# EIGHTEENTH REPORT

(Seven annual, eleven biennial.)

OF THE

# **BOARD OF TRUSTEES**

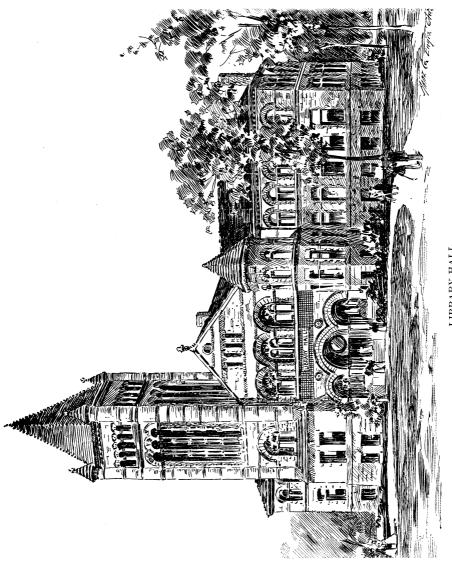
OF THE

# UNIVERSITY OF ILLINOIS

[POST-OFFICES, URBANA OR CHAMPAIGN, ILLINOIS.]

FOR THE TWO YEARS ENDING SEPTEMBER 30, 1896.

SPRINGFIELD, ILL.
PHILLIPS BROS., STATE PRINTERS.
1896.



University of Illinois, Urbana, November 1, 1896.

Honorable John P. Altgeld, Governor of Illinois.

SIR:—I have the honor to submit to you herewith, in compliance with the law, the eighteenth report of the Trustees of the University of Illinois, for the two years ending September 30, 1896.

I am, very respectfully, your obedient servant,

WILLIAM L. PILLSBURY,

Corresponding Secretary.

# CONTENTS.

	AGE.
Letters of transmittal	
Board of Trustees	
Faculty	
Director and staff of State Laboratory of Natural History	
Board of Direction and staff of Agricultural Experiment Station	
Faculty of the School of Pharmacy	
Summaries of students	. 17
Proceedings of Board of Trustees, 1894-1895	. 19
Meeting of September 25, 1894.	. 19
Meeting of November 15, 1894	. 36
Meeting of December 5, 1894	. 41
Meeting of January 10, 1895	. 57
Meeting of February 12, 1895.	. 61
Meeting of March 12, 1895	. 71
Meeting of June 11, 1895	. 87
Adjourned session, Chicago, June 27, 1895	. 119
Financial reports and warrants, 1894-1895	. 126
Proceedings of Board of Trustees, 1895-1896.	. 157
Meeting of September 4, 1895.	. 157
Meeting of September 19, 1895.	
Meeting of December 10, 1895	
Meeting of December 27, 1895	
Meeting of March 10, 1896	
Meeting of April 22, 1896.	
Adjourned session, May 25, 1896	. 239
Meeting of June 9, 1896	. 246
Meeting of June 26, 1896	. 263
Financial reports and warrants, 1895-1893	
Report of State Laboratory of Natural History.	. 298
Special Report of Biological Experiment Station.	
Report of Agricultural Experiment Station.	
Index	221

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TERM EXPIRES 1899.

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FRANK SMITH, A.M., Assistant Zoölogist. 310 West Clark Street, Champaign.

CHARLES ARTHUR HART, Curator of Collections. 927 West Green Street, Urbana.

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MARY JANE SNYDER, Secretary. 601 John Street, Champaign.

HENRY CLINTON FORBES, Librarian and Business Agent. 928 West Green Street, Urbana.

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Assistant Professor PERRY GREELEY HOLDEN, M.S., Assistant Agriculturist. 1006 West Illinois Street, Urbana.

WILBER JOHNIFRASER, B.S., Assistant in Charge of Dairy Experiments.

1003 South Wright Street, Champaign.

GEORGE PERKINS CLINTON, M.S., Assistant Botanist. 913 California Avenue, Urbana.

JOSEPH CULLEN BLAIR, Assistant Horticulturist. 1411 West Springfield Avenue, Urbana.

# THE SCHOOL OF PHARMACY OF THE UNIVERSITY OF ILLINOIS.

[Formerly the Chicago College of Pharmacy, 465-467 State Street, Chicago.]

# Faculty.

ANDREW SLOAN DRAPER, LL. D., President of the University, *Urbana*, *Ill*.

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# SPECIAL LECTURES FROM THE GENERAL CORPS OF INSTRUCTION OF THE UNIVERSITY.

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Food, its Adulteration and its Preservation.

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Embryology.

CHARLES ATWOOD KOFOID, Ph.D., . Superintendent of the Biological Station of the University.

# Summary of Students, 1894-95.

					Uni	vers	sity.			Pren to Sch	oara- ry ool.		ersity Pre- itory ool.
Courses and Classes.	Graduate School	Resident Graduates.	Seniors	Juniors	Sophomores	Freshmen	Specials	Men and Women	Total	Men and Women	Total	Total Men and Women	Total
Agriculture, Men. Mechanical Engineering, Men. Electrical Engineering, Men Civil Engineering, Men Municipal and Sanitary Engineering,	4	· · · · · · · · · · · · · · · · · · ·	9	23	3 15 19 13	4 26 38 24	 2 2	9 66 91 73	9 66 91 73	7 20 17 9	7 20 17 9	16 86 108 82	16 86 108 82
Men Architecture { Men. Architectural Engineering, Men. Chemistry { Men. Pharmacy, Men. Natural Science { Women. Mathematics { Men. Women. English and Mod \ Men. ern Languages } Women. Latin { Men. Women. Classical { Men. Classical { Wem. Men. Men. Men. Classical { Wem. Men. Men. Physical Training, Women.	······································	··· · · · · · · · · · · · · · · · · ·			188 1 2 111 2 144 3 3 1 7 9 9 3 3 3 7 7 2 2	177 6 111 11 33 122 22 1 1 1 266 9 6 4 8 8 2 1 1	31 11 22 1 11 11 2 66 22 1	2 15 37 3 6 6 36 63 41 11 15 25 4 4 3 10 2 2 2	2 } 73 15 } 40 6 } 49 } 104 } 26 } 29 } 13 2 2	111	} 12  4  } 3  5  } 20  1  31  6  111	2 82 3 19 39 4 11 47 47 22 4 4 18 82 53 14 18 83 8 8 3 11 12 2	2
	<u> —                                   </u>	-		-		183 19	24 24	93		31	147		
Total { Men  Total { Women  Total  Add for Summer School, 1894, those n Add for Winter School in Agricultur  Total, 1894-5	177 5 222	9	92 ur 5,	98	d ab	19 202 ove.	24 24 48	511 93	604	Men Wom Wom		. 18 } . 12 } . 28 } . 1 }	

# Summary of Students, 1895-96.

				τ	Jniv	ersi	ty.			l t	epara- ory hool.	and	ersity Pre- atory ool.
Courses and Classes.	Graduate School	Resident Graduates.	Seniors	Juniors	Sophomores	Freshmen	Specials	Men and Women	Total	Men and Women	Total	Men and Women	Total
Agriculture, Men	2 1 	1	122 177 111 13	2 111 199 8 8 2 2 166 11 2 2 8 8 1 3 3 3 1 88 111 999	2 122 255 188 1 12	6 23 36 22 20 1 6 5 5 1 6 6 6 6 6 5 3 3 7 7 7 1 1 1 191 43 234	33 44 22 33 66 11 1 22 33 1 144 110 27 39 666	144 666 1011 643 367 36 288 39 422 277 77 77 200 166 6199 221 1188 100 2	144 666 1011 644 3 3 70 166	2	5 25 10 10 9 9 9 22 2 2 2 2 2 4 4 4 22 1 28 6 5 5 5 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1	177 77 122 74 3 3 3 3 3 3 3 3 3 3 3 3 7 7 7 2 2 2 2 2	79 126 74 3 } 79 18 } 33 13 } 97 10 137 42 33 42 111 12
									Me	en.	Women	n. T	otal.
Summer School, 1895 Winter School in Agriculture, 189	6								1 1	4	13 1 .		27 18
Total Deduct those counted twice									3	1	14 1		<b>4</b> 5 5
University and Preparatory Scho	ol	۱							2 64		13 169		40 315
Total for 1895-6	•••				• • • • •	••••			67	3	182		355

# PROCEEDINGS

OF THE

# BOARD OF TRUSTEES

OF THE

# UNIVERSITY OF ILLINOIS.

FOR THE

# Year Ending August 31, 1895.

MEETING OF SEPTEMBER 25, 1894.

The Board of Trustees of the University of Illinois met in the office of the State Superintendent of Public Instruction, in Springfield, Illinois, at 2 o'clock p. m., Tuesday, September 25, 1894. There were present Governor Altgeld, and Messrs. Armstrong, Bullard, Graham, McKay, McLean, Raab, and Raymond; absent, Messrs. Bryant, Gore, Morgan, and Morrison.

The minutes of the meetings of June 5, 1894, and August 1, 1894, were approved.

On motion of Mr. McKay, it was voted that President Draper, the deans of the colleges, and two members of the Board of Trustees, should be a committee to make arrangements for the installation of the President, and the dedication of Engineering Hall, these exercises to be held November 15, 1894. Messrs. Armstrong and McKay were subsequently appointed as members of this committee from the Board of Trustees.

The Executive Committee made the following report, which was confirmed on motion of Mr. McKay:

#### REPORT OF EXECUTIVE COMMITTEE.

To the Board of Trustees of the University of Illinois.

Gentlemen:—Your Executive Committee met in Ghicago, August 17, 1894, with all the members present. President Draper and Mr. Morgan were also present.

It was voted that a room be added to the farm house on the south farm; and the request from the tenant for new corn-cribs and repairs on the barn was referred to Mr. Morrison, Chairman of the Farm Committee, with instructions to examine into the matter and have such improvements made as should be found necessary.

The following appointments were made: Mr. H. S. Grindley, assistant in chemistry, salary \$100.00 a month; Mr. A. C. Burnham, assistant in mechanical engineering, salary \$80.00 a month; Mr. F. A. Sager, assistant in physics, salary \$80.00 a month; Mr. I. H. Allen, storekeeper in the electrical engineering laboratory, salary \$30.00 a month. These appointments were all for ten months, beginning September 1, 1894.

In regard to the model school authorized by the Board of Trustees to be organized in connection with the course in pedagogics, it was voted that since Professor McMurry, at whose request the organization of a model school was made, had withdrawn from the Faculty of the University, the organization of said school be referred to President Draper with power to act.

Professor Burrill was appointed President of the Board of Direction of the Experiment Station and asked to accept the place for the present year.

President Draper and Professor Burrill were authorized to appoint a chemist for the Experiment Station, at a salary not to exceed \$2,000.00 a year.

It was ordered that inasmuch as the time set for the September meeting of the Board occurs during the week in which the Illinois State Fair is to be held in Springfield, the Secretary be instructed to announce the meeting to be held in the office of the Superintendent of Public Instruction, at Springfield.

S. A. Bullard.

N. W. GRAHAM.

Acting Secretary.

President.

President Draper was then requested to present his report.

### PRESIDENT'S REPORT.

To the Board of Trustees of the University of Illinois.

GENTLEMEN:—In view of the very recent date upon which I entered upon this position, I have but little to report.

The University entrance examination commenced on the 6th inst. The 10th and 11th inst. were registration days, and instruction was resumed on Wednesday, September 12th. The registration up to date is as follows:

University	590
Preparatory School	108
	1

This is an increase of about sixty over last year. The spirit of the Faculty and students of the University at the opening seems as hearty and buoyant as could be desired.

The members of the corps of instruction are all on duty, except that Mr. James David Phillips, instructor in general engineering drawing, and Mr. Fred Herbert Dodge, instructor in athlectics, are absent sick. As to the time when they will likely be able to return it is impossible to say. The position held by Mr. Phillips has been temporarily filled and, in the opinion of the Dean of the College of Engineering, the interests of the University are being satisfactorily taken care of. There is no one discharging the duties of instructor in athletics. I have a communication from a physician in Chicago, under whose charge Mr. Dodge is, saying that it may be some weeks before he can go on with his work. The Athletic Association has engaged Mr. Louie de P. Vail, of Peoria, to coach the foot-ball team, and has addressed a communication to the Board requesting assistance in meeting the expenses involved. I should be glad to have this done so far as the Board is able to do it, and it occurs to me that Mr. Vail might be given the position of instructor in athlectics until Mr. Dodge is able to resume it, or until the termination of the foot-ball season. There is very little done in the way of indoor athletics until the cold weather puts an end to outdoor work. This course would at least go some way towards assisting the Association to meet its engagements.

The University is seriously embarrassed by the failure to complete the new Engineering Hall according to contract. All plans had been predicated upon having possession of the building at the beginning of the year. The building

has made somewhat more rapid progress since the first of August, but there seems to be no reason to believe that it will be ready for delivery to us before the middle of November.

The Military Band is in need of some new instruments, in the place of some which have become unfit for use, which are so expensive that we can hardly expect individual members to supply them. I transmit herewith a communication from the leader of the band, with the endorsement of the professor of military science, in reference to the matter. It is needless to say that this band is of great service to the University and should have whatever assistance it is practicable to give it, and I therefore recommend an appropriation of the sum of three hundred dollars for band instruments.

Pursuant to the resolution adopted at the last meeting of the Board, on motion of Governor Altgeld, a circular was prepared in August, showing the advantages of the University, and was broadly distributed. The cost of the same consumed but a comparatively small part of the fund appropriate for the purpose, and I respectfully recommend that the balance be re-appropriated for the purpose of publishing other documents showing buildings and equipment of the University, for distribution.

I report also that I have received a communication from Miss Kate Cary, making a claim against the Board for the sum of fifty-four dollars for expenses incurred by her in preparing herself for teaching a model school, which it was proposed to establish in the University, but which has been abandoned. There was never any authority given, as I understand it, for the employment of Miss Cary, but it is probable that she was given reason to believe she would be employed in the capacity referred to. If we have been under any honorable obligations in the premises they have been discharged by the proffer of another situation of larger pay nearer her home, which has been declined. I am, therefore, unable to recommend the claim.

I submit the following important communication from the Librarian:

To the Board of Trustees of the University of Illinois.

Gentlemen:—Before the library of the University of Illinois can be, in any sense, of efficient service to the Faculty and students, and be worthy of comparison with the libraries of the other great universities of the country, certain glaring defects in its equipment and economy demand a remedy. To gain this object no large sum of money is required. A small appropriation made now will meet a need out of all proportion to the actual amount called for, and will insure against the necessity of spending a still greater sum in the future. In other words, the longer the delay incurred in adopting modern methods in the management of the library, the more costly will be their final and unavoidable introduction.

- (1) The proper classification and cataloguing of the library—of the first importance if we are to know what we have and all that we have, and how instantly to find any desired book—is the first need. A card catalogue equipment, calculated to meet the requirements of the library for the next ten years or more, should be purchased at the outset, and will cost \$200. One which would prove less economical in the end, but would be cheaper now, would cost about \$125. The purchase, however, of a smaller outfit, for more pressing immediate needs, is by no means advisable, involving, as it would, a waste, in the end, both of library space and of money. It should be added that the set of drawers now used by us is becoming crowded, and is, moreover, of awkward design and inconvenient for use. It is hardly necessary to say, in conclusion, that the Library Bureau is the patentee and sole manufacturer of approved card-catalogue outfits.
- (2) In order that the daily work of the library way be carried on, and, at the same time, system and method be introduced into the chaos of literature which has been accumulating ever since the founding of the University, the employment of a skilled cataloguer—a person who can work rapidly and in telligently and is familiar with the Dewey "Decimal System of Classification"—is indispensable. The securing of such an assistant is the more necessary if the University Librarian's position is to be one of more importance or dignity

than that of general drudge and man of all work. With a skilled assistant under him, he could enlarge the scope of his usefulness, and, by offering instruction and practical training in bibliography, library economy, and the use of books, vastly increase the mutual benefit to be derived both by the students from the library and by the library from the students. Much valuable voluntary assistance might in this way be secured, although it would in no wise obviate the necessity of employing a professional cataloguer. In a number of our sister universities and colleges, where the librarian has, in some instances, been constituted professor of bibliography and library economy, instruction, more or less detailed, is offered by him in those branches. Such is the case at the University of Colorado, at Amherst College, Bowdoin College, the University of California, Cornell University, the Iowa State College, the University of Michigan, Wellesley College, and the Maine State College. The employment of a trained cataloguer, unless we look for a high grade of experience and efficiency, would not cost over six hundred or eight hundred dollars a year, or somewhat less than that if the term of service were limited to the academic year.

The Librarian wishes to call attention to the very considerable and wholly unnecessary additional expense which will be incurred if the proper classification of the library is delayed until after its removal to the new building which we expect to occupy within the next year or two. Such a delay would necessitate moving twice each one of our 26,000 volumes, whereas, if the proper marking and labeling is completed as the books stand at present, they will be ready for immediate and correct arrangement upon the transferrence to the new library.

That the adoption of a systematic classification and designation of each book must come in the end, is obvious when it is considered how much time is now consumed in hunting for any desired volume from among the 26,000 on the shelves. As the library grows, this difficulty will increase unless the collection is at once put in proper order and carefully re-catalogued. If, for any reason, it should be found impossible to grant the library a liberal appropriation at this time, it will prove of far greater advantage to spend the money assigned to that department in the manner indicated above than in the purchase of new books for which our cramped quarters allow us no room. The time for expansion will come with the new building. Until then there is enough to do in preparing the present collection for removal and re-arrangement.

(3) So far as the appropriation for books will allow, a certain sum of money, for the purchase of general works of reference, should be placed at the disposal of the Librarian. These works, not falling within the department of any one instructor, often fail of being ordered, to the subsequent serious inconvenience of those using the library. Their expense sometimes deters an instructor from including them in his list, as their purchase would consume so large a portion of the sum assigned him for books. An annual appropriation of at least two or three hundred dollars should be at the command of the Librarian for the purchase of this class of books as well as of such new or necessary publications, manuals, aids, or appliances as fall within his own special line of work.

This application for an appropriation, inconsiderable in amount, but most urgently needed, is most respectfully submitted.

PERCY F. BICKNELL, Librarian.

Urbana, Ill., Sept. 21, 1894.

I also submit the following report of the President of the Board of Direction of the Agricultural Experiment Station:

### EXPERIMENT STATION REPORT.

# Dr. A. S. Draper, President University of Illinois.

DEAR SIR:—Having been appointed, for the time being, President of the Board of Direction of the Agricultural Experiment Station, I have undertaken to perform the not very well defined duties of the office.

The Board held the regular quarterly meeting on the 20th inst., with all members present except Mr. Gurler, of the State Dairymen's Association. The resignations of Professor Morrow and Mr. Farrington left their places vacant, and these have not been filled.

For the information of those present a report was prepared of the condition and progress of the affairs of the Station during the quarter, as communicated to me by each member of the Station staff. This report showed very commendable activity and some valuable results. The experiments in each department, except that of dairying, seem well planned and well executed. The dairy work has not been well established, and changes in the membership of the Station staff have been injurious to these experiments. It is very desirable that this work shall have prompt and earnest attention, but just what can be done until competent men are provided is difficult to state. There was no member of the standing committee on the subject present at the meeting. The assistant chemist and dairyman have been doing all within their power for the good of the department, but something more is needed. The assistant agriculturist is also trying to help here, but his time and attention are demanded elsewhere. Because something should be done and because nothing better seemed possible, the present President of the Board was added to this standing committee.

According to the report presented satisfactory progress has been made in various field experiments, in matters of feeding steers and pigs, in tests upon evaporation of water from soils, in various chemical and botanical investigations, and in experiments in horticultural subjects.

The consulting entomologist, Professor Forbes, contributed an important account of the very earnest efforts made by him, under the authority of the Station, and at its expense, to test in the fields the efficacy of a fungous disease in killing off chinch bugs. More than 2,000 packages were sent out containing infected bugs, and in many cases other infecting material. On the whole, results seem to show that this disease cannot be spread effectively during dry weather, though persistent artificial infection seems to have been useful in one case. A bulletin on the subject is to be published soon.

During the quarter bulletins Nos. 33 and 35 have been published, and No. 34 is in the printer's hands, while the manuscript for No. 36 is practically completed.

The first of these contains a short article on the destruction of chinch bugs, by Professor Forbes, and articles on dairy matters, by Professor Morrow and Mr. Farrington. No. 34, on wheat and oats, is by Professor Morrow and Mr. Gardner. No. 35, on the Russian thistle, and No. 36, on feeding experiments, are by Professor Morrow.

The Board of Direction presents the following papers:

Paper A is a statement of expenditures for the quarter ending June 30, 1894.

Paper B is a statement of expenditures for the year ending June 30, 1894.

Paper C is a list of warrants drawn during the quarter ending June 30, 1894, Nos. 231 to 335, inclusive, and is accompanied with vouchers for the same.

 $Paper\ D$  is a statement of appropriations, expenditures, and balances for the quarter ending September 30, 1894.

 $Paper\ E$  is a statement of appropriations asked for the current and next quarters.

The Board of Direction asks that the Trustees appropriate funds according to the estimates in Paper E, for the use of the Station.

# PAPER A-STATEMENT OF EXPENDITURES, QUARTER ENDING JUNE 30, 1894.

Board expense	846 1
Books and publications	30 0
Botanical apparatus and supplies	3 0
Bulletins and reports	163 4
Chemical apparatus and supplies	46 6
Fertilizers	11 0
Fuel and lights	35 8
Incidental expenses	
Printing, stationery, and postage	31 4
Salaries.	1.814 9
Seeds and trees	48 3
Tools and spenling	78 6
Tools and supplies	1 001 0
Wages and teams	1,201 9
Sundry experiments—	1
Chinch bug experiment	196 3
Clover and other forage plant experiments.  Dairying experiments	10 5
Dairying experiments	8 2
Drainage experiment.	49 6
Total	\$3,801 3
	+-,00-

# PAPER B-STATEMENT OF EXPENDITURES, YEAR ENDING JUNE 30, 1894.

Board expense Books and publications	\$127.84
Books and publications	347 41
Botanical apparatus and supplies	47 08
Bulletins and report	1.307 07
Chemical apparatus and supplies	309 44
Fertilizers	11 02
Per of and disable	187 60
Fuel and lights	187 60
Furniture and fittings.	12 80
Incidental expenses	62 74
Meteorological apparatus	25 67
Printing, stationery, and postage.	59 58
Salaries	7.312 16
Seeds and trees	101 12
Tools and supplies.	369 70
Tools and supplies.	4 107 07
Wages and teams Chinch bug experiment	4,127 27
Chinch bug experiment	196 34
Clover and other forage plant experiments	29 75
Clover and other forage plant experiments.  Dairying experiments	62 69
Drainage experiment	64 15
Nitrogen experiment	187 50
Farmers' Institutes	51 07
rathers institutes	21 01
Total	\$15,000 00
1.0141	Φ10, 000 OO

# Paper D—Statement of Appropriations, Expenditures, and Balances for the Quarter ending September 30, 1894.

	Appro- priated.	Expended.	Balances.
Buildings and repairs Board expense Books and publications Botanical apparatus Bulletins. Chemical apparatus Fuel and lights. Incidentals Printing, stationery, and postage Salaries Seeds and trees Tools and supplies Wages. Sundry experiments— Chinch bug experiments Wheat and forage experiments Total	50 00 50 00 10 00 200 00 60 00 25 00 2, 060 00 10 00 270 00 1, 100 00	814 53 211 13	59 00 50 00 10 00 200 00 50 00 60 00 25 00 841 66 10 00 270 00 285 47 38 87 100 00

#### PAPER E-ESTIMATES

Quarter ending December 31, 1894.	
childing and renairs	\$25
Building and repairs.	50
Books and publications	275
Sotanical apparatus	10
Bulletins.	1,100
hemical apparatus	25
'uel and lights	100
ncidentals	15
rinting, stationery, and postage	15
alaries.	1,500
eeds and trees	30 100
Voges	550
Vages. Cesting durability of timber.	50 50
Expenses of delegate to meeting of Association of American Agricultural Col- leges and Experiment Stations	50
_	
Total	\$3,895

The Board has appointed Dr. Burrill to represent the Experiment Station of this University at the meeting of the Association of American Agricultural Colleges and Experiment Stations, to be held in Washington, November 13, 1894, and asks approval of this appointment.

The Board has not planned any new work for the coming quarter, but will enlarge somewhat its feeding experiments in order to investigate more fully than has been done heretofore the value of wheat for feeding purposes.

It will also make some additions to the forestry plantation by planting some 100 trees each, of Kentucky coffee and of mulberry. It is further proposed to do much more work than heretofore in the way of testing the durability of timber grown in this state.

Respectfully submitted,

T. J. Burrill, President Board of Direction.

· I also submit an application from Miss Anita M. Kellogg, Director of the Woman's Gymnasium, asking for an appropriation for current expenses and for some additional light apparatus. In view of the fact that the attendance of students in that department is double what it was last year, I recommend that \$70.00 be appropriated for the services of a piano accompanist and \$200.00 for the other purposes suggested.

I submit a communication from the professor of military science asking for an appropriation of \$50.00 for the purchase of additional swords for officers of the battalion, consequent upon a re-organization thereof, and recommend that it be granted.

Also a communication from the professor of pedagogy requesting an appropriation for current expenses in his department, and recommend that \$150.00 be granted.

Also one from the Principal of the Preparatory School, of similar import, and recommend that \$200.00 be granted.

Also one from Dr. Burrill requesting that provision be made for employing assistance in the bacteriological laboratory, to the extent of \$5.00 per week for the fall term, and recommend that it be granted.

Also one from Professor Charles M. Moss for \$150.00 for the purchase of material and supplies to be used in the Greek department, and recommend that it be granted.

Also one from Professor Talbot for material and appliances in the laboratory of applied mechanics, and recommend that \$185.00 be allowed.

Also one from the business manager of the *Illini*, asking for an appropriation of \$630.00, to send the paper regularly to the high schools of the state. In my judgment the Board should give the *Illini* such support as is consistent with the finances of the University. The paper has been enlarged and improved in appearance, and I think it may be, materially, in quality, so as to make it really representative of the higher and better work of the University. It has undoubtedly served a good purpose in the past and as undoubtedly may be made of still greater usefulness in the future. It is possible that it might be better to leave it to the students to manage and support their paper in altogether their own way, and to use such University funds as are available for the purpose for the publication of bulletins wholly devoted to the higher literary and scientific work of the institution. But we probably are not prepared to do that this year, and, until we are prepared, we can probably secure no better arrangement than that now in operation. I therefore recommend the appropriation of such liberal sum to aid in the distribution of the *Illini* as the Board may be able to grant.

Respectfully submitted, A. S. Draper, *President*.

On motion of Governor Altgeld, the balance of the \$1,000.00 appropriated for advertising purposes, at the last meeting of the Board, was re-appropriated, the expenditure of this sum to be under the direction of President Draper and the President of the Board of Trustees.

On motion of Mr. McKay, President Draper and the deans of the colleges were directed to consider and report at the next meeting of the Board, upon a course of instruction in political and social science, to be offered in the next catalogue.

The Treasurer's report was received and referred to the Finance-Committee.

### TREASURER'S REPORT.

CHARLES W. SPAULDING, TREASURER, IN ACCOUNT WITH THE UNIVERSITY OF ILLINOIS, AUGUST 31, 1894.

1894.		Dr.		
Мау	31 T	To balance		\$67,468.74
June	2 F	From S. W. Shattuck, on general fund	\$ 10 00	
• •	9 I	Payment of bond No. 2, City of Urbana	1,000 00	
• •	9	" coupons due June 1, City of Urbana	495 00	
. 44	11 F	Payment on contract No. 62, R. H. Muhlhausen	100 00	
	19 T	Farm fund account	50 00	
• •	15 N	Morgan county coupons due June 15	1,400 00	
	22 (	Thampaign county '' '' 1	182 50	
	22 È	Homer township '' '' 22	375 00	
4.4	25 1	Morgan county coupons due June 15	540 00	
4.4	25	bond No. 5, due June 15	1,000 00	
	25 I	From S. W. Shattuck on general fund	2,581 30	
July	20 7	From S. W. Shattuck on general fund	195 00	
o uny	9 1	Farm fund account	85 90	
4.6	216	Farm fund account	2,250 00	
	3 7	Downsont on region subset diet bend No. 9 Chempsion Col	200 00	
	9 1	Payment on union school dist. bond No. 2, Champaign Co	160 00	
	2 1	Interest on above, due July 1	80,000 00	
		State appropriation account engineering building	250 00	
	5 5	Sangamon county coupons, due July 1	250 00	
	9 2	State appropriation for the payment of salaries, for ad-		
		ditions to the library, museum and cabinets, for		
		school apparatus, for material for the laboratories,	¥.	
		for furniture, and for current repairs on buildings,		
		the sum of	60,000 00	
	11 4	Austin coupons due July 1	575 00	
• • •	14 I	Part Pike county coupons, due July 1	1,960 00	
	14 I	Logan county coupons due July 1	750 00	
• •	14 (	Logan county coupons due July I. Gallatin county 1	630 00	
• •	14 ]	Macoupin county " " 1	618 00	
	17 1	From S. W. Shattuck on general fund	331 94	
• •	18 I	Litchfield coupons due July 1	440 00	
4.6	18 8	State appropriations for '93 taxes on Minnesota lands	1,519 35	

# Treasurer's Report—Concluded.

		1	1
1894.			
July	19 Sangamon county bond No. 2, due July 11	1,000 00	
	coupons 11		
	20 Champaign 30 State appropriation, from United States		
4 4	31 Township of Taylorville coupons, due August 1	1, 200 00	
August	1 Mattoon coupons, due August 1		
"	1 Champaign county bonds Nos. 17, 18, 19, 20, due August 1	. 2.000 00	
	coupons, due August 1	540 00	
• •	1 Kankakee county coupons, due July 1	2,400 00	
	1 Mansfield coupons due July 1	213 00 1,000 00	
	6 Morgan county bond No. 2, due August 1	540 00	
	6 Interest due January 1, '94 and accrued interest to date	9	
	on contract No. 39, J, E. Blickenstaff	. 25 15	
	6 Pittsfield school coupons due July 1	. 240 00	
••	6 State appropriation account State Laboratory of Natura	0.550.00	
	History		
	13 Montgomery county coupons due August 1	90 00	
* *	22 Montgomery county bond No. 1, due August 1	500 00	
	22 Accrued interest on above	. 1 67	
	31 From S. W. Shattuck, on general fund	. 1,581 30	1.5
••	31 Interest on endowment fund, June, July, and August	, , , , , , , , , , , , , , , , , , , ,	
	4 per cent	277 75	
	cent	383 91	\$197,611 7
			9965 000 E
			\$265,080 5
	Cr.		
ugust	31 By amount paid on account of general fund as per list o		
	warrants attached hereto	. \$21,642 82	
••	31 By amount paid on account of state appropriation as pe		
	list of warrants attached hereto	49,775 32	
	31 By amount paid on account of State Laboratory of Nat' History as per list of warrants attached hereto		
	31 By amount paid on account of U. S. fund as per list o		
	warrants attached hereto	. 462 30	
	warrants attached hereto	1	
	fund as per list of warrants attached hereto	4,172 15	
	31 By amount paid on account of U. S. Experiment Station farm account as per list of warrants attached hereto		\$79,391 9
	raini account as per list of warrants attached hereto	. 001 10	\$10,001 0
	Balances—		
	(Current fund	\$51,284 26	
	State appropriations { Engineering Hall	67,003 17	
	General fund. (Other appropriations	14,854 71 2,261 66	
	U. S. fund		
	Endowment fund	30,619 50	
	U. S. Experiment Station farm account	324 89	
		9196 DAG 70	
	Less overdraft of U. S. Experiment Station acc't	\$186,946 70 1,258 17	\$185,688 5
	2000 0 of that of 0. o. Experiment Station acc t	1,200 11	
		1.	\$265,080 5
	l e e e e e e e e e e e e e e e e e e e		

#### BUILDINGS AND GROUNDS.

Springfield, Ill., September 25, 1894.

To the Board of Trustees of the University of Illinois.

Gentlemen: Your Committee on Buildings and Grounds begs leave to report as follows:

Your Committee on consultation decided to put in water tube boilers for heating apparatus for Engineering Hall, and accepted a proposition from the Babcock & Wilcox Company, of New York, for two boilers of 200-H. P. each, at a price of \$9,700.00.

Your Committee on consultation with the Faculty of the Engineering College gave the contract for furniture for the new building, to the LaFayette Lumber and Manufacturing Company, for \$7,500.00, the contract to be fulfilled by December 1, 1894.

It being evident that the contract for Engineering Hall would not be completed September 1, according to its terms, your Committee asked the contractors to appear and show cause, if any, why they had not been able to carry out the contract. They appeared August 28th and stated that strikes through the summer had delayed them, and asked an extension of eight weeks. Your Committee, on examination into the reasons given, decided to recommend to the Board that an extension of six weeks be allowed. We make that recommendation now, believing that it is but just and right under the stipulations of the contract.

Your Committee ordered the removal of the old fences upon the campus, believing that the action would be commended by the Board.

Your Committee, upon estimating the amount of walks necessary for connecting the new building with the other walks of the grounds, found that they would, if laid in cement or manufactured stone, cost about \$1,000.00. We ask your instructions with regard thereto.

Your Committee recommends the payment of \$1,600.00 to the architect and superintendent, on account of services rendered.

The general contractors of the new building have been paid as follows: July 1, 1894, \$7,667.94; August 1, 1894, \$6,808.58; September 1, 1894, \$19,186.60.

It is the intention of the Committee not to pay any further money to the general contractors until the completion of the building.

Your Committee asks your instructions with regard to settling with the contractors, as the building will be completed before your next regular meeting.

Respectfully submitted,

S. A. BULLARD,

Chairman of Committee on Buildings and Grounds.

On motion of Mr. McLean, the report of the Committee was received, and the appropriation of \$1,600.00 for payment of the architect and superintendent was made, as recommended.

On motion of Mr. Armstrong, it was voted that the general contractors of the engineering building be held to their contract, and that no more money be paid until the building is completed and turned over. The Committee on Buildings and Grounds was instructed to communicate this action to the contractors.

Two hundred dollars was appropriated to be used, or as much thereof as may be needed, by the Committee on Buildings and Grounds, in constructing temporary plank walks about Engineering Hall.

President Draper's report was then taken up for consideration.

On motion of Mr. McLean, Mr. L. deP. Vail was made temporary instructor in athletics during the absence of the director of the gymnasium, Mr. Dodge.

On motion of Mr. Raab, \$300.00 was appropriated for band instruments and music.

On motion of Mr. Raab, \$50.00 was appropriated for the purchase of swords and belts, at the request of Captain Brush.

For the department of pedagogics an appropriation of \$150.00 was made.

For the preparatory school an appropriation of \$200.00 was made, to be used in the purchase of apparatus and supplies.

Professor Burrill was authorized to employ assistance in his department during the fall term, at an expense of \$5.00 a week.

For the department of Greek \$150.00 was appropriated.

For the purchase of supplies for use in the testing laboratory an appropriation of \$185.00 was made.

On motion of Mr. McKay, \$500.00 was appropriated for advertising in the *Illini* and for subscriptions. The distribution of the copies received was referred to the President of the University.

For the library, \$4,500.00 was appropriated, to be expended under direction of the Library Committee.

On motion of Mr. McLean, appropriations of Experiment Station funds were made in accordance with the recommendations of the Board of Direction of the Station, as presented in Paper E on page 6.

The appointment of Professor Burrill as delegate from the Experiment Station to the meeting of the Association of the American Agricultural Colleges and Experiment Stations, to be held in Washington, November 13th next, was approved.

For the woman's gymnasium an appropriation of \$200.00 for apparatus was made; also an appropriation of \$70.00 for a pianist for the year, these expenditures to be made under the supervision of the President of the University.

An appropriation of \$200.00 was made to defray expenses attendant upon the installation of President Draper, and the dedication of Engineering Hall,

The Secretary presented the following opinion, which he had, by order of the Board, obtained from the Attorney General:

STATE OF ILLINOIS, ATTORNEY GENERAL'S OFFICE.

Springfield, Ill., September 21, 1894.

W. L. Pillsbury, Secretary, Etc., Urbana, Ill.

Dear Sir: In reply to your communication of the 19th inst., I would say that I am of the opinion that the Trustees of the University of Illinois are without power to grant the right to any railroad company, whether using ears propelled by steam, electricity, or horse power, to trespass upon the grounds of the University, neither have they any authority to grant any franchises or rights of way in or over said lands. This is a matter of very great importance to the people of the state, and it will be much better for the Trustees of the University to refer such matters as these to some other authority; just what that authority is I am not prepared to say at present, but certainly it is not the Board of Trustees.

Of course, I know nothing about what portion or part of these grounds it is desired to cross with the street railway. It may be farming lands, which would not be seriously injured, and it may be the campus, or grounds upon which the buildings are situated. The principle of law, however, applies equally to both.

Yours truly,

M. T. MOLONEY,

Attorney General.

The Board instructed the Secretary to inform the Urbana and Champaign Electric Street Railway Company that, in accordance with the opinion of the Attorney General, it must decline to give it permission to lay a track across the University grounds along the line of Wright Street extending south.

The Secretary was also instructed to report its decision in this matter to the city councils of Urbana and of Champaign.

On motion of Mr. McKay, the Board adopted the following resolution:

Resolved, That the President of the Board be instructed to request the city council of Champaign, to take measures to abate the nuisance caused by the flow of sewage in the stream running through the University grounds, and that, in the event of failure of the said city council of Champaign to abate the nuisance, the President of the Board be further instructed to consult the Attorney General as to what steps the state may take in the premises to protect its interests.

On motion of Mr. McLean, Professor Shattuck was appointed Business Agent for the year beginning September 1, 1894.

The Finance Committee made the following report which was approved:

Springfield, Ill., September 25, 1894.

To the Board of Trustees of the University of Illinois:

Gentlemen:—Your Finance Committee reports that it has examined the report of your Treasurer, up to and including August 31, 1894, and finds that during the past three months the following bonds belonging to the endowment fund have been paid:

The city of Urbana, bond No. 2.  Montgomery county, school bond No. 5. Champaign county, school bond No. 1. Sangamon county, school bond No. 2. Montgomery county, school bond No. 1. Champaign Board of Education bonds, Nos. 17 to 20 inclusive. Morgan county, school bond No. 2.	1,000 500	00 00 00
	\$6,700	00

We also find that there has not been any purchase of new bonds for said endowment fund, and that there is now on hand of said fund the sum of \$30,-619.50 uninvested.

Your Committee therefore recommends that the Treasurer be directed to invest said amount of endowment fund in such bonds, as the law authorizes, and that he report his action in this matter at the next meeting of the Board.

# The committee finds the Treasurer's report correct and that it shows—

Balance on hand May 31st. Receipts to August 31st.		\$67,468 197,611	
		\$265,080	51
Paid out to August 31st.		\$79,391	98
Balance on hand— State appropriation General fund. United States fund.	\$133, 142 14		
United States fund.	2,261 66 20,598 51		
Endowment fundUnited States Experiment Station farm fund	30,619 50		
(O	\$186,946 70		-0
Owerdraft, United States Experiment Station	1,258 17		
		\$265,080	51

# Respectfully submitted,

ALEX. McLean J. E. Armstrong,

Finance Committee.

The Finance Committee made the following report, which was adopted:

Springfield, Ill, September 25, 1894.

To the Board of Trustees of the University of Illinois:

Gentlemen:—Your Finance Committee recommends the appropriation of following amounts for the purposes named, as requested in exhibit G, presented by the Business Agent. The appropriations are for three months ending December 31, 1894:

Board expense		\$400
Board expense alary of President and for instruction. alaries for services.		23,844
Salaries for services		2,427
Buildings and grounds		1,000
fuel and lights		2 500
tationery and printing		400
aboratories		400
ibrary and apparatus		50
Illitary department		50
Mechanical, architectural, agricultural, and horticultural depar	tmonta	400
votos cumple	unents	125
Vater supply		120
Turniture and fixtures  Jeating apparatus.	D-1	200
reating apparatus	Bajance	253
Advertising		872
Accredited schools		31
Biological station		1, 192
Art department		96
resident's office		499
ncidental expense account		200
Total		\$34,940

## Respectfully submitted,

ALEX. McLean, James E. Armstrong,

Committee on Finance.

The Finance Committee made the following report which was received for record:

Springfield, Ill, September 25, 1894.

To the Board of Trustees of the University of Illinois:

GENTLEMEN:—Your Finance Committee begs leave to state in reference to the necessary appropriations for the year ending August 31, 1895, that exhibit E, presented by the Business Agent, shows estimates of income from all sources of \$198,085.59, and estimated disbursements, predicated on the present basis of expenses, amounting to \$205,235.37. The apparent deficit of \$7,-149.78 is caused by the increase in salaries, and additions to the corps of instructors, and will have to be provided for out of the future income.

The Committee calls attention to this now so that the Board may be fully advised in the premises.

The estimates are as follows:

ESTIMATED RECEIPTS AND EXPENSES FOR THE TWELVE MONTHS ENDING SEPTEMBER 1, 1896.

·		
Receipts.		
Current balance September 1, 1894 State appropriations September 1, 1894 State appropriations Laboratory Natural History, September 1, 1894 United States fund, balance, September 1, 1894	\$2, 184 26 118, 615 79 6, 299 04 20, 346 50	\$147,445 59°
Interest from endowment, etc. Interest from Treasurer. Fees from students. Farm rents.	\$27,000 00 3,000 00 18,000 00 2,640 00	50,640 00
		\$198,085 59
Expenses.		
State Laboratory Natural History. Assignments, Paper B, State appropriation. Assignments, Paper C, United States fund. Assignments, Paper A, sundries.	\$6,299 04 81,653 96 346 50 2,700 87	#04 000 PF
Board expenses. Salary of President. Salaries for instruction. Salaries for services. Buildings and grounds. Fuel and lights. Stationery, printing, and catalogue. Departments. Incidental expense account. Laboratories. Water supply. Furniture and fixtures. Heating apparatus repairs.	\$1,200 00 7,000 00 82,660 00 9,075 00 3,000 00 5,000 00 1,000 00 1,000 00 1,000 00 500 00 500 00 500 00	\$91,000 37
		114,235 00
		\$205, 235 37

# Respectfully submitted,

ALEX. McLEAN,

Chairman of Committee on Finance.

The Finance Committee made the following report, which was adopted:

Springfield, Ill, September 25, 1894.

To the Board of Trustees of the University of Illinois.

GENTLEMEN: Your Finance Committee reports that it has examined the statement of the expenses of the Agricultural Experiment Station for the year ending June 30, 1894, and find the same correct, amounting in all to \$15,000, as per vouchers on file.

Your Committee also reports that it has examined the vouchers numbered 231 to 335, and finds the same correct.

Respectfully submitted,

ALEX. McLean, Chairman Finance Committee.

The Business Agent was instructed to see whether or not be could get a reduction in the price of gas. He was further instructed, in case no reduction could be secured, to investigate and report to the next meeting of this Board upon the practicability and cost to the University of putting in a gas plant of its own.

On motion of Mr. McKav, it was voted that the President of the University, together with the Deans of the Faculty, and the Committee on Instruction, be requested to report to the Board at its December meeting, whether or not a reorganization of the courses of study in the University is desirable, with plans for reorganization, if desirable. President Draper was also directed to report whether or not it is practicable to hold examinations for entrance to the University at different points in the State, about the close of schools next June.

On motion of Mr. Armstrong, the President of the University and the Committee on Instruction were directed to correspond with Professor T. F. Hunt, of Columbus, Ohio, to see whether he might not be secured for the University professorship of agriculture, together with the positions of agriculturist of the Experiment Station, and President of its Board of Direction. Authority was given to offer Professor Hunt a salary of \$2,500 a year, in addition to the use of the house that has been occupied by Professor Morrow.

On motion of Mr. Bullard, it was voted that the President of the University be requested to prepare a concise statement of the work and the needs of the University, to be presented for use in connection with our application to the next General Assembly for appropriations.

President Draper stated that he had a communication from Dr. Burrill, accompanied by papers, setting forth the requests of the several departments of the University for appropriations. The papers were referred to the committee on legislation.

President Draper also stated that he had a communication from Professor Forbes with regard to the appropriation needed for the Biological Station at Havana; this paper was also referred to the committee on legislation.

The Secretary presented a communication from Professor Mc-Murry, on which no action was taken.

The Business Agent presented the following report:

University of Illinois, September 25, 1894.

N. W. Graham, Esq., Chairman Board of Trustees, University of Illinois, I SIR: I have the honor to hand you herewith the financial statements for the quarter ending August 31, 1894, being-

Paper A, a showing of the current appropriations.

Paper B, representing the condition of the state appropriations, September 1.

Paper C, the same for the United States fund.

Paper D, a list of vouchers presented for audit, 1176 to 1650 inclusive.

Paper E, an estimate of receipts and expenses for the twelve months ending September 1, 1895.

Paper F, the same for the three months ending December 1, 1894.

Paper G, a list of appropriations required for the three months ending December 1, 1894.

—3 U. I.

# Paper A—Current Appropriations.

June 5 and August 1, 1894.	Appro- priated.	Receipts appropriated.	Expended.	Balance.
Board expense.  Salaries for instruction { Current.	\$\\ 16,058 33\$ \$1,650 00 \$300 00 \$1,500 00 \$1,200 00 \$325 00 \$300 00 \$100 00 \$50 00 \$50 00 \$200 00	212 50 230 46 1, 391 91 269 21 103 55 714 73	405 85 1,039 65 532 00 504 12 1,260 72 114 12 90 37 17 03 888 52 29 08 114 76	160 35 5 50 26 31 19 155 09 13 18 32 97 326 21 20 92 104 16
Minnesota lands.  Sundries— Heating	200 00 1,000 00 31 09 200 00 1,800 00 1800 00 268 00 110 79 59 47 36 18 116 72 1,465 50 180 00	602 00 700 00	116 72 1,458 25 180 00 15 00	97 74 872 20 31 09 1, 192 51 499 05 96 02 60 50 721 69 7 25

# Paper B-State Appropriations.

August 31, 1894.	Received.	Expended.	Balance.	Assigned.
Closed out	\$57, 701 14	857, 701 14		
Cabinets	1.000 00			894 39
Furnishing and heating Natural History Hall	6,000 00		688 56	688 56
Boilers and coal house			6,500 00	
Engineering building	160,000 00		67,034 22	67,034 22
Applied mechanics	472 00		472 00	
Civil engineering	233 00		202 91	202 91
Psychology	200 00	21 53	178 47	178 47
Botany		164 85	285 15	285 15
Library	5,500 00	4,578 37	921 63	921 63
Zoölogy	1,200 00	49 72	1,150 28	1,150 28
Architectural department	325 09		173 40	173 40
Geology	500 00	44 05	455 95	455 95
GeologyChemical Laboratory ventilation	700 00	667 05	32 95	32 95
Buildings and grounds	700 00	666 60	33 40	33 40
Mechanical engineering	4,000 00	1.193 74	2,806 26	2,806 26
Electrical engineering	5,550 00	5,123 65	426 35	426 35
Salaries for instruction	7,558 17	7,558 17		
Pharmacy desks	350 00			
Chemical laboratory	500 00	500 00		
Unassigned	36, 961 88		36,961 83	
Total	\$296, 401 14	\$177,785 35	\$118,615 79	\$81,653 96
Illinois State Laboratory of Natural History	\$15,313 26	\$9,014 22	\$6,299 04	\$2,805 04

### PAPER C-UNITED STATES FUND.

	Received.	Expended.	Balance.	Assigned.
Year ending June 30, 1893.				
Before reported on	250 00	153 55	\$96 45 5 23	\$96 45 5 23
Total	\$18,000 00	\$17,898 32	<b>\$101 68</b>	\$101 68
Year ending June 30, 1894.  Before reported on. Testing laboratory. Geology. Zoology Civil engineering. Mechanical engineering Architecture.	1,700 00 300 00 1,000 00 950 00	1,671 47 195 34 995 19 949 88 3,093 13	\$28 53 104 66 4 81 12	104 66 4 81 12
Total	\$19,000 00	\$18,755 18	<b>\$244</b> 82	\$244 82
Year ending June 30, 1895.				
Unassigned	\$20,000 00		\$20,000 00	

# The Board is requested to make the following assignments:

# Respectfully submitted,

S. W. SHATTUCK,

Business Agent.

C. G. Hopkins's bill of expenses incurred in attending the meeting of the Board, at the request of the committee appointed to secure a chemist for the Experiment Station, was ordered paid from the Experiment Station funds. The amount was \$59.69.

The Board adjourned.

N. W. GRAHAM,

W. L. PILLSBURY,

President.

Secretary.

# MEETING OF NOVEMBER 15, 1894.

A special meeting of the Board of Trustees of the University of Illinois was held in the University Parlor, in Urbana, at 9 o'clock, Thursday, November 15, 1894.

The following call was issued by the secretary:

"By order of the President, Mr. N. W. Graham, there will be a meeting of the Board of Trustees of the University of Illinois at 9 o'clock a. m., Thursday, November 15, 1894, in the University Parlor. Urbana, to consider such business as may be duly presented."

There being no quorum present, the Board adjourned to meet at 8 a. m. Friday.

In the afternoon Andrew Sloan Draper, LL. D., was inaugurated as President of the University of Illinois. And in the evening of the same day Engineering Hall was dedicated. The following was the program:

### PROGRAM OF INAUGURATION.

Music—''Abide With Me,'' (Donnizetti)—University Orchestra. Prayer—Rev. C. N. Wilder, D. D. Music—''Profumi Orientali,'' (Bellenghi)—University Mandolin and Guitar

Addresses (Five Minutes)—

For the Students—Peter Junkersfeld, President Senior Glass. For the Alumni—Hon. Charles G. Neely, Class of 1880, President Alumni Association.

For the Faculty—Professor Samuel W. Shattuck.

For the Faculty—Professor Samuel W. Shattuck.

Presentation of Governor Altgeld as presiding officer, by Hon. Nelson W. Graham, President Board of Trustees.

Music—"Liberty Bell," (Sousa)—University Military Band.

Delivery of Certificate of Election, Charter, Keys, etc., to the President—
Thomas J. Burrill, Dean of General Faculty.

Inaugural Address—President Andrew Sloan Draper, LL. D.

Music—"University Song"—University Glee Club. (Words by Carnahan,

'92. Music by Steele, '96.)

"Crusader," (Sousa)—University Military Band.

#### PROGRAM OF DEDICATION.

Overture—"World's Peace Jubilee," (Beyer)—University Military Band. Introductory Remarks—President Draper.

Music—"On Deck Polka" (Kral)—University Mandolin Club.

Address—President Charles Kendall Adams, LL. D., University of Wisconsin.

Music—"Down by the Riverside"—University Glee Club.

Address—General William Sooy Smith, of Chicago.

Overture—(Theo. Mozas)—University Orchestra.
BENEDICTION.

President's Reception, 9:00 p. m.—Engineering Hall.

Student's Reception at Engineering Hall, Friday, November 16, at 8:00 p. m.

# SESSION OF FRIDAY.

The Board met pursuant to adjournment, the following members being present:

Messrs. Armstrong, Bullard, Graham, McKay, McLean, Morrison, Raab, and Raymond; absent, Governor Altgeld, Messrs. Bryant, Gore, and Morgan.

The special committee appointed at the meeting of August 1st to convey to Mr. Bryant the congratulations and good wishes of the Board, reported that it had sent to him the following communication:

Urbana, Ill., August 1, 1894.

On the occasion of acquiring the age of eighty-seven years his fellow members of the Board of Trustees of the University of Illinois wish to extend to the Honorable John H. Bryant their congratulations. We note with pleasure and gratitude that this ripe age has been reached in health and in vigor of mind; that the heart is warm, the mind clear, and that the rich experiences of life, which have accumulated wisdom in him, are still the enjoyment of friends and as sociates. We regard him as a noble example of American manhood, the product of our American institutions, a ripe scholar, an earnest student, a royal character, a true patriot and loyal citizen, and a noble loving friend. We hope that the coming years may bear lightly upon him and that his great store of wisdom may long be a help to his fellow men. It is such lives of men that inspire us to labor so that footprints may be left on the sands of time, not to be swiftly washed away, but changed to enduring stone, that may point others to lives of honor and integrity, filled with noble deeds. By order of the Board,

NELSON W. GRAHAM, S. A. BULLARD, Committee.

On motion of Mr. Raab the action of the committee was approved.

A communication was received from Professor S. W. Parr stating that the Christian associations were willing to sell to the University a strip of land with forty feet front on the west side of the tract of land adjoining the Arboretum on the east and owned by them. The communication was referred to the Finance Committee.

The Business Agent, Professor S. W. Shattuck, made the following report, which was referred to the Finance Committee:

#### BUSINESS AGENT'S REPORT.

URBANA, ILL., Nov. 15, 1894.

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

SIR: I have the honor to hand you herewith, a communication from A. J. Chesbro, Superintendent of the Champaign and Urbana Gas Co., in answer to the action of the Board at its last meeting. Also one from the Champaign Electric Lighting and Power Co.

I have no definite knowledge of this matter.

The Board is requested to make the following appropriations at this time:

Board expense, additional Dedication of Engineering Hall and inauguration of President Draper Grading around Engineering Hall Shop practice classes, mechanical and architectural Moving into new building South farm buildings, etc	300 00 300 00 200 00
Total	\$1,500 00

## Respectfully submitted,

S. W. SHATTUCK,

Business Agent.

The Finance Committee made the following report:

To the Board of Trustees of the University of Illinois.

Gentlemen:—Your Finance Committee respectfully requests appropriations as follows:

Board expenses \$200  Expenses of the inauguration of President Draper and dedication of Engineering Hall \$300  Grading around Engineering Hall \$200  Mechanical and architectural departments, for shop practice \$300  Moving to Engineering Hall \$300  South farm buildings, etc \$200	00 00 00 00
--	----------------------

The committee also recommends that assignments be made of the funds of the State Laboratory of Natural History, as follows:

For the quarter ending December 31, 1894— For field work, office, and incidental expenses For salaries and assistance	\$375 00 875 00
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### Respectfully submitted.

J. E. ARMSTRONG, ALEX. MCLEAN, F. M. MCKAY, Finance Committee.

The Secretary stated that Brigadier-General D. W. Flagler, Chief of Ordnance, United States Army, was ready to issue to the University "two 3.2-inch B. L. steel field guns with carriages, etc., in lieu of the two muzzle-loading guns, etc., now on hand." But that in order to secure these it was necessary that the University should give bond, with two sufficient securities, in the sum of \$9,799.72, in order to insure to the War Department the proper care and the return of these guns and equipments.

The Board adopted the following resolution:

WHEREAS, Brigadier-General D. W. Flagler, Chief of Ordnance of the United States Army, has informed the President of this University that he is ready to issue to the University two 3.2-inch B. L. steel field guns with carriages, etc., in lieu of the two muzzle-loading guns, etc., now on hand, and

WHEREAS, The University will be required, if this change is made, to furnish a bond in the sum of \$9,799.72; therefore be it

Resolved, That the President of the University be authorized to effect the exchange of field guns, and that the President and Secretary of this Board be authorized to execute, in the name of the University, a bond for the above named amount.

The communication received from the Urbana and Champaign Electric Street Railway Company, with reference to a contract to be made with the Champaign Electric Lighting and Power Company, for furnishing electric power to the University, was referred to the Executive Committee and the Business Agent to report upon at the next meeting of the Board.

The bill of the Urbana and Champaign Electric Street Railway Company for power, from July 1 to September 1, 1894, amounting to \$41.20, was ordered paid.

A communication received from Dr. Bayard Holmes, of Chicago, was referred to the Governor, President Draper, and Mr. Armstrong for consideration, to be reported upon as soon as practicable.

The Committee on Buildings and Grounds was directed to have a conference with the mayor and city council of the city of Champaign with regard to the sewage in Boneyard Creek, and report at the next meeting of the Board.

Professor Forbes's request to have Mr. W. G. Johnson, assistant entomologist of the Laboratory of Natural History, take charge of the students' laboratory work in entomology, during the ensuing winter and spring terms, and that Mr. Johnson be placed upon the corps of instructors of the University, but without additional salary, was granted.

A communication from Professor S. W. Parr with regard to improvements in the Chemical Laboratory, was presented by President Draper and referred to the legislative committee.

The papers presented with regard to electric lighting were referred to the Finance Committee.

President Draper also presented a communication from the editor and business manager of the *Junior Annual* for 1894, asking for an appropriation. Upon motion of Mr. McLean the Board appropriated \$110.00 to this purpose, but stipulated that the University should have a page of advertising in the *Annual*.

A communication was received from Mr. F. S. Olver, of Champaign, asking for the use of Military Hall for one concert by the Theodore Thomas orchestra, of Chicago. This request was endorsed by many citizens of Champaign and Urbana. It was voted to permit the Hall to be used for this purpose with the stipulation that the University should be at no further expense than that of heating and lighting the hall, provided that Mr. Olver should arrange with the Secretary of this Board to have the concert during term time and for the admission to desirable seats in the Hall of all persons connected with the University at not more than 50 cents a seat.

President Draper presented a statement, prepared by Mr. Esty, instructor in electrical engineering, with regard to installing a system of telephones. The cost of a system of fifteen telephones—overhead construction—was estimated at:

	1
Poles	\$150:00
Labor	
Wire	35 00
Telephone and switch-board	275 00
Total	\$490 00
	*****

This matter was referred to the Executive Committee and Business Agent with power to act.

A request from Professor Shea for an appropriation was referred to the Finance Committee.

Upon request of Professor I. O. Baker, Chairman of the Committee of the Faculty on Admission and Accredited Schools, \$120.00 was appropriated for the printing of 500 certificates to be issued to accredited schools.

A communication from the Union Mfg. Company suggesting that the water main now terminating in the University yard, be extended to connect with the water main on Green Street, at the corner of Mathews avenue, was referred to the Committee on Buildings and Grounds, and the President, with power to act.

Professor Burrill's bill of \$56.75. expenses incurred in attending the recent meeting of the Association of the American Agricultural Colleges and Experiment Stations. at Washington, D. C., was ordered paid, upon the recommendation of the Finance Committee.

On motion of Mr. Bullard, \$400.00 was appropriated for furnishing Engineering Hall with hose and reels for fire protection.

President Draper reported that he and Professor Burrill, who had been appointed a special committee to secure a chemist for the Experiment Station, recommended the appointment of Mr. Cyril G. Hopkins, of Brookings. S. D., to this position, at a salary of \$1,50000 a year; term of service to begin as soon as Mr. Hopkins should enter upon his duties.

The recommendation of the committee was approved.

The matter of appointment of a professor of agriculture—after cunsiderable discussion—was deferred to the next meeting of the Board.

President Draper was authorized to employ, for the winter and spring terms, assistants in the Preparatory School, at an expense of \$60.00 per month.

The matter of advertising the short term in agriculture, and of securing assistance that might be needed therefor, was referred to President Draper with power to act.

The Board adjourned.

W. L. PILLSBURY,

N. W. GRAHAM,

Secretary.

President.

# MEETING OF DECEMBER 5, 1894.

The Board of Trustees of the University of Illinois met in the University parlor, Urbana, Ill., at 3 o'clock p. m., Wednesday, December 5, 1894. There were present Messrs. Bullard, Armstrong, McLean, Morrison, Raab and Raymond. There being no quorum present, the time was spent in an informal discussion of University affairs.

At 4 o'clock the Board took a recess to attend the University convocation. After the convocation the Board adjourned to meet at the Doane House, in Champaign, at 8 o'clock p. m.

## EVENING SESSION.

The Board met pursuant to adjournment, the same members being present as in the afternoon. In the absence of President Graham, who had missed his train, Mr. Morrison was called to the chair.

The following committee report was received, during the consideration of which, Mr. Graham arrived:

Urbana, Ill., December 5, 1894.

To the Board of Trustees of the University of Illinois:

Gentlemen:—Your committee appointed to consider the matter of bringing a medical college in Chicago, or elsewhere, into relations with the University, reports that it has carefully considered the subject in its different bearings, and it seems manifest that the interests of the University, of higher professional education in Illinois, and of medical practice, would be promoted by such a step. After investigating various medical institutions in Chicago, we report that the one with which the prospects of consumating an arrangement seem most promising, is the College of Physicians and Surgeons, of Chicago, located at the corner of Harrison and Honore streets, which is one of the three most prominent medical Colleges in Chicago. The other two of the three are already affiliated with other universities.

We learn that the College of Physicians and Surgeons looks with favor upon an alliance with this University. Dr. W. E. Quine, President of the institution, is present at this meeting for the purpose of considering the matter, and we recommend that the Board advise with him in relation thereto.

Respectfully submitted,

J. E. ARMSTRONG, A. S. DRAPER,

Committee.

The report of the committee was adopted on motion of Mr. McLean.

Dr. Quine was invited to meet the Board and discuss the matter, and he did so. After a very full interchange of views, Dr. Quine presented the following communication to the Board:

Urbana, Ill., December 5, 1894.

The undersigned having been unofficially authorized by a majority of the Board of Directors of the College of Physicians and Surgeons, of Chicago, to enter into negotiations with the Trustees of the University of Illinois with a view to securing the permanent union of the two institutions named, hereby proposes and agrees to sell the property and good will of the College of Physicians and Surgeons, of Chicago, to the Trustees of the University of Illinois, for a price not exceeding one hundred and sixty thousand dollars, to be agreed upon by the parties in interest or determined by a committee on appraisal, appointed on an equitable basis of representation.

WM. E. QUINE.

After further consideration, the following resolution, offered by Mr. Armstrong, was adopted:

Resolved, That the Board favors the absorption of the College of Physicians and Surgeons, of Chicago, by the University of Illinois; that the Treasurer and the Business Agent of the University be a committee with those already appointed for the purpose of determining and reporting the fair market value of the College of Physicians and Surgeons, and that an application be made to the legislature for appropriations to pay for the same, provided that the Board of Directors of the College of Physicians and Surgeons at an early day take formal action committing itself as to the proposition and agree to favor no other alliance pending the termination of the application to the legislature.

The minutes of the meetings of September 25th and November 15th were approved, as presented by the Secretary.

President Draper stated that he had no formal report to make, but that he had several communications which, he would present, making a statement with regard to each.

He stated that, with Dr. Burrill, he had made diligent inquiry with regard to the qualifications of all men known to be available for the position of professor of agriculture, and recommended that Mr. Eugene Davenport, of Woodland, Mich., be appointed Dean of the College of Agriculture and a professor therein; that he also be appointed agriculturist of the Agricultural Experiment Station and a member of its Board of Direction, and that his salary be \$2,000.00 a year, one-half to be paid from the funds of the Station, and the use of dwelling house on the Station farm, the salary to increase \$100.00 a year until it reach \$2,500.00, of which the house shall be considered \$200.00.

The report of the committee was adopted on motion of Mr. McLean.

It was voted to publish the exercises of inauguration and dedication day, and \$300.00 was appropriated to defray the expenses of publication.

The Board adjourned to meet at 8 o'clock Thursday morning.

## SESSION OF THURSDAY.

After the Board had met pursuant to adjournment, Professors Ricker, Baker, Talbot, Shea, and Breckenridge were heard with regard to the necessity of obtaining from the legislature appropriations for the College of Engineering.

The Finance Committee made the following report:

Urbana, Illinois, December 6, 1894.

To the Board of Trustees of the University of Illinois.

Gentlemen: At a meeting of this Board held in November last, the matter of an appropriation asked for by Professor Shea was referred to your Committee on Finance. The Committee respectfully reports that the request has been investigated, and recommends that the sum of \$1,000.00 be appropriated from the United States fund for the department of physics and electrical engineering.

Respectfully submitted,

ALEX. McLean, J. E. Armstrong,

Committee on Finance

The report of the Committee was adopted.

Urbana, Illinois, December 6, 1894.

To the Board of Trustees of the University of Illinois.

GENTLEMEN: Your Finance Committee reports that it has examined the vouchers on which University warrants Nos. 176 to 1,650, inclusive, have been issued, and finds the same correct and properly receipted.

The Committee has also examined the vouchers on which Experiment Station warrants, Nos. 1 to 80, inclusive, were issued, and has found the same correct and properly receipted.

The Committee recommends the payment of \$10.66 to Dr. W. E. Quine on account of expenses incurred by him in attending this meeting of the Board upon invitation of the committee on medical college.

Respectfully submitted,

ALEX. McLean, J. E. Armstrong,

Committee on Finance.

The report of the committee was approved and the appropriation was made as recommended.

Urbana, Illinois, December 6, 1894.

To the Board of Trustees of the University of Illinois.

Gentlemen: The Finance Committee begs leave to recommend that the following appropriations be made for the quarter ending March 1, 1895, amounting in the aggregate to \$35,706.77:

undry balances			\$2,842 400
stimates—Board expensesalaries for instruction and President			99 647
ajaries for instruction and President			23,844
alaries for services			2,795
uildings and grounds			200
nel and lights		1	3 000
ationery and printing	. (		400
aboratories			400
ibrary and apparatus			50
ilitary and apparatus			50
ilitary department			
ecnanical, architectural, and horticultural departments			600
echanical, architectural, and horticultural departments cidentals			200
ater supply			125
arniture and fixtures		1	200
acting annaratus			300
eating apparatusop practice classes			. 90
top practice classes			300

The Committee also recommends that assignments be made of the funds of the State Laboratory of Natural History, as follows:

For the quarter ending December 31, 1894—

For field work, office, and incidental expenses-	\$375
For salaries and assistance.	875

## Respectfully submitted.

ALEX. McLean, J. E. Armstrong.,

Finance Committee.

Urbana, Ill., December 6, 1894.

To the Board of Trustees of the University of Illinois.

GENTLEMEN: Your Committee on Finance recommends that the Treasurer be instructed to transfer to the endowment fund \$5,000 of the Kankakee County bonds held as part of the general fund, reimbursing the general fund therefor by transferring \$5,000 cash from the endowment fund to the general fund.

Respectfully submitted,

ALEX McLEAN.
J. E. ARMSTRONG.

Finance Committee.

URBANA, IEE., December 6, 1894.

To the Board of Trustees of the University of Illinois.

GENTLEMEN: Your Finance Committee reports that it has examined the report of the Treasurer, Mr. C. W. Spalding, which report is made a part of this report, and finds the following balances on hand Nov. 30, 1894:

State appropriations—		
State appropriations	400.000	
Current fund	\$33,838 -	41
Engineering Hall	44 964 6	66
Digital in its in the second of the second o	41,001	80
Other appropriations.	8,775	26
General fund.	1 996 9	90
General rund	1,000	-0
U. S. fund	16,463	92
Endowment fund	36, 219	50
Tandowment tund	50, 210	30
U. S. Experiment station fund	2.8864	55
Experiment Station, farm account.	700	10
Experiment Station, farm account	190	10

Your Committee recommends that the Treasurer be requested to invest immediately of the above balance of the endowment fund not less than \$20,000 in good and sufficient lawful bonds, and that any premium necessary to the purchase of said bonds be paid out of current funds not otherwise appropriated; provided, however, that the bonds shall not cost such a sum as to net less than 4 per cent. interest.

Respectfully submitted,

ALEX McLean, J. E. Armstrong,

Finance Committee.

#### TREASURER'S REPORT.

CHARLES W. SPALDING, TREASURER, IN ACCOUNT WITH THE UNIVERSITY OF ILLINOIS, NOVEMBER 30, 1894.

1894.	Dr.		
	Dr.		. · · · · · · · · · · · · · · · · · · ·
September 1	Fo balance	62 750 00	\$185,688 5
$\begin{array}{ccc} \ddots & 5 \\ 28 \end{array}$	farm fund account	\$3,750 00 209 64	100
October 1	'' Jasper county coupons	750 00	
10	"Experiment Station warrant	3,750 00	
'' 13	"farm fund account	10 00	
15	"from S. W. Shattuck, on general fund	1,172 84	
'' 16		3, 127 29	
26	44 44 44 44	2,673 59	
20		819 29	
26	on farm account	160 83	
ovember 5	Cass county coupons	325 00	
:: 7	Sangamon county bond, No. 6	600 00 42 00	
24	"Sangamon county coupon	5,000 00	
24	Douglas county coupons	600 00	1.0
30	" on farm account	105 64	
'' 30	" from S. W. Shattuck, on general fund	2, 186 78	
	Interest on endowment fund to date at 4 per cent	314 33	
	Interest on all other funds to date at 2 1-2 per cent	462 52	
			\$26,059
		11.4	\$211,748
		1.140	0211, 127
1894.	Cr.	:	
November 30	By amount paid out of general fund as per list of war-		
44 00	rants attached hereto	\$12,739 01	
30	By amount paid out of state appropriations as per list of		
44 00	warrants attached thereto	45,244 56	
30	By amount paid out of State Laboratory of Natural His-	4 040 07	
44 90	tory fund, as per list of warrants attached hereto	1,219 35	
30		4, 134 59	
** 30	attached hereto	4, 104 33	
. 00	as per list of warrants attached hereto	3,355 28	
'' 30	By amount paid out of U.S. Experiment Station farm	0,000 =0	
	account, as per list of warrants attached hereto	20 82	
			\$66,713
	Balances;		
	State appropriations—	enn one na	
. 1	Current fund	\$33,838 31	
	Engineering HallOther appropriations	44,064 66 8,775 26	
	General fund	1,996 29	
	U. S. fund	16, 463 92	
	Endowment fund	36, 219 50	
	U. S. Experiment Station fund	2,886 55	1
1	U. S. Experiment Station farm account	790 18	
			\$145,034
	·		\$211,748

The following resolution, offered by Mr. Armstrong was adopted:

Resolved, That the Governor, President Draper, and the Chairman of the Finance Committee constitute a committee to prepare and present to the legislature at its next session a bill providing for a change in the law of the state regarding the investment of endowment funds held by the University, and especially as to the kind of securities which may be handled.

President Draper stated that the copy for the catalogue would be prepared at as early a date as possible, certainly before the next regular meeting of the Board. Some changes will be found necessary, and he asked that these might be made upon the approval of the Committee on Instruction, and it was so ordered.

President Draper presented the report of the Agricultural Experiment Station.

## AGRICULTURAL EXPERIMENT STATION.

# Dr. A. S. Draper, President University of Illinois,

DEAR SIR: I beg leave to submit herewith the usual quarterly report of the Agricultural Experiment Station of the University of Illinois.

The Board of Direction of the Experiment Station at its meeting yesterday directed me to ask leave of you to undertake the following experiments:

- 1. To test the digestibility of some foods for cattle.
- 2. To study methods of ripening cream for its better preservation and for the better keeping qualities of butter.

In other respects the work of the Experiment Station will be continued during the next quarter along the lines already laid down.

The papers submitted herewith are as follows:

Paper A is a statement of expenditures of the Station for the quarter ending Sept. 30, 1894.

Paper B is a statement of expenditures for the current quarter up to Nov. 30, 1894.

Paper C is a list of warrants issued during the quarter ending Sept. 20, 1894, No. 1 to 80, inclusive, and is accompanied with vouchers for the same.

 $Paper\ D$  is an estimate af appropriations needed to carry on the work of the Station during the current and next quarters.

Paper A-Expenditures for Quarter ending September 30, 1894.

Board expenses Books and publications Bulletins	\$13 8
Books and publications	23 2
Bulletins	213 2
ruel and lights	57 €
ncidentals	
rel and lights ncidentals Printing, stationery, and postage salaries Seeds and trees	5 (
Salaries	1,646
Seeds and trees	7 7
Pools and sunnies	222 6
Cools and supplies. Vages	1, 140
Cundw ovnoviments	1, 140 €
Sundry experiments— Chinch bug experiment	232 2
Innen bug experiment	202 2
m-4-1	60 CEO 1
Total	\$3,652

Paper B-Appropriations, Expenditures and Balances for Quarter ending December 31, 1894.

	Appropriated.	Expended.	Balances.
Building and repairs	\$25 00		\$25 00
Board expenses			50 00
Books and publications	275 00		63 86
Botanical apparatus			10 00
Bulletins	1, 100 00		647 36
Chemical apparatus	25 00		
Fuel and lights			100 00
Incidentals	15 00		
Printing, stationery and postage	15 00		10 89
Salaries	1,500 00		613 30
Seeds and trees	30 00		6 45
Tools and supplies	100 00	66 30	33 70
Wages	550 00		
Sundry experiments—	000 00	000 00	
Testing durability of timber	50.00		50 00
Expenses of delegate to meeting of Association of Ameri-	0.0 00		
can Agricultural College and Experiment Stations	50 00		50 00
Total	\$3,895 00	\$2,220 11	\$1,684 22

#### PAPER D-ESTIMATES.

Quarter ending December 31, 1894.		
From general fund— For chemical apparatus and supplies		\$25 06
From farm fund— For tools and supplies. For wages	\$100 00 100 00	200 00
Quarter ending March 31, 1895.	-	
From general fund— Board expense. Buildings and repairs. Books and publications. Bulletins. Chemical apparatus and supplies Fertilizers. Fuel and lights Incidentals Printing, stationery, and postage Salaries. Seeds and trees Tools and supplies. Wages Investigation with regard to irrigation	\$40 00 40 00 50 00 700 00 25 00 25 00 25 00 25 00 70 00 250 00 250 00 250 00 250 00 250 00	\$4,060 <b>0</b> 0
From farm fund— Wages Fencing Purchase of stock	\$250 00 400 00 250 00	\$900 00

The Board of Trustees is requested to make these appropriations. It is also requested to authorize the Board of Direction of the Experiment Station to order, upon satisfactory bids, chemical apparatus and supplies to be imported, not exceeding in amount \$225.00, and botanical apparatus and supplies not exceeding in amount \$50.00.

Respectfully submitted,

T. J. Burrill,

President Board of Direction.

The requests of the Board of Direction of the Experiment Station, as presented by Dr. Burrill, were granted and appropriations of Experiment Station funds were made as asked in the report.

President Draper submitted the following communication from the editor and business manager of the "Junior Annual."

University of Illinois, December 6, 1894.

To the Honorable Board of Trustees of the University of Illinois.

Gentlemen:—Through President Draper we have learned that you have granted our request, and appropriated one hundred and ten dollars for the "Junior Annual of '96." Permit us to thank you heartily for the same. We promise you a book in keeping with the honor of the institution. Thanking you for your prompt and gracious action, we remain,

Most respectfully yours,

FRED W. HONENS.

ROBERT K. PORTER,

Business Manager..

Editor.

# RESIDENCES OF PROFESSORS ON UNIVERSITY LANDS.

A communication was presented from the members of the Faculty relative to the Board of Trustees granting the use of land belonging to the University for the erection of houses to be used by instructors of the University.

The Committee on Buildings and Grounds, to which had been referred a similar paper, previously prepared, submitted the following report:

URBANA, ILL., December 6, 1894.

To the Board of Trustees of the University of Illinois.

Gentlemen: Your Committee on Buildings and Grounds reports as follows with regard to an investigation, made by your direction, into the feasibility of permitting members of the University Faculty to erect residences upon University grounds. The committee has consulted the Attorney General with reference to the matter, and presents herewith a letter received in reply:

Springfield, Ill., December 4, 1894.

Hon. S. A. Bullard, Springfield, Ill.,

DEAR SIR: Referring to the question which you submitted to me the other day, I would say that I find, under section seven of the act for the organization and maintenance of the University, that the Trustees have power to provide buildings, apparatus, and conveniences; to fix the rates for tuition; to appoint such professors and instructors, and establish and provide for the management of such model farms, model art and other departments, and professorships as may be required to teach, in the most thorough manner, such branches of learning as are related to agriculture and the mechanic arts, and military tactics without excluding other scientific and classical studies.

Are the Trustees authorized to let, for a nominal rent, to a person who is a professor in the University, a lot of ground for the purpose of enabling him to erect a dwelling to be occupied by him as such, as long as he remains a professor in the University, and when he ceases to be such, purchase the dwelling at a certain appraised value?

If the law quoted above is all there is upon the subject, I am inclined to the opinion that the authority is not clearly enough conferred to warrant such an action on the part of of the Trustees with safety.

Questions of public policy I have nothing to do with. It is for me to construe the law, and in all these matters where authority is not clearly given, to proceed with caution. The legislature, however, has power to confer such authority upon the Trustees in express terms.

Yours truly.

M. L. NEWELL,

M. T. MOLONEY,

Assistant.

Attorney General.

Your committee recommends that no attempt be made at present to pursue the subject further. Your committee believes that some method through private enterprise may be made practicable in handling the matter, but has not given that phase of the subject full consideration.

Respectfully submitted,

S. A. BULLARD, N. B. MORRISON,

Committee on Buildings and Grounds.

The report of the Committee was received for record.

On motion of Mr. Armstrong, the Committee on Buildings and Grounds, together with President Draper, was instructed to investi-

gate this subject further, and to present to the Board at its next meeting such a plan as it might find practicable by which residences for professors in the University may be erected on University grounds.

President Draper presented the following communication from the Faculty of the University with regard to the summer school:

## SUMMER SCHOOL.

URBANA, ILL., December 5, 1894.

To the Honorable Board of Trustees of the University of Illinois.

GENTLEMEN: In behalf of the Faculty of the University, the Committee of Administration respectfully presents to the Trustees the following recommendations relating to the summer school. These recommendations have received the approval of the Faculty.

The list of subjects recommended for this session is as follows: Pedagogy and psychology, political science (including history), botany, zoölogy and physiology, chemistry, mathematics, English, physical culture, manual training (wood work), and manual training (iron work).

Concerning subjects not of University grade, we advise that announcement be made in our preliminary circular that recognized University tutors will organize private classes in preparatory subjects at a fixed fee and on certain conditions, to be hereafter determined in consultation with those proposing to undertake the organization of such classes. The fees in this case will go directly to the instructor, who will not receive other compensation.

The director of the school should be empowered to make arrangements for courses of lectures additional to the regular courses of study, to be given usually by members of the Faculty of the University at a fixed compensation, in number not less than two each week nor more than one a day.

We recommend that the regular session at the University begin Monday, June 24th, but that an opportunity be offered those intending to pursue the subjects of zoölogy, botany, or entomology, for ten days' experience in field work and laboratory study of living specimens, at the University Biological Station, in Havana. To this end the Director of the Station undertakes to make the necessary provision of room, tables, microscopic equipment and other apparatus, and to open the Station to such students on June 13th.

We are of the opinion that a four weeks' session should be provided for and that a tuition fee of \$10 should be required for the entire session, with some suitable arrangement for a rebate to those who give notice in advance that they cannot remain for the full time.

We think that University students who wish to make up back work should be required to pay a double fee unless a class of at least five can be formed in the study asked for; and that students should not be permitted to study for University credits in advance, except in the subjects which are listed in the catalogue as fractional courses, and then only on payment of a double fee unless a class of five can be formed.

The Faculty of the summer school should consist of the director and the smallest number of instructors sufficient suitably to provide for the various departments, with the understanding that departments shall be combined under one instructor whenever practicable.

The corps of instruction should receive pay at the rate of one-tenth the usual annual salary of each, with the exception of the director, who should receive twice this sum. We make the latter suggestion on account of the time consumed and the labor and responsibility involved in preparing a scheme of work, in writing and publishing circulars and announcements, in conducting the necessary correspondence, and in the organization and general management of the school itself, all of which we think should be left substantially in the hands of the director.

4 U. I.

We have deemed it wise to estimate the probable income of the school, first, from attendance, and second, from University appropriations. The first of these items we place at \$500 and the second at \$1,500, making a total of of \$2,000 as the estimated income of the school for the next session. Subtracting from this \$200 for miscellaneous expenses and \$400 for the salary of the director, we have left \$1,400 for salaries of the corps of instruction. We find that the average salary for the session last year was \$150 for each instructor, and that the \$1,400 presumed to be available would enable us to provide this year a corps of ten instructors in addition to the director.

We therefore recommend that your honorable body appropriate \$1,500 for the next session of the summer school.

Respectfully submitted,

DAVID KINLEY.

Secretary of Committee of Administration.

On motion of Mr. Armstrong, it was voted that an appropriation of \$1,000 be made to defray—together with the fees received, which were also appropriated—the expenses of the summer school; provided that no instructor in the summer school be paid for his services more than one month's salary, according to the pay-rolls of the current year, except that the director be paid for his services, prior to the opening of the school, \$100.

Professor Kinley was chosen director of the summer school on motion of Mr. Armstrong.

George Frederickson was recommended by the Faculty to receive the degree of Bachelor of Science, and authority to confer this degree was given by the Board of Trustees.

Upon the request of Dr. Burrill and Professor Palmer, authority was given to order, upon satisfactory bids, apparatus and supplies to be imported for the botanical laboratory, to the amount of \$200, and for the chemical laboratory, to the amount of \$1,500; \$1,000 of this latter sum to be paid from the fees of the chemical department.

Thirty dollars, in addition to the \$70 already appropriated, was appropriated for the pay of the pianist in the women's gymnasium for the current year.

For the purchase of apparatus in the men's gymnasium, \$100 was appropriated.

Mr. Raab, who was at this time obliged to go, said a few words regarding his connection with the Board of Trustees of the University during his term of office as Superintendent of Public Instruction. Messrs. Graham, McLean, and Morrison were appointed to draft resolutions expressive of the esteem in which Mr. Raab's services are held by the members of the Board.

The committee appointed to consider what appropriations should be asked of the legislature, made the following report:

#### APPROPRIATIONS.

URBANA, ILL., December 5, 1894.

To the Board of Irustees of the University of Illinois.

Gentlemen:—The committee on applications to the biennial session of the legis'ature, which is about to convene, reports that it has carefully investi-

gated the requests of the different departments for additional help, and has endeavored to discern the imperative needs of the University and to see in what directions funds for its extension and upbuilding should be applied to secure the largest future results. While the requests from the different departments show an intelligent grasp of their work and commendable enthusiasm in its prosecution, we have felt it necessary to ignore very many requests altogether, and to reduce materially the sums asked for in others, when we come to consider all the interests of the University together and to lay plans for its wise and harmonious future development.

If the University is to continue the course of expansion and growth upon which it has entered, and gain the position which the State University of Illinois should occupy among the universities of the neighboring states, and do what it well may in the educational work of Illinois, we are of the opinion that it would be wise for the legislature to make appropriations for the following additions to the plant. In most cases the additions are vital to meet the demands which the increasing number of students and the developing interests of the State make upon the University; in all cases they are highly desirable. The sums asked for are arrived at by careful inquiry and are the result of the best judgment we have. They are as moderate in amount as we dare suggest when we remember our obligations to the future and that the State can no longer afford to erect structures which are not impressive in appearance, suited to the uses of modern university life, and constructed of such materials and in such ways as will endure:

Library and Audience Hall	\$250,000 00
Museum addition to Natural History Hall.	80,000 00
Astronomical Observatory	15,000 00
President's House	20,000,00
Central heating, lighting, and power plant. Extending the equipment for College of Engineering.	55,000 00
Extending the equipment for College of Engineering	80,000 00
Apparatus and appliances	6,000 00
Increase of scientific collections and cabinets	4,000 00
Improvements in the Chemical Laboratory.	5,000 00
Furnishing Engineering Hall	20,000 00
Materials for shop practice	3,000 00
Dairy building	40,000 00
Laboratory for vegetable physiology	2,500 00
Paving street and laying side-walks Fire protection	9,300 00
Fire protection	3,000 00
Additions to libraries	20,000 00
Taxes on Minnesota lands	3,200 00
For a small temporary building and equipment for work of the Biological Ex-	
periment Station on the Illinois River	5,000 00
m + 1	*****
Total	\$621,000 00

The operating expenses of the University have materially advanced during the last two years. They now reach the sum of \$56,000 annually, over fixed revenues, as nearly as can be estimated. Taking into consideration the continually increasing difficulty in maintaining former rates of interest on investments, the added cost of maintenance of plant as new buildings are added, and the imperative necessity of offering additional courses and improving the instruction, it will at least be necessary for the legislature to appropriate the sum of \$80,000 annually, for ordinary running expenses; and for half of the operating expenses of the Biological Experiment Station, \$2,500, the other half being borne by the State Laboratory of Natural History.

Respectfully submitted.

S. A. BULLARD, N. B. MORRISON,

Committee.

The report of the committee was approved.

On motion of Mr. Morrison, \$300 was appropriated for the purchase of additional cases for the geological department.

On motion of Mr. McLean, \$130 was appropriated for the purchase of a typewriter and cabinet for the use of the College of Engineering,

and the Dean of the College was authorized to employ a competent stenographer and typewriter to take charge of the correspondence and otherwise assist the heads of the departments in the College of Enneering, after January 1st, next.

The employment of a foundryman in the mechanical engineering machine shop, after January 1st, at \$50 a month, was authorized.

The Business Agent made the following report, which was referred to the Finance Committee:

#### BUSINESS AGENT'S REPORT.

University of Illinois, December 5, 1894.

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

SIR: I have the honor to hand you herewith the following financial statements for the three months ending December 1, 1894.

Paper A, a statement of the current appropriation for the three months.

Paper B, a showing of the State appropriations, November 30, 1894.

Paper C, the same for the U.S. fund.

Paper D, a list of vouchers presented for audit.

Paper E, estimates for the nine months ending September 1, 1895.

Paper F, estimates for the three months, ending March 1, 1895.

The Board is requested to appropriate the estimate for expenses, in this paper.

Paper G, an estimate for a gas plant.

PAPER A-CURRENT APPROPRIATIONS.

September 25, November 15, 1894.	Appropriated.	Receipts appropriated.	Expended.	{Balance.
Board expense.  Salaries for instruction and for President \{ \begin{align*} \text{Current.} \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	22, 734 00 2, 427 50 400 00 2, 500 00 400 00 200 00 325 00 75 00 100 00 400 00	144 72 1,253 75 315 04 868 21 112 69 31 60 200 00 1 25	\$366 58 { 5,659 98 { 5,659 98 { 5,274 65 11,209 85 2,059 69 192 26 946 48 310 13 1,135 1,135 1,0	\$33 42 \$589 52 \$367 81 236 74 1,698 24 89 87 318 67 312 69 11 80 37 43 39 31 35 30 62 84
Water supply Furniture and fixtures Heating apparatus Advertising Biological station Art department President's office Accredited schools Band instruments South farm Illini Junior Annual Moving into Engineering Hall Inauguration and dedication Agricultural convention	125 00 200 00 253 24 872 20 1, 192 51 96 02 499 05 151 09 300 00 500 00 500 00 500 00 500 00 500 00		125 00 82 59 262 66 264 10 276 99 23 63 471 95 8 75 283 32 159 02 142 85	608 10 915 52 72 39 27 10 142 34 16 68 40 98 357 15 110 00 300 00 135 10

PAPER B-STATE APPROPRIATIONS.

November 30, 1894.	Received.	Expended	. Balance.	Assigned.
Closed out	\$65,759 31	\$65,759 3	1	
				\$94 39
Cabinets Furnishing and heating Nat. Hist. Hall	6,000 00		1 669 19	669 19
Boilers and coal house	6,500 00		264 10	264 10
Engineering building	160,000 00	120,455 9		39, 544 06
Applied mechanics				
Civil engineering	233 00	127 9	105 10	105 10
Psychology		95 7	104 28	104 28
Botany	450 00		285 15	285 15
Library		5,846 4	4, 153 59	4, 153 59
Zoölogy		196 5	1,003 41	1,003 41
Architectural department	325 00	325 0	)	
Geology	500 00	122 9	377 10	377 10
Geology Chemical laboratory ventilation	700 00	686 5	13 45	13 45
Building and grounds	2,100 00	1.083 6	1.016 31	1,016 31
Mechanical engineering		2,844 0	1,155 98	
Electrical engineering	5,550 00	5,550 0		
Salaries for instruction	11, 209 85			
Pharmacy desk				109 05
Pedagogy		41 0	108 91	108 91
Greek	150 00	3 0	147 00	147 00
Greek Woman's gymnasium	270 00	)	270 00	270 00
Shop practice	300 00	300 0	)	
Unassigned	18,981 98	3	18,981 98	
Total	\$296,401 14	\$227,565 7	\$68,835 39	\$49,853 41
Illinois State Laboratory of Natural History	15,313 26			

PAPER C-UNITED STATES FUND.

	Received.	Expended.	Balance.	Assigned.
Year ending June 30, 1893.				
Before reported on	\$17,663 09 250 00 86 91		\$96 45 5 23	
Total	\$18,000 00	\$17,898 32	\$101 68	\$101 68
Year ending June 30, 1894.  Before reported on. Testing laboratory. Geology. Zoölogy Civil engineering Architecture.  Total.  Year ending June 30, 1895.	\$14,550 00 1,700 00 300 00 1,000 00 950 00 500 00 \$19,000 00	1,679 67 298 31 995 19 950 00 416 20	\$20 33 1 69 4 81	1 69 4 81 83 80
Salaries for instruction. Testing laboratory. Unassigned.	135 00 14,590 35	\$5,274 65	\$135 00 14,590 35	\$135 00 
Total	\$20,000 00	\$5,274 65	\$14,725 35	\$135 00

I reported to the Board November 15th the action of the local gas company upon the request of the University for a reduction in the price of gas.

The Board is requested to make available for current use \$5,000.00 of the reserve fund.

Respectfully submitted,

S. W. SHATTUCK,

Business Agent.

The Committee on Buildings and Grounds made the following report:

#### SEWAGE IN BONEYARD CREEK.

Urbana, Illinois, December 6, 1894.

To the Board of Trustees of the University of Illinois.

Gentlemen:—Your Committee on Buildings and Grounds reports that in accordance with your instructions it has consulted with the mayor and city council of the city of Champaign with regard to the abatement of the nuisance caused by sewage flowing from the city of Champaign through the aboretum. The conference was very satisfactory. The city is, as your Committee believes, making good progress toward the end desired. It has received encouragement from the city of Urbana that permission may be obtained to run the sewer along the natural course, which is through the corporation of Urbana; it also appears that the city of Champaign has a system of sewerage fully planned which can be put in operation as soon as an outlet can be obtained. Our aim in the conference was to convince the city officials of the urgency of immediate action, and we believe that we were able to do this, and that the city will carry on this matter to completion. Your Committee was glad to find that all appreciated the necessity of prompt action, and seemed to be really in earnest in regard to the matter.

Respectfully submitted.

S. A. BULLARD, N. B. MORRISON,

Committee on Buildings and Grounds

The Committee on Buildings and Grounds also made the following report:

#### ENGINEERING HALL.

Urbana, Illinois, December 6, 1894.

To the Board of Trustees of the University of Illinois.

Gentlemen: Your Committee on Buildings and Grounds reports, concerning Engineering Hall, that the work of the general contractors, Messrs. Yeager & Schultz, has been nearly completed for some time. It was so nearly completed the 15th of November—the occasion of the dedication—that no inconvenience was occasioned by any lack in that regard. The work yet remaining to be done is furnishing and putting in some hardware, some further work on the window-blinds of the physical lecture room, and a few other minor matters scarcely worthy of mention.

The extra work done by the contractors, under the direction of the committee, authorized by it on request of the engineering faculty, is as follows:

Stone work Hardware Plumbing and gas-fitting Carpenter and brick work Painting and varnishing	1,061 5 1,223 0	51 )1
Total	\$2,828 5	54

In laying the foundations of the building it was found necessary to strengthen them by going to a greater depth in the earth; this cost \$495.17, making a total of \$3,313.62 extra work done by the contractors.

The work done by the general contractors, Messrs. Yeager & Schultz, and the work done by the several sub-contractors, has throughout been very satisfactory, and your Committee takes great pleasure in commending the work of these gentlemen.

Your Committee desires also to recognize the invaluable services of the local superintendents in charge of the work—Mr. I. H. Rapp, who had charge till August 15th, and Mr. S. P. Sutton, who had charge from August 15th to the end of November, when the work was substantially completed. These gentlemen have shown themselves to be thoroughly capable and have done their work to the entire satisfaction of your Committee.

From our report at the September meeting you know that the building was not completed on the terms specified in the contract. After considering again the subject of the forfeiture required in the contract, and the serious detention occasioned on account of the strikes last summer, and the additional time required for the extra work done, your Committee still feels that it is but just to the contractors that an extension of about six weeks be granted. We therefore recommend that the building be accepted, with the requirement that all remaining work be completed at the earliest possible moment, and that the contractors be settled with in full with the exception of \$5,000.00, to be paid when the work is done. That they be allowed an extension of thirty-eight days on their contract, and that a forfeiture of \$50.00 per day be declared till November 15th, the day of dedication, making a forfeiture of thirty-eight days, or \$1,900.00.

The work on the heating contract is practically done. The furniture is about half received, and we have promises that it will all be here in due season.

The building can be put to use at the beginning of the winter term, moving in taking place during the holiday vacation.

Respectfully submitted,

S. A. BULLARD, N. B. MORRISON,

Committee on Buildings and Grounds.

After a somewhat prolonged discussion the report of the Committee was received and adopted, and the Committee was authorized to make a Settlement with Messrs. Yeager & Schultz according to the terms therein stated.

The following tabulated statement of the attendance at the University the present term was received:

Dummary of Diagents, December 5, 108	Summary	of Students, De	ecember 5,	1894.
--------------------------------------	---------	-----------------	------------	-------

					Uni	vers	sity.			to	para- ry ool.	para	ersity Pre- itory ool.
Courses and Classes.	Graduate School	Resident Graduates.	Seniors	Juniors	Sophomores	Freshmen	Specials	Men and Women	Total	Men and Women	Total	Total Men and Women	Total
Agriculture, Men	1	i	5	9	10 23 20 1 16 	7 33 51 23 1 36 1 9	2  1 2  3 	9 63 94 72 3 79 1 18	9 63 94 72 3 80 18	4 13 13 9 6	4 13 13 9 6	81 85 1	13 76 107 81 3 86 21

# Summary of Students—Concluded.

					Uni	iver	sity.			Prer to: Sch	ara- ry ool.	Unive and para Scho	ersity Pre- tory ool.
Courses and Classes.	100	Resident Graduates.	Seniors	Juniors	Sophomores	Freshmen	Specials	Men and Women	Total	Men and Women	Total	Total Men and Women	Total
Chemistry { Men.   Women   Pharmacy, Men.   Women   Matural History { Women.   Mathematics { Men   Women.   English and Mod	3 3 1 1	 1 2 2	52	1 12 5	111 88 44 11  88 44 33 77  1122	17  3 16 4 1 1 1 31 23 6 6 3 8 6 6 1 243 38	1  2 1 1  2 9  2 6 1 1 1 1 1 	35 1 6 34 16 3 1 60 46 10 12 24 9 3 8 1 2	} 36 6 6 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	11 14 49 88  12 100 23 66 11  12 23 24	1 22	36 22 10 43 24 3 1 72 56 15 30 10 3 9 1 1 2	} 38 10 67 4 128 27 40 12 12
Total	16	9	61	84	123	281	36		610		106		716

Mr. Bullard made a statement with regard to an opportunity offered for advertising the University in the public schools of the state. Mr. Bullard was requested to investigate the matter further and report at the next meeting of the Board.

The Finance Committee, to which was referred the proposition of the Christian associations to sell to the University a part of their land, made a report of its progress and asked for further time. The request was granted.

The Board adjourned.

W. L. PILLSBURY,

Secretary.

N. W. GRAHAM,

President.

# MEETING OF JANUARY 10, 1895.

A special meeting of the Board of Trustees of the University of Illinois was held at the Grand Pacific Hotel, Chicago, at 7 o'clock p. m., Thursday, January 10, 1895.

The following call had been issued by the secretary:

"By order of the President, Mr. N. W. Graham, there will be a special meeting of the Board of Trustees of the University of Illinois, at the Grand Pacific Hotel, Chicago, at 7 o'clock p. m., Thursday, January 10, 1895, for the purpose of considering such business as may be duly presented."

The following members were present: Messrs. Armstrong, Graham, McKay, McLean, Morgan, Morrison, Raab, and Raymond. Absent, Governor Altgeld, and Messrs. Bullard, Bryant, and Gore.

Upon the request of Professor Burrill, President of the Board of Direction of the Experiment Station, \$75.00 was appropriated from the farm fund of the Experiment Station, to meet the shortage in the account of "tools and supplies," for the quarter ending December 31, 1894.

Twenty-five dollars was appropriated from the Experiment Station funds for the use of the chemical laboratory during the current quarter.

President Draper presented for the consideration of the Board of Trustees the following resolution:

Resolved, That when any instructor in the University is temporarily absent or for any reason fails to perform the duties assigned to the position, the President of the University be authorized, in his discretion, to employ such assistance as may be practicable to perform the duties of such instructor, at an amount not exceeding the compensation of such instructor for the time being and to cause the sum paid for such assistance to be deducted from the salary of the instructor whose absence has made such assistance necessary.

The resolution was adopted.

President Draper presented a communication from Professor Shea, tendering his resignation as professor of physics, to take effect September 1, 1895.

On motion of Mr. McLean, it was

Resolved, That the Board receives Professor Shea's resignation with great regret, and unanimously declines to accept it. The Board assures Professor Shea that it will assist him in every way practicable in promoting the growth and success of the departments of physics and electrical engineering.

The President was authorized to employ a practical electrician, who shall be an assistant in the electrical department.

The following communication from the College of Physicians and Surgeons, of Chicago, was received for record:

College of Physicians and Surgeons.

CHICAGO, December 18, 1894.

At a regular meeting of the Board of Directors of the College of Physicians and Surgeons of Chicago, held on December 15, 1894, the following resolutions were unanimously adopted:

- 1. That the Board of Directors of the College of Physicians and Surgeons, of Chicago, hereby proposes and agrees to sell the property and good will of the College to the Board of Trustees of the University of Illinois for a price not exceeding one hundred and sixty thousand dollars, to be agreed upon by the parties in interest or decided by a committee of arbitration upon the basis of the exact amount of money actually expended in the upbuilding of the institution.
- 2. That we hereby agree not to engage in negotiations with any other-University pending the action of the legislature upon the foregoing proposition.

D. A. K. STEELE, President.

[SEAL.]

OSCAR A. KING, Secretary.

January 4, 1895.

At a meeting of the stockholders of the College, held January 2, 1895, the action of the Directors was unanimously approved.

WM. E. QUINE..

#### BY-LAWS.

Section 2 of article 9 of the By-Laws of the Board was amended to read as follows:

Section 2. The President shall be charged with the supervision of the educational facilities and interests of the University, and to that end shall recommend from time to time to the consideration of the Board such measures as he shall deem necessary and expedient. He shall have, under the direction of the Board or its Executive Committee, general supervision of all the departments in the University and the officers therein, and shall, at the request of the Board, recommend all professors, instructors, and assistants of the institution, that may from time to time be found needful. He shall report in full, in writing, at the annual meeting of the Board of Trustees what has been done during the year in the several departments of the University, together with recommendations as to the future requirements of the University, as may seem to him needful. At other meetings he shall present, in writing or otherwise, such matters as he finds necessary to bring to the consideration of the Board.

The committee appointed to consider the purchase of the College of Physicians and Surgeons made an informal report of progress.

The following resolution, offered by Mr. McLean, was adopted:

Resolved, That the committee on the College of Physicians and Surgeons be requested to ascertain and report to this Board, at once, the actual value of the real estate and other property belonging to the College of Physicians and Surgeons, and that the committee have authority to expend whatever money may be necessary in order to ascertain the facts upon which to base such report.

The following resolution, offered by Mr. Morrison, was adopted:

Resolved, That the Committee on Buildings and Grounds together with the President of the University and the professor of architecture be and hereby are directed to determine the general characteristics of the new buildings for which it has been decided to make application to the legislature and to cause sketches and drawings of such proposed buildings to be prepared by the architectural department of the University to an extent which will clearly indicate to the members of the legislature and others the proportions and character of the same, and that when needed appropriations are insured said committee shall take measures to secure the best possible plans and designs for such buildings, or at least for the proposed library building, by the largest practicable competition among the architects of the country.

Mr. McKay moved that the sum of \$80,000.00, which it was proposed to ask of the legislature for current expenses, be increased to \$100,000.00; the increase to be used, if obtained, for building up the departments of history and of social science and economics.

Pending the consideration of this motion, the Board adjourned to meet at 9 o'clock the next morning.

## MORNING SESSION.

The Board met pursuant to adjournment, the same members being present as the evening before.

The committee appointed at the last meeting of the Board to prepare resolutions concerning Mr. Raab, presented the following, which were adopted:

WHEREAS, The Honorable Henry Raab, Superintendent of Public Instruction, and, ex officio, a member of the Board of Trustees of the University of Illinois, has served on this Board for the past four years; and

WHEREAS, By the expiration of his term of office he is about to sever his connection with the Board, we deem it eminently proper to adopt the following resolutions:

Resolved, That we, the members of the Board of Trustees of the University of Illinois, do thank Mr. Raab for his prompt and constant attendance at our meetings.

Resolved, That we express to him our high appreciation of his sterling and upright character, and wise counsel, at all times frankly and zealously given.

Resolved, That we extend to Mr. Raab our sincere good wishes for his future success in life and for his prosperity in all his undertakings.

Resolved, That the Secretary be requested to hand a copy of these resolutions to Hon. Henry Raab.

ALEX. McLean, Nelson W. Graham, N. B. Morrison,

Committee,

On motion of Mr. Armstrong, it was voted that the bill with regard to scholarships in the University, which was presented at the last session of the legislature, should be offered again at this session.

The Secretary was directed to note that Mr. Ralph P. Smith, Ph.B., had been appointed instructor in German for the current college year, at a salary of \$100.00 a month for ten months, beginning September 1, 1894; and that Captain D. H. Brush, of the 17th U. S. Infantry, detailed by the War Department as military instructor.

in the University, had been appointed professor of military science and tactics, and had entered upon his duties September 1, 1894.

President Draper was authorized to employ a messenger for service in his office.

On motion of Mr. Morgan, it was voted that the President of the Board of Trustees and Dr. Draper should prepare a comprehensive paper showing the needs of the University, to be used in promoting the passage of appropriation bills. It was ordered that the statement should bear the signatures of all the members of the Board.

The motion offered by Mr. McKay before the Board adjourned Thursday evening, was again considered, and, with the consent of the mover, it was changed so as to increase the \$80,000.00 to \$90,000.00, and in that form was passed.

The legislative committee which should have charge of the appropriation bills was appointed, consisting of the following persons: President Draper, the Executive Committee of the Board, Mr. McLean, chairman of the Finance Committee, and Messrs. Morgan and Armstrong.

The Board then went into executive session, after which it adjourned.

N. W. GRAHAM.

W. L. PILLSBURY,

President.

Secretary.

# MEETING OF FEBRUARY 12, 1895.

The following call for a special meeting of the Board of Trustees of the University of Illinois, was issued February 2, 1895:

"By order of the President, Mr. N. W. Graham, there will be a special meeting of the Board of Trustees of the University of Illinois, at the office of the Superintendent of Public Instruction, Springfield, Illinois, at 10 o'clock a. m., Tuesday, February 12, 1895, for the purpose of considering such business as may be duly presented."

The members of the Board being assembled at the Leland Hotel, it was decided to accept an invitation from Governor Altgeld to hold the first session of the meeting at the Executive Mansion.

The Board was called to order there at 10 o'clock a. m.

There were present Governor Altgeld, and Messrs. Armstrong, Bullard, Graham, Inglis, McKay, McLean, Morrison, and Raymond, and Dr. Julia Holmes Smith. Mr. J. W. Judy was absent.

Colonel Morgan had met with the Board at informal sessions held. Monday evening and Tuesday morning, but had not been able to remain for the regular meeting.

Mr. John H. Bryant had resigned as a member of the Board of Trustees, and Dr. Julia Holmes Smith, of Chicago had been appointed by the Governor and confirmed by the Senate as a member of the Board in his place.

Mrs. Lucy L. Flower, a member-elect of the Board, was present by invitation.

President Draper read an address to the Thirty-ninth General Assembly, which he had prepared concerning the University by direction of the Board:

#### UNIVERSITY OF ILLINOIS.

To the Members of the Thirty-ninth General Assembly of Illinois:

Shall Illinois develop a State University worthy of her imperial position among the states? Shall she be under the necessity of making apologies, or shall she erect a University which compares favorably with those of the surrounding states? Shall we build up a complete, symmetrical public school system, and shall we have a University which may rightfully stand at the head of such an ideal system, stimulate all its departments, fill our sons and daughters with a desire for liberal learning, and make it unnecessary for them to go beyond the borders of the state to get whatever and all they may crave? Our resources are inexhaustible; our great and rapidly growing population is full of energy, and engrossed with affairs. Shall we go on with the evolu-

tion of a University which will not only promote the development of these resources, but also act strongly upon the intellectual life of this great people?

We have been chosen by the men and women of Illinois, a constituency even greater than that of all the members of the General Assembly combined, to carry on this work. We should come short of discharging our duty to the people, and to the high interests involved, if we did not press these questions upon the members of the General Assembly. We do it with earnestness, for we have reached the time in the history of the University when its future is to be determined. The circumstances are critical. The time has come to decide whether the State University of Illinois shall become a first-class, or a third-class, or a fifth-class University. We cannot decide and make our deffectual. Even the people themselves cannot act, for the way is not The decision is with the law makers. We must carry the matter to cision effectual. them, and with them we are obliged to leave the responsibility. that they may act wisely, that they may meet their responsibility with confidence, we ask that the broad subject may have very full, even painstaking, consideration.

We ask a great deal at the hands of the legislature; it is not for ourselves, but for Illinois. We do not ask that any project or questionable wisdom shall be entered upon. The propriety of government help for universities is well settled the world over. All of the constitutional governments of Europe extend it. Harvard, Yale, Princeton, Columbia, are all resultants of the wisdom and generosity with which their states supported their earlier years, fully as much as of the private benevolence with which their affectionate children have promoted their more mature development. In all the central and western states the policy of developing State Universities, is all well established as any other policy of government. In nearly all of these states broad foundations have been laid, and great progress has already been made.

The last year or two has witnessed a decided advance in nearly all of the states. The University of Ohio had an income last year of \$183,783.69. It has a guarantee of 1-20 of a mill on all assessable property of the State; it has 750 students. The two institutions in Indiana, which between them cover the work of our University, have 1,422 students. The University of Michigan has the avails of a regular state tax of 1-6 of a mill; the annual income is about \$400,000; it has 2,800 students. The University of Wisconsin has a permanent tax of 1-8 of a mill and an additional tax of 1-10 of a mill for the six years following 1891; its annual income is \$260,000; besides this the legislature has appropriated \$165,000 in the last two years; its buildings and equipment aggregate \$1,000,000, and an application is now before the legislature for \$360,000 for a new library building; it has 1,500 students. Since February, 1891, the University of Missouri has received \$1,525,000 from the legislature, and the value of building, grounds, and equipment is more than \$2,200,000; the regular annual income income is about \$290,000. Minnesota has 2,100 students in all departments in her state University, to which she gives a tax of 15-100 of a mill regularly, and recently appropriated \$200.00, for buildings. The University of Calfornia has received \$400,000, for engineering work alone. There is hardly one of the state universities which has not, within the last two or three years, received appropriations for plant and operating expenses far greater than ever before, and which has not extended its courses of instruction and improved the quality of its work accordingly.

Why is it necessary to put so much money into universities? Because University work is without limits. The University is a seat of learning where "any person can find instruction in any study." The essence of modern University work is investigation and research in whatever direction the student may desire to go. Thirty years ago the student was required to follow a prescribed course; now he exercises his option in all of the great Universities. This is of large value to him, but it involves an infinite number of courses. Not only the enlargement of the field of learning, but the vast improvement in the system of instruction adds to the expense. Thirty years ago the instruction was largely catechetical, but now that kind of instruction would not be tolerated in any respectable institution. Extensive libraries are imperative. In every department, shops, or laboratories, in which students pursue investigations and carry theories into practical operation, and seminary rooms,

in which they may discuss all the questions involved, are required. All this demands accommodations and equipments which are extensive and costly, and must be frequently changed to keep pace with the progress of learning.

But this is not all. The University ought to render directly to the people a service of inestimable public value in the way of information touching the economic uses of the resources and products of the State, and bearing upon the employments and life of the people. To carry on such work is surely within the domain and powers of the state government. That government comes short of its duties and purposes which does not promote it. The people all desire it, and they give support to no institution more cheerfully than to the ones which are able to do it. Innumerable applications for services of this kind are brought to the University, and we are anxious to meet them. The state University, representing all the people, and standing above any private or commercial interest, can carry on work of this class with an independence and an authoritative decisiveness which are hardly possible in an institution supported by private benefactions. Moreover, it is obvious that unless this class of work is carried on by the state University, it will hardly be carried on at all. But all this requires educated men, the latest facilities, and sometimes long experimentation and considerable money before definite and valuable results can be announced.

Again, in the interests of the future, it must be frankly admitted that the organization and work at the University is too one-sided, and must be broader and more comprehensive before we can expect to attain even measurably a university ideal worthy of our great state.

The University was founded upon the proceeds of the Morrill Land Grant. Act, the main purpose of which was the promotion of agriculture and the mechanic arts. The state has kept faith with the terms of that enactment.

The University has rendered a great service to the good cause of scientific agriculture in the foremost agricultural state in the Union,—perhaps not all it might have rendered, but a very great service nevertheless. It has recently entirely reorganized the plans and work of the College of Agriculture, and and confidently hopes to make that service even more satisfactory in the future than in the past.

We believe that we may safely claim that it has developed the foremost College of Engineering in the west, and one of the three largest in the country.

The superior attainments and the persistent liberality of the small scientific staff of the University have enabled it to perform considerable very valuable work in the physical and natural sciences, which has gained it wide celebrity in scientific circles.

All this is of the highest importance, but it is far from making an ideal whole for a university. There is a world of thought, as well as a world of matter. 'The state's children are to be trained and disciplined to deal with men as well as with things; to live in organized society as well as labor with the hands. The greatness of the state can safely be left dependent, not upon resources, not upon numbers, not upon luck or chance, not even upon industry alone, but upon the extent to which the intellectual life and the moral sense of the people are developed and trained for sound and profitable social relations, upon the extent to which ambition is aroused by the world's history, upon the extent to which people value public security and personal liberty, and are intelligent and intent upon securing them. Right here is at once the greatest educational necessity and the grandest educational opportunity. The questions of paramount importance at the present time are within the domain of literature, law, history, political ethics, economics, sociology, philosophy, etc. With the city of greatest proportions and most rapid growth of any city in the country within our borders, these questions press more heavily upon the people of this than of any other state. The great centers of educated thought in the country, through their work and through their graduates, will radiate influences which will settle these questions. For reasons which are obvious they cannot be safely left to institutions supported by private capital and peculiarly and naturally sensitive to individual opinions and corporate interests. Surely the

university of a state whose people have larger interests in these subjects than any other people in the country cannot be considered complete which is not abundantly equipped to pursue these great lines of intellectual investigation which so naturally devolve upon it. Yet it is here that our University stands most in need.

The learned professions organized and have always given virility and power to the universities, and in return the universities have been the conservators and promoters of the learned professions. No university is complete without associated professional schools. Once established, they are likely to be nearly or quite self-sustaining, and they give vitality to the thought and energy to the influence of the whole institution.

An opportunity is offered for absorbing into the University, the College of Physicians and Surgeons of Chicago, by the purchase of the property at its cost. This medical college, it is needless to say, is one of the leading institutions of its class in the city. Other medical colleges of equal standing have been already absorbed by other universities. The proposition has been frequently mentioned in the newspapers of the state, and is apparently considered very favorably. It seems to present an opportunity for securing a medical department for the University and to open the way for the University to render a service to the medical profession, while it would at the same time enlarge our advantages and our opportunities by identifying University interests with the interests of the city of Chicago. If, upon examination, this project should meet the approbation of the legislature, its consummation would accomplish the most difficult step in the direction of developing an ideal university organization.

More than twenty years ago the University was opened to women on the same terms as to men. Yet the line of work we have most strongly developed is not adapted to the tastes or employments of women, and therefore the advantages held out to them are not equal to those enjoyed by the men. Accordingly the number of women students is only about one-sixth of the entire body.

These considerations point to to the wisdom, even the necessity of a greater development of courses in the classics, in literature, in history, in political economy, in the fine arts, and kindred lines of learning. The information and culture studies are now richly deserving of more attention than they have heretofore had.

It surely will not be said that it is not the policy of the state to do this. If that were true the state should have done less than it has done in these directions. If it is not true it should do a great deal more than it has done. Our neighboring states are all developing great literary and professional schools. Some of them organized state universities before they opened their land grant colleges. All are proceeding on both lines now and both lines of work are imperative to a complete university. How far they have proceeded it is interesting to us to note, and it may be indicated by a very brief statement. With the great city of Chicago and its vast institutions within our borders, it would be expected that more college students would come to Illinois from the surrounding states to be educated than would be sent to those states by us for that purpose. Yet the last available report of the United States Bureau of Education shows that while we have in the colleges of Illinois 558 students from other states, we have sent 1,154 students from this state to the colleges of other states. It may be more interesting to make a comparison with our nearest neighbors, and when we do so the facts are even more striking. The states of Ohio, Michigan, Wisconsin, Indiana, and Illinois, comprise the old Northwest Territory. The mighty ordinance of 1787, ante-dating and rivaling the Constitution itself, which erected this favored Territory, declared that "religion, morality and knowledge being necessary to good government and the happiness of mankind, schools and the means of of education shall forever be encouraged." The history of these five great states has not been very unlike, nor the opportunities very unequal. Certainly no one will say that Illinois is excusable in being behind any one of them in any laudable undertaking and most assuredly not in the observance of beneficent work enshrined in the hearts of the people and embodied in the organic and funda-

mental law. Yet we send 83 college students to Indiana, and received but 54 back; we send 91 to Ohio and receive but 41 back; we send 70 to Wisconsin and receive but 42 back; we send 239 to Michigan and receive only 30 back. These figures do no not include the students in the professional schools (i. e., the law schools, medical schools, etc.); if we were to count those the result would be against us very much more strongly.

Notwithstanding this fact, it is gratifying to know that the figures also show that in the aggregate Illinois sends more students to college in proportion to her population than either Indiana, Wisconsin, or Michigan. Indiana has one college student to every 1,409 people; Wisconsin, one to every 1,364; Michigan, one to every 1,383; while Illinois has one to every 1,292 people. But one conclusion results from all this, and that is that the people of Illinois are demanding more college facilities than we are providing; that they know what they want and are determined to get it, and that they are finding it in states which are doing more than we are in the matter.

It is unnecessary to offer any suggestions as to the importance of the state training her own children, and in her own way. As great a state as Illinois, is strong enough to look the facts squarely in the face and go about providing a remedy, and when their attention is once called to the facts her law makers will violate all the traditions and characteristics of the state if they do not provide the remedy speedily and heroically.

When ask to specify the most urgent needs of the University, we will say that in the way of additions to the plant larger and fire-proof buildings for our library and museum collections, which are now in a cramped building which is not fire-proof and is unprotected, and is much needed for other purposes; an audience room which is large enough to accomodate our general meetings; a central heating and lighting plant, which is safely equal to the demands upon it; an agricultural building; a small astronomical observatory, all are entitled to rank in the first class. It is quite possible that two or more of these wants may be advantageously met in the same structure, but as much as the University needs substantial help we will concur in the opinion that the state cannot afford to erect permanent structures which are not of a character calculated to promote the future growth of the institution and be attractive and useful in the days when the student body shall be doubled or trebled, and the work shall be so extended as to reach and uplift every interest of the people in all parts of the commonwealth.

In the way of equipment we need such additions to the library as will put the University into possession of the world's latest knowledge upon its different lines of work. Our scientific collections must be augmented, if our scientific experiments are to be extended and made of wider value; and our engineering equipment must be enlarged and improved if we can expect to advance or to hold our position among the technical schools of the country.

The appropriations for operation expenses, which meet the salaries of professors and instructors, care of property, and all ordinary running expenses, must be materially increased if we are to expand the work of the University so as to make it altogether worthy of the state, and meet the demands which the people are making upon us. Indeed, this must be done if the healthful growth which has recently been manifest is not to be arrested.

We cannot go into detail or offer proof or argument to any extent in this communication, but we shall be prepared to present the same to the appropriate committees with all the precision and exactness that can be desired.

In the meantime, is it too much to suggest that this subject is of sufficient importance to the future interests of this imperial state to justify careful legislative examination of all the circumstances at the State University, and perhaps at the universities of some of the neighboring, states, by a committee specially charged with that duty for the purpose of determining what the duty of the legislature may be in the premises?

We respectfully submit these observations with entire confidence that no member of the General Assembly would have Illinois behind any other state of the Union in any wise and beneficent policy which she undertakes to carry out but that all, with one voice, will say that whatever she undertakes to do she shall do as well and as competely as any one does it, or abandon the undertaking.

Urbana Illinois, February 12, 1895.

J. W. Judy, S. M. Inglis, F. M. McKay, Alex. McLean, S. A. Bullard, R. P. Morgan, Julia Holmes Smith, Nelson W. Graham, N. B. Morrison, James E. Armstrong, Isaac S. Raymond, Lucy L. Flower,

Trustees of the University of Illinois.

The Board adopted the address, and Messrs. McLean, Raymond, and Pillsbury were appointed a committee to publish the address with instructions to expend a sum not to exceed \$250.00 for that purpose.

On motion of Mr. Armstrong, it was voted to reconsider the motion by which the report of the committee on legislative appropriations (see page 50) made at the December meeting of the Board, was approved.

After a discussion covering the whole of the morning session the list of appropriations to be asked for was amended to read as follows, and the report of the committee so amended was adopted:

Per Annum Appropriations.	
Taxes on Minnesota lands. Running expenses Additions to libraries Additions to apparatus and appliances Materials for shop practice Increase of scientific cabinets and collections. Operating expenses of biological station.	\$1,500 00 90,000 00 10,000 00 3,000 00 1,500 00 2,000 00 2,500 00
Appropriations for Building, Etc.	
For library building and assembly hall, and safe accommodation of art, industrial, and zoölogical collections. Astronomical observatory. President's house Completing the fitting and furnishing Engineering Hall. Extending equipment of College of Engineering and for changing and housing machinery. Improvements in Chemical Laboratory. For dairy building. Laboratory of vegetable physiology. Paving streets and laying walks Fire protection. Building for Biological Station on Illinois River	250,000 00 15,000 00 12,000 00 10,000 00 50,000 00 40,000 00 2,500 00 9,300 00 3,000 00 5,000 00

The Board then adjourned to meet at 2:30 p.m., in Parlor 5, Leland Hotel.

## AFTERNOON SESSION.

The Board met pursuant to adjournment.

It was voted that a bill, as follows, with regard to the purchase of the College of Physicians and Surgeons, of Chicago, should be introduced in the General Assembly:

A bill for an act to enable the University of Illinois to acquire the property and good will of the College of Physicians and Surgeons, of Chicago, and to establish a professional medical department in connection with said University.

- Section 1. Be it enacted by the People of the State of Illinois represented in General Assembly: That the University of Illinois be and is hereby authorized to acquire the property and good will of the College of Physicians and Surgeons, of Chicago, and organize a professional medical department of said University.
- SEC. 2. The price to be paid for the property of said college shall not exceed the sum of \$160,000, and shall be agreed upon by the parties in interest or decided by a committee of arbitration upon the basis of the exact amount of money actually expended in the upbuilding of said college.
- SEC. 3. No part of the purchase price shall be paid until a certified copy of the agreement between the parties, or of the determination of the arbitrators, be filed in the office of the Auditor of Public Accounts, nor until the Attorney General shall certify that the title to said property is free and clear of all incumbrances and that the deed by which it is proposed to convey the same to the University is correct in form and sufficient to vest said title in said University.
- Sec. 4. In organizing said medical department at said University the Board of Trustees shall appoint all necessary officers, professors, and instructors, fix all salaries and do whatever may seem advisable to maintain such medical department upon the highest possible plane of excellence and efficiency, but said Trustees shall recognize no particular schools of medicine to the exclusion or disparagement of any other school. Said Trustees shall maintain tuition fees in said department upon a basis which will make said department self-supporting so far as practicable.
- Sec. 5. The sum of \$160,000, or so much thereof as may be necessary, is hereby appropriated to carry out the purpose of this act, which shall be paid out of any moneys in the treasury not otherwise appropriated; and the Auditor of Public Accounts is hereby authorized and directed to draw his warrant on the treasury for the sum so agreed upon or determined as the value of said property, upon the order of the Chairman of the Board of Trustees of said University attested by the Secretary and seal of said University, and the certificate of the Attorney General herein provided for.

An appropriation of \$240 from current funds was made to cover the expenses of visiting high schools.

The digging of a well on the south farm at an expense not to exceed \$200 was authorized. The Farm Committee was charged with the work.

A request from the class of '95 to be allowed to make an inscription on a stone at the right of the entrance to Engineering Hall was denied, and it was voted that for the future no class inscriptions should be made on the buildings.

The appropriation of \$30 for partitions in Professor Frederick's rooms was made.

For Board expenses \$200, and for incidental expenses \$250 were appropriated.

On motion of Mr. Bullard, it was voted that the Executive Committee be instructed to purchase the Chase property on Springfield avenue between Wright street and our shops, in the City of Urbana, Ill., and pay not to exceed the sum of \$7,000 therefor, which sum was appropriated from the general fund for that purpose. It was also voted that the abstract of title should be submitted to Judge Cunningham.

Dr. Draper's bill of expenses amounting to \$80.59 was ordered paid. President Graham appointed Mr. Inglis and Dr. Smith members of the Committee on Instruction, and Mr. Judy a member of the Farm Committee.

An appropriation of \$100 was made for the Technograph.

The Treasurer was instructed to transfer \$7,000 of Kankakee bonds held as part of the general fund to the endowment fund and \$7,000 cash from the endowment fund to the general fund.

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

# EVENING SESSION.

At the evening session a conference was had with Mr. Meyer, speaker of the house of representatives, and Mr. Dunlap, chairman of the senate committee on appropriations.

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

## MORNING SESSION.

No quorum was present and the Board adjourned.

N. W. GRAHAM,

W. L. Pillsbury, Secretary.

President.

# MEETING OF THE EXECUTIVE COMMITTEE.

A meeting of the Executive Committee of the Board of Trustees of the University of Illinois was held in Parlor 5, Leland Hotel, at 9 o'clock a.m., Wednesday, February 13, 1895. All the members of the committee were present.

There was presented from the Faculty of the University a set of by-laws which had been adopted by the Faculty, and to which the Board of Trustees was requested to give its approval.

#### BY-LAWS OF THE FACULTY.

1. The Faculty of the University shall consist of the President and all the resident professors and assistant professors, and of such others as have independent charge of departments of the University instruction, and the Librarian. The President of the University shall be its president, and the dean of the general Faculty its Vice-President, ex officio, and a Secretary shall be chosen annually by ballot at the first regular meeting in September.

The Faculty of the University shall have control of the discipline and studies of the University, and shall make, in their behalf, from time to time,

such regulations as it may deem expedient.

- The Faculty of the University shall hold its regular meetings at 4 o'clock p. m., on the first Monday of each month during the term, except that the first meeting of the college year shall be held the Friday preceding the opening of the fall term. The President shall have power to call special meetings of the Faculty as he may deem necessary. The order of business at each meeting shall be:
  - Calling the roll of members.
  - Reading minutes of last meeting.

3. Reports of officers.

Reports of committees.

- 5. Reports from the several colleges. 6.
- Unfinished business. New and miscellaneous business.

The President, Vice-President, and Secretary shall have the powers and

perform the duties usually devolving upon such officers.

- The standing committees of the Faculty shall be as follows, all except the Committee of Administration, to be elected annually by the Faculty, at the first meeting of the year, or as soon thereafter as practicable, by ballot, upon nominations to be presented by the Committee of Administration, each committee to hold office till its successor is elected:
- 1. A committee of administration to consist of the President, the Vice-President, and the Deans.
- 2. A committee on admission and preparatory schools.
- 3. A committee on military affairs.
- A committee on athletics 4.
- A committee on students' welfare.
- A committee on library.

The President shall be chairman of the Committee on Administration, and shall be, ex officio, a member of each other committee, in addition to the members elected.

7. The duties and powers of the standing committees shall be (1) to originate, consider, and recommend to the Faculty lines of policy and particular measures in their several provinces; and (2) to act upon all matters referred to them by the Faculty.

The Committee of Administration shall have all the authority of the Faculty itself, ad interim, when necessity or the dispatch of business requires it, provided that it shall not change any action of the Faculty without the consent, in writing, of at least a majority of the latter.

The University shall comprise four colleges: the College of Agriculture, the College of Engineering, the College of Science, and the College of Literature and Arts. The faculty of each of the several colleges shall consist of the President and of such professors, instructors, and assistants as shall annually

be assigned to it by the President.

The officers of each college faculty shall be a dean and a secretary, the first to be elected by the Trustees of the University and the second by the faculty of his college. It shall be the duty of the dean to call and preside over all the meetings of the faculty of his college. He shall decide, at his discretion, subject to the approval of the college faculty at its next meeting, all matters coming within the sphere of that faculty which involve merely the application of established rules or fixed principles of action to individual cases. He shall further be responsible for the execution within the college, of all rules and orders made by the college faculty. All official communications from members of the college to higher University authority concerning the affairs of the college or any department thereof, shall be transmitted through the dean who may endorse thereon such recommendation as he may deem advisable. The secretary shall keep the records of the college faculty meetings, and shall give notice of the called meetings to each member of the faculty.

10. The faculty of each college shall meet at the call of the dean and at his discretion, except that he shall call a meeting at any time on the written request of one-third of the faculty. The duty of the college faculty shall be to recommend to the Faculty of the University such acts or policies as it may deem for the good of the college; and to transact such business as may be referred to it by the general Faculty. It shall also have power to take original action upon the affairs of its students, in pursuance of the established rules or the fixed practice of the University, but all such action shall be reported forthwith, to the President of the University, and shall be subject to revision by the general Faculty. All requests by students shall be referred by the President direct to the various college faculties with power, where the nature of the case indicates such action.

- 11. The University departments of administration shall be as follows: Agriculture, veterinary science, mathematics, architecture (architectural engineering), civil engineering, mechanical engineering, municipal and sanitary engineering (theoretical and applied mechanics), physics, electrical engineering, general engineering drawing, art and design, botany and horticulture, geology (mineralogy), zoölogy (physiology), entomology, general biology, chemistry (pharmacy), applied chemistry, economics, pedagogy, philosophy (anthropology), psychology, history, English, German, Greek, Latin, Romance languages, military science, gymnasium, physical culture for women, and the library.
- 12. The ranking instructor in each department shall be the head of the department, and shall be responsible to the President for the execution in his department of all regulations and orders of the faculties concerning courses and programs of study, and for the progress and general development of all branches of the departmental work. He shall make all department reports, prepare estimates for the expenses of his department, and be responsible for the distribution and expenditure of funds assigned to it. All official communications from members of his department shall be addressed to him, and shall be forwarded by him, with his endorsement, to the proper authority.
- 13. Numbers 1, 2, 8, 9, and 10 of the above by-laws may be amended by vote of the Faculty and the approval of the Trustees, and the remaining by-laws by vote of the Faculty alone: *Provided*, that no amendment be adopted by the Faculty until it has lain upon the table at least one week.

The by-laws were approved.

It was also ordered that in presenting the courses of study in the catalogues of the University hereafter the order shall be:

- 1. College of Literature and Arts.
- 2. College of Engineering.
- 3. College of Science.
- 4. College of Agriculture.

The following resolution was adopted:

In view of the fact that efforts have been made to discriminate against the use of Illinois coal on the ground of the large per cent. of volatile carbon, and since the coal industry of our state involves so large and important interests of the state;

Resolved, That Professor Breckenridge is hereby directed to begin such mechanical, physical, electrical, and chemical experiments as he may deem advisable, looking to the more perfect combustion of Illinois coal, both as to treatment and to amount of heat units utilized; and, further,

Resolved, That he be requested to make known to this Board at its next regular meeting the assistance required and the necessary expenditure of money, together with other items of interest in this connection.

Adjourned,

N. W. GRAHAM,

W. L. PILLSBURY,

President.

# MEETING OF MARCH 12, 1895.

The Board of Trustees of the University of Illinois met in the University Parlor, Urbana, at 3 o'clock p. m., Tuesday, March 12, 1895. The members present were Messrs. Armstrong, Bullard, Graham, Inglis, McLean, Morgan, Morrison, Raymond, Dr. Julia H. Smith, and Mrs. Flower; absent, Governor Altgeld and Mr. Judy.

The newly elected members, Messrs. McLean, Bullard, and Mrs. Flower, had already taken and filed the required oath of office.

The minutes of the meetings of December 5, 1894, and January 10, and February 12, 1895, were approved.

The President announced as the next business the election of a President of the Board for the ensuing year, stating at the same time that he was not himself a candidate for re-election. Mr. Bullard nominated Mr. Armstrong, and Mr. McLean nominated Mr. Morrison. On the twelfth ballot Mr. Graham received five of the eight votes cast, and was declared elected. The election was made unanimous on motion of Mr. Morgan.

On motion of Mr. Morgan, W. L. Pillsbury was elected Corresponding and Recording Secretary and Registrar, with a salary of \$1,200 a year.

On motion of Mr. Morrison, Mr. Charles W. Spalding was elected Treasurer, his bond to be in the same amount as heretofore—\$600,000.

President Draper presented the following report:

#### PRESIDENT'S REPORT.

Urbana, Illinois, March 12, 1895.

To the Board of Trustees of the University of Illinois.

GENTLEMEN: By action of the Board the term of service of professors, assistant professors, and associate professors is at the pleasure of the Board, so that they continue indefinitely in the absence of action to the contrary. The service of members of the corps of instruction who come within these classes is reasonably satisfactory. However, it seems to me that circumstances have so changed at one or two points in our work as to render changes in the arrangements touching professors advisable.

Without attempting to give here all the reasons for the recommendation, I advise that the services of the assistant professor of psychology be discontinued after the present year, and that a suitable person be employed who is primarily adapted to the examination of high schools seeking place upon our accredited list, and who shall spend as much of his time for that purpose as may be deemed necessary and the remainder of his time in work at the Uni-

versity, and that the courses heretofore assigned to the professor of pedagogy, the assistant professor of psychology, and the instructor in philosophy, be rearranged to conform to the readjustment.

The whole question of reorganization of the Agricultural Department is now open and demands your attention at this time. You will remember that Professor Davenport was engaged as Dean of the college, as a member of the staff of the Experiment Station, and as a professor; but the title of his professorship was left for determination after consultation with him. It has been generally agreed that the whole subject of general agriculture has become too large to be properly in charge of one man. The ground can be covered in the most superficial way only, either in investigation or instruction, by any one person, and superficial work cannot be tolerated with us. Your consideration is therefore asked to a division of the department, as follows:

- 1. A subdivision including the breeding, feeding, and care of animals.
- 2. A subdivision of agriculture proper, or the specialties concerning soils and crops.
  - 3. Dairy manufactures.

Professor Davenport desires that the first of these divisions be assigned to him and that he be styled Professor of Animal Husbandry. In addition to the specialties thus defined the subject of comparative agriculture may be added to the duties of this chair, so that the head of the general department shall lecture upon the inter-relations and comprehensive bearings of all agricultural topics among themselves and to other subjects.

As chief of the second division some one should be appointed with the rank and title of associate professor of agriculture, with the understanding that more definite designation of title may sometime be made. The salary proposed at the outset is \$1,600.00 to be divided equally between the instruction account and the Experiment Station, and the time of beginning of service September first.

The third division should be organized as soon as practicable. An initial salary of \$1,200.00 and the rank of assistant professor may be named for one who should have charge of this work.

In studying the conditions and prospects of the College of Agriculture the subject of veterinary science must be included. The course of instruction at present offered is insufficient to prepare students to become reputable practitioners in what is now one of the regular professions. On the other hand the student of general agriculture can hardly find time for the full course as now given, nor do his requirements seem to demand it. It therefore seems policy to establish a full course from which students may graduate as professional veterinarians, or to reduce the instruction to that concerning the common diseases of domestic animals, to meet the needs of agriculturists.

The first of these proposals would require the appointment of at least one more professor; the second would demand instruction in the winter term only. Under all the circumstances of the case, with the recent establishment elsewhere of veterinary colleges apparently equal to the demand, the latter native seems to be the advisable one, if any change is to be made.

The question of filling the two new positions mentioned, if these are created, is a very important one and must be left for further consideration. The success of the movement so depends upon the persons appointed that the utmost care must be taken in the selection of the man or men deemed best fitted for the work, whether or not this means the advancement of any one now employed.

In the further development of the horticultural department the creation of an assistant professorship, with a salary of not less than \$1,500.00 to be divided between the instruction account and the Experiment Station, is recommended, subject to the same conditions in regard to appointment as the above.

I am of the opinion that an important readjustment in the sphere of physical culture and athletics is advisable. The arrangement of the last year has been highly unsatisfactory. The same theories and general plan should pre-

vail upon the same subject throughout the University and apply so far as practicable to men and women alike. It is recommended that the services of the present instructors be discontinued and that a single department of physical training be established, with a director at its head who shall have general direction of all the work in that line, and that an instructor or assistant be provided to act under his direction in carrying on such work as may probably be delegated to such a person. There is reason to believe that greater efficiency and more harmony of action would result from the arrangement, with a smaller expenditure of money. What money can be saved by this arrangement may well be devoted to assist in the employment of expert coaches for one or more of the athletic teams. A director could probably be secured who could coach one or more of these teams, but it is hardly practicable to secure one who could render that service to all. I am much interested in our physical training and athletic sports. It is important that a competent authority in the University should be charged with the duty of looking after the health and sound physical development of not a few, but of all the students. It is important that we also encourage and at the same time exercise such control as may be necessary over the athletic sports. We shall find ourselves discredited in the minds of students, and measurably so in the minds of the public, if we neglect to do this, for it has come to be an important avenue for gaining public attention. We shall doubtless find that such management will promote good fellowship and, if well directed, stimulate a healthful moral tone among the students.

It is recommended that the following instructors be reappointed for the ensuing year, but upon the understanding that their precise positions, duties, and salaries, will be determined at the June meeting, viz: George Washington Parker, George Perkins Clinton, Thomas Arkle Clark, Cyrus Daniel McLane, Cyril Balfour Clark, Herman S Piatt, James David Phillips, Charles Alexander Gunn, William Esty, Bernard Victor Swenson, Albert Root Curtiss, Frank Smith, Lorin William Peabody, George Washington McCluer, Henry Jones, Helen Eliza Butterfield, Jeremiah George Mosier, Harry Sands Grindley, Robert Clarke Vial, Fred Anson Sager.

I also recommend the reappointment of Percy Favor Bicknell as librarian, and of Edward Gardnier Howe as principal, and Nathan Austin Weston and Lillie Adelle Clendenin as instructors in the Preparatory School.

Miss Alice May Barber does not desire reappointment.

As to instructors and assistants not named above I can only say that I am not yet prepared to recommend their reappointment.

It seems to me that the interests of the University imperatively call for the organization of a department of music, and I suggest that the Board at least authorize the initiatory steps in that direction. Very respectfully,

A. S. Draper.

President.

Professor Shea presented his resignation, which was referred to President Draper and Mr. Armstrong.

A petition was received from a number of students asking that, if possible, provision be made for instruction in political science and jurisprudence in the College of Literature and Arts. The petition was referred to the Committee on Instruction.

A letter was received from the editor and the business manager of the *I llio* asking for assistance from the Board in paying their publication expenses. This letter was laid over until the next meeting of the Board. Messrs. Morgan, Armstrong and Morrison were appointed a committee to prepare resolutions with regard to the suspension of certain students for hazing. President Draper made a full explanation of the action taken by the Council of Administration with regard to this suspension.

The Board adjourned to meet at 9 o'clock Wednesday morning.

## Session of Wednesday Morning.

When the Board met pursuant to adjournment, the same members were present as Tuesday afternoon, except Dr. Smith and Mrs. Flower.

On motion of Mr. Armstrong, Dr. Draper and Professor Shattuck, the Business Agent, were authorized to make arrangements to take care of the legislative committee which was expected to visit the University Friday. They were given power to spend such a sum of money for this purpose as might be found necessary,

Messrs. Yeager & Schultz, contractors on Engineering Hall, were, on motion of Mr. Morgan, given an opportunity to state their reasons for asking a remission of the penalty enforced against them on account of their delay in completing the building according to the terms of the contract. After they had been heard, it was voted, on motion of Mr. Morrison, that the contractors should present their claims to the Committee on Buildings and Grounds, when appointed.

The request of W. O. Krohn for an appropriation to meet expenses incurred and future expenses in the psychological laboratory was referred to the Committee on Finance.

On motion of Mr. Bullard, Messrs. McLean and Morrison were elected members of the Executive Committee of the Board.

The President announced the standing committees of the Board as follows:

Farm—Isaac S. Raymond, chairman; N. B. Morrison, Alex. McLean, J. W. Judy.

Buildings and Grounds—Richard P. Morgan, chairman; N. B. Morrison, Alexander McLean, I. S. Raymond.

Finance—N. B. Morrison, chairman; S. A. Bullard, J. E. Armstrong.

Instruction—J. E. Armstrong, chairman; S. A. Bullard, S. M. Inglis, Dr. Julia H. Smith.

Publication—Nelson W. Graham, chairman; President Draper, W. L. Pillsbury.

Library—President Draper, chairman; S. M. Inglis, Mrs. Flower, Professor S. W. Shattuck, Percy F. Bicknell.

Students' Welfare—Dr. Julia H. Smith, chairman; Mrs. Flower, R. P. Morgan.

The committee last named is a new committee.

President Draper presented the report of the Experiment Station.

#### EXPERIMENT STATION REPORT.

Urbana, Illinois, March 12, 1895.

# Dr. A. S. Draper. President University of Illinois.

SIR:—I beg leave to submit from the Board of Direction of the Agricultural Experiment Station the following:

 $Paper\ A$  is a list of warrants drawn, Nos. 81 to 171, inclusive, for the quarter ending December 31, 1894, and is accompanied with vouchers for the same for audit.

 $Paper\ B$  is a statement of expenditures for the quarter ending December 31, 1804

Paper C is a statement of appropriations, expenditures and balances for the quarter ending March 31, 1895.

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

PAPER B-STATEMENT OF EXPENDITURES FOR QUARTER ENDING DECEMBER 31, 1894.

Board expense Books and publications. Bulletins and report. Chemical apparatus. Fuel and lights	\$38 225	
Bolletins and report	823	
Chemical apparatus.	49	
Fuel and lights.	71	
		72
Printing, stationery, and postage. Salaries.	25	57
Seeds and trees.	1,440	50
Tools and enumlies	97	91
Tools and supplies. Wages.	589	33
Total	\$3,398	23

# Paper C-Appropriations, Expenditures and Balances, Quarter ending March 31, 1895.

	Appropriated.	Expended.	Balances.
Board expenses	\$40 00		\$40 00
Board expenses. Buildings and repairs	40 00		40 00
Books and publications	50 00	\$3 00	47 00
Bulletins	700 00		686 50
Chemical apparatus and supplies	75 00		
Fertilizers	25 00		
Fuel and lights	100 00	·	100 00
Incidentals	25 00		25 00
Printing, stationery, and postage	25 00		
Salaries	1,910 00		
Seeds and trees	70 00		
Tools and supplies	250 00		
Wages	750 00	310 00	440 00
Sundry experiments—		4.00	
Wood durability experiment.  Investigation with regard to irrigation		14 24	
Investigation with regard to irrigation	25 00		25 00
Total	\$4,085 00	\$1,669 18	\$2,430 06

### PAPER D-ESTIMATES.

Quarter ending March 31, 1895.	
From general fund— Botanical apparatus. Wood durability experiment.	\$10 00 50 00
Total	\$60 00
Quarter ending June 30, 1895.	•
From general fund— Board expenses Books and publications Botanical apparatus Bulletins Chemical apparatus Fuel and lights Incidentals Printing, stationery, and postage Salaries. Seeds and trees Tools and supplies. Wages Wood durability experiment  Total.	\$40 00 50 00 10 00 300 00 50 00 100 00 25 00 25 00 30 00 200 00 1,250 00 200 00 1,250 00 \$4,090 00
From farm fund— Buildings and repairs. Irrigation experiment	\$400 00 125 00
Total	\$525 00

The Board of Direction asks authority to undertake these two lines of investigation:

- 1. Soil experiments with field crops.
- 2. Irrigation experiments.

The other work which the Board proposes to carry on is along the lines already authorized.

The Board of Direction, until its next meeting, will retain its present staff at salaries now paid.

Respectfully submitted,

T. J. Burrill, President Board of Direction.

Authority was given the Board of Direction to carry on the new experiments named in its report, and appropriations were made for expenses of the Station, according to the estimates presented.

The Secretary reported that E. E. Chester, of Champaign; E. A. Riehl, of Alton, and H. B. Gurler, of DeKalb, were recommended for membership in the Board of Direction of the Experiment Station by the Illinois State Board of Agriculture, the State Horticultural Society, and the State Dairymen's Association, respectively. They were, thereupon, elected members of the Board of Direction.

Messrs. Raymond and Morrison, and Professors Burrill, Forbes, and Davenport were also elected members of the Board of Direction. Professor Burrill was made President of the Board of Direction, and Messrs. Raymond and Morrison were appointed members of its Executive Committee.

Dr. A. S. Draper was elected President of the University for the next two years, at a salary of \$7,000 per annum.

A request having been presented for the opening of White street, across the north campus, the following resolution was adopted on motion of Mr. Morrison:

Resolved, That the opening of White street, through the University grounds, is undesirable because it would be destructive of the drill ground and athletic park, and that the officers of the Board be directed to take any necessary steps to prevent the consummation of any movement in that direction.

The matter of reorganization of the department of Psychology was, after some discussion, referred to the Committee on Instruction, and President Draper, with power to act.

President Graham called Mr. Bullard to the chair and he presided for the rest of the session.

On motion of Mr. Armstrong, the recommendations of the President, with regard to the reorganization of the Department of Agriculture, were referred to the Committee on Instruction.

On recommendation of the Finance Committee, further consideration of Professor Krohn's bill was postponed till the June meeting.

The following resolution was adopted with regard to the Department of Physical Training:

Resolved, That after the present University year, the physical training, both as to men and women, be embraced in a single department, to the end that there may be uniformity of theory and procedure upon a single subject throughout the University, and that a director of this department be appointed at a salary of \$1,600 per annum, with an assistant at \$700 per annum, and that the President of the University be authorized to expend not to exceed \$400 per year in employing expert assistants to coach the athletic teams.

The following resolution concerning the Department of Music was adopted:

Resolved, That the President of the University be requested to report to the Board, as soon as practicable, a plan for starting a department of music, indicating what instructors should be employed, naming suitable persons whose services can be secured and the salaries it may be necessary to pay them, to the end that the Board may determine whether it is practicable to make such a move.

On motion of Mr. Raymond, the following resolution was adopted:

 $Resolv \circ d$ , That Professor Eugene Davenport's title be Professor of Animal Husbanary.

Instructors were reappointed for the ensuing year in accordance with the recommendations made in the President's report.

Professor J. D. Bruner's resignation of the professorship of Romance languages was accepted. Mrs. J. D. Bruner's (Elizabeth C. Cooley) resignation of the assistant professorship of the German language and literature was accepted.

On motion of Mr. Morrison, \$25,00 was appropriated from the general fund for repairs on the rifle range.

The matter of the safety of the second floor of Machinery Hall was referred to the Committee on Buildings and Grounds.

On Motion of Mr. McLean it was voted that measures be taken to secure the establishment of a United States signal station at the University.

The following papers with regard to experiments with coal were received from Professor Breckenridge and referred to the Committee on Buildings and Grounds:

#### EXPERIMENTS WITH COAL.

University of Illinois, Urbana, February 11, 1895.

President A. S. Draper.

DEAR SIR: During the present year we have been making a few experiments to determine the evaporative power of several grades of Illinois coal. The results are not what should be obtained with ordinary good coal. The considerable interest taken in the work started here leads me to believe that this University should at once prepare for the most extensive and sclentific tests of our coal products. The many devices on the market for smoke prevention should be fully investigated so that the manufacturing interests of the state may have reliable information concerning the efficacy of any of these devices.

A careful survey of the work done by different American and foreign inventors and manufacturers should be made and a bulletin should be issued from time to time giving the results of the investigations as the work advances.

A careful and systematic attempt should be made to endeavor to discover, if possible, in what way a maxium economy may be combined with minimum smoke production.

These tests should be made under practical every day conditions. Boilers of different types should be operated under such conditions as are found at all manufacturing points.

The tests should be made with different sizes as well as grades of Illinois coal.

Careful chemical analysis should be made of the coals used as well as the refuse and escaping gases.

Arrangements should be made so that the draft and air supply may be entirely under the control of the experimenter.

It would also be advisable to arrange so that the air supply may be heated before being used.

You will recognize the importance to our state coal interest that work of this description be undertaken.

In order that this work may be taken up it would be necessary to expend considerable money for suitable apparatus, such as fan blower for pressure, fan blower for exhaust, steam induction blower, engine and air compressor, reheating furnace, anemometers, pyrometers.

Considerable expense would be incurred in setting up and taking down the different devices offered for tests.

It seems to me we should not undertake to do this work unless we could have ten thousand dollars to devote to the work.

We expect to erect, so I understand, a central heating plant. This will contain at least  $1{,}000~\rm{H.~P.}$  of boilers and suitable chimney.

We could use any of this plant for purposes of this test, but we should provide sufficient room so that builders may come here and erect a boiler and furnace for purposes of testing.

These tests would surely accomplish much good. They would attract considerable attention to our University from all parts of the state, and if possible such tests should be undertaken.

Yours truly,

L. P. Breckenridge,
Professor of Mechanical Engineering.

University of Illinois, Urbana, March 12, 1895.

To the Board of Trustees of the University of Illinois.

Gentlemen: In accordance with your request made at your last meeting, I have considered the question of experiments in connection with the economical burning of coal under steam boilers. I submit to you a report which I had already prepared for your last meeting, and which did not at that time come to your notice. This report covers the principal features of the case, and is probably what you desire.

I understand that you have decided that a central heating plant is not necessary at the University of Illinois. The crowded condition of our present boiler house will not allow of making experiments on as careful and satisfactory a plan as was anticipated in the report above referred to. It is probable, however, that something can be done; but I am very much opposed to making very much stir outside our regular work, because we can not go into the subject in so careful a manner as we should do if we are to advertise generally throughout the state that we are making scientific tests looking toward the economical consumption of coal and prevention of smoke.

I have received proposals from three different concerns representing as many devices for smoke prevention.

The first two appliances could, with advantage, be experimented with here, and to do that would not involve any serious changes in our boiler construction, but simply the introduction of special grate bars or devices in introducing warm air near the bridge wall.

It occurs to me, however, that it would be more advantageous, as far as results obtained are concerned, if money could be appropriated so that tests could be made of such devices as exist in different parts of the state for producing economical results and smoke prevention, and that we be authorized to go to these places for the purpose of making the test. This would give us an opportunity of testing a larger number of devices than we could possibly afford to test in our present quarters, and I should much prefer to recommend that a small sum, say \$500.00, be appropriated for making tests at Chicago. After this amount was expended we should be able to see how far such money would reach, and what the expense would be of making these tests at the different cities. It would be necessary to go to different places, where the devices exist, obtain permission (which I think it would be possible to do), ship our apparatus to these points, make a series of trials, and then move on to some other place.

I submit these recommendations for your consideration, as requested, believing that something in the line of work indicated is very desirable, and would be of value to the University and state.

Very respectfully submitted.

L. P. Breckenridge,
Professor of Mechanical Engineering.

A communication from Mr. W. R. Howe, offering to do grading on Green street at prices named, was referred to the Committee on Buildings and Grounds.

Mr. Armstrong, to whom, with President Draper, Professor Shea's resignation had been referred, reported recommending that the

President be instructed to say to Professor Shea that it is the unanimous wish of the Board that he withdraw his resignation.

On motion of Mr. McLean, it was voted that the Business Agent be requested to report to the Committee on Buildings and Grounds the salaries of all employés of the University, except those on the corps of instruction.

The bill of the Electric Lighting and Power Company for power furnished in September and October, 1894, amounting to seventy-eight dollars, was ordered paid from current funds.

The Committee on Buildings and Grounds made the following report, which was adopted, and amount named was ordered paid to G. W. Bullard, architect of Engineering Hall:

URBANA, ILL., March 13, 1895.

To the Board of Trustees of the University of Illinois.

Gentlemen: Your Committee on Buildings and Grounds recommends the payment of the final fee of the architect of the new building, amounting to \$1,044.64.

Respectfully submitted,

S. A. Bullard,

N. B. Morrison,

R. P. MORGAN,

Committee on Building and Grounds.

The Finance Committee made the following report, which was adopted:

URBANA, ILL., March 13, 1895.

To the Board of Trustees of the University of Illinois.

GENTLEMEN: Your Finance Committee reports that it has examined the vouchers of the Agricultural Experiment Station, Nos. 81 to 171, inclusive, and has found the same correct and duly receipted.

Respectfully submitted,

ALEXANDER McLEAN,

J. E. Armstrong,

Finance Committee.

On motion of Mr. McLean it was voted to pay Messrs. Yeager & Schultz \$4,900, leaving \$100 to be retained till some further work had been done.

On motion of Mr. Morgan the Secretary was directed to write Mr. C. W. Spalding with regard to the employment of Professor Mc-Murry, and also with regard to the rule of the Board concerning the employment of the professors in the University.

The following resolution was adopted on motion of Mr. Morgan:

Resolved, That we greatly regret that our venerated wise counsellor and colleague, John H. Bryant, should have felt it imperative, on account of his advanced age and enforced absence in the south, to resign his position as Trustee, and that we extend to him our most cordial best wishes for the remainder of his long and eminently useful life.

The Secretary is instructed to forward a copy of this resolution to Mr. Bryant.

On motion of Mr. Armstrong, Messrs. Armstrong, McLean, and Bullard were appointed a committee to prepare resolutions concerning the services of Mr. McKay while a member of the Board.

The Treasurer's report was received and referred to the Finance Committee.

## TREASURER'S REPORT.

CHARLES W. SPALDING, TREASURER, IN ACCOUNT WITH THE UNIVERSITY OF ILLINOIS, FEBRUARY 28, 1895.

				(	
1894.			Dr.		
Novembe:	r 30	To bala	nce	40F0 00	\$145,034 6
December	r 11	Receive	od interest, contract No. 62, E.W. Harms, assignee. No. 81, Frank Topka	\$250 00 63 00	
4.4	$\frac{12}{12}$		principal, "No. 81, Frank Topka	150 00	
4.6	15		interest "No 83 L S Rotten	39 20	
	15		No. 109, Otto Monson	28 00	
4.4	18		from S. W. Shattuck, on general fund	1,001 50	
	21		principal, contract No. 35, Losey & Martin	600 00	
	$\frac{21}{24}$		interest, '' No. 35, Losey & Martin principal, '' No. 36, L. L. Ruyle, assignee.	$\frac{48}{1,500} \frac{00}{00}$	
	24		principal, interest, No. 36, L. L. Ruyle, assignee. No. 36, L. L. Ruyle, assignee.	120 00	
	24	4.4	No. 73 O. Mattson	84 00	
	26		" No. 40, Jos. Dezort	96 00	
	27			200 00	
	27		interest, No. 65, Jos. Cuta	84 00	
	27 27		principal, No.72, Dale & Roise, assignees	$\begin{array}{c} 240 & 00 \\ 148 & 12 \end{array}$	
	28			75 80	
	28	4.4	interest, "No. 79, Ole Sorensen	74 20	
	31		principal, "No. 71, Thos. Peterson	60 00	
	31	• • •	interest, "No. 71, Thos. Peterson	4 20	
	31	• • •	No. 63, R. O. Braaten	4 39	
1895.	2	14.4	Austin coupons due Jan. 1, 1895	575 00	
January	$\frac{2}{2}$		principal, contract No. 45, Blevins & Miller	1,556 10	
	$\tilde{2}$	4.4	interest No 45 Blevins & Miller	124 48	
	$\frac{2}{2}$	4.6	principal, No. 64, E. Lindquist	100 00	
	2		interest. No. 64, E. Lindquist	84 00	
	3		No. 69, B. Pederson	14 70	
	4		" No. 74, B. Pederson No. 72, Dale & Roise, assign's	14 70 8 37	
	4	* *	No. 66, Peter Larson	84 00	
	5		Gallatin county coupons due Jan. 1, 1895	630 00	
"	5 5		Crawford county coupons due Jan. 1, 1895	600 00	
	5		principal, contract No. 53, F. Novotny, assignee interest, No. 53, F. Novotny, assignee	200 00	
	5 5 7		No. 112, Ole Lindquist	56 00 79 63	
	7		from W. L. Pillsbury, on farm fund account	765 11	
• •	7		U. S. Experiment Station warrant	. 3,750 00	
	7		principal, contract No. 38, N. R. Simpson, assignee.	800 00	
	7		interest, contract No. 38, N. R. Simpson, assignee	64 00	
• • •	7		interest, contract No. 46, W. H. Ruyle, assignee	96 15	
	7	6.6	interest "No. 57, C. Anderson	$\begin{bmatrix} 300 & 00 \\ 24 & 00 \end{bmatrix}$	
	7	4.4	principal "No. 75 S. J. Halquist	150 00	
4.6	7		interest, "No. 75. S. J. Halquist	73 50	
	7		interest, contract No. 46, W. H. Ruyle, assignee principal, contract No. 57, C. Anderson interest, No. 57, C. Anderson principal, 'No. 75, S. J. Halquist interest, 'No. 75, S. J. Halquist No. 76, S. J. Halquist principal 'No. 90, Nels Olson	73 50	
	9		principal, 110. 55, 11clis Olson	100 00	
	9		interest, No. 99, Neis Olson	42 00	
4.4	9	4 4	from S. W. Shattuck, on general fund	52 50 1,596 04	
	11	• •	balance 1894 interest, contract No. 46, W. H. Ruyle, assignee.	7 53	
* *	11		interest on contract No. 46, W. H. Ruyle, assignee	96 00	
	21	• •	interest on contract No. 39, J. E. Blickenstaff	24 20	
	21	• •	principal, contract No. 54, B. F. Leibyinterest, No. 54, B. F. Leiby	100 00	
"	$\frac{21}{23}$	•••	principal, No. 41, Christianson &	106 40	
	23		interest, contract No. 41. Christianson & Losey	850 00 73 00	
	29		interest, contract No. 41, Christianson & Losey from S. W. Shattuck on general fund	2,744 51	
February	4		Champaign county coupons due Feb. 1, 1895	270 00	
 6 T	4		principal, contract No. 77, Wm. Buethe	200 00	

# Treasurer's Report—Concluded.

				· · · · · · · · · · · · · · · · · · ·
1895. February	44 44 44 46 66 66 18 18 23 25 25	" principal, " No. 80 Wm. Buethe, assignee interest. " No. 80 Wm. Buethe, assignee account interest on Buethe contracts	\$14 00 200 00 14 00 120 00 67 20 3 50 150 00 400 00 30 50 1, 543 50 1,000 00 93 20 2,000 00	
44	28 28	ment fund	5,000 00 1,976 18	
••	28	" interest to date at 2½ per cent. on all other	412 45	
		funds	362 64	\$34,883 50
				\$179,918 17
		Cr.		
February	28	By amount paid out of general fund as per list of war-		
	98	rants attached hereto	\$17,289 53	
		warrants attached thereto	50,505 37	
		By amount paid out of State Laboratory of Natural History fund, as per list of warrants attached hereto	1,920 64	
	28	By amount paid out U. S. fund, as per list of warrants attached hereto	8,441 74	
* *	28	By amount paid out of U. S. Experiment Station fund, as per list of warrants attached hereto		
• •	28	By amount paid out of U.S. Experiment Station farm	3, 241 05	
.4 4	28	fund, as per list of warrants attached hereto By amount paid out of endowment fund for Kankakee	953 20	
		bonds	5,000 00	00= 054 56
		Balances: State appropriations— Current fund	\$17, 790 81 11, 334 84 5, 126 57 4, 629 75 8, 022 18 41, 664 90 3, 395 50 602 09	\$87, 351 53 \$92, 566 64
				\$179,918 1
				φ113, 313 11

Professor Shattuck presented his report as business agent:

## BUSINESS AGENT'S REPORT.

University of Illinois, March 12, 1895.

Nelson W. Graham, President of the Board of Trustees, University of Illinois, Sir: I have the honor to present you herewith the following financial statements:

Paper A, a showing of the current appropriations from Dec. 1, 1894, to Feb. 28, 1895.

Paper B, the condition of the state appropriations Feb. 28, 1895.

Paper C, the United States fund Feb. 28, 1895.

 $Paper\ D,$  a list of vouchers, presented for audit, being Nos. 1,551 to 2,125 of old series, and Nos. 1 to 500, new series.

Paper E, an estimate of receipts and expenses for the six months ending Sept. 1, 1895.

Paper F, an estimate for the three months ending June 1, 1895. Paper G, a list of appropriations the Board is requested to make at this time. PAPER A-CURRENT APPROPRIATIONS.

December 5, 1894, and January 10 and February 12, 1895.	Appropriated.	Receipts appro- priated.	Expended.	Balance.
Board expense.  Salaries for instruction and for President U.S. fund State.  Salaries for services Buildings and grounds Fuel and lights Stationery and printing. Preparatory School. Mechanical department Architectural department Horticultural department. Military department Laboratories Library and apparatus. Incidentals.	3, 005 00 200 00 3, 005 00 200 00 3, 000 00 400 00 200 00 255 00 270 00 75 00 400 00 50 00	\$198 75 1, 168 50 358 65 801 27 37 85 554 66	103 68 31 96	\$215 87  48 09  86 71 61 12 163 12 10 42 54 28 1 36
Sundries— Water supply Furniture and fixtures Heating apparatus Advertising Biological Station Art department President's office Accredited schools Band instruments Illini The Technograph Junior Annual. Gymnasium Moving into Engineering Hall Inauguration and dedication Publication of exercises Publication of Trustees' address. Chase property Summer school. South and Griggs farms Typewriter and cabinet Music fees.	300 00 608 10 915 52 102 39 27 10 382 34 16 68 357 110 00 110 00 100 00 300 00 250 00 00 7 000 00 7 000 00 7 000 00 100 00 7 000 00 7 000 00 100 1	1, 620 00 133 40	219 10 261 06 450 22 188 06 30 21 27 10 259 40 13 77 128 57  110 00 84 56 171 20 135 10 2 25 43 08  65 34 164 00 130 00	297 75 206 92 7,000 00 934 66 1,696 98
PAPER B-STATE A		1		
February 28, 1895.  Closed out. Cabinets. Furnishing and heating Natural History Hall. Engineering building. Applied mechanics. Civil engineering. Psychology Botany. Library. Zoölogy Geology Geology Geology Buildings and grounds Mechanical engineering Municipal and sanitary engineering. Salaries for instruction. Geology cases. Pedagogy Greek. Woman's gymnasium Shop practice. Unassigned.	\$90, 694 16 1, 000 00 6, 000 00 472 00 233 00 200 00 10, 000 00 450 00 1, 200 00 2, 100 00 4, 000 00 12, 018 17 150 00 150 00 15	953 01 5, 361 92 153, 725 06 179 66 190 77 176 18 8, 852 06 197 16 1, 717 34 3, 175 66 1, 177 34 1,	\$46 99 638 01 6 6, 274 95 643 34 47 37 85 5 840 9 30 302 90 382 66 5 824 35 94 36 14 00 3 34 47 5 99 35 6 6, 283 81	638 01 6, 274 95 432 34 53 40 9 30 273 85 1, 147 97 778 34 302 90 382 66 824 35 48 10 14 00 34 47 99 35 257 00
Total				

#### PAPER C-UNITED STATES FUND.

	Received.	Expended.	Balance.	Assigned.
Year ending June 30, 1893.				
Before reported on	\$17,663 09 250 00 86 91	156 93		
Total	\$18,000 00	\$17,906 93	\$93 07	\$93 07
Year ending June 30, 1894.		÷ :		
Before reported on. Testing laboratory Geology Zoölogy Architecture	1,700 00	1,700 00 300 00 1,000 00	\$40.47	
Total	\$19,000 00	\$18,959 53	\$40 47	\$40 47
Year ending June 30, 1895.  Salaries for instruction.  Testing laboratory.  Electrical engineering.	1,000 00	125 60 946 68	53 32	\$9 40 53 32
Total	\$20,000 00	\$14,958 56	\$5,021 44	\$62 72

With this paper I also connect a bill for \$112.69, presented by Charles W. Spalding, Treasurer.

By the custom of many years, the appropriations from current funds become inoperative if not used within the quarter that they are made. Hence it will be necessary to take action again in the matter of the Chase property purchase, if it is to be paid for. I have not included an item for that purpose in the list of appropriations of paper G, as the assignments before made from the State and United States funds, together with the usual appropriations for the three months, exceed the available funds, including the \$8,000 of the reserve fund.

It will be necessary to put off a part of the usual payments of May and June till the July interest on the endowment is received.

The attention of the [Board was drawn to the condition of the finances at its meeting in September last (see report of meeting, page 31). Since then it has appropriated a large amount outside of the budget presented by the Business Agent.

The Board is requested to make the following assignments:

From the State appropriations— For shop practice For salaries for instruction	\$300 00 5,983 81
From the United States fund— For salaries for instruction. It is also requested to make available for current use the balance of the reserve fund.	5,154 98 8,000 00

Respectfully submitted,

S. W. SHATTUCK,

Business Agent.

On motion of Mr. Armstrong, assignments of state appropriations and of United States fund, were made as requested in the Business Agent's report. (See above.)

On motion of Mr. McLean, the remaining \$1,000 of Kankakee bonds held as a part of the general fund, were ordered transferred to the endowment fund, the general fund to be reimbursed therefor by cash from the endowment fund.

The following appropriations were made, as recommended by the Business Agent:

## APPROPRIATIONS.

oard expense		\$40
Board expense	23	3,84
alaries for services	3	3, 10
Buildings and grounds		20
'uel and lightstationery, printing, postage, and catalogue	$\ldots = 2$	2,50
tationery, printing, postage, and catalogue	1	1, 20
aboratories		20
aboratories		5
filitary department		5
Iechanical, architectural, and horticultural departments		30
ncidentals		20
Vater supply		12
urniture and fixtures		10
leating apparatus		20
hop practice classes		30
dvertisingbal	ance.	15
Gological station	******	72
rt denartment		7
ceredited schools		12
711:21		22
The Technograph	4.4	10
ymnasium		1
ublication of exercises		29
'ublication of Trustees' address		20
ummer school.		93
outh farm well	4.4	20
outh farm well		-20
Total	995	5.83

It appearing that the Executive Committee of the Board, to which had been referred the matter of the purchase of the Chase propery, had taken no action concerning the purchase, the vote whereby the purchase was ordered at the meeting of February 12th (see page 68), was reconsidered, and the matter was referred to the Committee on Buildings and Grounds.

The bill of the Treasurer, C. W. Spalding, amounting to \$112.69, was ordered paid.

The Executive Committee of the Agricultural Experiment Station was requested to consider a plan of reorganization of the Station and to report upon the same at the June meeting of the Board.

Mr. Morgan, of the committee to which the matter had been referred, offered the following resolutions with regard to the hazing incident:

Resolved, That the Board approves and commends the action of the Council of Administration in suspending students who were engaged in the recent kidnapping of the president of the freshmen class, and will cordially support any future action which may be necessary to prevent effectually any conduct on the part of the students which interferes with the rights of individuals or reflects harmfully upon the University.

Resolved, further, That the Board is highly gratified by the moral courage and good sound sense displayed by the students in pledging themselves against hazing and any action not for the best welfare of themselves and the University.

The resolutions were adopted.

On motion of Mr. McLean, it was directed that hereafter inventories of the several departments of the University be made at the September meeting.

On motion of Mr. Morgan, the Board adjourned.

N. W. GRAHAM,

W. L. PILLSBURY,

President.

Secretary.

# MEETING OF JUNE 11, 1895.

The Board of Trustees of the University of Illinois met in the University parlor, Urbana, Illinois, at 3 o'clock p. m., Tuesday, June 11, 1895.

The members present were Messrs. Armstrong, Bullard, Graham, McLean, Morgan Morrison, and Raymond, and Mrs. Smith and Mrs. Flower; those absent were Governor Altgeld, Messrs. Inglis and Judy.

The minutes of the last meeting were approved as presented by the Secretary.

Mr. Graham suggested that in recording the minutes it be stated, after the list of committees on page 74, that the last named committee, that on Students' Welfare, was a new committee.

The President presented his report.

## PRESIDENT'S REPORT.

URBANA, ILLINOIS, June 11, 1895.

To the Board of Trustees of the University of Illinois.

Gentlemen: The Faculty of the University respectfully recommends that you give authority to confer first degrees as follows:

#### DEGREES.

College of Literature and Arts. Degree of Bachelor of Arts.

Joel Edward Ferris, Parker Hale Hoag, Bertha Marion Pillsbury, Marion Emeline Sparks.

College of Literature and Arts. Degree of Bachelor of Literature.

Robert Allen Bower, George Henry Campbell, Sherman Duffy, Marianna Green, Francis Edward King, Edward Loring Mann, William Ira Roysdon, Daisy Coffin Scott, William John Scott, Henry Harrison Scurlock, Bertha Spencer, Marion Thompson. College of Engineering. Degree of Bachelor of Science.

Course in Architecture.

Herbert Clarke Arms, William Thomas Burrill, Alexander Donnan, Alfred Fellheimer, Frederick Blair Keeler, Edward John Lake, Albert Milton Long, Fred Elbert Mather, William Robert Morrison, Charles William Noble, Arthur Low Pillsbury, Thomas Washington Reely,

Joseph William Royer.

Course in Architectural Engineering.

William Henry Dillon,

Stephen Ford Holtzman, Homer Thomas.

Course in Civil Engineering.

Harry William Baum, Charles Worth Beach, William Guthrie Boon, Ray Shepherd Carberry, Milo Smith Ketchum, William Clarence Smith Lemen,

Robbins Yale Maxon,
Alexander Majors Munn,
John Conrad Quade,
Harley Edson Reeves,
Charles Victor Seastone,
John Eaton Shepardson,
Godfrey Sperling.

Course in Electrical Engineering.

Earl Vanhise Capps, Jesse Grant Funston, Ernest Alexander Hunt, Peter Junkersfeld, William Haven Kimball, Walter Noble Vance, Charles Carlton Webster, Parker Merrill Williams.

Course in Mechanical Engineering.

Charles Barry, Fred Albert Beebe, Frank Lyman Busey, Clyde Robert Carmack, James Albert Green, Elmer Kirkpatrick Hiles, David Rossiter Llewellyn, Albert Jefferson Sayers.

Course in Municipal and Sanitary Engineering.

Charles Baker Burdick,

Clarence Adelbert Clement.

College of Science. Degree of Bachelor of Science.

Course in Chemistry.

John DeWitt Clinton, Armin Harms, James Albert Kinkead (Class of 1893), Herbert Brunskill Rowe, Robert Watt Stark.

Course in Natural Science.

Hortense Call, Adolph Hempel, Horatio Richmond Marsh, Grace Lillian Moore, Mabel Stewart, William Kriebel Yeakel. The following named graduates of former classes, having pursued the studies required therefor, are recommended by the Faculty for the second degrees designated:

	1		
Keturah Elizabeth Sim, B. L		1884	Degree of Master of Literature
William David Pence, B. S	4.	1886	Degree of Civil Engineer
Anna Shattuck Palmer, B. L	• • •		Degree of Master of Literature
Andrew Wallace Gates, B. S	• • •	1892	Degree of Civil Engineer
George Washington Seaman, B. S			Degree of Mechanical Engineer
Charles Frederick Hottes, B. S	• • •	1894	Degree of Master of Science
Grant Clark Miller, B. S		1894	Degree of Master of Architecture.
Robert Alvin Wood, B. S	**		Degree of Mechanical Engineer
Ola C Woolsey, B. L			Degree of Master of Literature

The University not having had authority to grant degrees before July 1, 1877, the Faculty recommends that degrees be conferred as follows upon persons graduated prior to that date:

## Class of 1872.

Henry A. Drewry, B. S., Jacob Norton Wharton, B. S.,	Reuben O. Wood, B. S.
	CLASS OF 1873.
Edgar L. Hill, B. S.	Samuel Houston Hook, B. L.
	Class of 1874.
Herbert Eaton, B. S. Gregory Gabrialial, B. S.	William Watts, B. S. Walter Ward Wharry, B. S.

## Class of 1875.

D. Elroy Barnard, B. S. Vantile William Coddington, B. S. Franklin P. Dobson, B. S. Burleigh Arthur Dunlap, B. S. Earnest Eaton, B. S. George N. Gridley, B. S. John Charles McCauley, B. L. James H. Parks, B. S. Emory Edward Patch, B. S.

William Clarence Pollock, B. S. Hector Hilgard Tyndale, B. L. Laura Morris Anderson, B. L. (Mrs. J. R. Greenhalgh) Israella Kate Kariher, B. L. (Mrs. Albert Eisner) Flora Lorena Kellogg, B. L. (Mrs. Hudson)

#### CLASS OF 1876.

Edward Lull Ballou, B. S. William B. Chandler, B. S. James Frederic Drake, B. L. John D. Gill, B. L. Simeon T. Gore, B. S. Charles E. Gregory, B. L. Daniel S. Mackay, B. L. William A. Mackay, B. L. Frank I. Mann, B. L.
William F. Oliver, B. L.
Frank M. Palmer, B. L.
James Frederic Rhodes, B. L.
Charles Weston, B. L.
Thomas Thatcher Williams, B. L.
Mattie Gray Holton, B. L.
(Mrs. J. H. Krebbs)

#### Class of 1877.

Charles H. Barry, B. S.
Charles Brush, B. S.
William Buckingham, B. S.
Luther G. Clay, B. S.
Benjamin F. Crow, B. S.
Benjamin F. Crow, B. S.
Benjamin F. Grow, B. S.
Hiram Gilkerson, B. S.
Hiram Gilkerson, B. S.
Allen G. Kennedy, B. S.
Allen G. Kennedy, B. S.
Loseph Corson Llewellyn, M. S.
John Firemont Moore, B. S.
George Clark Rice, B. L.
John James Seymour, B. S.
Color L. Sim, B. S.

Franklin Spence, B. S.
John M. Stayman, B. S.
Myron Jerome Wright, B. S.
Nettie Adams, B. L.
Eva Bogardus, B. L.
Ida Belle Falls, B. L.
Emily C. Maxwell, B. L.
Martha Page, B. L.

Emma Clarinda Piatt, B. L.
(Mrs. M. E. Whithan)
Velma Elethea Skinner, B. L.
(Mrs. Velma Skinner-Ward)
Gertrude Switzer, B. L.
(Mrs. H. Peddicord)

#### PROGRESS DURING THE YEAR.

A comparison of the catalogues shows an increase in numbers, of the corps of instructions, as follows: 1893-4, 63; 1894-5, 75.

The increase in total attendance is from 743 to 815. The increase in the University proper is from 552 to 609.

The following report of the work of the University, made by the committee of the senate appointed to visit state educational institutions, is submitted for your information:

REPORT OF SENATE COMMITTEE TO VISIT STATE EDUCATIONAL INSTITUTIONS.

Springfield, Ill., May 14, 1895.

The Hon. Joseph B. Gill, President of the Senate and Gentlemen of the Senate.

Your committee, by appointment of the senate to visit educational institutions, beg leave to report that, in the discharge of their duty, they have visited the University of Illinois, and beg leave to submit for your consideration the following:

The University of Illinois is situated at Urbana, Champaign county, Illinois, and opened its doors for students in 1868. From that time until the present, her growth has been gradual and her advance in the last few years has been more rapid than in any portion of her history, and the promise of future good is greater to-day than ever before.

The grounds of the University cover about seven hundred acres. A large part of this tract is beautifully laid out and is covered with magnificent shade trees. Upon the grounds are situated six principal buildings, viz.: University Hall, Machinery Hall, Chemical Laboratory, Natural History Hall, Military Hall, and the new Engineering Hall. In addition to those six buildings are a number of other small buildings for department uses by the University. In the University Hall are located the Art Gallery, Library, Museums of Natural History and of the Industrial Arts.

The University is divided into four colleges, viz.: Agriculture, Engineering, Science, and Literature and Arts. The work of the College of Agriculture is practical as well as scientific and technical. It purposes to give students such instruction as will properly fit and prepare them to become practical and successful farmers. In connection with this department is also the Experiment Station, which furnishes abundant opportunity for the practical demonstrations and experiments. We believe that this department alone is of great value to the State, and its aid in the advancement of agriculture, its thorough preparation of young men for this most important of all interests in this State, is worth all that it costs the State of Illinois to maintain the University. One of the needs of to-day among the great agricultural interests is more information, and this department furnishes it and is meeting a long felt want, and we believe will largely assist in bringing the farmers of Illinois up to that high standard of success that their profession so well deserves.

The College of Engineering comprises five departments, the Architectural Civil, Electrical, Mechanical, and Sanitary. In all of these departments there is great opportunity offered to the young man or young woman desiring a practical education, which alone furnishes that power so necessary to success. In all of these departments the young man and young woman have day by day practical experience in the distinctive lines in which they are engaged, thus not only furnishing them the theory in these several departments, but giving them a practical knowledge, which fits them much better to cope readily with competition when they go out into the active duties of life to maintain themselves. In addition to this, the physical labor required in these departments in the presence of the studeuts, gives to manual labor a standing and a dignity that is worth a great deal to every young man and young woman.

The University is prepared to furnish and is furnishing to our young people a fine literary education, and, at the same time, fitting and preparing them to take a place at once as practical men and women in all of these departments of life, and it is with pleasure that your committee notes the enthusiasm and earnestness with which the teachers in all of these several departments engage in their work, and the interest and enthusiasm manifested by the students of the institution is also noticeable.

The Zoölogical Museum of the University possesses a large collection of valuable specimens which cannot be replaced by almost any amount of money. The same may be said of the Botanical and Geological Museums. The Agricultural Museum is also rich in specimens. The Museum of Industrial Arts contains a large collection of the raw materials of industry. The Art Gallery contains a large number of full size casts of celebrated statues, and a large number of other valuable works of art.

The library contains about 28,000 volumes, which together with the libraries of the Agricultural Experiment Station and the State Laboratory of Natural History, make over 35,000 volumes accessible to the students.

Your committee desire to call special attention to the fact that the valuable collections in all these museums, together with the library, are located, of necessity, in University Hall, which is the oldest building on the grounds, built without much reference to protection from fire; and your committee believe that there should be built upon the University grounds, a building of sufficient size and made as near as possible fire-proof, in which the library can be placed and which should be known as the Library Building, and also in which the the collections of all these museums could be put and there safely kept; and your committee believe that this building should be furnished by the state at once. The building in which they are now located is in such a condition, that, if a fire was to break out, it would be impossible to preserve or save these valuable collections, and if they were destroyed they could not be replaced probably for a quarter of a century, if ever. We desire to call attention to another fact, that the chapel and a great many class rooms are located in this same building, and that there are at times from four to six hundred students probably reciting in that building and there is but one stairway leading from the fourth story in which are the society halls, and that in case of fire it would be almost impossible for the students to get out safely.

Your committee also call attention to the fact that the machinery in Machinery Hall is on the second floor of that building, and they are also informed, and from their investigation believe, that this building was not constructed with the idea of having such an amount of heavy machinery on the second floor, and that the machinery in said building on said second floor, together with the number of students that are at work with the machinery at times, is too heavy a strain upon the floor of said building. Your committee believe that a building should be furnished so that this machinery can be placed on a ground floor.

Your committee also note that the power house to furnish heat is so situated and in such a condition that it would appear to be impossible properly to heat the buildings. The electrical plant is also in a building where there are other departments. Your committee believe that all of the heating apparatus, and

the electrical plant should be consolidated in one building, so that in case of fire or explosion, there would be no danger to other buildings or to the lives of the students

Your committee find that there is no sufficient gymnasium room for either the gentlemen or the ladies. The young men are permitted to use part of the Military Hall for that purpose, and the ladies are substantially without accommodations of this kind. We believe that there ought to be provided at the earliest possible date a good gymnasium, especially for the young ladies, together with bath rooms for all of the students.

While your committee believe that the very best work possible under all the circumstances is being done at the University, yet your committee believe that there are many things that should be added to the University to make its work complete and to make it rank with other universities in states not near so large or so able as our own. Therefore, your committee beg leave to make the following recommendations:

- 1st. They believe that the appearance of the grounds and the landscape view of the same could and would be materially improved if the trees on the grounds were trimmed to that height that you could see over the entire grounds from any part thereof.
- 2d. We believe there is a necessity for more room for the accommodation of the students as an assembly room, and also recitation rooms.
- 3d. We believe the old street railway track should be taken out of the grounds where it now is and that that street should be properly paved and that some old fences along the side of that street should also be removed.
- 4th. That a new building should be provided in which to place the library and all of the specimens in the several museums. That said building should be large enough to anticipate the future wants of the University.
- 5th. That every encouragement should be given to all of the experimental work done in the University, as your committee believe that it peculiarly fits young men and women for their special vocations in life. We believe that it is better to do such work in the presence of the students and have them do it while yet in school, than it is to theorize and talk about it in the class room.
- 6th. We believe also that every encouragement should be given to the University in extending its work in the agricultural department. That it should be furnished with all the facilities for carrying on a scientific examination and experiments relating to all of the industries of the state.
- 7th. We heartily approve of the system of allowing students the free choice of studies, thus enabling each student within certain lines to take such work as suits his or her tastes and business, and prepares them for their particular work in life.

In conclusion your committee believe that the foundations have been well laid for a great university, and that the people of this state should take sufficient pride in their University and assist it in every way possible to build upon this foundation, until it shall be a peer to any other institution in the United States and recognize no superior.

We believe that Illinois is entitled to a University to which her people will gladly lend their aid in every way, so as to make it a University that will send out into the world her sons and daughters strong physically, mentally, and morally, to meet and overcome successfully all obstacles in their pathway to success.

Your committee take great pleasure in most heartily recommending to this state and to the People of the State of Illinois, the work of Dr. Andrew S. Draper, the present President of the University, and congratulate all of the people upon his selection to this position. In him we believe the University has a man worthy and well qualified to carry on this great work of education.

His ripe experience and mature judgment in the management of the University will insure its success if the people give him that hearty support that he and the cause he so ably represents merit.

Most respectfully submitted,

ORVILLE F. BERRY, GEORGE D. ANTHONY, C. PORTER JOHNSON,

Committee to Visit State Educational Institutions.

The following report from the Inspecting Officer to the Inspector General of the United States Army, will show a very gratifying improvement in the military department:

#### MILITARY DEPARTMENT.

Springfield, Ill., May 20, 1995.

The Inspector General, United States Army.

SIR: I have the honor to submit the following report of an inspection of the Military Department of the University of Illinois:

The Military Professor, Captain D. A. Brush, 17th Infantry, is a progressive and energetic officer of much experience. The result of his year's work proves him well fitted for the position.

The authorities are convinced of the good effect of military instruction on the students, support it by marked consideration in class standing, and uphold the Military Professor in the enforcement of discipline.

A rifle range, one of the best armories and drill halls in the State, ground adequate for close order drill, and such expenditures as are necessary, afford material support.

The corps is organized into a battalion of four companies, and band officers are uniformed as in the State service; band in dark blue blouse, trousers, and forage cap; all others wear a similar uniform of cadet gray. All were in uniform. The average age of the cadets is twenty years.

The review was followed by an inspection and battalion drill. All movements were executed with snap and precision. Officers seemed thoroughly conversant with their duties.

Of the total number of cadets (239), 13 were absent, 3 with and 10 without leave.

Arms and equipment are cared for by a janitor. The arms were in good condition; the leather parts of the equipment were scratched. The setup of the cadets and their steadiness during the exercises showed thorough instruction in the school of the soldier. The marching in line and column was excellent. The old guns being obsolete and the 3,2 in. rifles expected, no instruction has been given in the manual of the field piece. Flagging of messages by the signal squad was well done. Some instruction in target practice is given. Theoretical instruction is given in drill regulations and organization and tactics. Wagner's "Security and Information," and "Organization and Tactics" are the text books used. Lectures illustrative of the course of study are given by the instructor. All government property was serviceable and in good condition. The cadets" rifles are new.

The graduating class showed, by their answers, intelligent and practical application of the theoretical knowledge given.

The Military Department is in a healthy and growing condition. The benefits evidenced amply justify its continuance.

Woven cartridge belts should replace the leather waist belts. They are less expensive, more durable, more useful, and easily cared for.

Pieces lighter and more easily handled by cadets than the 3.2 in, rifles should be supplied for artillery instruction.

A cadet rifle of the magazine pattern should replace the obsolete ones now in use.

The drill ground is rather small for extended order drill. The lack of time and space for this and practical instruction in minor tactics, is a drawback not peculiar to this, but common to most colleges. To overcome it a summer encampment of the cadets of colleges in the same state is a desirable but hardly attainable goal.

Very respectfully, your obedient servant.

DAVID J. BAKER, JR., 1st Lieutenant 15th Infantry.

#### CATALOGUE AND ADVERTISING.

I respectfully recommend the appropriation of \$2,000 for the publication of the next annual catalogue and for other publications calculated to bring the University to the knowledge of the people of the state.

#### LECTURES.

I respectfully recommend the appropriation of the sum of \$1,000.00 for the purpose of meeting the expenses of a course of lectures upon special topics of interest in the work of the University, by persons of well known prominence in similar work elsewhere, such lectures to be delivered at the chapel of the University and to be free.

#### CURRENT UNIVERSITY PUBLICATIONS.

For several years the Board of Trustees has appropriated \$500.00 to assist in defraying the expenses of the Illini, a students' publication which has been sent to all the high schools of the state. This publication has reflected much credit upon the student body during the last year. In appearance it has ranked with any similar publication in the country. It has been partially devoted to the publication of papers of permanent educational value, prepared by members of the Faculty or by students, but more largely to items of University news and information. In the management of the Illini the University authorities have intentionally absolved themselves from responsibility. As far as we have been disposed to go in that direction has been to make sure that nothing was introduced into its columns which was calculated to reflect upon any University interest. It seems to me the time has come when we may advantageously change the University policy in this regard. To that end I recommend the appropriation of \$300.00 to the management of the Illini, upon condition that a copy of the paper be sent to each of the high schools of the state upon a list furnished from the Registrar's office, and not exceeding 400 in number. In view of a second recommendation which I shall make in this connection, I think it would be specially advantageous to the Illini it should be published in less expensive form and should only attempt to cover fields of current University news.

I also recommend that the University begin with the fall term the publication of a magazine to be devoted almost exclusively to papers of permanent educational value prepared by persons connected with the University, and that the sum of \$800.00 be set apart for defraying the expenses of the same. During the last year we have had a considerable number of papers which were well deserving of publication and which have not found their way into print for lack of provision for the same. I feel confident that a publication of this character would not only stimulate all the departments of this University, but would reflect credit upon us abroad.

## UNIVERSITY MILITARY BAND.

I have found continual annoyance during the year from the fact that members of the senior and junior classes, who had rendered service in the battalion during their freshman and sophomore years, and who were no longer

subject to military duty, objected to service in the band, although their services were highly necessary to its efficiency. It is needless to say that the military band is a very important element in our University life. I can readily see, moreover, that it is quite a tax upon students and that there is considerable ground for the feeling on their part that they should be excused from band service when they are no longer subject to military duty. I am informed that it would be satisfactory to a number of students of this class to continue their service in the band if their term fees were returned, and I therefore recommend that the term fees be hereafter returned to such students as may be approved by the professor of military science, who, though no longer subject to military duty, shall continue their service in the band, upon condition that they sign an agreement to be obedient to all orders of the constituted authorities of the University touching the military band, and that they remain in such service throughout the year up to and including the day of the annual commencement.

## CORPS OF INSTRUCTION.

The time has come, it seems to me, when it is imperatively necessary for the Board of Trustees to take action defining the proper classification of the members of the instructional force, and prescribing the duties and prerogatives of the several classes. There has been no friction in the force during the year and we have no reason to anticipate any, but I think it would be a relief to all of the members if their prerogatives and duties were defined by action of the Board of Trustees.

Some changes are imminent in the force. Professor James Dowden Bruner has tendered his resignation. Miss Elizabeth Cutting Cooley (now Mrs. Bruner) has likewise tendered her resignation. Professor William J. Eckoff has tendered his resignation of the position of professor of pedagogy. These several resignations are herewith transmitted. Professor Edward Snyder, absent during the year on leave, and Assistant Professor James McLaren White, also absent during the year on leave, have indicated their readiness to resume work at the beginning of the next University year.

For the position of professor of pedagogy I respectfully recommend the appointment of Mr. Arnold Tompkins.

For the position in the department of Romance languages, made vacant by the resignation of Professor Bruner, I recommend the appointment of Mr. George D. Fairfield, with the title of Asssistant Professor of Romance Languages.

I recommend the establishment of a department of Political Science, and the appointment thereto of Mr. Charles W. Tooke, with the title of Assistant Professor of Political Science.

I recommend the establishment of a department of Mediaeval History and recommend the appointment thereto of Mr. Frank Zinkeisen, with the title of Assistant Professor of History.

For the position of Director of Physical Culture I recommend the appointment of Mr. Henry H. Everett.

For the position of Director of Physical Culture for Women I recommend the appointment of Miss Ella H. Morrison.

I also recommend the appointment of Mr. George A. Huff as assistant director of the gymnasium and coach of the athletic teams. Mr. Huff will come to the service of the University for \$1,000.00 during the next year and the athletic teams are willing to defray one-half of the expense involved. The department of physical culture and athletics has so developed as to make this step advisable, and I think we are fortunate in being able to secure the services of so good on assistant as Mr. Huff has shown himself to be.

At the last meeting of the Board I was, by resolution, directed to ascertain for what expense it would be possible to establish a department of music in the University, and have given considerable attention to the matter. As the result of my investigation I learn that it is possible to establish such a depart-

ment upon a very satisfactory basis at an expense which will not exceed \$1,500.00 or \$1,600.00 per annum, and which is likely to be very much less than that. I respectfully recommend the appointment of Mr. Walter Howe Jones as director of the department of music to be established.

I also recommend the appointment of an instructor in vocal music.

I also recommend the appointment of Mr. William L. Steele to a special musical scholarship in the University. Mr. Steele is now a student in the University in his junior year. A most worthy man, an excellent student with unusal ability, he has been of considerable assistance to us in a musical way during the last two years. During that time he has led the military band. While he is much interested in University music, he feels that he cannot devote so much time to the matter without injury to his regular work, and I do not think it ought to be expected. He is willing to take two years in which to perform the work required in his senior year, and devote half of his time to general University music, for a compensation of \$300.00 a year. I think it would be a unique compliment to him and an excellent arrangement for the University to bestow upon him a special musical scholarship of the value of \$300.00 a year for the next two years.

Taking the foregoing recommendations into consideration and also some other changes in the corps of instruction, of which it is not necessary to speak here in detail, I recommend that the corps of instruction with titles and salaries for the next year be determined as in the schedule submitted herewith.

This schedule is made without any reference to the advisability of action by the Board of Trustees covering the general change of salaries for members of the corps of instruction or any classes thereof, but it is made with some special reference to what I conceive to be the special claims of individuals.

Beyond all this I am constrained to say that I think the best interests of the University call for the establishment of a course of Domestic Science, but I have not been able to see my way clear for any particular recommendation upon that subject as yet.

### REORGANIZATION OF THE SHOPS.

It seems to me that the situation in the mechanical shops is decidedly unfortunate. There is a lack of system, plan, and neatness in the shops. The men in charge of the shops have been selected, I fear, without sufficient reference to educational interests. The work of the shops will lack practical results unless it is closely allied to educational interests. I think a policy should be pursued which will bring intellectual development and manual skill into more intimate relationship. It seems to me, also, that there is an unfortunate association of commercial interests in our shop practice. The present arrangement is not only unfortunate educationally, but I think it is unfortunate from a business standpoint. I am constrained to believe that it is costly to our educational work and far from economical for our business interests. I am unable to see why two wood shops should be maintained and think one of them should be abolished without delay, in the interest of good work as well as of economy of space and of instructors and foremen. Beyond all this it will be necessary to remove the heavy iron-working machinery placed upon the second floor of the mechanical building. It not only causes the building to vibrate, but leads to apprehension as to its safety. A special appropriation has just been made by the legislature to cover the expense of these changes, and, while we are making the changes which it seems to me are imperatively necessary, it seems to be a proper time to make changes which are desirable. I therefore recommend:

- 1. That a new shop one story high be erected on the east side of the avenue leading from University Hall to Military Hall directly south of the old railroad track, and that this shop run east and west with the head against the avenue.
- 2. That the iron-working machinery on the second floor of Machinery Hall be removed to this shop.

- 3. That the architectural wood shop be discontinued and the machinery and implements therein be moved to the second story of the present mechanical building, and that all the wood work in connection with the University be embraced within a single department to be carried on upon that floor.
- 4. That the parts of the mechanical engineering equipment now in the basement of the Chemical Laboratory be removed to Machinery Hall or to the new shop.
- 5. That a room be set apart in Machinery Hall for the use of the superintendent of building and grounds, who, it is hoped, will soon be appointed, to be used by him for carrying on carpentry, cabinet-making, or other work incidental to the needs of the construction and supply department of the University.
- 6. That the President divide the remaining space in Machinery Hall between the mechanical engineering department and the testing laboratory, according to their relative needs.

#### CARE OF BUILDINGS AND GROUNDS.

It seems clear to me that the time has come when it is necessary to establish a new department in aid of the proper administration of University affairs. I refer to a department having charge of University property. Nothing has caused me more annoyance during my service with the University than the very common neglect of University property which has been manifest. I do not mean to lay special censure upon any particular individual. The fact is that University buildings have been erected and grounds have been developed without any organization adequate to their care. One or two of the janitors seem to have had a fair conception of what good janitorial service is. The others are incapable of any such conception, and in my judgment, are altogether unfitted for the service which they are bound to render us. Buildings are not kept as clean and wholesome as they should be, and furnishings suffer severely because of continual neglect, or because what is done is done by persons who have no knowledge of what should be done and no adaptation to the service. Members of the corps of instruction and officers in administrative positions are continually put to serious annoyance because of the inefficiency of janitorial service.

Criticism may properly be made upon the care of the grounds also. The lawns have not been renewed where they have become run out. The trees need trimming higher up so that one can look across the campus when standing on the ground. When trees have been cut down the stumps have been left in the ground and always make an unsightly spot upon the lawn. Law-lessness is prevalent about University property to a degree which I never saw before, elsewhere, about public property. The people of the vicinage maraude upon our grounds and are impertinent when their depredations are resisted. All of the heavy stone-work for the cemetery at the south of the campus is drawn through the grounds, funeral processions frequently pass through the grounds, even military processions do this to the demoralization of University work. At the last Memorial Day exercises, by count, more than 7,000 persons passed through the grounds, paying no respect to lawns or shrubbery. rode their horses and drove their vehicles over the lawns and were displeased when the employés of the University endeavored to stop such proceedings. The daily labor which has been employed about the University has been very unsatisfactory for want of competent direction. I am constrained to say that sufficient money has been paid for this labor to have produced very appreciable results, but that such results have not been attained because of lack of organization and necessary direction. There has been a lack of responsibility and accountability about the matter.

From these remarks I desire especially to except Mr. A. B. Barker, who has for 20 years been in charge of University Hall and has always been as faithful and devoted as it is possible for a man to be. He has been a faithful servant of the University, entitled to the respect of its officers. His advancing years render it impracticable for him to carry on the service now required of him, but I trust that there may be a readjustment which will retain him for certain duties to which he is exceptionally adapted.

-7 U. I.

In view of the foregoing, I recommend the following:

- That a Superintendent of Buildings and Grounds be appointed who shall have general charge of all janitors and other persons employed to perform labor in the care of buildings and grounds, and personal property about the University; that this officer be authorized to appoint all janitors and workmen necessary to be appointed, and that he also have authority to discharge any janitor or workman, in his department, for cause, at any time.
- 2. That Mr. A. B. Baker be relieved from service as janitor of University Hall, but that he be retained in the service of the University, and allowed the use of the rooms now occupied by him in the basement of University Hall, and required to show visitors about the University buildings and grounds, and perform such other light service as may be required of him by this office.

  3. That the Superintendent of Buildings and Grounds have an office in University Hall, and have immediate charge of that building, and that no

other janitor for that building be appointed.

- 4. That when a suitable force of janitors shall have been appointed, application be made to the authorities of the cities of Urbana and Champaign, to commission the members of said force as special policemen, to serve as such about the University buildings and grounds, and without any expense to said cities.
- 5. That the Superintendent of Buildings and Grounds be directed to prohibit any driving through the grounds, except by light pleasure carriages, to require all bicycles to keep off the walks and lawns, and to require all persons to keep off the lawns of the campus between the University buildings.

REQUESTS FOR OPERATING EXPENSES, AND EXTENSION OF APPARATUS AND EQUIPMENT.

The following requests have been made for funds for operating expenses and extension of apparatus and equipment for the University departments:

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Iechanical	engineeri:	ng			• • • • • • • • • • •			1,900	
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The aggregate of these requests for extension of equipment is more than \$45,000.00. I am obliged to say, and I say it with regret, that I cannot escape the feeling that many of these requests are made without sufficient discriminating judgment about the necessity or the advisability of such expenditures. Some are made without indicating in what way or for what specific purpose it is proposed to expend the funds which have been appropriated. I think that the heads of departments are bound to exercise sound judgment as to what expenditures are really necessary to meet the needs of their departments, and I also think that they are bound to take into consideration the possibility of meeting the requests they make.

I respectfully recommend the following appropriations for the purpose of extending equipment and meeting the ordinary expenses of departments during the ensuing year:

Library Art and design.	\$200 00
Art and design	250 00
Psychological laboratory	- 300 00
Steam heating.	500 00
Zoölogy	500 00
Psychological laboratory. steam heating Josilogy Chemistry	500 00
Applied chemistry Feology Physiology Sotany and horticulture Agriculture	500 00
lanlary	800 00
Develology	500 00
Determined boutlevillens	900 00
Sotany and norticulture	300 00
Agriculture	2,000 00
Physical culture. School of music	600 00
School of music	250.00
Total	87, 200, 00

I also recommend that the sum of \$10,000.00 be appropriated the present year from specific appropriations made for the purpose, to be expended in extending the equipment of the College of Engineering, the same to be used in the several departments of the college in ways which shall be certified by the dean thereof as the most advisable.

I recommend that the specific appropriations made by the legislature, for addition to apparatus and appliances (\$3,000.00), materials for shop practice (\$1,500.00), increase of scientific cabinets and collections (\$1,000.00), completing the fitting and furnishing of Engineering Hall (\$5,000.00), improvement in the Chemical Laboratory (\$5,000.00), laboratory of vegetable physiology (\$2,000.00), equipment and materials for fire protection (\$2,000.00), building and equipment for work of Biological Experiment Station on the Illinois river (\$2,500.00), and operating expenses of said Station (\$1,500.00), paving streets and laying walks (\$9,300.00), be appropriated to the several purposes for which they have been made, upon the condition and understanding that no purchases of additional equipment shall be made and no agreements entered into, except upon a statement showing what it is desired to purchase, where it may be obtained, and at what probable cost, and, briefly, the reasons for the proposed expenditure, and not until this statement shall have the approval of the President as to the advisability of the purchase, and the approval of the Business Agent as to the reasonableness of the price to be paid.

It should also be distinctly understood that the appropriation of \$5,000.00 for improvement in the Chemical Laboratory must be in a large measure devoted to the work of surveying the waters of the state upon a comprehensive plan, pursuant to promises made to the legislature.

I present herewith the report of the Agricultural Experiment Station, and recommend that appropriations be made and authority to conduct experiments be granted in accordance therewith.

### EXPERIMENT STATION REPORT.

Urbana, Illinois, June 10, 1895.

Dr. A. S. Draper, President of the University of Illinois,

SIR: I beg leave to submit from the Board of Direction of the Agricultural Experiment Station the following:

Paper A is a list of warrants drawn, Nos. 172 to 265, inclusive, for the quarter ending March 31, 1895, and is accompanied with vouchers for the same for audit.

 $Paper\ B$  is a statement of expenditures for the quarter ending March 31, 1895.

Paper C is a statement of appropriations, expenditures, and balances for the quarter ending June 30, 1895.

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

## Paper A-Statement of Expenditures for Quarter ending March 31, 1895.

Paper A—Statement of Expenditures for Quar	TER ENDIN	G MARCH 31	, 1895.
Goard expense Gooks and publications Gotanical apparatus Gulletins Chemical apparatus Pertilizers Fuel and lights Reidentals Printing, stationery, and postage Salaries Geeds and trees Gools and supplies Vages Sundry—			\$29 8 31 4 671 6 75 3 21 1 100 0 1 1 28 5 1,820 6 249 9 768 6
Wood durability experiment	• • • • • • • • • • • • • • • • • • • •		58 4
Total	• • • • • • • • • • • • • • • • • • • •		\$3,903
Paper C—Statement of Appropriations, Expendituent Ending June 30, 1895.	Appropriated.	Expended.	
Board expense Books and publications. Books and publications. Botanical apparatus Bulletins Chemical apparatus Fuel and lights Incidentals Printing, stationery, and postage. Salaries Seeds and trees. Fools and supplies Wages Wood durability experiment.	\$40 00 50 00 10 00 300 00 50 00 100 00 25 00 25 00 200 00 1,250 00 200 00 1,250 00	1, 106 65 23 37 54 87 600 85	\$40 50 10 100 25 25 853 6 145 649 50
Total:	\$4,090 00	\$2,280 05	\$1,958
Paper D-Estimates.			
Quarter ending June 30, 1895.  From farm fund—     Dairy stock and fittings.     Horses. Irrigation experiment. Milk wagon Repairs on house. Wages  Total.		• • • • • • • • • • • • • • • • • • • •	\$50 250 25 142 35 400 \$902
Quarter ending September 30, 1895.			
From general fund— Board expense Board expense Botanical apparatus. Buildings and repairs Bulletins Chemical apparatus Fuel and lights Incidentals Printing, stationery, and postage Salaries Seeds and trees Tools and supplies Wood durability experiment. Wages			\$40 50 60 25 150 275 60 25 25 1,660 25 150 50 1,250
Total			\$3,845

## PAPER D-ESTIMATES-Concluded.

From farm fund— Wages Irrigation experiment Purchase of pigs	40 00
Total	

The Board of Direction asks authority to undertake the following experiments:

- 1. Establishing varieties of red clover by selection.
- 2. Improvement of Indian corn by selection and careful breeding.
- 3. Companion and eatch crops for Indian corn.
- 4. Methods of Pasteurizing cream and milk.

The Board of Trustees is asked to assign funds of the Experiment Station according to estimates made in *Paper D*, and also to authorize the President and Secretary of the Board of Direction to expend, as the best interests of the Station may require, any unexpended balances of the United States fund.

The Board of Direction will continue for the rest of the year until March 31, 1896, its present staff at salaries now paid.

Respectfully submitted.

T. J. Burrill.

President Board of Direction.

I respectfully recommend that \$30.00 be appropriated for the purchase of a bust of Senator Justin S. Morrill, pursuant to an arrangement which has been entered into by the different institutions deriving revenues from the Morrill acts.

Respectfully submitted,

A. S. DRAPER,

President.

Authority was given to the President to confer degrees as recommended by the Faculty. (See page 87.)

\$2,000.00 was appropriated for the publication of catalogues, circulars, announcements, etc.

The question of appropriating \$1,000.00 for maintaining a course of lectures was referred to the Committee on Instruction.

The recommendations with regard to the *Illini* and a University quarterly were referred to the Committee on Publication.

The recommendations with regard to the military band and the scholarship in music were referred to the Committee on Students' Welfare.

The recommendations with regard to corps of instruction and the reorganization of the shops, so far as it concerns the work of instruction, were referred to the Committee on Instruction.

The recommendations with regard to building a new shop and the removal of machinery to it; also with regard to the care of buildings and grounds were referred to the Committee on Buildings and Grounds.

Mr. Morrison, from the Finance Committee, presented a bond submitted by C. W. Spalding, Treasurer, and moved its approval. After

some discussion, on motion of Mr. Bullard, further consideration of the bond was postponed until Wednesday afternoon.

The Board then adjourned to meet at 2 o'clock Wednesday afternoon.

#### SESSION OF WEDNESDAY AFTERNOON.

At this session the same members were present as on Tuesday.

The bond of the Treasurer was further considered and was approved on the following vote: Yeas, Messrs. Armstrong, Bullard, Graham, McLean, Morrison, Raymond, and Mrs. Smith; nays, Mr. Morgan and Mrs. Flower.

The Committee on Instruction reported verbally recommending the appointment of Arnold Tompkins, A.M., as professor of pedagogy at a salary of \$1,800.00 a year.

That George D. Fairfield, A. M., be appointed to the position in the department of Romance languages made vacant by the resignation of Professor Bruner, with the title of Assistant Professor of Romance Languages, and at a salary of \$1,000.00 a year.

That there be established a department of political science and constitutional history and law, and that Chas. W. Tooke, Ph. D., be appointed Assistant Professor of Political Science, at a salary of \$1,000.00 a year.

That there be established a department of mediaeval history, and that Frank Zinkeisen, Ph. D., be appointed Assistant Professor of History, at a salary of \$1,000.00 a year.

That Mr. Henry H. Everett be appointed Director of Physical Training, to receive a salary for the first year of \$1,200.00, for the second year \$1,400.00, and for the third year \$1,600.00, if his services shall be satisfactory.

That the term of service of each of the above named persons begin September 1, 1895.

That Miss Ella H. Morrison be appointed Director of Physical Culture for Women, and to have charge of the woman's gymnasium, at a salary of \$700.00 for ten months, term of service to begin September 1, 1895.

That Mr. George A Huff be appointed Assistant Director of the Gymnasium and Coach for Athletic Teams, to be paid by the University \$500.00 for ten months, service beginning September 1, 1895.

That there be established a School of Music; and that Mr. Walter Howe Jones be appointed Assistant Professor of Music; that he receive a salary of \$700.00 a year and one-half of the music fees in excess of \$700.00, term of service to begin September 1, 1895.

That there be an assistant in vocal music at a salary of \$500.00 for ten months, beginning September 1, 1895, such assistant to be appointed by President Draper.

The report of the committee was adopted, and the appointments were made as therein recommended.

The Committee on Instruction presented the following, which was adopted:

PLAN OF GOVERNMENT OF THE INSTRUCTIONAL FORCE OF THE UNIVERSITY OF ILLINOIS.

- 1. All persons who give instruction in any department of the University shall constitute the Corps of Instruction.
- 2. The members of the Corps of Instruction shall be classified as follows: (a) the President; (b) the Dean of the General Faculty, who shall likewise be Vice-President; (c) the deans of the separate colleges; (d) professors; (e) associate professors; (f) assistant professors; (g) instructors; (h) assistants; (i) fellows. The Librarian and the Director of the Gymnasium shall rank as assistant professors.
- 3. The President, the Dean of the General Faculty, and the deans of the separate colleges shall constitute the Council of Administration.
- 4. The President, the Dean of the General Faculty, the deans of the separate colleges, the professors, the associate professors, the assistant professors, and all heads of departments, shall constitute the General Faculty.
- 5. The members of the instructional force in each college shall constitute the college faculty of that college.
- 6. The President shall be the executive head of the University. It shall be his duty to secure efficiency in all the departments, orderly and economical administration and healthful development in all the affairs of the University. He is hereby clothed with all authority needful to that end, and for his acts he is answerable to the Board of Trustees alone.
- 7. The Dean of the General Faculty shall have general oversight of the instructional departments of the University, and more particular supervision of the Graduate School. He shall also be vice-president and exercise the functions of the President in the absence of that officer.
- 8. The dean of each College shall be the executive officer of that College and shall be responsible to the President for carrying out all University policy and for the execution of all established rules or special directions given by any superior authority. The dean shall make an annual report to the President on or before the first day of June in each year, in which he shall fully treat of the work of his College. He may make report or advance suggestions at any time and shall report to the President whenever requested to do so.
- 9. The members of the Council of Administration, other than the President, shall be associated with that officer in an advisory capacity touching the discharge of administrative duties. The Council shall have exclusive jurisdiction over all matters of discipline. It shall not exercise general legislative functions, but when any matter arises which has not been provided for by rule or common usage or legislative action of the General Faculty, and which can not be conveniently laid over till the next meeting of the General Faculty, it may act upon the same according to its discretion, and its action in such case shall not be subject to reversal by the Faculty. It shall be the duty of the secretary of the Council to report to the Faculty, or to particular officers, all items of its action when necessary to efficient administration.
- 10. The General Faculty shall exercise general legislative functions touching the education policy of the University or any particular matter incidental thereto.
- 11. The faculty of each College may exercise legislative functions touching any matter appertaining exclusively to the internal work of that College and the progress of students therein. It shall not, however, have authority to take away from any student any University privilege, nor shall it do anything trenching upon the executive duties of the dean. It must be understood that the College organization is only for convenience within University circles, and that no College shall take action not well supported by rule or

usage for which the general officer of the University may be called upon to answer. All matters of general policy, or matters involving the interests of outside parties, must be determined by general University authority.

- 12. A professor shall be the head of a department and, subject to superior authority as to policy and course of procedure, he shall be responsible for the quality and efficient progress of the work of that department, and all subordinates in the department shall conform to his views touching department policy, while they exercise their own originality and genius in carrying it out. The ranking member in a department staff which is without a professor at its head shall, for the time being, be the head of the department. Subordidates in a department, and particularly associate professors, shall be entitled to offer to the head professor thereof such suggestions as they may see fit concerning the general policy of the department, but the final determination of that policy shall rest with the head thereof and with the authorities superior to him.
- 13. Any member of the Corps of Instruction shall report to any superior authority upon request. All communications to superior authorities, whether made pursuant to request or voluntarily offered, shall, unless otherwise specially directed, be transmitted through all intermediary officers, to the end that they may have have knowledge thereof and an opportunity to comment thereupon if they think advisable.

The following recommendations coming from the Council of Administration were presented by the President:

## AMENDMENTS AND ADDITIONS TO THE RULES FOR GOVERNMENT OF STUDENTS.

Members of the Graduate School shall not be required to pay fees for studies approved by the Council of Administration as leading to an advanced degree; but the usual term fee shall be charged all students taking any undergraduate work.

A fee of five dollars shall be charged for entrance to classes in physical culture to all those connected with the University who do not otherwise pay fees.

Persons connected with the University, other than regular students, shall, if they attend any University classes, register and take class cards. Any such person shall also pay a fee of \$5.00 if the study pursued be not one accepted in his case for a second degree.

Amend the third paragraph, on page 5 of the "Rules for the Government of Students," edition of 1893, to read as follows: "A student receiving a condition in any one study shall take a re-examination at a time appointed by the instructor within one month from the beginning of the following term, unless given a longer time by the President of the University."

A student failing at any second examination, or not taking the re-examination at the appointed time, may not have a further examination without permission of the President, and then only upon the payment of a fee of \$5.00. This rule to apply to entrance examinations also.

For all special examinations the student must take out in advance, a permit from the Registrar.

Three dollars shall be paid as a fee by those who seek extra entrance examinations in the Preparatory School.

The two days preceding the beginning of instruction at the opening of terms shall be registration days. On one of these days each student must register, in person, at the Registrar's office, and must, before registering, file with the Registrar an approved list of studies for the ensuing term.

Students will not be permitted to classes before registration.

Subsequent to registration days lists of studies will not be approved and registration will not be permitted except upon the authority of the President.

No unmatriculated student shall be entered as a conditioned Freshman unless enrolled in at least two University subjects, and unless all entrance conditions can be made up during the year; and no student having entrance conditions may pursue University studies more than one year.

That the time of students may be fully occupied, each person is required to to pursue studies, exclusive of military and physical culture studies, aggregating not less than three nor more than three and three-fifths credits; except that students in courses requiring more than such number of studies in any term shall not be limited as to such required studies by this rule; and, excepting further, that a student whose standing in each study of the preceding term has been "passed with credit," may take for the term studies aggregating not more than four credits. Students may be permitted to take more or less than the amount of work described above only on a three-fourths vote of the members of the College faculty present at a formal meeting.

A term's credit in every subject shall be upon the basis of work requiring, for the average student, fifteen hours a week in outside preparation and class, and laboratory exercises combined. Fractional credits shall require such part of fifteen hours a week as the fractional credit indicates.

Candidates for advanced standing, not from other colleges or universities, may secure such standing on examination only. In the case of freshmen students seeking advanced standing on the basis of their preparatory work, such standing shall be granted after satisfactory examination only.

Those who present for entrance to the Preparatory School, satisfactory grades for not less than one year's work in an accredited school of the University, shall be excused from examination.

Hereafter the following members of the University battalion shall be allowed one credit for Military 2, whenever they are members of either of the following organizations, viz: The University foot-ball eleven, the University base-ball nine, or the University track team, and that in addition to the regular members of the foot-ball eleven and base-ball nine above mentioned, three substitutes be included in each organization and allowed the same credit as the regular members. This credit should be allowed but once and be given for the term in which the organization is engaged in contests with others; that is, for foot-ball, credit for fall term be allowed; for base-ball and track team, credit for spring term. Where a member of the battalion is a member of more than one organization, say foot-ball and base-ball, or track team, he may elect in which term he will take his credit, but in no case can he receive more than one. Also, that not more than fifteen credits be given to members of the track team as a whole.

The system of marking in the University shall be as follows:

The grades shall be "failed," "conditioned," "passed," "passed with credit." The passing mark shall be 60.

## CHANGES IN ARCHITECTURAL DEPARTMENT.

That one year of free-hand drawing, in addition to the year of this work prescribed be substituted for the year of shop practice now required for graduation in the course in architecture.

That one year of Mechanical Engineering 1 be substituted for the year of shop practice now required for graduation from the course in architectural engineering.

That the architectural shops, with machines, plant and materials, be transferred to such departments as may be ordered by the Board of Trustees, and dropped from the inventory of the department of architecture and architectural engineering. This is recommended also by the dean of the College of Engineering and the faculty of that College.

#### CIRCULAR.

The issue of a circular is recommended to give information concerning the changes and additions in courses, new departures in the work of instruction, and improvements about the University.

#### FELLOWSHIPS.

The Council of Administration further recommends that fellowships for the ensuing year be assigned as follows:

In the College of Literature and Arts, to Miss Marion Thompson, of the present graduating class.

In the College of Engineering, to Mr. Peter Junkersfeld, also of the present graduating class.

### ACCREDITED SCHOOLS.

With regard to accredited schools the Council of Administration recommends:

That the life of all certificates to accredited schools be three years.

That the time limit for recognizing the validity of high school certificates of graduation be abolished.

A motion having been made to approve and adopt these recommendations, Mr. Armstrong moved to amend by making the passing mark 75 instead of 60. This amendment was lost on the following vote: Yeas, Dr. Smith, Mrs. Flower, Mr. Armstrong; nays, Messrs. Morgan, Morrison, Raymond, McLean, and Bullard.

The recommendations were adopted after an amendment giving freshmen in the architectural course the option of taking either architectural shop practice or free-hand drawing.

The Committee on Instruction also recommended the appropriation of \$1,000,00 for a course of lectures, and this report was referred to the Committee on Finance.

The Committee further recommended that a Department of Household Economics be established as soon practicable.

These recommendations were adopted.

The Committee further reported recommending that the position of foreman in the architectural shops be abolished.

This was referred to the Committee on Buildings and Grounds.

The Committee on Instruction further reported recommending that the deans of the General Faculty and the several colleges be reappointed for the ensuing year—that Professor Burrill be Dean of the General Faculty; Professor Kinley, Dean of the College of Literature and Arts; Professor Ricker, Dean of the College of Engineering; Professor Forbes, Dean of the College of Science, and Professor Davenport, Dean of the College of Agriculture.

The report was adopted.

The Committee on Instruction also presented a report concerning recommendations with regard to changes of titles and salaries of members of the Corps of Instruction for the ensuing year.

The report was adopted so far as it related to titles, but the matter of salaries was referred to the Committee on Finance. (For the complete report of both committees see page 110.)

The Committee on Students' Welfare made the following report which was adopted:

URBANA, ILL., June 12, 1895.

To the Board of Trustees of the University of Illinois.

Gentlemen: Your Committee on Students' Welfare has considered the suggestion of President Draper concerning returning fees to such students as may continue in the military band by appointment of the Professor of Military Science after they are no longer subject to military duty, and recommends that an amount equal to the term fees be paid them at the end of the year.

Your committee also recommends that a special musical scholarship of \$300 a year for two years be given to the present leader of the band, Mr. William L. Steele, as suggested by President Draper,

Respectfully submitted,

Julia Holmes Smith, Lucy L. Flower, Richard P. Morgan,

Committee on Students' Welfare.

It was voted that after Sept. 1st, next, the pay of the secretary in the President's office should be \$60 a month; that the pay of the secretary in the Registrar's office, and the stenographer in the office of the College of Engineering, \$50 a month, and that the Secretary of the Experiment Station should be authorized to pay his stenographer \$50 a month, this last to be paid from the funds of the Experiment Station.

The Board then adjourned to meet at 9 o'clock Thursday morning.

# SESSION OF THURSDAY MORNING.

The same members were present as on Wednesday, except Mrs. Smith.

A communication received from the Rock River Farmers' Club was referred to the Farm Committee.

The following resolution offered by Mr. McLean was adopted:

Resolved, That all reports of standing and special committees touching matters submitted to them for investigation or action shall be made in writing, giving such details as the subject matter of such reports requires.

The four resolutions which follow were successively presented and adopted:

Resolved, That Mr. A. B. Baker be relieved of his duties as janitor at University Hall and that, in view of his long and faithful service and the esteem in which he is held by the Board, he be retained in its service for the purpose of conducting visitors about the University buildings and grounds, and performing such other light service as may be requested of him by the President; and that for such services he be given the use of the quarters now occupied by him in the basement of University Hall, and also the sum of \$500 a year.

Resolved, That there be appointed a superintendent of buildings and grounds at an annual salary not exceeding \$1,200 a year, whose duty it shall be to have general charge of all University building and grounds. All the janitors employed by the University shall be under his supervision and direction, and for cause may be discharged by him at any time. Temporary workmen and helpers which are necessary at times may be employed by him at rates of compensation approved by the Business Agent. In the discharge of his duties he shall act under the general direction of the Buildings and Grounds Committee and, in its absence, the President of the University.

Resolved, That when the Superintendent of Buildings and Grounds has been appointed and the force of janitors connected with the University shall have been so reorganized as to give promise of efficiency, application be made by the President to the authorities of the cities of Urbana and Champaign for the appointment of the Superintendent of Buildings and Grounds and the members of his force as special police officers, to the end that they may have power to arrest idlers, trespassers, marauders, disturbers of the peace, and any persons found on or about University property or menacing the quiet and security of the University; and that when invested with such authority such Superintendent and janitors shall be held accountable for the good order about all buildings and grounds and the safe keeping of all University property.

Resolved, That hereafter no advertising signs be allowed upon University property; that no trespassing be allowed upon the campus between the principal buildings of the University; that all riders of bicycles be required to keep upon the roadway and never allowed upon the walks; that no vehicles, loaded or otherwise, be allowed to enter the carriage ways of the University unless the same are for light pleasure driving alone, or are on business connected with the University; and that the Superintendent of Buildings and Grounds be authorized to put up suitable notices or take any proper steps necessary to secure the complete enforcement of this resolution.

The Committee on Buildings and Grounds reported verbally through its chairman, Mr. Morgan, that it had looked into the claim of Messrs. Yeager & Schultz for the remission of the penalty imposed by the action of the Board taken December 6, 1894 (see page 35) and had agreed to the remission of the full amount of \$1,900.00, less \$125.00 paid the inspector on account of the delay in completing the contract.

On motion of Mrs. Flower, the action of the committe was approved.

On motion of Mr. McLean, the balance, \$1,775.00 was ordered paid, any part of same which could not be met from the state appropriation for the erection of Engineering Hall after the amount for electric wiring had been paid, to be paid from the \$5,000.00 appropriated at the last session of the legislature for completing the fitting and furnishing of Engineering Hall.

The Farm Committee made the following report:

Urbana, Ill., June 13, 1895.

To the Board of Trustees of the University of Illinois.

Gentlemen: Your Farm Committee recommends the adoption of the following resolution:

WHEREAS, A communication has been received by the members of this Board from the president of the Rock River Farmers' Club relative to the manner in which the University of Illinois has been conducted in the past and its plans for the future concerning the agricultural department, and

Whereas, We believe that said Club is laboring under a misapprehension as to what is doing in the department named, and as we also believe that this institution was organized for the benefit of the agricultural interests and the mechanical arts of the State of Illinois, and further believe that it should subserve the interests named; therefore be it

Resolved, That this Board hereby reaffirms or declares that it has been in the past, and shall be in the future, its earnest desire and aim to increase, if possible, and extend the usefulness and benefits of this department to every section of the state.

<sup>14</sup> Resolved, That we ask the hearty coöperation of all clubs and associations interested in agricultural pursuits and request that they keep more in touch

with this Board, and communicate with it freely concerning all matters with which they, together with this institution, are virtually interested, as it is the sincere desire of this Board to make the agricultural department of the University as efficient and useful to the people of this state as the projectors of the University designed and hopefully anticipated.

Resolved, That we cordially invite the members of the agricultural clubs and associations to visit the University and familiarize themselves with its condition and its work.

Respectfully submitted,

ISAAC S. RAYMOND, ALEXANDER MCLEAN, N. B. MORRISON.

Farm Committee.

The Executive Committee of the Board of Trustees submitted the following report:

URBANA, ILLINOIS, June 13, 1895.

To the Board of Trustees of the University of Illinois:

GENTLEMEN: Your Executive Committee reports that at a meeting held in Springfield, April 3, 1895, at which all members of the Committee were present, an appropriation of \$200.00 for incidental expenses, and \$200.00 for Board expenses, as made.

Respectfully submitted,

N. W. Graham, N. B. Morrison, ALEXANDER MCLEAN, Executive Committee.

The report from the Board of Direction of the Agricultural Experiment Station was then taken up and it was voted that appropriations be made as requested in the report, and that authority be given to undertake the experiments therein named.

Professor Eugene Davenport was appointed a delegate to attend the meeting of the Association of American Agricultural Colleges and Experiment Stations to be held in Denver July next, and it was ordered that his expenses be paid from University funds. There was also appropriated \$10.00 for payment of the University's membership fee in the association.

An appropriation of \$30.00 was made for the purchase of a bust of Senator Justin S. Morrill.

The question of offering prizes for oratorical contests was referred to the Committee on Instruction.

The appointment of needed assistants not already provided for was referred to President Draper and the Executive Committee with power to act.

On motion of Mr. Bullard the paving of Green street, laying walks, and payment of the sewer tax was referred to the committee on Buildings and Grounds with power to act; and the Committee was authorized to expend the sum of \$9,300.00, appropriated by the legislature at its last session for this purpose.

Mr. Morrison, from the Committee on Finance, presented President Draper's bill of expenses, amounting to \$82.72; also the bill of Professor H. J. Waters for traveling expenses, amounting to \$34.10, and the bill of Miss Adeline W. Rowley for traveling expenses, \$9.30, and they were ordered paid.

The special committee appointed to draft resolutions concerning Mr. F. M. McKay's services as a member of the Board of Trustees, made the following report, which was adopted:

URBANA, ILLINOIS, June 13, 1895.

To the Board of Trustees of the University of Illinois:

Gentlemen:—Your special committee offers the following report with regard to Mr. F. M. McKay:

Mr. F. M. McKay was appointed a member of the Board of Trustees by Governor Oglesby in 1884, and at the end of that term was elected by the people of the state for a term of six years. During his ten years' connection with the Board he has been a regular attendant upon its meetings, entering into all its affairs with energy and enthusiasm. He came into the Board with a high ideal of what the University should do for the people of the state in the cause of higher education, and maintained throughout his official relation with the Board earnest and successful prosecution of his views as to the work of the University. As Chairman of the Committee on Instruction much credit is due him in raising the standard of instruction and broadening the scope of the University courses. In view of these facts we recommend the passage of the following resolution:

Resolved, That in recognition of the distinguished service which Mr. F. M. McKay has rendered to the University and the cause of higher education, as a Trustee of the University of Illinois, we respectfully recommend that the Faculty of the University present his name at the commencement of 1896 for the degree of master of arts.

J. E. Armstrong,

Chairman of Committee.

The Committees on Instruction and on Finance made the following report with regard to the positions and salaries of the members of the corps of instruction for the ensuing year.

For convenience of reference both those instructors in relation to whom changes have been made, and those remaining the same as heretofore, are included in the list.

URBANA, ILLINOIS, June 13, 1895.

To the Board of Trustees of the University of Illinois.

GENTLEMEN:—Your Committees on Instruction and on Finance respectfully submit the following schedule of titles and salaries for the ensuing year:

Thomas Jonathan Burrill, Ph. D., LL. D., Vice President, Dean of the General Faculty, and Professor of Botany and Horticulture	\$2,700 00 2,000 00 2,000 00
Nathan Clifford Ricker, M. Arch., Dean of the College of Engineering and Pro- fessor of Architecture.  Ira Osborn Baker, C. E., Professor of Civil Engineering.	2,300 00 2,200 00
Stephen Alfred Forbes, Ph. D., Dean of the College of Science and Professor of Zoology Charles Wesley Rolfe, M. S., Professor of Geology.	1,000 00 2,100 00
Donald McIntosh, V. S., Professor of Veterinary Science. Arthur Newell Talbot, C. E., Professor of Municipal and Sanitary Engineering Arthur William Palmer, Sc. D., Professor of Chemistry	1,800 00 2,100 00 2,100 00
Frank Forrest Frederick, Professor of Art and Design. Samuel Wilson Parr, M. S., Professor of Applied Chemistry. Herbert Jewett Barton, A. M., Professor of the Latin Language and Literature	1,900 00 2,100 00 2,000 00
Charles Melville Moss, Ph. D., Professor of the Greek Language and Literature Daniel Kilham Dodge, Ph. D., Professor of the English Language and Literature Lester Paige Breckenridge, Ph. B., Professor of Mechanical Engineering and	2,100 00 2,000 00
Superintendent of Heating Plant.  Daniel William Shea, Ph. D., Professor of Physics.  David Kinley, Ph. D., Dean of the College of Literature and Arts, Professor of	2,250 00 2,200 00
Political Economy and Social Science  Daniel Harmon Brush, Captain 17th Infantry, U. S. A., Professor of Military Science and Tactics.	2,250 00

Eugene Davenport, M. S., Dean of the College of Agriculture and Professor of Animal Husbandry Edgar J Townsend, Ph. M., Associate Professor of Mathematics	\$1,000 00 1,650 0
George William Myers, A. M., Associate Professor of Mathematics (on leave) Katharine Merrill, A. B., Assistant Professor of the English Language and Lit-	1,000 0
erature. William Otterbein Krohn, Ph. D., Assistant Professor of Psychology. James McLaren White, B. S., Assistant Professor of Architecture. Henry Elijah Summers, B. S., Associate Professor of Human Physiology and	1,300 0 1,800 0 1,500 0
Vertebrate Anatomy.  William Humphrey VanDervoort, M. E., Assistant Professor of Mechanical En-	1,650 0
gineering.  Evarts Boutelle Green, Ph. D., Assistant Professor of Civil Engineering.  Evarts Boutelle Green, Ph. D., Assistant Professor of History.  Harry Sands Grindley, Sc. D., Assistant Professor of Chemistry.  Thomas Arkle Clark, B. L., Assistant Professor of Rhetoric.  Herman S Platt, A. M., Assistant Professor of Romance Languages.  Bernard Victor Swenson, B. S., Assistant Professor of Electrical Engineering.  Arthur Hill Daniels, Ph. D., Assistant Professor of Philosophy.	1,650 00 1,400 00 1,600 00 1,050 00 1,300 00 1,000 00 1,100 00 1,200 00
INSTRUCTORS AND ASSISTANTS.	
Cyrus Daniel McLane, B. S., Instructor in Architecture.  Cyril Balfour Clark, Foreman in Machine Shops.  William Emanuel Sandford, Ph. G., Instructor in Pharmacy.  James David Phillips, B. S., Instructor in General Engineering Drawing  Charles Alexander Gunn, B. S., Assistant in Architecture.  Alfred Holmes White, A. B., Assistant in Chemistry.  William Esty, B. S., Instructor in Electrical Engineering.  Albert Root Curtiss, Foreman of Wood Shop.  Frank Smith, A. M., Instructor in Zoölogy.  Lorin William Peabody, B. S., Assistant in Testing Laboratory.  George Washington McCluer, M. S., Assistant in Horticulture.  Henry Jones, Foreman in Blacksmith Shop.  Ralph Parsons Smith, Ph. B., Instructor in German  Peter Mogensen, B. S., Assistant in Mathematics.  Helen Eliza Butterfield, M. L., Instructor in Rhetoric.  Jeremiah George Mosier, B. S., Assistant in Engineering.  Alton Cyrel Burnham, B. S., Instructor in Mechanical Engineering	1, 100 00 800 00 850 00 850 00 850 00 800 00 1, 200 00 1, 200 00 180 00 1, 200 00 1, 200 00 750 00 750 00 800 00 800 00 800 00 855 00 855 00
Fred Anson Sager, B. S., Instructor in Physics. Edward John Lake, B. S., Assistant in Art and Design. Charles Frederick Hottes, B. S., Assistant in Botany.	600 00 600 00
PREPARATORY SCHOOL.	
Edward Gardnier Howe, Principal	1,800 00 900 00 650 00
REGISTRAR.	
William Low Pillsbury, A. M	1,400 00
LIBRARIAN.	
Percy Favor Bicknell, A. M	1,550 00

# Respectfully submitted,

J. E. ARMSTRONG, JULIA HOLMES SMITH, S. A. BULLARD,

Committee on Instruction.

N. B. Morrison, J. E. Armstrong, S. A. Bullard,

Finance Committee.

The report was adopted on motion of Mr. Morgan.

The payment of \$20.00 a month to a messenger in the President's office was authorized.

The Treasurer's report was submitted and referred to the Finance Committee.

#### TREASURER'S REPORT.

CHARLES W. SPALDING, TREASURER, IN ACCOUNT WITH THE UNIVERSITY OF ILLINOIS, May 31 1895.

Dr.	
28 To balance 11 Principal, contract No. 47, M, Hubka 11 Interest, contract No. 47, M, Hubka 12 Transfer of eight Kankakee bonds to endowment f 29 From S, W, Shattuck on general fund. 5 Quarterly Experiment station warrant. 10 Mansfield coupons, due January 1, 1895. 26 From W, L, Pillsbury, on farm account. 27 From S, W, Shattuck, on general fund. 2 Payment of Bond county bond No. 3. 2 coupons. 3 "Cass county coupons Nos. 1 and 2. 3 "Cass county coupons. 6 Shelby county bond No. 5. 6 Error in payment of warrant No. 166 (1894-1895). 8 From S, W, Shattuck on general fund. 11 Balance Pittsfield coupons, due July 1, 1894. 28 From S, W. Shattuck on general fund. 31 Interest to date on endowment fund at 4 per cent. 31 "all other funds at 2½ per cent.	\$480 00 46 45 und 8,000 00 2,630 29 3,750 00 213 00 354 75 1,000 00 600 00 78 00 1,000 00 325 00 325 00 500 00 300 00 4,117 06 390 00 2,072 52 365 78
an other runus at 2 2 per cent	\$23,705 53
	\$116,272 17
Cr.	
31 By amount paid out of general fund as per list of rants attached thereto	Steel   Stee
U, S. Experiment Station farm fund	
C, S. Experiment Station farm fund	55, 148 57 \$116, 272 17

The committee is instructed to submit a design for the building, with its recommendations thereupon, at a meeting of the Board to be called at its request, at such time as it may fix.

The committee is hereby authorized to offer premiums to the amount of \$1,200.00 for designs for the library building, under such rules and regulations as may be adopted by the committee; and it is further authorized to offer to the successful competitor the usual fees for service as architect and superintendent.

The following report from Professor Forbes, director of the State Laboratory of Natural History was received:

URBANA, ILLINOIS, June 10, 1895.

Mr. Nelson W. Graham, President Board of Trustees,

DEAR SIR: I beg to report concerning appropriations for the State Laboratory of Natural History, that the bill covering our expenditures for the next two years has passed the House and is on third reading in the Senate, where it is practically certain to pass this week, probably on Tuesday. It carries a total amount of \$19,800.00, which, in addition to the \$5,500.00 specifically appropriated to the Biological Station in the University bill, makes \$25,300.00 for the expenses of investigation work under my direction, as compared with \$14,600.00 last session, being an increase of \$10,700.00.

The present bill contains, in addition to the usual items, an allowance of \$1,500 per annum for the expenses of an investigation of the contagious diseases of insects, and of \$1,500 per annum for one half the expenses of the biological station at Havana—the other half of these expenses having been provided for in the University bill. I have consequently to ask the reappointment of my present office force, and the appointments additional of Mr. Chas. A. Kofoid, as Superintendent of the Illinois State Biological Experiment Station at a salary of \$1,200 per annum; of Mr. B. M. Duggar as Botanical Assistant at the State Laboratory of Natural History, at a salary of \$1,000 per annum, and of Mr. Adolph Hempel as Zoölogical Assistant of the State Laboratory, at a salary of \$720 per annum.

The complete list is as follows:

Adolph Hempel, Zoölogical Assistant W. G. Johnson, Assistant Entomologist C. A. Kofoid, Superintendent Biological Station	750 00 720 00 1, 200 00	00 00 00 00 00
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Miss Lydia M. Hart, whom I have under continuous engagement as artist, receives a compensation by the hour, varying according to the nature of her work.

Mr. Smith's salary from the State Laboratory I have placed at \$200 instead of \$400 as last year. According to present arrangements for my work, much more of his time will go to the University department of instruction than last year, and it seems to me right that the University should pay him \$1,200 accordingly, instead of the \$1,000 now received from that source. Mr. Johnson, on the other hand, whose salary has been in part chargeable to the University assignment of \$1,800 for various purposes, made to my department in March, 1894, will be paid according to the above scheme wholly from the State Laboratory appropriations.

I think it very desirable that before I finish my plans for the equipment of the Biological Station I make a trip to Newport, New York City, and Cold Spring Harbor, and perhaps to some other places in the east for the purpose of examining apparatus and methods of equipment provided for similar work elsewhere, and I ask the authority of the Trustees to make this trip at the expense of the appropriation for the equipment of the Station.

Mr. Morrison, chairman of the Finance Committee, reported verbally approving appropriations in accordance with the recommendation of the President (see page 99), as follows:

Library Art and design Psychological laboratory. Steam heating. Zoölogy Chemistry. Arplied aboratory.	300 00 500 00 500 00 500 00
Applied chemistry Geology Physiology Botany and horticulture Agriculture. Physical culture School of music. College of Engineering.	500 00: 800 00: 500 00 300 00 2,000 00 600 00
	,

These sums to be taken from the specific appropriations made by the legislature, so far as proper.

The report was approved and appropriations made as recommended.

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

WHEREAS, The Board at this session has by resolution adopted a plan looking to the appointment of a Superintendent of Buildings and Grounds, and properly policing the buildings and property of the University, therefore be it

Resolved, That the President of the University, the chairman of the Committee on Buildings and Grounds, and the Business Agent, be appointed a committee to provide a plan for carrying out the business contemplated by the action of the Board relative to the appointment of a superintendent of the buildings and grounds, and to report at the next meeting of the Board.

A claim made by Robinson & Burr, of Champaign, was referred to the Committee on Buildings and Grounds.

The Board adjourned to meet at 2 o'clock p. m.

#### SESSION OF THURSDAY AFTERNOON.

The Board met pursuant to adjournment, the same members being present as in the morning.

It was voted that when the Board adjourned it should adjourn to meet at 9 o'clock a. m., June 27, 1895, at the Palmer House, Chicago.

The following resolution was offered by Mr. Bullard, and was adopted:

WHEREAS, The state has appropriated \$150,000.00 for a new library building; and

WHEREAS, This amount of money will be in the treasury of the University after July first, next, therefore be it

Resolved, That the Committe on Buildings and Grounds be, and hereby is, instructed to enter at once on the consideration of the erection of this building.

I have to suggest for the name of our station on the Illinois River, that of the University of Illinois Biological Experiment Station, and ask your approval of this title.

Respectfully yours,

S. A. Forbes, Director of Laboratory.

The recommendations of the report as to appointments and salaries were approved, and the appointments were made.

Professor Forbes was authorized to make a trip for the purpose of examining other biological stations, and it was voted that the expenses of such trip should be paid from the appropriations for the equipment of the Station.

The station on the Illinois River was given the name of the University of Illinois Biological Experiment Station, as requested.

Appropriations of funds to the State Laboratory of Natural History were made as follows, for the quarter beginning July 1, 1895:

For field work, office, and incidental expenses	
For library	250 00
For salaries and assistance	912 50
For bulletins	125 00
For illustration of report of State Entomologist	62 50
For investigation of contagious diseases of insects	375 00
For equipment of the Biological Station	2,500 00
For expenses of the Biological Station.	375 00
For expenses of Biological Station, from appropriation to the University	375 00
2 of caponace of Biological Station, from appropriation to the Christian, 11011	0.0 00

On motion of Mr. McLean, an assignment of a sufficient amount of funds was made to pay the taxes on Minnesota lands.

On motion of Mr. McLean, the following resolution was adopted:

Resolved, 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.

Resolved, That the Treasurer of the Board of Trustees of the University of Illinois be, and 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.

An appropriation of \$1,000.00 for a lecture course was made on approval of the Finance Committee.

An appropriation of \$25.00 was made for the purchase of material for fences on the south farm.

By request of Mr. Graham, Mr. McLean occupied the chair for the rest of the session.

On motion of Mr. Morgan, the recommendation of President Draper with regard to the reorganization of the shops (see page 96) was approved.

On motion of Mr. Armstrong, the President was requested to have prepared a sketch plan of the University grounds, so as to show the relative position of the buildings and the walks.

The following resolution, offered by Mr. Bullard, was adopted:

Resolved, That the Committee on Buildings and Grounds is hereby instructed to have prepared drawings, specifications, etc., for the new buildings and improvements provided for by the present legislature; and that the Committee is hereby authorized to let the contracts for the construction of the same.

This does not apply to the library building otherwise provided for, and this work shall be done on advice and consultation with the President and members of the Faculty interested in the several buildings.

The matter of the reorganization of the agricultural department was taken up and, after discussion, further consideration was deferred till the next meeting of the Board.

A resolution, offered by Mr. Morgan, with reference to the purchase of a sprinkler, was referred to the Finance Committee, to report at the next meeting.

On motion of Mr. Morgan, it was voted that the Committee on Buildings and Grounds be instructed to ascertain and report at the next meeting of the Board for how much the S. W. 4, 21–19–9, E. 3d P. M., can be sold.

Professor Shattuck, the Business Agent, presented his report.

#### BUSINESS AGENT'S REPORT.

URBANA, ILLINOIS, June 11, 1895.

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

SIR: I have the honor to hand you herewith the financial statements due from me at this time:

Paper A, a showing of the current appropriations from March 1, to June 1, 1895.

Paper B, the condition of the State appropriations, June 1, 1895.

Paper C, the same for the U.S. fund.

Paper D, a list of vouchers presented for audit, being 501 to 1,150.

Paper E, an estimate of receipts and expenses for the year ending September 1, 1896.

Paper F, an estimate for the three months ending September 1, 1895.

The Board is requested to appropriate the \$31,854.20 given in this paper for the expenses of the three months for the purposes named.

#### PAPER A-CURRENT APPROPRIATIONS.

March 13, 1895.	Appropriated.	Receipts appropriated.	Expended.	Balance.
Board expenses.  Salaries for instruction and for President \{ \begin{array}{l} Current. \\ U. S. Fund. \\ State. \end{array} \} \} \text{Salaries for services.} \text{Buildings and grounds.} \text{Fuel and lights.} \text{Stationery and printing.} \text{Preparatory School.} \text{Mechanical Department.} \text{Architectural ''} \text{Horticultural ''} \text{Military Laboratory Library and apparatus.} \text{Incidentals} Inc	23,844 00 3,100 00 200 00 2,400 00	137 54 1,001 50 393 58 916 82 17 80 322 36	911 26 385 59 1,271 57 664 76 621 77 49 00 7 48	\$141 88 924 7: 5 44 155 99 1,726 24 814 41 295 00 18 88 42 5: 248 56 33 7.
Sundries.  Water supply	200 00 157 86 727 46 72 18 112 69 122 94 228 58 100 00 15 44 297 75 206 92 934 66 200 00		44 85 39 35 97 06 280 93 112 69 122 80 228 56 100 00 25 297 75 149 45 30 64	125 00 55 11 160 6i 60 88 446 55 57 8 10 00 15 11 57 4 904 00 200 00

# PAPER B-STATE APPROPRIATIONS.

March 13, 1895.	Received.	Expended.	Balance.	Assigned.
Closed out	\$103,012 33 1,000 00			\$46 99
Furnishing and heating Nat. Hist. Hall Engineering building	6,000 00 160,000 00 472 00	155,021 54	4,978 46	4,978 46
Applied mechanics	233 00 200 00	188 30 200 00	44 70	44 70
Botany Library Zoölogy	450 00 10,000 00	9,479 33	520 67	520 67
GeologyBuildings and grounds	500 00 2,100 00	460 60 1,867 92	39 40 232 08	39 40 232 08
Mechanical engineering Municipal and sanitary engineering. Salaries for instruction	4,000 00 50 00 5,983 81		2 23	592 79 2 23
Geology cases Pedagogy	300 00 150 00	286 00 120 86	14 00 29 14	29 14
Greek Woman's gymnasium Shop practice	150 00 300 00 300 00	98 11	201 89	60 57 201 89
Total	\$296,401 14	\$288,709 91	\$7,691 23	\$7,691 23
Illinois State Laboratory of Natural History	\$15,313 26	\$15, 127 92	\$185 34	\$185 34

#### PAPER C-UNITED STATES FUND.

	Received.	Expended.	Balance.	Assigned.
Year ending June 30, 1893.				
Before reported on	\$17,750 00 226 06 23 94	\$17,750 00 226 06 23 94		
Total	\$18,000 00	\$18,000 00		
Year ending June 30, 1894.				
Before reported on	\$18,500 00 500 00			\$29 97
Total	\$19,000 00	\$18,970 03	\$29 97	\$29 97
Year ending June 30, 1895.				
Salaries for instruction	\$18,865 00 135 00 1,000 00	\$134 48	\$0 52	
Total	\$20,000 00	\$19,999 48	\$0 52	\$0 52

Papers G and H are bills for which appropriations are requested, if approved. Paper I is a communication from Yeager & Schultz, requesting a payment of \$1,775, as due them on contract.

I must draw the attention of the Board to the fact that there will be a balance in the state appropriation of only \$580.97 to pay this account, after paying out the other contract, as estimated by the architect.

In this connection I present *Paper K*, an estimate for repairs of the roof of Engineering Hall.

Respectfully submitted,

S. W. SHATTUCK,

Business Agent.

The list of warrants with vouchers was referred to the Finance Committee.

Appropriations were made as follows in accordance with recommendations of the Business Agent:

Sundry balances—Paper A	\$1,669 2
Board expenses	500 0
Salaries for instruction and President	20,000 0
Salaries for services	2,000 0
Buildings and grounds	600 0
Fuel and lights	2,000 0
Stationery, printing, and catalogue	1,500 0
Mechanical, architectural, horticultural, and military departments	500 0
Laboratories	1,000 0
Library and apparatus	50 0
ncidentals	400 0
leating apparatus.	
Furniture and fixtures	
Military scholarships	285 0
antically scholarships	200 0
Commencement	100 0
Water supply	250 0
water supply	200 0
Total	\$31,854 2
10181	\$51,504 Z

An appropriation of \$100 was made to be used as might be needed in making repairs on the roof of Engineering Hall.

The Committee on Buildings and Grounds was instructed to cause some modification of the window sills in the third story of Engineering Hall, so as to prevent the rain drip from defacing and injuring the building.

The Board adjourned.

N. W. GRAHAM,

W. L. PILLSBURY,

President.

Secretary.

#### Adjourned Session, Chicago, June 27, 1895.

The Board of Trustees of the University of Illinois met, pursuant to adjournment, at 9 o'clock a. m., June 27, 1895, at the Palmer House, in Chicago. The members present when the Board was called to order were Messrs. Bullard, Graham, McLean, Morgan, Morrison, Raymond, Dr. Julia Holmes Smith, and Mrs. Flower; Mr. Armstrong came in a little later; those absent were Governor Altgeld and Messrs. Judy and Inglis.

Mr. Morgan, chairman of the Committee on Buildings and Grounds, stated that the Committee had not yet sent out a call for designs because it was not deemed advisible to do this till the site of the library had been fixed and some other preliminaries determined.

A communication from the Illinois Bee Keepers' Association, presented by President Draper, was, on motion of Mr. McLean, referred to Professor Davenport, Dean of the College of Agriculture, for report at the next meeting of the Board.

A communication from Mr. G. W. Parker, asking to be appointed superintendent of buildings and grounds, was referred to a special committee appointed at the last meeting, to consider and report upon the duties of a superintendent.

A communication from Professor Davenport with regard to expenditures upon the house occupied by him, was referred to the Committee on Buildings and Grounds with power to act.

Dr. J. W. Scott, Secretary of the State Board of Health, by invitation conferred with the Board at some length with regard to a vaccine farm which the University is to establish, in accordance with an act recently passed by the legislature, and also with regard to the University's conducting for the Board of Health some examinations of candidates for admission to medical schools in this state.

#### The following resolutions were adopted:

Resolved. That funds be set apart as follows, from the special appropriation of \$5,000 for changes in the Chemical Laboratory, which was intended to cover the expense of carrying on a systematic survey of the waters of the state:

For the salary of a chemist in charge, for ten months, beginning September 1, 1895  For preparing room.  For furniture, including two desks fitted with gas and water supply  For apparatus of permanent character.  For apparatus of perishable character.  For chemicals.  For contingent expenses, printing, expressage, etc.	500 0 500 0	0 0 0 0 0
Total	\$2,750 0	0

Resolved, That when waters are analyzed for private parties, said parties be required to pay the expense of carriage to and from the University.

Resolved, That when waters produced outside of the state are examined for persons who have a commercial and business interest to be promoted thereby, a charge covering the examination shall be made therefor, the amount of the charge to be determined by the Business Agent, and the moneys received to be paid into the treasury and a separate account kept thereof.

Resolved, That the professor of chemistry proceed to make a systematic survey of the waters of the rivers and lakes of the state.

Resolved, That the State Board of Health be notified that the University will respond to its requests for an analysis of waters when questions of health are involved.

Resolved, That the work be undertaken from and after September 1, 1895.

Resolved, That the Committee on Buildings and Grounds be, and hereby is, authorized to expend not more than \$1,000 from the special appropriation above named, in making changes in the Chemical Laboratory.

#### The following resolution was adopted:

Resolved, That all persons connected with the University be notified that when an application is made by any outside party for any service which the University can render, they shall not say whether the University will or will not undertake to render the service, or upon what terms it can be undertaken, but that all such matters shall be referred to the President of the University and the Business Agent, with power to act in each case as may to them seem wise.

On motion of Mrs. Flower, it was voted to increase Professor Forbes's salary \$250 a year, the increase to be paid from the funds of the State Laboratory of Natural History.

Mr. Morgan stated that he had had a conference with Professor Forbes concerning the Biological Station at Havana, and that Professor Forbes desires, inasmuch as the appropriation for the structure and equipment for the station was only half what was asked for, to use the appropriation in the construction of a boat which can be used as the headquarters for the Station and can be readily moved to different points on the river. He asked, in behalf of the Committee, instructions from the Board relative to the matter.

The following resolution was adopted:

Resolved, That as the appropriation for the establishment of a Biological Station on the Illinois river is but half the amount estimated to be necessary

and applied for, the Committee on Buildings and Grounds be, and hereby is, authorized and instructed to expend, in its discretion, the amount appropriated in furtherance of the purposes intended.

A communication from Professors Talbot and Breckenridge, asking that a water main be put in from Wright street to Machinery Hall, was referred to the Committee on Buildings and Grounds with power to act.

President Draper reported that, acting under authority given him by the Board, he had appointed Miss Elinor Ellsworth assistant in vocal music, at a salary of \$500 for ten months, beginning September 1, 1895, with the understanding that all fees received from students in vocal music shall be paid into the treasury until such fees shall aggregate \$500, and if they exceed that amount one-half of the excess shall be paid to Miss Ellsworth and the other half into the treasury.

The Committee on Publication offered the following resolution relative to the matter referred to it at the last meeting of the Board, and the resolution was adopted:

Resolved, That the sum of \$800 be appropriated for the publication, in magazine form, at such intervals as the Faculty may think advisable, of original papers of educational and scientific value prepared by persons connected with the University; and that a further sum of \$500 be appropriated for aiding the publication of the *Illini*, upon assurance that the mechanical appearance of the same shall be continued as desirable as at present. And that 400 copies of the paper be distributed through the mails weekly, without further cost, as directed by the President of the University.

#### President Draper presented the following:

To the Board of Trustees:

I respectfully recommend changes in the instructional force as follows:

- 1. That Alton Cyrel Burnham be transferred from being instructor in mechanical engineering to be instructor in mathematics at the salary already assigned, viz., \$800.
- 2. That Robert Alvin Wood, fellow in mechanical engineering last year, be appointed instructor in mechanical engineering, in the place of Mr. Burnham, at \$800 for ten months.
- 3. That an additional instructor in mechanical engineering be appointed by the Executive Committee, at \$75 a month, for ten months.
- 4. That a foreman in the moulding shop be appointed by the Executive Committee, at a salary of \$50 a month, for not more than nine months.
- 5. That the salary of William Esty, instructor in electrical engineering, be advanced from \$1,000 to \$1,050.
- 6. That an additional instructor in physics be appointed by the Executive Committee, at \$75 a month, for ten months.
- 7. That Milo Smith Ketchum be appointed assistant in civil engineering, at \$70 a month, for ten months.
- 8. That Charles N. Cole be appointed assistant in the preparatory school, at \$75 a month, for ten months.
- 9. 'That an additional assistant in the preparatory department be appointed by the Executive Committee, at \$75 a month, for ten months.

I also recommend that the salary of Ferdinand John Foote, mechanician in the electrical engineering department, be advanced from \$60 to \$75 per month, and that the salary of M. F. Lindsey, storekeeper in the chemistry department, and the salary of I. H. Allen, storekeeper in the electrical engineering department, be advanced each from \$30 to \$35 a month.

Respectfully submitted,

A. S. Draper.

President.

Transfers, appointments, and additions to salaries were made in accordance with the recommendations of the President, in the foregoing paper, to take effect September 1, 1895.

The following communication was received from a committee of the Illinois State Board of Health:

CHICAGO, ILL., June 27, 1895.

To the Trustees of the Illinois State University.

GENTLEMEN: At a meeting of the Illinois State Board of Health, held in the city of Chicago, June 25, 1895, the committee on the administration of the medical practice act, reported the following:

Your committee would recommend, that in case satisfactory arrangements can be made with the Trustees of the University of Illinois, all applicants for matriculation in medical colleges of whom an examination is required, be examined by and present certificates from the Faculty of that institution as a condition of matriculation.

The committee was instructed to confer with the Trustees of the University of Illinois and request them to coöperate with the State Board of Health in the manner above indicated.

In view of this action, the committee would respectfully request that your Board take such action at your present meeting.

Very respectfully,

B. M. GRIFFITH, M. D., JOHN A. VINCENT, M. D., OSCAR O. BAINES, M. D.,

Committee

In relation to this matter presented by the State Board of Health, Mr. McLean offered the following preamble and resolution, which were adopted:

WHEREAS, This Board deems the matter referred to in the foregoing communication from the State Board of Health, of great importance to the medical profession of the State of Illinois, therefore be it

Resolved, That this Board grants the request of said committee and instructs the Faculty of the University to conduct the proposed examinations, the matter being in charge of the President of the University and the Deans, who are directed to report a plan for said examinations, and suggestions in relation thereto to this Board at its next meeting.

The Board then took a recess to meet at 2:30 p.m.

When the Board convened after recess, President Graham presented a communication from the Urbana and Champaign Electric Street Railway Company, asking further consideration of its request, formerly presented, that the company be permitted to extend its railway line south from the terminus of Wright street across the University farm to the road running east and west between the University grounds and the cemetery.

On motion of Mr. Morgan, the request of the railway company for permission to make such extension across University lands was denied.

The special committee appointed at the last meeting of the Board, to consider and report upon the duties of the Superintendent of Buildings and Grounds, made the following report:

CHICAGO, ILL., June 27, 1894.

To the Board of Trustees of the University of Illinois.

GENTLEMEN: Your special committee begs leave to offer the following resolutions:

Resolved, That the Superintendent of Buildings and Grounds be authorized to appoint janitors and assistants for the several buildings, for as many months in the year as he shall deem necessary, as follows:

Assistant at University Hall.  Assistant at the closets. Janitor at Chemical Laboratory. Janitor at Engineering Hall. Janitor at Natural History Hall. Janitor at the Mechanical Shops. Janitor at Military Hall.	25 00 30 00 40 00 40 00 30 00	per month.
. I		

Resolved, That the Superintendent may also employ additional workmen by the day, or student help by the month, for needed service in the care of buildings and grounds, as may be necessary.

Resolved, That the Superintendent may discharge any employé in his department at any time, for cause or when there is no work for the employé, and that he make no agreement which will preclude a discontinuance of the services of any such employé at any time.

Resolved. That the Superintendent, at the end of each month, file with the Business Agent, a report containing an itemized statement of the expenses of his department during the preceding month, and any recommendations as to future proceedings which he may deem advisable.

Respectfully submitted.

A. S. DRAPER, R. P. MORGAN, S. W. SHATTUCK,

Committee.

The report of the committee was adopted on motion of Dr. Smith. Mr. McLean offered the following resolution, which was adopted:

Resolved, That hereafter all persons connected with the steam heating department shall be employed or dismissed by the President of the University, and the professor in charge of the mechanical engineering department.

Mr. Bullard presented a proposition, with regard to advertising, from Mr. P. K. McMinn, of Springfield; the proposition was declined on motion of Dr. Smith.

On motion of Mr. Armstrong, the Executive Committee was directed to appoint a Superintendent of Buildings and Grounds.

On motion of Mr. Raymond, the Finance Committee was directed to take a sufficient bond of the Business Agent, in amount not less than \$15,000.

The following resolution was adopted:

Resolved, That the Chairman of the Farm Committee, Dr. Burrill and the President of the University, be appointed a committee with power to establish a vaccine farm and laboratory; that so far as practicable, the Professor of Veterinary Science be charged with the care of the same, and his salary

be paid in part from the special appropriation made by the establishment of said farm by the legislature; that the committee determine the amounts to be charged for the product of the laboratory, and that the sums so received be paid into the treasury and a separate account be kept thereof.

Upon recommendation of the Faculty, the Board of Trustees granted authority to the President to confer upon Mr. Isaac S. Raymond the degree of Master of Literature.

A proposition from the Twin City Telephone Company, presented by Mr. F. D. Rugg, was referred to the Finance Committee with power to act.

Mr. Bullard presented the following resolutions and moved their adoption:

Resolved, That the new library building be located in a southwesterly direction from University Hall, placing the building so that its west front may be, as nearly as practicable, opposite the east end of Daniel street, in the city of Champaign.

Resolved, That the building shall be made with fireproof construction in the part or parts where books and valuable articles or papers shall be housed, and of slow burning construction in all other parts.

Resolved, That in the opinion of the Board the new library building should be constructed with stone on the exterior.

It was decided to consider the resolutions separately.

The first resolution was adopted, on motion of Mr. Armstrong, by the following vote: Yeas, Messrs. Armstrong, Bullard, Graham, Morrison, Raymond, Dr. Smith, and Mrs. Flower; nays, Messrs. McLean and Morgan.

Mr. Morrison moved to amend the second resolution to the effect that the building should be entirely of fire-proof construction.

Pending the consideration of this amendment, the Board adjourned to meet at 9 o'clock Friday morning.

#### SESSION OF FRIDAY.

When the Board convened, pursuant to adjournment, the same members were present as on Thursday, excepting Mrs. Flower.

Mr. Morgan presented a claim from Messrs. Robinson & Burr for \$200.00 on account of deductions made from the contract price on the heating apparatus in Natural History Hall, and on his motion the claim was rejected.

The consideration of Mr. Morrison's amendment, which had been interrupted by adjournment, was then resumed, and the amendment was lost by the following vote: Yeas, Messrs. Morrison, Morgan, and Dr. Smith; nays, Messrs. Armstrong, Bullard, Raymond and McLean.

The resolution was then adopted by the following vote: Yeas, Messrs. Armstrong, Bullard, Graham, McLean, and Raymond; nays, Messrs. Morgan, Morrison, and Dr. Smith.

Mr. L. J. Highland, representing the Illinois Safety Heating Company, was heard on the subject of establishing a plant to manufacture gas for use at the University, and was asked to submit a proposition with regard to the same to the Committee on Buildings and Grounds.

By request of Mr. Graham, Mr. Bullard presided during the remainder of the session.

The Finance Committee was instructed to purchase a sprinkler for the use of the grounds.

Mr. Morgan offered the following resolution:

Resolved, That the Committee on Buildings and Grounds be instructed to sell the S. W. ½ 21–19 N.-9 E. 3 P. M., on the best practical terms, for a sum not less than \$75 per acre, and apply the proceeds to the construction of a residence for the President of the University. And it is further instructed to locate the building directly west of Engineering Hall, and west of the main avenue of the campus, or elsewhere, as shall be decided upon by President Draper and the Committee.

In case of such sale, the President and Secretary of this Board are authorized and directed to make the necessary conveyance of the same.

Mr. Raymond moved to amend by striking out \$75.00 and inserting \$80.00.

Mr. McLean moved to postpone the whole subject till the September meeting. Upon this motion the yeas were Messrs. Bullard, McLean, and Raymond; nays, Messrs. Armstrong, Morgan, Morrison, and Dr. Smith.

The motion was lost.

Upon the amendment offered by Mr. Raymond, the yeas were Messrs. Bullard, Graham, McLean, and Raymond, Dr. Smith being excused from voting; nays, Messrs. Armstrong, Morgan, and Morrison, and the amendment prevailed.

The resolution was then adopted by the following vote: Yeas, Messrs. Armstrong, Graham, Morgan, Morrison, Raymond, and Dr. Smith; nays, Messrs. Bullard, and McLean.

It was voted that the whole of the \$1,775 appropriated at the meeting of June 13th, in the payment of the claim of Yeager & Schultz, should be taken from the state appropriation for Engineering Hall.

An appropriation was made of \$100 to be offered in prizes at an oratorical contest.

The Business Agent was authorized to sell three old machines, now in Machinery Hall, belonging to the mechanical engineering department.

The Board adjourned.

W. L. PILLSBURY,

N. W. GRAHAM,

Secretary.

President.

#### LIST OF WARRANTS FOR YEAR ENDING AUGUST 31, 1895.

о.	Date.	To whom.	For what.	Amoui
	1894.	•		
1	Sept. 1	Yeager & Schultz	On building contract	\$19, 186
3	1	Maltby & Wallace	On heating contract	1,000
3	1	l(∔e∩ I. Retchelder	(I) n electric wiring contract	300
5	1	Robinson & Burr	Pipe, fittings, etc Repairs, etc Shafting, etc.	23
5	1	Western Electric Instrum't Co.	Repairs, etc	16
6 7 8 9	'' 1	Chicago Shafting & Pulley Co.	Shafting, etc	121
7	" î	Chas. H. Besly & Co	Iron, etc	68
8	" i	Western Electric Co	Lamps, etc.	177
	;; į	Quincy Granite Co	Iron, etc. Lamps, etc. Granite cubes	10
0	1	Library Bureau	Library cards, etc	33
1	1	Engineering News Pub. Co	Library cards, etc	6
2				26
3	1	J. C. Vaughn	Greenhouse stock	4
14	1	<u>L</u> . <u>М</u> адаsse	Charts	.2
15	1	E. H. Sargent & Co	Laboratory supplies	17
16	1	C. N. Clark & Co	Paper weights	. 7
7	1	A. A. Beal & Co	Greenhouse stock Charts Laboratory supplies Paper weights Plates	25
8	1	A. C. Stokes	Analytical keys	1
9	;; 1	Geo. B. Cresson	Books, etc	1 4
10	1	McIntosh Battery & Optical Co.	Repairs	4
1		Library Bureau	Supplies. Expenses.	7
2	٠٠٠ أ	W. O. Kronn	Expenses	10
3	1	W. G. Johnson		10
4	1	E. B. Forbes		19 97
Ď		S. A. Forbes	Calarra far Cartanahan 1904	
9	29	T. J. Burrill	Salary for September, 1894	583 225
0 1 1 2 3 4 5 6 7 8 9 0	29			166
ğΙ	" 29	S. W. Shattuck		83
ă	49	E. Snyder		166
ΨĮ	29	N. C. Ricker L. O. Baker		166
1 2 3	" 29	C A Forbas		83
2				166
3	" 29	C. W. Rolfe D. McIntosh		150
5	20	A. M. Talbot	44 . 44	166
2	29	A. N. Talbot A. W. Palmer	66 66	166
6	29	E E Englowiek	44 44	158
8	" 29	F. F. Frederick S. W. Parr	44 44	166
9	29	H. J. Barton	66 66	166
9		Chas. M. Moss.	**	166
	" <sup>29</sup>	D. K. Dodge		166
2	" 29	L. P. Breckenridge		166
3	49	D W Shee		166
	44 29	D. W. Shea		158
1	40	David Kinley		150
3	" $\frac{29}{29}$	J. D. Bruner Wm. J. Eckoff	44	150
2	29	Katharine Merrill		100
3	** 29	W. O. Krohn		150
9	" 29	Fligsboth Cooley		133
Ś	29	Elizabeth Cooley		125
í	" 29 " 29	H. E. Summers E. J Townsend		125
2	29	W. H. VanDervoort		129
3	" 29	W. D. Pence	44, 44,	104
1	" 29	E. B. Green	44 44	133
5	" 29	P. F. Bicknell.		125
3	20	E. G. Howe		150
	" 29	A. Kellogg.		110
3	29	A U Deviols		105
9	29	A. H. Daniels G. W. Parker		115
0	49	Γ. A. Clark		110

·-	Date.	To whom.		For what.		Amou
	1894.					
2 Se	pt.29	C. B. Clark W. E. Sandford Alice M. Barber	Salary for	September,	1894	\$75
3	29	W. E. Sandford		4.4		80 65
<b>64</b> .∣	29	H. S. Piatt		4.4		1 95
5 6	6 90	H F Poulzon		4.4		30
7	. 29	C. A. Gunn A. H. White Wm. Esty B. V. Swenson A. Curtiss		4.4		85 30 75 75 100 85 75 80 70
8 4	. 29	A. H. White				75
9 '	• 29	Wm. Esty				100
ŏ '	. 29	B. V. Swenson	• • •	"	,	85
1 '	29	A. Curtiss	**	• •		75
2 '	. 29	Fred A. Sager		••		80
[3]	29	Fred A. Sager L. W. Peabody G. W. McCluer	;;	• • • • • • • • • • • • • • • • • • • •		70
4	29	G. W. McCluer		6.6		10
5	29	Helen Butterfield P. Mogenson R. Vial. E. J. Lake. J. G. Mosier.				75
6	. 29	P. Wiel			•••••	60
6	. 29	E I Lake				45
9 4	. 29	J. G. Mosier				60
šŏ '	29	H. E. Reeves Henry Jones A. C. Burnham Harry Grindley	••			15 60 75 60 45 60 10 50 80
ši '	· 28	Henry Jones	• •			50
2 '	' 29	A. C. Burnham	! !!	• •		80
33 '	29	Harry Grindley		• •		100
	; 39	Gertrude Shawhan				
55	29	N. A. Weston				80 60 40
50	29	Adelle Clendenin R. A. Wood G. C. Miller			••••••	60
57	. 29	G C Millon	4.6	4 4	••••••	
100	. 23	C F Hottes		4.4		40
٠ ا	, 29	Ola C. Woolsey	6.6	4.6		40
ñ '	. 29	G. C. Miller. C. F. Hottes Ola C. Woolsey W. S. McGee. W. L. Pillsbury Lillie Heath Elva Blount	4.6			40 40 40 100 45
2 '	. 29	W. L. Pillsbury		**		100
3 '	29	Lillie Heath		4.4		45
)4				• • • • • • • • • • • • • • • • • • • •		45
<i>f</i> 5	29	A. B. Baker				70 30
M-1	; 29	C. A. Herme L. G. Lathrop		44		30
77				44	<b>.</b>	65
8	. 29	J. Morrow. M. F. Lindsey. L. H. Walden. A. Iten I. H. Allen		4.4		30
00 '	. 29	L. H. Walden	4.4	4.6		25
11 '	. 29	A. Iten	. 44			25
12 '	· 29	I. H. Allen	"	**		30 65 30 25 25 25
3			**			40
4	29	Philip Schwehm	1			40 25 83
15	: 29	H. C. Forbes				88
6	29	Mary J. Snyder. W. G. Johnson. Frank Smith.			• • • • • • • • • • • • • • • • • • • •	100
77	. 29	Frank Smith		4.6	•••••	100
)8 )9	29	C. A. Hart.		4.4		100 100 62 45 22
0 '				4.4		45
1 '	29	N. W. Graham	Expenses	to Board m	eeting	22
2 '	· 29	Alex. McLean				20
3 '	29	S. A. Bullard				20 20 114 15 27
.4 ,	; 29	Miles Newbery N. W. Graham Alex. McLean S. A. Bullard Jas. E. Armstrong F. M. McKay W. L. Pillsbury S. W. Shattuck C. B. Kimball R. P. Smith Lydia Hart. W. G. Johnson		• •		15
5	29	F. M. McKay				27
.6	29	W. L. Phisoury	**	4.6		7
.7) ,	29	C R Kimball	Salary for	September,	1894	en en
8	, 29	R P Smith	Salar V. 10L	periemper,	1004	60 100
n '	· 29····	Lydia Hart	Drawings	and expense	s	64
ni '	· 29	W. G. Johnson	Traveling	avnangag		24
22 '	· 29	F. L. Bills	Postage			27
3 1	29	G. W. Bullard	Architect's	s services	· · · · · · · · · · · · · · · · · · ·	1,600 4,647 170
4 .	29	Babcock & Wilcox Co	Boilers			4,647
5	29	Maitby & Wallace Co	Putting in	steam		170
26 Oç	į. 15	Mogganger Printing Co	1 11e			5
27	, 15	The Champaign Times	Advertism	ıg		3 7 6
8	, 15	The Public School Pub Co				6
, 180	· 15	Lydia Hart. W. G. Johnson. F. L. Bills. G. W. Bullard Babcock & Wilcox Co. Maltby & Wallace Co. Peoria Steam Marble Works. Messenger Printing Co. The Champaign Times. The Public School Pub. Co. Knowlton & Bennett. Fuller & Fuller Co. Kariher Coöperative Co.	Paints, etc			25
61	15	Fuller & Fuller Co	Chemical	supplies, gla	ss, etc	62
22 '	' 15	Kariher Cooperative Co	Matches. e	tc		4
12) *	15	Bullard & Gormley Co	Hardware.			4
4 '	15	Rhowton & Bennett. Fuller & Fuller Co. Kariher Coöperative Co. Bullard & Gormley Co. Baker Adamson. Goodyear Rubber Co. Richards & Co. E. G. Smith. Henry Heil Chemical Co.	Acids			95
5 '	15	Goodyear Rubber Co	Tubing			18
36	15	Richards & Co	Chemical s	supplies	,	36
	15	E. G. Smith	T001S			39 62

No.	Date.	To whom.	For what.	Amount
	1894.		Tools Coal. Paper Hardware. Pulley, etc. Milling machines Drills Steel Scales. Stamps Tool grinder. Services, Supt. Engineering Hall. Blind. Drayage Ord's Zoölogy Laboratory supplies.  Books, etc. Prints. Moulding machine Stationery and books. Paper, etc Garpet. Cabinet. Furniture. Office rent. Expenses. Spark guard. Water to January 1, 1895. Drayage Traveling expenses. Battery, etc. Expenses of cleaning room Postage. Labor.  Salary for October, 1894.	
139	Oct. 15	J. T. Slocomb & Co	Tools	\$3.0
140	15	Albany Parf'd Wrann's P. Co.	Pener	786 <b>3</b> 3
142	15	Orr & Lockett Hardware Co	Hardware.	6513
143	'' 15	Jones & Laughlins	Pulley, etc	2013
144	15	Brown & Sharp M'f'g Co	Milling machines	579.9 1119
145	15	Sanderson Bros. Steel Co	Steel	1119 211
140	" 15	Fairbanks, Morse & Co	Scales.	24 0
148	15	The Ohio Stamp Works	Stamps	3 2 68 0 240 0
149	15	W. F. & John Barnes Co	Tool grinder	68 0
150	15	F. R. Coffman	Services, Supt. Engineering Hall	240 0
152	" 15	R. S. Wilber.	Dravage	3 6
153	" 15	Sam'l N. Rhoady	Ord's Zoölogy	3 0 2 0 7 8 80 7 108 9
154	15	Bausch & Lomb Optical Co	Laboratory supplies	. 78
155	15	Eimer & Amend	Pooks ate	80 7
157	" 15	W. H. Ran	Prints	7 3
158	" 15	Rankin & Fritsch F. & M. Co	Moulding machine	20 0
159	15	A. C. McClurg & Co	Stationery and books	134 6 12 2
160	15	Eugene Dietzgen & Co	Class plates etc	12 2
161	15	F. H. Robeson & Bros	Carnet	11 2 32 5
163	' 15	Office Specialty M'f's Co	Cabinet	54 2 280 0 22 5
164	<b>'' 15</b>	A. H. Andrews Co	Furniture	280 0
165	15	B. Zelle	Office rent	22 5
186	15	T. H. Troyett	Expenses	20 5 1 5
168	15	Union Manufacturing Co	Water to January 1, 1895	125 0
169	'' 15	W. R. Howe	Drayage	125 0 90 2
170	15	N. C. Ricker	Traveling expenses	11 6
171	15	Wm. Esty	Expenses of cleaning room	16 2
173	15	F. L. Bills.	Postage	54 0
174	'' 15	Pay roll of men, Sept., 1894	Labor	54 0 589 3
175	15	Pay-roll of students, Sept., 1894.	g 1	186 1
176	31	A. S. Draper	Salary for October, 1894	583 3
178	' 31	S. W. Shattuck		225 0 166 6 83 3
179	'' 31	E. Snyder	**	83 3
180	31	N. C. Ricker		166 6
181	" 31	S A Forbes		166 6 83 3
183	'' 31	C. W. Rolfe	**	166
184	" 31	D. McIntosh	44	150 (
185	31	A. N. Talbot		166 6
186	" 31	A. W. Palmer		. 166 6 158 3
189	,, 31	S. W. Parr	**	. 158 3 . 166 6
189	'' 31	H. J. Barton	1	166 6
190	" 31	Chas. M. Moss	4. 4	. 166 6
191	31	D. K. Dodge		. 166 6 166 6
192	" 31	D. W. Shea	44	166 6
194	' 31	David Kinley		. 166 6 158 8
195	'' 31	J. D. Bruner	44	150 (
196	" 31	Wm. J. Eckoff	44 44	. 150 (
197	31	W O Krohn		150 (
198 199	" 31	Katharine Merrill W. O. Krohn Elizabeth Cooley H. E. Summers E. J. Townsend Wm. H. Van Dervoort W. D. Pence E. B. Greene Percy F. Bicknell E. G. Howe Anita M. Kellogg A. H. Daniels G. W. Parker T. A. Clark C. D. McLane Frank Smith J. D. Phillips		100 ( 150 ( 150 (
200	" 31	H. E. Summers		125 (
201	;; 31	E. J. Townsend		. 125 (
202	31	Wm. H. Van Dervoort	***	. 129 104
203 204	" 31	E. B. Greene.	"	133
205	" 31	Percy F. Bicknell		. 125 (
200	" 31	E. G. Howe	" "	. 150
207	31	Anita M. Kellogg		. 110
208	31	A. H. Daniels	** ** ***	
209 210	31	T. A. Clark	"	. 110 (
211	" 31	C. D. McLane	**	. 105 (
212	31	Frank Smith		. 100 ( 100 (
218			**	

	Da	ate.	To whom.	For	r what.		An
Ī	18	94.				,	
5	Oçţ.	31	C. B. Clark W. E. Sandford Alice M. Barber H. S. Piatt H. E. Parker C. A. Gunn A. H. White William Esty B. V. Swenson A. Curtiss. Fred A. Sager	Salary for Octob	oer, 1894	l	-
)		31	W. E. Sandford	1			
7	• • •	31	Alice M. Barber	<b>::</b>			
3	•••	31	H. S. Piatt	1 ::	• • •		
)		31	H. E. Parker				
)		31	C. A. Gunn				1
	• • •	31	A. H. White				
3		31	William Esty	::			
3		31	B. V. Swenson				
Į		31	A. Curtiss	::			1
5		31	A. Curtiss. Fred A. Sager. L. W. Peabody G. W. McCluer Helen E. Butterfield Peter Mogensen	1	• • •		ŀ
3		31	L. W. Peabody				1
7		31	G. W. McCluer				1
3		31	Helen E. Butterfield				
9		31	Peter Mogensen				1
		31	K. Aiai				
Ļ		31	E. J. Lake		4.4		
2		31	J. G. Mosier		4.4		
3		31	<u>н</u> . к. кееves		4.4		
5		ئال 1	Henry Jones			• • • • • • • • • • • • • • • • • • • •	
3		ئل	A. U. Burnnam				
		ئل	H. S. Gringley				
l		ئل	Peter Mogensen R. Vial E. J. Lake. J. G. Mosier H. E. Reeves Henry Jones A. C. Burnham H. S. Grindley. Gertrude Shawhan N. A. Weston Robt. A. Wood G. C. Miller C. F. Hottes Ola C Woolsey. W. S. McGee Adelle Clendendin W. L. Pillsbury Lillie Heath Elva Blount A. B. Baker C. A. Herme L. G. Lathrop J. Morrow M. F. Lindsey L. H. Walden A. Iten				
١		31	N. A. Weston	٠.,			
		31	Robt. A. Wood				l
١		J1	G. C. Miller				i
l		31	С. Г. нопев				Ì
l	4 4	31	Ola C Woolsey				
l	6.6	31	W. S. McGee		4.4		
l		91	Adene Clendendin		4.4		
	6.6	91	W. L. Pillsbury				:
Į	4.6	91	Lillie Heath				Į.
	6.6	91	Liva Blount				ļ
	6.6	91	A. B. Baker		6.6		1
		91	U. A. Herme		4.4	• • • • • • • • • • • • • • • • • • • •	
		91	L. G. Lathrop		4.4		1
	4 4	91	M W Lindson		4.4		
	6.6	31	I H Wolden		4.4		
		31	A Itan		4.4		ł
	4 4	31	I H Allan		6.6		
	4 4	31	E W Justus		4 4		İ
		31	Philip Schwehm				i
		31	L. de P. Vail				:
		31	H. C. Forbes				
		31	Mary J. Snyder				1
		31	W. G. Johnson				1 :
	• •	31	Frank H. Clement Co	Planer			1 :
	• •	31	F. A. Rich	Cutter			
	4 4	31	Carl Schoenhof	Books			
١		31	Robinson & Burr	Astronomical ta	$\operatorname{rget}\dots$		
	4.6	31	Library Bureau	Cards, etc			
	4 4	31	C. H. Baddely	Lamps, etc			
	4.6	31	Wabash R. R. Co	Freight charges			
		31	Empire Steam Laundry	Toweling			
		31	M. F. Lindsey L. H. Walden A. Iten L. H. Walden L. H. Allen E. W. Justus Philip Schwehm L. de P. Vail H. C. Forbes Mary J. Snyder W. G. Johnson Frank H. Clement Co. F. A. Rich Carl Schoenhof Robinson & Burr Library Bureau C. H. Baddely Wabash R. R. Co. Empire Steam Laundry Isaac Fielding Union Telephone Co W. O. Krohn E. G. Howe W. L. Pillsbury S. W. Shattuck Jones & Laughlins Fuller & Fuller Co. A. C. McClurg & Co. Pantagraph Co The Ashcroft Mfg. Co. J. B. Edson Buffalo Scales Co. Theo. S. Obermayer E. G. Smith A. P. Cunningham & Son T. H. Trevett Maltby & Wallace Co Elimer & Amend Yale & Towne Mfg. Co. J. B. Edson Buffalo Scales Co. T. H. Trevett Maltby & Wallace Co Elimer & Amend Yale & Towne Mfg. Co. J. B. Elson D. Blakinson & Son Co. Lea Bros. & Co.	P. O. box rent			
		31	Union Telephone Co	Rent of instrum	ents		1
		31	W. O. Krohn	Expenses			
	" "	31	E. G. Howe	Expenses			
		31	W. L. Pillsbury	Traveling exper	ses		
		31	S. W. Shattuck	Petty expenses.	3 mont	hs to Aug. 3.	
		31	Jones & Laughlins	Steel			
		31	Fuller & Fuller Co	Hard oil finish .			
		31	A. C. McClurg & Co	Books, etc			
		31	Pantagraph Co	Binding			1 :
		31	The Ashcroft Mfg. Co	Indicators			:
		31	J. B. Edson	Pressure record	ing ga	uge	
١		31	Buffalo Scales Co	Test weights			
ı		31	Theo. S. Obermaver	Ladle shanks. b	ail, etc		
	6.6	31	E. G. Smith	Calipers, gauges	s, etc		2
١		31	A. P. Cunningham & Son.	Tracing cloth			-
١	4 4	31	T. H. Trevett	Copper band, et	c		
١		31	Malthy & Wallace Co	Fittings and ret	airs		1 2
-		31	Eimer & Amend	Burettes and su	pports		
	4 4	31	Yale & Towne Mfg. Co	Locks, etc			
		31	P. Blakinson & Son Co	Gould's Diction	ary		
	7.6	31	Lea Bros. & Co	The Am. Journa	lof M	ed Science	1

э.	Date.	To whom.	For what.	Amou
	1894.		Granulated spelter.  Mats. Manikin. Books. Freight charges.  """  Traveling expenses. On contract for heating. Camera. Cases. Hardware. Books. Laboratory supplies. Coal. Plates. Laboratory supplies. Petty expense. Books. Photographs Charts. Cases and cards. Books.  Pulley. Belting. Pulley. Lumber. Books. Tools and supplies. Traveling expenses. Hire of boat. Expenses to Board meeting.  """  Traveling expenses. Salary, part of October, 1894. Drawings.	
92	Oct. 31	Matthiessen & Hegeler Zinc Co.	Granulated spelter	31 29 34
93	31	The Chicago Carpet Co	Mats	8
94	31	A. H. Abbott & Co	Manikin,	2
95	31	U. S. Patent Office	Books	31
<b>1</b> 6	31	U. U. U. St. & L. Ry. Co	Freight charges	29
20	31	Basifa E-mass Ca		34
00	44 91	American Express Co		10
vo Vo	44 91	W G Johnson	Traveling expenses	18 34 500
11	Nov 15	Malthy & Wallace Co	On contract for heating	500
12	15	Douglass & Shuey Co	Camera	10
3	'' 15	The Globe Co	Cases	60 10 7 23
4	'' 15	Henry Trevett	Hardware	10
)5	<b>''</b> 15	B. Westermann & Co	Books	7
6	<b>''</b> 15	Bausch & Lomb Optical Co	Laboratory supplies	23
7	15	B. F. Swartz	Coal	6
8	15	A. A. Beal & Co	Plates	33
9	15	J. M. Schilling	Laboratory supplies	33 26
0	15	H. C. Forbes	Petty expense	4
1	15	Geo. B. Cresson	Books	18
2	15	Thos. Naughton	Pnotographs	16 20
3	15	Library Purcey	Cases and sands	20
4	" 15	Fetog & Lourist	Pooks	213 31
2	10	Carl Schoonhof	Dooks	91
7	15	Manning Maywell & Moore	Pulley	1 4
۵	" 15	Page Belting Co	Belting	49
9	'' 15	Paul Mfg. Co	Pulley	1 8
ŏ	'' 15	Hamilton & Son	Lumber	4
1	'' 15	Eyller & Co	Books	4
2	" 15	The Machinist Supply Co	Tools and supplies	37
3	" 15	E. H. Sargent Co	Laboratory supplies	18
4	15	G. P. Clinton	Traveling expenses	
5	15	G. E. McHose	Hire of boat	8
6	15	N. W. Graham	Expenses to Board meeting	13
7	15	Alex. McLean		20
Ö	15	F. M. McKay		10
ă	· · 15	N. D. MOFFISOH	Thereling expenses	56
1	" 15	C A Hart	Solory part of October 1894	69
2	'' 15	Lydia M. Hart	Drawings	27
3	15	Bernard Quaritch.	Books	41 437 15 85 19 29 18 61 56 62 27 13
4	" 15	W. O. Krohn	Expenses	34
5	" 15	P. F. Byrnes	Crushed rock	(
6	15	The Star Crescent Distillery	Alcohol	38
7	" 15	Frank_Young	Tuning piano	
8	15	WRHowe	Drayage	24 125
9	15	F. L. Bills	Postage	125
0	15	S. A. Forbes	Expenses	48 24 42
1	15	T. A. Ulark	Plans, cuts, etc	24
2	15	Nontune Motor Co	Apparetus	42
3	19	Figher Governor Co	Apparatus	12
<b>4</b> 5	10	Malthy & Wallage Co	Pine fittings etc	61
6	" 15	Orr & Lockett Hardware Co	Locks	61
7	" 15	Robinson & Burr	Briquette molds.	4.5
8	15	The M. C. Lilly Co	Swords, belts, etc	48 61
9	" 15	N. B. Morrison. T. J. Burrill C. A. Hart. Lydia M. Hart. Bernard Quaritch. W. O. Krohn P. F. Byrnes The Star Crescent Distillery Frank Young W. R. Howe F. L. Bills. S. A. Forbes T. A. Clark. G. E. Stechert. Neptune Meter Co. Fisher Governor Co. Maltby & Wallace Co. Orr & Lockett Hardware Co. Robinson & Burr The M. C. Lilly Co. Payroll of men, Oct. 1894. Payroll of men, Oct. 1894. A. S. Draper T. J. Burrill. S. W. Shattuck E. Snyder I. O. Baker S. A. Forbes C. W. Rolfe D. McIntosh A. N. Talbot A. W. Palmer F. F. Frederick	Traveling expenses. Salary, part of October, 1894. Drawings. Books. Expenses. Crushed rock. Alcohol Tuning piano. Drayage Postage. Expenses. Expenses. Plans, cuts, etc Books Apparatus. Pipe, fittings, etc Locks. Briquette molds. Swords, belts, etc. Labor	460
0	" 15	Payroll of students. Oct., 1894.	Salary for November, 1894	460 163
1	'' 30	A. S. Draper	Salary for November, 1894	
2	;; 30	T. J. Burrill.	***	225
3	30	S. W. Shattuck		166
4	<b>44</b> 30	E. Snyder		8
5	30	N. C. Ricker	;;	166
6	30	I. O. Baker	;;	166
7	30	S. A. Fordes		83
8	30	U. W. Kolie		166 150
9	" 30	D. McIntosn		166
0	" 30	A. W. Palmor		166
2	" 30	E F Frederick	:: :: :::::::::::::::::::::::::::::::::	158
3	" an	S W Parr		166
4	30	H J Barton		166
5	" 30	Chas M Moss	44	166
6	" 30	D. K. Dodge	44 44	166
7	** 30	A. N. Talbot A. W. Palmer F. F. Frederick S. W. Parr H. J. Barton Chas. M. Moss D. K. Dodge L. P. Breckinridge D. W. Shea David Kinley		166
8	" 30	D. W. Shea	**	166
	44 90	T 1777 1		158

		ate.	To whom.		For what.	. : * :
		10.4	J. D. Bruner Wm. J. Eckoff. Katharine Merrill W. O. Krohn Elizabeth Cooley H. E. Summers. E. J. Townsend W. H. VanDervoort W. D. Pence E. B. Greene Percy F. Bicknell. E. G. Howe. Anita M. Kellogg A. H. Daniels G. W. Parker H. S. Grindley T. A. Clark C. D. McLane Frank Smith R. P. Smith R. P. Smith R. P. Smith R. P. Shith J. D. Phillips C. B. Clark W. E. Sandford Alice M. Barber H. S. Piatt H. E. Parker Chas. A. Gunn Alfred H. White William Esty. B. V. Swenson A. Curtiss. Fred A. Sager L. W. Peabody G. W. McCluer Helen E. Butterfield Peter Mogensen. R. Vial E. J. Lake J. G. Mosier. H. E. Reeves		· · · · · · · · · · · · · · · · · · ·	
NT.	18	94.	I D Rmmor	Solowy	for November 1904	
T4.	YY.	30	Wm. J. Eckoff	Sarary,	101 110 vemper, 1004	
	4 4	30	Katharine Merrill.		• • •	
	4 4	30	W. O. Krohn	• •	* * J. 3.1 . pt	
		30	Elizabeth Cooley		· · · · · · · · · · · · · · · · · · ·	
		30	H. E. Summers		1 H - 👯 1 V - A - A - A	
	• •	30	E. J Townsend			أستنت فت
	• •	30	W. H. VanDervoort		tera dijeloji je s	
	• •	30	W.D. Pence			
		30	E. B. Greene	1	ngila ji asaw	~
		30	Percy F. Bicknell			***********
		30	E. G. Howe			
		<u>ა</u> ს	Anita M. Kellogg			
	4.4	90	C W Porkor		4.4	
		30	H S Grindley		4.6	
	"	30	T A Clark		4.6	
	"	30	C. D. McLane		• •	
	4 4	30	Frank Smith.		• •	
	4 4	30. · ·	R. P. Smith	••	4.6	********
	"	30	J. D. Phillips	• •		
	4 4	30	C. B. Clark			
		30	W. E. Sandford	4,6	4.4	
	4 4	30	Alice M. Barber		6.6	
	• •	30	H. S Piatt		• •	
	• •	30	H. E. Parker			
		30	Chas. A. Gunn			
	• •	30	Alfred H. White			• • • • • • • • • • • • • • • • • • • •
	• •	30	William Esty			
		30	B. V. Swenson			• • • • • • • • • • • • • • • • • • • •
		30	A. Curtiss			
		30	Fred A. Sager			•••••
		<u>ა</u> 0	L. W. Peabody		4.4	
		30	G. W. McCluer			•••••
		ಶ೪	neien E. Butterfield		44	••••••
		ას	Helen E. Butterfield Peter Mogensen. R. Vial. E. J. Lake. J. G. Mosier H. E. Reeves Henry Jones A. C. Burnham Gertrude Shawhan N. A. Weston. Adelle Clendenin Robt. A. Wood G. C. Miller Chas. F. Hottes Ola C Woolsey W. S. McGee F. H. Dodge L. de P. Vail W. L. Pillsbury L. P. Breckenridge S. W. Shattuck Lillie Heath Elva Blount A. B. Baker C. A. Herme L. G. Lathrop J. Morrow. M. J. Lindsey L. H. Walden L. H. Walden L. H. Walden L. H. Walden L. G. Lother J. Schwem J. M. Doughty H. C. Forbes Mary J. Snyder W. G. Johnson C. A. Hart Mrs. Frank Smith Miles Newberry C. A. Hart I. O. Baker Twin City Electric Co. Stearns Lime & Stone Co			
		30	E I Lake			
,		30	L. J. Lake			• • • • • • • • • • • • • • • • • • • •
,		90	H F Rooves		4.4	• • • • • • • • • • • •
,	6 6	30	Honry Iones		6.6	
4	4 4	30	A C Burnham			
•	• •	30	Gertrude Shawhan		6.6	
•	"	30	N. A. Weston			
•	"	30	Adelle Clendenin		· · · · · · · · · · · · · · · · · · ·	
٠	٠.	30	Robt. A. Wood	• •	• •	
1	٠.	30	G. C. Miller	4 4	••	
•	"	30	Chas. F. Hottes			
٠	• •	30	Ola C Woolsey			
•		30	W. S. McGee		. ~	
	• •	30	F. H. Dodge		<sup>1</sup> 2 September, 18	394
		30	L. de P. Vail		November, 1894	
		30	W.L. Pillsbury		• • • • • • • • • • • • • • • • • • • •	
		30	L. P. Breckenridge		s months to dat	e
		30	S. W. Shattuck		37	• • • • • • • • •
,		30	Lillie Heath		November, 1894	
		<u>გე</u>	Elva Blount			
,		ಶ್ಚು	A. B. Baker			
		<b>ჟ</b> ∪	U. A. nerme			•••••
		<b>ა</b> წ	L. G. Lathrop			
		ου	J. MOTTOW		4.6	
		შV	M. J. Lindsey			
		ე <b>ს</b> ეი	L. H. walden		4.6	
		<u>ა</u> ს	A. Hen			• • • • • • • • • • •
•		90	E. W. Instruc			•••••
		90	Philip Sahwam			•••••
•		90	I M Donghty			
		90 · · · ·	J.M. Doughty			•
		90	Mony I Snydon	6.6	44	**********
		90	W. G. Johnson		4.6	
		ას 90	W. G. Johnson			
		90	Mug Fronk Smith		Mor. 1904	••••••
		30	MIS. FIRIK SHIIIII	Labor	1118y, 1074	
		90	C A Heat	Railwar.	fore	
	٠.	30	U. A. Hart	Evnera	y 1010	••••••
		90	Therein City Flootnia Co	Lampa	ord	
	•					

ο.	Date.	To whom.	For what.	Amou
	1894.			
10	Nov. 30	Roston Musical Instrument Co.	Musical instruments	\$283
<b>4</b> 9	1404.	Hornetoin Bros	Musical instruments Pamphlets, etc Carpets, rugs, etc. Chemical apparatus.	224
50	'	Marchall Field & Co	Compete mage eta	09
		Marshall Field & Co Richards & Co., limited Richard Kny & Co Fuller & Fuller Co.	Charges, rugs, etc	93
51		Richards & Co., limited	Chemical apparatus	9
52				2
53		Fuller & Fuller Co	supplies	51
54	1	A. B. Dick & Co	Paper	1 5 22 3 1 2 10
55		Goodyear Rubber Co	Rubber tubing	5
56	1 ::	Detroit Flower Pot Mfg. Co	Flower pots	22
57	• •	Chas. A. Scribner Co	Belting	3
58	1 ::	Mackay Print Paper Co	Paper	1
59		C. J. Sabin	Coal	2
60	* *	Jones & Laughlins	Steel	10
61	**	Lawton & Co	Simplex printer	11
$\tilde{62}$		Engineering News Pub. Co	Advertising.	6 3
63		Hammond Type Writer Co	Ribbons and renairs	3
64	4.4	Knowlton & Rennett	Leed oil etc	Ĭ ŏ
6 <del>5</del>		Albany Porf Wran Paner Co	Penor	š
	4.4	Dries & Sandford	Oile of a	11
66		V anih an Cananativa Ca	Town ote	11 13
67		Thomas Snow	Mercury and iodine Paper Rubber tubing Flower pots Belting. Paper Coal Steel Simplex printer Advertising Ribbons and repairs Lead, oil, etc Paper Oils, etc Jars, etc Sand Hammers	3
68		Homes Hell Charter L.	Баши История	2
59		neury neu Unemical Co	Tammers	$\frac{2}{2}$
70		Academy of Nat. Sci. of Phil	Daala	400
71		Library Bureau	Books, cases, etc	169
72		Thomas Snow.  Henry Heil Chemical Co. Academy of Nat. Sci. of Phil. Library Bureau.  Machinists' Supply Co. Soule Photograph Co. Maltby & Wallace Co. Eimer & Amend.  J. E. Armstrong. F. L. Bills. Pantograph Co.	Sand Hammers Journal Books, cases, etc. Tools, etc. Slides	30
73		Soule Photograph Co	Snaes	193
14		Maltby & Wallace Co	Labor. Apparatus and supplies Expenses to Board meeting	58
75		Eimer & Amend	Apparatus and supplies	38
76	•••	J. E. Armstrong	Expenses to Board meeting	10
77.	•••	F. L. Bills	Postage	45
78		Pantograph Co	Printing programs	29
79	• •	D. H. Lloyde & Son	Stationery, etc	33
30		A. C. McClurg & Co	Books and printing	195
31		George Besore	Lumber	161
$\tilde{32}$		Sheldon Brick Co	Brick, sand, etc	70
33		E. S. Tucker	Slides	17
34		Orr & Lockett Hardware Co	Hardware	161 70 17 9
35		The Arlington Mfg. Co	Pyraline sheeting	ĭ
<b>36</b>		Champaign Co. Herald	Printing	91
37		A P Cunningham & Son	Stationery etc	91 12
38		T R White Jr	Gas 3 months to Oct 1 1894	114
39		II and C Electric St Rv Co	Power 3 months to Sent 1 1894	41 61
90	4.6	C. W. Noble	Rlue printe	61
91		The Bahcock & Wilcox Co	Roilers	4, 647 1, 099
2		A H Androws & Co	Furniture	1,099
3	4.4	C Hamilton & Con	Lumbon	152
		D II Evens	Illinian bassintian	142
4		Mark and Dark Harry	Ittimi subscription	298
5		mechanical Dept. Univ. of III	Labor, material and power	290
6		Architectural Dept. Univ. of III.	Apparatus and Supplies Expenses to Board meeting Postage Printing programs Stationery, etc. Books and printing Lumber Brick, sand, etc. Slides Hardware Pyraline sheeting Printing Stationery, etc. Gas, 3 months, to Oct. 1, 1894 Power, 3 months to Sept. 1, 1894. Blue prints Boilers Furniture Lumber Illini subscription Labor, material and power  Matting etc.	446
7		T T D 1 6 D		256
8		r. K. Kobeson & Bros	Matting, etc	56 68
9		G. E. Stechert.	Books and publications	65
0		F. K. Robeson & Bros. G. E. Stechert. A. C. McClurg & Co Yeager & Schultz. N. W. Graham Alex. McLean S. A. Bullard J. E. Armstrong N. B. Morrison Henry Raab	Books On contract, Engineering Hall. Expenses to Board meeting	454
)1	Dec: 15	Yeager & Schultz	On contract, Engineering Hall	18,938
Z	••	N. W. Graham	Expenses to Board meeting	14
3	• •	Alex. McLean		24
4	4.6	S. A. Bullard		47
5	• •	J. E. Armstrong		10
6	* *	N. B. Morrison	:: :: :: ::::::::::::::::::::::::::::::	33
7	4.4	Henry Raab		7
8	4.6	Isaac S. Raymond		15
19		W. E. Quine		10
0	4.4	C. K. Adams	Expenses	17
1	4.4	C F Hottes	Evnenses and services	18
$\frac{1}{2}$	4.4	W O Krohn	Evnances	29
3	6.6	Fronk Smith	Salary 2 months to Sort 90 1904	50
	4.4	F 1 Dilla	Postero	39
4		I rdie M. Hent	Descripe a	39
5	4.4	Lyuia M. Hart	Drawing	34
6	• • •	м. к. ноже	prayage	25 14
7	• • • • • • • • • • • • • • • • • • • •	Electric Appliance Co	Laboratory supplies	14
8	• • •	F. H. Dodge	Record book	43
9	• • •	American Express Co	Freightage	43
20	• •	Pacific Express Co	** =	30
21		Wabash Railway Co	Expenses Expenses and services Expenses and services Expenses Salary 3 months to Sept. 30, 1894 Postage Drawing Drayage Laboratory supplies Record book Freightage	30 37
2		C., C., C. & St. L. Rv. Co	44	16
3		Illinois Central R. R. Co	**	50
!	4.4	Payroll of men. Nov., 1894	Labor	568
24				

о.	Date.		To whom.	For what.	Amour
	1894.				
26	Dec:	15	Goodyear Rubber Co	Rubber tubing	\$4
411			E. Miller & Son	Dry goods	23
28			Brown & Sharpe Mfg. Co	Calipers	23 31
$\frac{29}{30}$	6.6		E. G. Smith	Rubber tubing Dry goods Calipers Hardware Tracing paper, etc. Wire, globes, etc. Chemical supplies Odd numbers Chemical apparatus and supplies Expenses Cuts Plates. Tweezers	11
31	4 6		A P Cunningham & Son	Tracing namer etc	14
32	4.4		Western Electric Co	Wire, globes, etc.	14 78
33			Henry Heil Chemical Co	Chemical supplies	1
34			Electrical Engineer	Odd numbers	1
35			Queen & Co	Chemical apparatus and supplies	491
$\frac{36}{37}$	4.4		H. C. Forbes Floatro Co	Expenses	66 66
38			A A Roal & Co.	Plates	4
39	4-4		O. Riley	Tweezers	1 1
40	4 4		Levy Type Co	Plates	1 8
41			National Typewriter Exchange	Ribbons	500
42			Edwin Hunt's Sons	Hardware	500
43 44			Yale & Towne Mig. Co	Doiler commontions	26 268
45	4.4	i	Shelden Briek Co	Brick	110
46	6.6		Office Specialty Mfg. Co	Shannon files	139
47	4 4		Walch & Wyethe	Covering steam pipe	202 19
48	" "		Library Bureau	Cases, etc	19
49			S. P. Sutton	Services as superintendent	265
50			Fuller & Fuller Co	Chemical supplies	49
51			Noting of Motor Co	Pipe and fittings, etc	52
52 53	4.6		Page Relting Co	Relairs	8
54			Whitall Tatum & Co	Plates. Tweezers Plates. Ribbons Hardware Locks Boiler connections Brick Shannon files Covering steam pipe Cases, etc. Services as superintendent Chemical supplies Pipe and fittings, etc Repairs. Belting Pharmacy supplies Gauges and cards Brass rods, etc. Hardware Books. Cyclopedia of Names. Chairs Gas for October, 1894 Trays Index Power for November, 1894 Furniture	91
55			Crosby St'm Gauge and V. Co.	Gauges and cards	39
56			Chas. H. Besly & Co	Brass rods, etc	23
57			Hubbard & Sons	Hardware	20
58			Sylvia Clapin	Books	4
59 60			Webster Mfo. Co	Cyclopedia of Names	10
61			T R White In	Cas for October 1904	16
$\hat{62}$			Pantagraph Co	Travs	183 52
63	• •		J. W. Weston	Index Power for November, 1894. Furniture Extra papers	38 2,824
64			Electric Lighting & Power Co.	Power for November, 1894	38
65 66	• • •				
67			The Illini	Extra papers	63 17
68			Northwestern Cal Light Co	(Cas	7
39			Henry R. Worthington	Copper float	10
70	• •		H. Chester	Hack hire	3
71		- 1	Lyon & Healey	Music	6
72 73		- 1	D. H. Lloyde & Son	Stationery	16 2
74			Empire Steam Laundry	Washing	7
75			A. H. White	Rooks	6
76	Dec:	31	A. S. Draper	Salary for December, 1894	583
4 1	• •		T. J. Burrill		225
8			S. W. Shattuck		166
79 30			S. V. Slattuck E. Snyder N. C. Ricker I. O. Baker	Extra papers. Photos. Gas. Copper float. Hack hire. Music. Stationery. Washing. Labor. Books. Salary for December, 1894.	83
31	4.6		N. U. Kicker	** ** *** ***	106
2		-	S. A. Forbes	"	166 83
33	4.4		C. W. Rolfe		166
34	4.4		D MaIntoch	6.6	150
5			A. N. Talbot A. W. Palmer F. F. Frederick S. W. Parr		166
6			A. W. Palmer	"	166
8			F. F. Frederick		158
9	4.6	-	S. W. Parr. H. J. Barton.		166
ő					166 166
1	4.4		D. K. Dodge		166
2		Ì	Chas. M. Moss D. K. Dodge L. P. Breckenridge D. W. Shea David Kinley J. D. Bruner Wm. J. Eckoff Katharine Merrill W. O. Krohn Elizabeth Cooley H. E. Summers		166
3	4.4		D. W. Shea		166
4			David Kinley	44	166 158
25			J. D. Bruner		150
96			wm. J. Eckoff		150
97 98		ĺ	Manuarine Merrill		100
99	4.4		W. O. Krulli		150 133 125
		- }	ELIZADEUL COOLEY		199

## $List\ of\ Warrants - \hbox{Continued}.$

-	Date.		To whom.		For what		Amo
	1894.						
1	Dec.	31	E. J Townsend W. H. Van Dervoort W. D. Pence.	Salary :	for December.	1894	\$1
<u>د</u> ا			W. H. Van Dervoort				1
3			W. D. Pence	•			1
1			E. B. Greene				1
5			F. H. Dodge Percy F. Bicknell	•			1
6			Percy F. Bicknell	٠			1
7			E. G. Howe Anita M. Kellogg. A. H. Daniels	٠			1
3			Anita M. Kellogg	•			1
۱			A. H. Daniels			*	1
۱			Geo. H. Parker	٠ ،			1
İ			H. S. Grindley	٠ .			1
۱			T. A. Clark		• • •		1
ł			C. D. McLane	٠			1
ı	" "		Frank Smith	•		********	1
١			R. P. Smith.	٠ .			1
١			J. D. Phillips	•			
İ			C. B. Clark	•			ł
	4.6		W. E. Sandford	•	• • •		
ŀ	4 4		C. B. Clark W. E. Sandford Alice M. Barber	•			
ı	4 4		H. S Piatt	٠ .			
١	4.4		H. S. Piatt H. E. Parker		• • • •		
I	4.4		Chas. A. Gunn	٠			
1	4.4		Chas. A. Gunn Alfred H. White	1			
I	4.4				• • •		1
١	4.4		William Esty B. V. Swenson A. R. Curtiss. Fred A. Sager L. W. Peabody G. W. McCluer Helen E. Butterfield	٠.			_
1	4.4		A R Curting	•	4 44		
I	6.6		Fred A Segar	•			-
ı	6.6		I. W Poshody				
ı	4.6		G W MaChan			••••••	
J			Holon E Buttorfield	٠ ،		• • • • • • • • • • • • • • • • • • • •	
١			Peter Mogenson			• • • • • • • • • • • • • • • • • • • •	
ı	4.4		R. Vial	1	• • •		
1	. 4.4		E. J. Lake			•••••	
	4.4		J. G. Mosier				
			H E Roovee	٠ .	• • •		
	4.4		H. E. Reeves				
1	4.4		A C Rurnham				
	4.4		A. C. BurnhamGertrude Shawhan				
١	4.4		N. A. Weston				
ı	4.4		Adalla Clandandin				
١			Adelle Clendendin	1			
ı	4.4		G C Miller				
ı			G. C. Miller Chas. F. Hottes Ola C Woolsey.				
1	4.4		Ola C Woolsey				
ı	. 44		W. S McGee				
	4.4		Lillie Heath	•			
I	4.4		Elva Blount	•	4 4 4		1
	4.6		A. B. Baker	•			
ı	4.4		C. A. Herme				
I	4.4		L. G. Lathrop				
١	4.4		J. Morrow				1
ļ	4.4		M F Lindsov			• • • • • • • • • • • • • • • • • • • •	1
I			M. F. Lindsey L. H. Walden				1
l	. 4 4		A Iton				1
ĺ			A. Iten				
			I. H. Allen E. W. Justus		4 44	•••••	
١	4.4		Dhilim Caharahan	، ا			1
١	6.6		Philip Schwehm			• • • • • • • • • • • • • • • • • • • •	
١	4.4		J. M. Doughty				1
I			U. M. Vansant	t .		• • • • • • • • • • • • • • • • • • • •	
I			Geo. W. Lee			• • • • • • • • • • • • • • • • • • • •	i i
I			Unas. B. Ewalt			• • • • • • • • • • • • • • • • • • • •	1
ļ			C. M. Vansant. Geo. W. Lee Chas. B. Ewalt. W. L. Pillsbury H. Ewalt.	1		• • • • • • • • • • • • • • • • • • • •	1
			н. Ewalt			• • • • • • • • • • • • • • • • • • • •	
	• • •		Bonn mayer			• • • • • • • • • • • • • • • • • • • •	
			H. C. Forbes			• • • • • • • • • • • • • • • • • • • •	
			Mary J. Snyder	:			
-			W. G. Johnson Chas. A. Hart				1
ł			Chas. A. Hart				
I			Frank Smith	Salary,	3 months, to D	ec. 31, 1894	l
1			Chas A. Hatt Frank Smith F. L. Bills. T. J. Burrill Central Electric Co. Queen & Co. W. C. Vosburgh & Co. E. B. Preston & Co.	Postage			
Ì			T. J. Burrill	Expense	es to Havana.		
			Central Electric Co	Buzzers	, etc		
Į	• •		Queen & Co	Apparat	us		
ı	4.4		W. C. Vosburgh & Co	Combin	ation lighting	fixtures	1,0

о.	Date.	To Whom.	For what.	Amour
76	Dec: 31	Henry Trevett	Hardware	\$312
77	Dec:	Henry Trevett	Hardware	50
78			Lumber	778
79	• • •	Geo. Besore. E. Henry. The Gazette. E. H. Sargent & Co H, C. Forbes B. Westermann & Co We Donnell Bros. Walker & Mulliken. W. G. Lobreson.	Lumber. Paints, etc. Printing and binding. Battery jars	102 290
80	**	The Gazette	Printing and binding	290
81		E. H. Sargent & Co	Battery jars	6 3
82		H, C, Forbes	Expenses. Books Century Dictionary of Names. Chairs	3
83 84		Ma Donnell Bros	Century Distingry of Names	8 15 10 2
85	4.4	Walker & Mulliken	Chairs	10
86	4.4	W. G. Johnson	Expenses Flag Expenses Bunting, etc Ribbon Bunting, etc Latches	2
87		C. B. Johnson	Flag.	5
88		C. B. Johnson	Expenses	2 5 1 3 3 11 34 7
89		S. A. Forbes F, K, Robeson & Bros	**	3
90		F, K, Robeson & Bros	Bunting, etc	3
91		Edward F. Hill Yale & Towne M'f'g Co. Douglass Shuey Co.	Ribbon	11
92	4.4	Edward F. Hill	Bunting, etc	34
93		Yale & Towne Mirg Co	Latches. Gem City stands. Salary, 3 months, to date.	10
94 95		C W Footon	Solony 2 months to date	18 100
96		I R Greenhelgh	Spoons	111
$\frac{30}{97}$	**	Eugene Dietzgen & Co	Rubber stamp	3
8		B. Zelle.	Rubber stampOffice rent	17
99	* *	Douglass Shutey Co. C. W. Foster J. R. Greenhalgh Eugene Dietzgen & Co. B. Zelle. Frank Smith S. W. Shattuck	Expenses	23
00	* *	S. W. Shattuck	Petty expenses, 3 mo. to Nov 30, '94.	36
	1099.			
싰	January 15	N. W. Graham	Expenses to Board meeting	33 15
2		N. W. Graham Henry Raab. W. L. Pillsbury. C. F. Wilder. J. F. Creek. Mayme A. Hill. F. I. Bill.	1	15
)3 )4		W. L. Phisbury	Colony fall town 1904	9
55	4.4	J. F. Crook	Salary, fall term, 1894	36 50
)6		Mayme A Hill	Salary as nianist fall term	26
7				26 53
8		The Monarch Distillery	Alcohol	18
)9		Central Union Telephone Co	Rent of inst's to March, 31, 1895	18 21
10	**	R. K. Porter	Standard dictionary	1 36
11	**	W. O. Krohn	Expenses	31
12	::	W. O. Krohn H. E. Summers. W. H. Van Dervoort., John Orstand The Brickbuilder Mary H. Steele W. R. Howe.	Alcohol Rent of inst's to March, 31, 1895 Standard dictionary Expenses	25
13		W. H. Van Dervoort.,	D	14 6
15		The Brickbuilder	Drayage Subscription Music fees Drayage	4
6		Mary H Steele	Music food	100
17		W R Howe	Drayage	130
18		Marion Wright	Expenses	3
9		David Kinley	***	24
20	::	W. K. HOWE Marion Wright David Kinley S. B. Hedges Mrs. C. W. Foster. S. H. Garrison	Door, etc Music fees	1 9
1	::	Mrs. C. W. Foster	Music fees	33
2		S. H. Garrison	Brick work Drawers Labor	17
3		Wm. McGuire. Payrolls of men Dec., 1894 Payrolls of students Dec., 1894.	Drawers	14 312 360
5		Povrolla of students Dog 1904	Lapor	360
6		H. Chester	Carriage hire.	1
7	"	J. D. Bush.	Brooms	1 1
8	• •	C. W. Reynolds	Castings	2
9	**	Smith-Premier Typewriter Co.	Typewriter, etc	132 192
10	::	H. Chester. J. D. Bush. C. W. Reynolds. Smith-Premier Typewriter Co. T. R. White, Jr. Bullard & Gormley Co. Porter Bros. Ozias Riley. Urbana Brick Co. Stearns Lime & Stone Co. General Assembly, Presbyt'an Public School Publishing Co. Kariher Coöperation Gro. Co. Standard Oil Co. Electric Appliance Co. Central Electric Co. A. G. Spalding Bros Jay W. Seavet Fairbanks, Morse & Co. T. H. Trovett	Castings Typewriter, etc. Gas, November, 1894 Hardware. Crash	192
1	• •	Bullard & Gormley Co	Hardware	30
2	**	Origa Pilor	Crash  Clock	30
4		Uzias Miley	Brick	13
5		Stearns Lime & Stone Co	Plaster	5
6		General Assembly, Preshyt'an	Plaster Church minutes, 1894	1
7	"	Public School Publishing Co.	Advertising	1 6
8	**	Kariher Coöperation Gro. Co	AdvertisingTubes, etc	4
9	• • •	Standard Oil Co	Oils	26
0	**	Electric Appliance Co	Oils Binding posts. Electrical supplies. Gymnasium apparatus.	5
1	::	Central Electric Co	Electrical supplies	10
2		A. G. Spalding Bros	dymnasium apparatus	7
13		Jay W. Seavet	Anthropometric charts	5 13
5		T. H. Trovett	Hardware	13
16		Union Manufacturing Co	Hardware Water, 3 months to April, 1895	2 125
7	4.4	Bacon Mittendorf & Hall	Frames and charts.	7
8	"	Union Manufacturing Co Bacon Mittendorf & Hall Engineering News Pub. Co	Books	7 8 2 22
19		Ore & Lockett Hardware Co	Books Repairs, etc Laboratory supplies	
60	• •	Eimer & Amend	Laboratory supplies	$ $ $2\overline{2}$
1	• •	Eimer & Amend. U. S. School Furniture Co A. H. Andrews & Co Edwin Hunt's sons.	Chairs Desks and chairs	252
52				96

#### UNIVERSITY OF ILLINOIS.

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o.	Date.		To whom.	For what.	Amour
	1895.				
754	Jan.	15	Western Electric Co	Wire.	\$17
755			The Machinists' Supply Co	Wire Gear cutter Lumber Oil cups Tapes One book One book Books	3
156	••		Hamilton & Son	Lumber	15
757	**		Kridler Manufacturing Co	Oil cups	2
58	::		Kenffel & Esser Co	Tapes	2
59			E. Steiger & Co	One book	_1
60			Central Electric Co	One book	54
$\frac{61}{62}$			Conthruigh & Cuitables	Ding	558
63			Pantagraph Co	Rinding and stationary	3 56
64	••		A. A. Beal & Co.	Plates	3
$6\overline{5}$			Hornstein Bros	Printing.	322
66	••		Photo Engraving Co	Half-tone engraving	7
67	**		Franklin Engraving Co	Cuts	22
68			J. B. Lippincott Co	Drawing	1
69			E. H. Sargent & Co	Bottles and corks	14
70			Thayer Jackson Stationery Co.	Reporters' books	1 42
$\frac{71}{72}$			American Express Co	Plates and photos	42
72 73			C C C & St J P	Freightege	35
13 74			Wahash Railway Co	rioismuago	56
75	• •		I. C. R. R. Co	**	40
76			Robinson & Burr	Repairs, etc	113
77			J. W. Keller	One book One book One book Books Pins. Pins. Binding and stationery Plates Printing Half-tone engraving Cuts Drawing Bottles and corks Reporters' books Freightage Plates and photos Freightage Plates and photos Freightage  "" Repairs, etc Labor and material Brooms and brushes Coal Loal Coal Coal Coal Coal Coal Coal Hinkstands Spools Greenhouse stock Paper Roller Gas Mats, matting Advertising Stationery and printing Plaster casts Poles Stamps Drawers and cases	9
78			Gerts, Lombard & Co	Brooms and brushes	16
79			Horns' Coalery Co	Coal	55
80	1 ::		Urbana Brick Co	[Coal	29
81			Boyd & Abbott Co	Inkstands	18
$\frac{82}{83}$			Hammond Typewriter Co	Spools	1 8
50 84			Albany Pon Wran'ng Papar Co.	Paper	21
85			A B Dick & Co	Roller	1
86	• •		Chicago Calcium Light Co	Gas	6
87	• • •		Chicago Carpet Co	Mats. matting	35
88			F. W. Honens	Advertising	110
89	::		Champaign Co. Herald	Stationery and printing	. 89
90			P. P. Caproni & Bro	Plaster casts	. 6
91	-1	•	Electric Lighting & Power Co.	Poles	. 11
92			F. A. Sackmann Bevis & Co	Stamps Drawers and cases Cases	272
93 94	٠.		Library Princer	Coases	212
95			E R Preston & Co	Racks	78
96			The Am. Society of Civil Eng.	Publications	
97			Agricultural Experiment Stat'n	Publications	15
98			Maltby & Wallace Co	Repairs, etc	43
99	1		Library Bureau E. B. Preston & Co The Am. Society of Civil Eng. Agricultural Experiment Stat'n Maltby & Wallace Co A. C. McClurg & Co R. S. Wilber	Books and stationery	166 52
00		٠.	R. S. Wilber	Drayage	52
U	Jan.	31	A. S. Draper	Salary for January, 1895	583
$\frac{02}{03}$	11		S W Shottnak		225 166
0a 04			E Snyder		83
$0^{4}_{05}$			N. C. Ricker		166
Ŏĕ			I. O. Baker		166
07	' ' '		I. O. Baker S. A. Forbes C. W. Rolfe	Publications Hauling cinders Repairs, etc Books and stationery Drayage Salary for January, 1895	83
08	3 **		10. w. none		. 100
06			11) Meintoch	,	
10	)		A. N. Talbot		. 166
11	::		A. W. Palmer		
12			A. N. Talbot A. W. Palmer F. F. Frederick S. W. Parr		
18 14	)		O. W. Farr	: :: :: :: :: :: :: :: :: :: :: :: :: :	. 166
$\frac{14}{15}$			Chae M Mose	44 44	
16	3		F. F. Frederick S. W. Parr H. J. Barton Chas. M. Moss. D. K. Dodge L. P. Breckenridge. D. W. Shea. David Kinley J. D. Bruner Wm. J. Eckoff Eugene Davenport Katherine Merrill W. O. Krohn Mrs. J. D. Bruner		
17			L. P. Breckenridge		. 166
18			D. W. Shea		. 166
19	) "		David Kinley		. 158
20			J. D. Bruner	** **	. 150
21			Wm. J. Eckoff	44 44	150
22	5		Eugene Davenport		
2			Katherine Merrill		. 100
$\frac{324}{2}$	::		W. O. Krohn	** ** **	. 150
2			W. O. Krohn Mrs. J. D. Bruner H. E. Summers E. J Townsend. W. H. Van Dervoort W. D. Pence. E. B. Greene. F. H. Dodge Percy F. Bicknell.	**	. 133
32(	,		F I Townsond		. 125 . 125
229			W H Van Dervoort		129
20			W. D. Pence.		
330	٠٠ · ·		E. B. Greene		. 133
331	í · ·		F. H. Dodge		. 133
332			ID II Di-l11	** **	. 125

о.	Date.		To whom.		For wha	at.	Amou
т ее	1895.	91	F C Howe	Colony for	Tonnor	1905	\$150
ออ J 34 35	an.	OΙ	E. G. Howe Anita M. Kellogg. A. H. Daniels.	Salary for	oanuary,	1099	110
5	4.4		A. H. Daniels		6 6		108
6			G. W. Parker H. S. Grindley T. A. Clark C. D. McLane Frank Smith.	1	• •		113
7			H. S. Grindley				100
8	• •		T. A. Clark	• • •	• •	************	110 108
9	• •		C. D. McLane	**	• •		108
0	• •		Frank Smith	::	• • •		100
1			Frank Smith.  R. P. Smith.  J. D. Phillips.  C. B. Clark.  W. E. Sandford.  Alice M. Barber.  H. S. Piatt.  H. E. Parker.  Chas. A. Gunn.  Alfred H. White.  William Esty.	::	• • •		100
2	• • •		յ. ը. Phillips	;;		• • • • • • • • • • • • • • • • • • • •	80 75 80
3	4.4		U. B. Clark			• • • • • • • • • • • • • • • • • • • •	73
4 5			W. E. Sandiord			•••••	8
6			H C Diett			• • • • • • • • • • • • • • • • • • • •	0.
7			H F Doubon				9
8	4.4		Chag A Gunn		6.6		68 88 30 72
9	4.6		Alfred H White		4.6		7
ŏ	4.4		William Esty	4.6	. 6.6		100
ĭ			B. V. Swenson	4.4			8
$\tilde{2}$	• •		Alfried H. White. William Esty. B. V. Swenson. A. R. Curtiss. Fred. A. Sager. L. W. Peabody. G. W. McCluer. Helen E. Butterfeld. Peter Mogenson. R. Vial	**			100 85 75
3			Fred. A. Sager		4.6		
4			L. W. Peabody				70 15 60 75
5			<u>G</u> . W. <u>McCluer</u>	6.6	4.6		1.
6	• •		Helen E. Butterfield	**	4.6		60
7	• •		Peter Mogenson		• • •		7.
3	• • •		R. Vial	::	• • •		0
9	6.6		E. J. Lake. J. G. Mosier. H. E. Reeves		• •	• • • • • • • • • • • • • • • • • • • •	4.
9			J. G. Mosier			• • • • • • • • • • • • • • • • • • • •	60
1 2			Honny Jones				10 50
3	4.4		Henry Jones. A. C. Burnham. Gertrude Shawham				9
4	4.4		Gartruda Shawham		4.4	• • • • • • • • • • • • • • • • • • • •	80
5	4.4		N A Weston		4.6		20
6	4.4		N. A. Weston Adelle Clendenin Robt. A. Wood		4.4		86
7	4 4		Robt. A. Wood				40
8	4 4		G. E. Miller	• •	4.4		40
$\check{9}$	4 4		Chas. F. Hottes	• • •			40
0	4.6		Kobt. A. Wood G. E. Miller.   Chas. F. Hottes   Ola C Woolsey.   W. S. McGee   L. D. Brode   Marion Thompson.   Chas. T. Wilder   Lillie Heath				40
1	• •		W. S. McGee	* *			40
2	• •		L. D. Brode		"		50
3	• • •		Marion Thompson		• • • • • • • • • • • • • • • • • • • •		25 30
4			Chas. T. Wilder			• • • • • • • • • • • • • • • • • • • •	30
5 6	4.		Lillie Heath		4.4		4.
7	4.4		Elva Blount A. B. Baker F. J. Foote				45
			F I Foote				70 60
9	4.4		John F Creek		6.6		5
Ď	• •		C. A. Herme.		4.6		50 30
ĭ	4.4		L. G. Lathrop.		4 4		30
2	• •	- 1	J. Morrow				30
3	4.6		M. F. Lindsey				30
1	• •		F. J. Foote John F. Creek C. A. Herme L. G. Lathrop. J. Morrow M. F. Lindsey. L. H. Walden A. Iten I. H. Allen				25 25
5	• •		A. Iten				2
6			I. H. Allen		" "		' 30
?	• •		E. W. Justus		• • •		4
3			E. H. Alten E. W. Justus. Philip Schwem Chas. B. Ewalt H. Ewalt W. L. Pillsbury H. C. Forbes Mary J. Snyder W. G. Johnson. C. A. Hart				25
?			Unas. B. Ewalt		• • • • • • • • • • • • • • • • • • • •		13
2			M. F. Dillahama			• • • • • • • • • • • • • • • • • • • •	40
L			W. L. Pillsbury			• • • • • • • • • • • • • • • • • • • •	100
3			Many I Spydor		4.4		8
1	4.6		W G Johnson				85 62 100
5	4.4		C. A. Hart		4.4		62
3	4.4	ĺ	Twin City Electric Co	Renairs		• • • • • • • • • • • • • • • • • • • •	1 02
7	4.4		W. A. Olmsted.	Slated clot	h	· · · · · · · · · · · · · · · · · · ·	6
3	4.6	- 1	Champaign County Printing Co.	Printing	nd station	erv	20
á			Lawton & Co	Simplex su	ipplies		12
ni .	4.4		Office Specialty Mfg. Co	Cases			12
IF	Peb.	5	Maltby & Wallace Co	On heating	contract		1, 125
2			W. G. Johnson. C. A. Hart Twin City Electric Co W. A. Olmsted. Champaign County Printing Co Lawton & Co Office Specialty Mfg. Co Maltby & Wallace Co Lafayette Lumber Mfg Co. N. M. Graham. Alex. McLean. R. P. Morgan.	On furnitu	re contra	st	2,000
3			N. M. Graham	Expenses	to Board n	neeting	25
4	4.6		Alex. McLean				31
5	4.4		R. P. Morgan				31 18
6	• •		Alex. McLean. R. P. Morgan. W. R. Howe Katharine Merrill Isaac Fielding W. O. Krohn Lydia M. Hart.	Hauling co	oal		187
7			Katharine Merrill	Expenses.	<b></b>		1
			Isaac Fielding	Postage st	amps		10 16
$\frac{8}{9}$	4.4						

	Date.		To whom.	For what.	Amou
Ϊ.	1895.				
1 Feb	1000.	5	Western Union Telegraph Co	Telegrams. Freightage. Coal. Repairs. Desks. Glass, paint, etc. Books. Subscription. Half-tone. Entomological News. Books. Cuts. Expenses Expenses	\$17
2			American Express Co	Freightage	\$17 23 577
3	4.6		McLean County Coal Co	Coal	577
4	4 4		Odin Coal Co	Court	231
5	6 6	- 1	Robinson & Burr	Ranging	14
6		- 1	A H Andrews Co	Dooks	54 219 210
7		1	William Price	Class point eta	910
		- 1	A C McClung & Co	Doobs	219
8	4.4		A. C. McClurg & Co	C-1	25
			Am. Architand Bild'g News Co	Subscription	8
0		1	Blomgren Bros. & Co	Half-tone	8
1		l	E. F. Cresson	Entomological News	1 2
2			John P. Morton & Co	Books	2
3		- 1	Hanson Bros	Cuts	1
4		- 1	C. A. Hart	Expenses	8
5	••		<u>H. C. Forbes</u>	Expenses	3
6 Feb	) <b>.</b> .	15	The Western News Co	Subscription	232
41	• •	ļ	G. E. Stechert	Books	167
8	4.4	١	A. C. McClurg & Co	* * *	261
9			The Brickbuilder Pub. Co	44	10 25
Ō			Houghton, Mifflin & Co	44	25
1			The Municipal Eng's Co	Periodicals	1
$\hat{2}$	4 4		Pantagraph Co.	Binding	46
3			Am. Public Health Association	Periodicals	18
4			Champaign County Herald	Printing and envelopes	38
5	4 4		A. S. Draper	Expenses.	80
6			N W Graham	Expense to Roard meeting	99
7	"	1	J E Armstrong	Expense, to Deard inceming	22 23
8			F M McKov		17
9			W. I. Pillehury		1 15
0			Honny I Choon	Colour Tonnour 1905	15 45 10
			I D Puch	Carary, January, 1099	10
1 2			Western Union Malassanh Ca	Tolograms	100
			W O Vnobn	E-manas visiting ashaels	90
3	4.4		W. O. Krolli	Expense, visiting schoots	39 18
1			T. A. Ulark	Malain a photos	18
5	• •	- 1	Charles T. Wilder	Taking photos	13
6	::		E. ri Bills	Postage	122
7			Pacific Express Co	Expressage	16 36 451
8			American Express Co		36
9			Payroll of men, Jan., 1895	Labor	451
0			Payroll of students, Jan., 1895	_ **	190
1	::		B. Westermann & Co	Books	5
2			E. H. Sargent & Co	Vials and corks	3
3			L. S. Foster	Books	3
4			Blomgren Bros. & Co	Photos	1
5	• •		S. R. Roberts	Manual of Conchology	(
6			Science	Subscription	
7	• •		L. V. Manspeaker	Lamp, chimneys, etc	5
8			Keen & DeLnag	Letter book	2
<u> 9</u>	"		Henry R. Worthington	Meter, coupling, etc	46
ŏl	• •		Engineering-Mechanics	Subscription	1
ĭ	• •		Hartford Steam Boiler Inspec-		
1			tion and Insurance Co	Books	14
2			Crosby St'm Gauge and V'lyeCo	Drum, indicators, etc.	149
3	" "		W W Walls & Co	Cement	1 2
1	4.4		Eimer & Amend	Entomological News. Books. Cuts. Expenses Expenses Subscription. Books.  Periodicals. Binding. Periodicals. Printing and envelopes. Expenses. Expenses. Expenses. Expense, to Board meeting.  Salary, January, 1895 Janitors' supplies Telegrams. Expense, visiting schools.  Taking photos. Postage. Expressage. Labor.  Books. Vials and corks. Books. Photos. Manual of Conchology. Subscription. Lamp, chimneys, etc. Letter book. Meter, coupling, etc. Subscription. Books. Drum, indicators, etc. Cement. Chemical supplies. Mounting photos. Microscope attachments. Coal. Gas Dec. 1894, and Jan. 1895. Lumber and coal. Gas lights and tapers. Coal. Gas Dec. 1894, and Jan. 1895. Lumber and coal. Gas lights and tapers. Coal. Power, January, 1895. Micrometer. Expenses, visiting schools. Blue prints. Salary for February, 1895.	28
5			Soula Photograph Co	Mounting photos	1 2
6			Rangah & Lomb Ontical Co	Miarosaono attachments	46
			Mal on County Coal Co	Cool	205
7			T D White In	Cog Dog 1904 and Tam 1905	327 307
			Carron Dagana	Gas, Dec., 1894, and Jan., 1899	129
9			The City Floor	Carliebte and tarrier	128
0			Twin City Electric Co	Gas lights and tapers	ė
1			Ç. J. Sabin	Coal	.5
2			Electric Light and Power Co	Power, January, 1895	36
3			E. G. Smith	Micrometer	4
1	• •		I. O. Baker	Expenses, visiting schools	15
5	••		Charles W. Noble	Blue prints	588 225
6 Feb	).	28	A. S. Draper	Salary for February, 1895	588
4			T. J. Burrill	- "	225
$\dot{8}$			S. W. Shattuck		160
$\mathbf{\tilde{g}}$			E. Snyder		8
ŏ	• •		N. C. Ricker		166
1	• •		I. O. Baker	44 44	83 166 166
2			S A Forbes	**	8
3			C W Rolfe		
4			S. W. Snattuck E. Snyder N. C. Ricker I. O. Baker S. A. Forbes C. W. Rolfe D. McIntosh A. N. Talbot A. W. Palmer		
			A ST M W	44	
5					

э.	Date.		To whom.		For wha	t.
Ì	1895.					
37 1	Feb.	28	F. F. Frederick	Salary for	February,	1895
201			S. W. Parr			
99	::		H. J. Barton			
90	**		Chas. M. Moss. D. K. Dodge L. P. Breckenridge D. W. Shea. David Kinley J. D. Bruner Wm. J. Eckoff Eugene Dayenport			• • • • • • • • • • • • • • • • • • • •
91 92	4.4		D. K. Doage			• • • • • • • • • • • • • • • • • • • •
			L. P. Breckenriage			
3			D. W. Snea			• • • • • • • • • • • • • • • • • • • •
5			David Kiniey			
6			Wm I Falsoff		4.4	• • • • • • • • • • • • • • • • • • • •
			Will. J. ECKOII			• • • • • • • • • • • • • • • • • • • •
8			Eugene Davenport. Katharine Merrill. W. O. Krohn Mrs. J. D. Bruner. H. E. Summers.			
9			W O Vmohm			• • • • • • • • • • • • • • • • • • • •
			Mag I D Dawnen			
0			H F Carrage and		4.6	
$_{2}^{1}$			E I Townsond		6.6	
3			E. J Townsend W. H. Van Dervoort W. D. Pence			
1			W. H. van Dervoort			
L	4.6		W. D. Fence			
5			F. B. Greene			
6	4.6		Power F. Dielmell			
3			F C Home			
	4.6		. U. Д0We			
9	4.4		Allica M. Kellogg			
)	**		A. D. Daniels		6.6	• • • • • • • • • • • • • • • • • • • •
1			U. W. Farker			
2	4.4		T. A. Clemb			
3			F. B. Greene F. H. Dodge Percy F. Bicknell E. G. Howe Anita M. Kellogg A. H. Daniels G. W. Parker H. S. Grindley T. A. Clark C. D. McLane Frank Smith			
5		`	U. D. McLane			
6			P D Cmith			***************************************
1			I D Dhilling			• • • • • • • • • • • • • • • • • • • •
l			O. D. Clark			• • • • • • • • • • • • • • • • • • • •
3			W E Condford			
			C. D. McDalle Frank Smith R. P. Smith J. D. Phillips C. B. Clark W. E. Sandford Alice M. Barber			• • • • • • • • • • • • • • • • • • • •
)			Ance M. Barber			•••••
L			11. D 1 1att			
3			H. E. Parker			
			Chas. A. Gunn Alfred H. White			•••••
5			William Fater			• • • • • • • • • • • • • • • • • • • •
3			D V Compage			•••••
7			William Esty.  B. V. Swenson  A. R. Curtiss  Fred A. Sager  L. W. Peabody  G. W. McCluer  Helen E. Butterfield		.'.	
3			Fred A Segar		4.4	
i	4.4		I. W. Poobody			
ő			G W McCluer			
ί	4.4		Helen E. Butterfield		4.4	
2			Peter Mogenson		4.4	
3	4.4		P Viel			
Ĺ	• •		P. Vial E. J. Lake J. G. Mosier	4.6	4.4	
5			I G Mosion			
	4.4		H. E. Reeves			
-			H. E. Reeves Henry Jones		4.4	
3			A C Burnham			
3			A. C. Burnham			*************
í	4.4		N A Weston			
			Gertrude Shawhan N. A. Weston Adelle Clendenin Robt. A. Wood G. C. Miller Chas. F. Hottes Ola C Woolsey. W. S. McGee L. D. Brode Marion Thompson Chas. T. Wilder David Kinley Lillie Heath		4.4	
			Robt A Wood		4.4	
			G C Miller		4.4	
			Chas F Hottes			
5			Ola C Woolsey	• •		
6			W S McGaa		4 4	
7			L. D. Brode			
3			Marian Thompson			•••••
3			Chag T Wildor	4.6		
			David Viplor			
	4.4		Lillia Haath			
			Flya Plannt			
1			Lillie Heath Elva Blount A. B. Baker			
3			A. D. Baker		4.4	• • • • • • • • • • • • • • • • • • • •
			F. J. Foote			• • • • • • • • • • • • • • • • • • • •
			John F. Creek			
	::		C. A. Herme., L. G. Lathrop.			
7	::		L. G. Lathrop			• • • • • • • • • • • • • • • • • • • •
8			J. Morrow			
9			M. T. Lindsey	::		
)			Ļ. н., Walden		••	
1			J. Morrow. M. T. Lindsey. L. H, Walden	::		
2	• • •		I. H. Allen E. W. Justus. Philip Scweme.	::	••	
3	• •		E. W. Justus	1	• •	
Li .	• •		Philip Scweme	1	••	

## $List\ of\ Warrants{\rm--Continued}.$

о.	Date.	To whom.	For what.	Amour
	1895.			
85	Feb. 28	Chas B Ewalt	Salary for February, 1895. Salary for 3 months to date. February, 1895. 3 months to date. February, 1895. February, 1895.	\$13
66	1 60; 20	L. P. Breckenridge	Salary for 3 months to date	62
67	6.6	W L Pillshury	"February 1895	100
68	4.4	S W Shattuck	" 3 months to date	150
$\widetilde{69}$	4.4	H C Forbes	"February 1895	83
7Ŏ		Mary I Spyder	rebitially, 1000	62
71		W G Johnson		100
72	6.6	C A Hent		62
73	6.6	Henry J. Green		45
74	4.4	H. Ewalt.		40
75	- 66			40 20
76	4.4	E C II.	T3	1 40
77		Control Floatria Co	Appenses	12
8		Wostorn Floatria Co	Apparatus	15
79	4.4	American Machinist	Subsarintion	3
ŏ		Price & Sandford	Oila	ı
31	4.4	D D & W L Doots	Cuntain poles	7
32		The Keriker Coërerstien Co	Matabas	9
33		Emil Creiner Cooperation Co	Ammonotora	4
34		John Mayer. E. G. Howe. Central Electric Co. Western Electric Co. American Machinist Price & Sandford F. F. & W. L. Roots The Kariher Coöperation Co. Emil Greiner. G. Cramer	Dhoto plates	6
35		W H Rockwith	Expenses Apparatus Oils. Curtain poles Matches Apparatus Photo-plates Twino	1
36		I P Nolson	Twine	2
37	4.4	Rulland & Complex Co	Hooks	4
38	6.6	Champaign County Dtg Ca	HooksPrinting	
35 39	4.4	Name generatt Machine Co	Chirometer	10
90		Kirknotriak & Possiaklass	Townling reaks etc	90
1		Own & Look of Handman Co	Handware	30 18
$\dot{\tilde{2}}$		Manning Maywell & Moore	Dulloy and shaft	10
3		Inmes R Clow & Sons	Dine and fittings	56
4		Whitell Tetum & Co	Tore ota	7
5		Tohn Magnino	Dwinting	4
6 6	4.4	D H Lloyde & Son	Stationery	6
7		Trans Ento Son'y of Ontonio	Subscription	1
8		Ine Kariner Cooperation Co. Emil Greiner G. Cramer W. H. Beckwith. J. R. Nelson Bullard & Gormley Co. Champaign County Ptg. Co. Narragansett Machine Co Kirkpatrick & Barricklow. Orr & Lockett Hardware Co. Manning, Maxwell & Moore. James B. Clow & Sons Whitall, Tatum & Co. John Maguire D. H. Lloyde & Son Treas. Ento. Soc'y of Ontario A. C. McClurg & Co. W. H. Lowdermilk Co. G. E. Stechert Yeager & Schultz M. B. Suezey Malthy & Wallace Co G. L. Andrews. T. J. Burrill. Franklin Eng & Elect'n'g Co.	Printing Spirometer Toweling, racks, etc Hardware Pulley and shaft. Pipe and fittings Jars, etc Printing. Stationery Subscription Stationery	105
9		W H Lowdownill Co	StationeryBooks	108
Ď		G F Stochort	DOOKS	625
)1	+ 4	Vonger & Sabultz	Amount due on contract	5,000
2		M D Chogor	Dumb waiter	3,000
)3	* *	Malthy & Wallace Co	Ropeirs ate	70 130
)4	4.4	G I Androws	Rook	5
)5		T. J. Burrill	Repairs, etc Book Expense to Havana	18 2
6		Franklin Eng. & Elect'p'g Co	Cuts	18
7	4.4	H C Forbes	Evnences	1 2
8	• •	Chas T Wilder	Making negatives etc	13
9	4.4	A A Real & Co	Plata	3
Ŏ	4.6	Office Specialty Mfg. Co.	Plate Cabinet perforator Books	ĭ
ĭ	* *	G E Stochart	Rooke	512
2	4.6	A C McClurg & Co	DOOKS	110
$\tilde{3}$	4.4	Katharina Marrill		119
4	4.4	Franklin Eng. & Elect'p'g Co. H. C. Forbes. Chas, T. Wilder. A. A. Beal & Co. Office Specialty Mfg. Co. G. E. Stechert. A. C. McClurg & Co. Katharine Merrill. S. A. Forbes. C. A. Hart. Lydia M. Hart F. L. Bills.	Evnense	42
5		C A Hart	EAPOHSO	10
6		Lydia M. Hart	Drawings	7
7		F. L. Bills	Postage	33
8	* *	Alex McLean	Expense  Drawings. Postage. Expenses to Board meeting.	19
9		W. R. Howe	Drayage	13 168
20		F. L. Bills. Alex. McLean W. R. Howe. A. J. Williamson. E. R. Dunlap. N. W. Davis E. J Townsend H. J. Barton. A. W. Palmer Bausch & Lomb Optical Co.	Drayage Negatives Labor.	100
1		E R Dunlan	Lahor	1 6
$\dot{\bar{2}}$		N W Davie	Sand	3
3		E I Townsend	Sand. Expense visiting schools	25
4		H I Barton	Sarboned Alemine Schools	36
5	• •	A W Dalmon		21
6		Pangah & Lomb Ontige! Co	Annomatus	88
7		Bordon Sollock Co	Casla	25
8		D D Cannoni & Bro	Porthonon globs	30
9	4.4	Fimer & Amond	A promotus	21
0		The Western News Co	Apparatus. Scale Parthenon slabs. Apparatus. Subscriptions	11
1		Am Institute Floatwice Fra	Pools	19
$\frac{1}{2}$		W. A. Olmated	Apparetus	9
		W. A. Uimsted	Apparatus	1 40
$\frac{3}{4}$	4.4	I W Putler Deserve	Frinding, etc	48
		Champaign Co Drinting C:	Drinting circular	1 45
35 36		Champaign Co. Printing Co	Cubacintian	15
		Emphylin Eng. and Elector C:	Subscription	128 75
37		Franklin Eng. and Electro. Co.	Certificates	1 75
8		W.J. Eckon	Expenses visiting schools	19
39		McLean Co. Coal Co	Apparatus Scale Parthenon slabs Apparatus Subscriptions Books Apparatus Printing, etc Envelopes Printing circulars Subscription Certificates Expenses visiting schools Coal. Analyses of water Charts Stationery, etc.	371
10 11		A. w. Palmeer & S. W. Parr	Analyses of water	110 10 14
		LI VV Seevir	Unarts	1 10

lo.	Date.		To whom.		For what.		Amou
	1895.	-,-					
143	Feb.	28	Ginn & Co.  H. Swannell. Eberbach Drug and Chem. Co. Fuller & Fuller Co. Architectural Dept. Univ. of Ill Chemical Dept. Univ. of Ill. Mechani'l N. W. Graham. N. B. Morrison R. P. Morgan J. E. Armstrong.	Journal of 1	Morphology		9
144	- 0		H. Swannell	Laboratory	supplies		24
145			Eberbach Drug and Chem. Co.	Boxes			19
146			Fuller & Fuller Co	Chemical su	applies		27
147			Architectural Dept. Univ. of Ill	Labor and 1	națerial		370 388
148							388
149			Chemical Dept. Univ. of Ill	Chemical si	upplies		320
150	M 1	4 =	Mechani'i	Labor, mate	erial and pov	wer	320
151	March	19	N. W. Granam	Expenses to	ь во́яга mée	ung	39
152			N. D. MOTTISOH				61 33
153 154	4.4		I E Armstrong				36
55			Alex MeLean			• • • • • • • • • • • • • • • • • • • •	53
56			S A Rullard	4.6			24
57			I. S. Raymond	4.6			33
58			S. M. Inglis				3
59			C. W. Spalding	Expenses			112
60	4.4		R. P. Morgan J. E. Armstrong. Alex. McLean S. A. Bullard I. S. Raymond S. M. Inglis C. W. Spalding C. M. Moss E. B. Greene T. A. Clark H. B. Gurler	Expenses vi	isiting school	ols	15
61			E. B. Greene				2
62	4.4		T. A. Clark	* *			30
63	4.4		H. B. Gurler	Expenses ar	ad lectures.		66
34	"		Chas. H. Besly & Co	Hardware .			2
35			I. A. Clark. H. B. Gurler. Chas. H. Besly & Co. G. W. Bullard. Isaac Fielding. F. L. Bills	Architect's	fees		1,044 10
56	• •		Isaac_Fielding	Postage			10
67	• • •		Isaac Fielding F. L. Bills. Mary E. Smith Western Union Telegraph Co T. J. Burrill S. W. Shattuck	"'			186
38	• •		Mary E. Smith	Making scr	eens		6
39¦			Western Union Telegraph Co	Telegrams.			3
70			T. J. Burrill	Expenses			10
71			S. W. Shattuck	~::			21
72			Mayme Hill American Express Co Payroll of men February, 1895. Payroll of students Feb., 1895.	Salary Febr	ruary, 1895		10
/3			American Express Co	F'reightage		• • • • • • • • • • • • • •	16 371
4			Payroll of men February, 1895.	Lapor			371
5	M1	·	Payron of students Feb., 1895				194
	March	30	T. J. Burrill. S. W. Shattuck. E. Snyder.	Salary for	March, 189	5	583
77			T. J. Burrill				225
78			E Spreden		.;		166 83
79 30	4.4		N. C. Ricker				166
31	4.4		I O Rakar		4.4		166
32	4.4		S A Forbee				83
33			I. O. Baker. S. A. Forbes C. W. Rolfe				166
34	4.4		D. McIntosh				150
35			A. N. Talbot	• •			166
36			A. W. Palmer				166
37			F. F. Frederick				158
8			S. W. Parr	• •			166
39			H. J. Barton				166
90			Chas. M. Moss				166
)1			D. K. Dodge	::			166
2			L. P. Breckenridge				166
3			D. W. Snea				166
4			David Kiniey				166 150
5	* *		Wm I Fakoff		6.6	• • • • • • • • • • • • • • • • • • • •	
6	4.4		Fugano Davonnort				150 83
8			S. A. Forbes. C. W. Rolfe. D. McIntosh. A. N. Talbot. A. W. Palmer. F. F. Frederick S. W. Parr. H. J. Barton. Chas. M. Moss. D. K. Dodge. L. P. Breckenridge. D. W. Shea. David Kinley. J. D. Bruner. Wm. J. Eckoff. Eugene Davenport. Katharine Merrill. W. O. Krohn Mrs. J. D. Bruner. H. E. Summers. E. J. Townsend. W. H. VanDervoort. W. D. Pence E. B. Greene F. H. Dodge Percy F. Bicknell E. G. Howe Anita M. Kielog A. H. Maielog A. H. Maielog G. W. Parker H. S. Grindley T. A. Clark C. D. McLane Frank Smith				100
9			W O Krohn		6.6		150
ŏ	4.6		Mrs J D Bruner		6.6		133
1			H E Summers				125
2			E J Townsend	4.4			125
3	4.6		W. H. Van Dervoort				125 129
4	4.6		W. D. Pence				104
5			E. B. Greene				133
6			F. H. Dodge		4.4		133
7			Percy F. Bicknell				125
8	" "		E. G. Howe	• "	4.4		150
9			Anita M. Kellogg				110
0			A. H. Daniels				105
1	4 4		G. W. Parker				115
2			H. S. Grindley	**			100
3	• •		T. A. Clark				110
4			C. D. McLane				105
5			Frank Smith				100
6			R. P. Smith				100
17			T. A. Clark C. D. McLane Frank Smith R. P. Smith J. D. Phillips C. B. Clarke W. E. Sandford Alice M. Barber	•••	• •		80
18	4.4		C. B. Clarke		• •		75
19	4.4		W. E. Sandford				80
20			A 11 76 TO 1				65

lo.	Date.		To whom.		For wh	nat.	Amour
	1895.	00	TT G DY U				
221	March	30	H. S Piatt.	Salary for	March,	1895	\$85
$\frac{222}{223}$			H. E. Parker			• • • • • • • • • • • • • • • • • • • •	30
$\frac{220}{24}$			Chas. A. Gunn. Alfred H. White. William Esty.		4.4		75 75
25	••		William Esty		4.4		100
26	**		William Esty B. V. Swenson A. R. Curtiss Fred. A. Sager L. W. Peabody G. W. McCluer Helen E. Butterfield Betor Magneson		4.4		85
27			A. R. Curtiss	**	"		85 75
28			Fred. A. Sager	::	"		80
29			L. W. Peabody			• • • • • • • • • • • • • • • • • • • •	70
$\frac{30}{31}$			Holon F Puttorfold			•••••	15 60
$\frac{31}{32}$			Peter Mogenson		4.4	•••••	75
$\frac{32}{33}$			R. Vial		"		
34		- 1	R. Vial E. J. Lake J. G. Mosier H. E. Reeves	**			45
$3\bar{5}$			J. G. Mosier	**			
36	**	- 1	H. E. Reeves				10
37			Henry Jones. A. C. Burnham Gertrude Shawhan		• • •	• • • • • • • • • • • • • • • • • • • •	50
$\frac{38}{28}$	4.	Į.	A. C. Burnham		4.4	• • • • • • • • • • • • • • • • • • • •	80
39			Gertrude Snawnan			•••••	20
40 41			N. A. Weston		4.4		80 60
12			Robert A. Wood				40
43			C C Millor				40
14	"		Chas. F. Hottes				40
<b>4</b> 5			Ola C Woolsey		"		40
16		1	Chas. F. Hottes. Ola C Woolsey. W. S McGee. L. D. Brode			••••••	40
17	• •		L. D. Brode		• • •	• • • • • • • • • • •	50
48			Marion Thompson			• • • • • • • • • • • • • • • • • • • •	25 30
19 50			Marion Thompson Chas. T. Wilder W. L. Pillsbury, Lillie Heath				100
51	• •		Lillie Heath				45
52			Elva Blount		4.4	**********	45
53	4.4	1	Elva Blount A. B. Baker F. J. Foote John F. Creek		4.4		70
54	• • • • • • • • • • • • • • • • • • • •	- 1	F. J. Foote				60
55	• •	1	John F. Creek	• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •	50
56			C. A. Herme			• • • • • • • • • • • • • • • • • • • •	30
57 58	* *		L. G. Lathrop. J. Morrow. M. T. Lindsey L. H. Walden.	* *	4.6		30 65
59	* *		M. T. Lindsev	* *	* *		30
60	"	- 1	L. H. Walden		4.6		25
61	• •		A. Iten	• •	" "		25
62		- 1	<u>I. H. Al</u> len		• • •		30
33			E. W. Justus			• • • • • • • • • • • • • • • • • • • •	45 25
34	4.4		Chag P E-malt			• • • • • • • • • • • • • • • • • • • •	25 13
35 36		-	A. Iten I. H. Allen E. W. Justus Philip Schwem Chas. B. Ewalt H. C. Forbes			•••••	83
37	4 4		Mary J. Snyder	4.4	4.4		62
8			W. G. Johnson	4.4		***********	100
39			C. A. Hart		- "		62
70			C. W. Foster	Salary for t	three mo	nths, to date	100
1		- 1	The Technograph	Advertising	g	• • • • • • • • • • • • • • • • • • • •	100 23 82
2	"	- 1	Standard Utl Uo	Ull Lumbo <del>n</del>	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	23
13 74	4.6	- 1	Philip Schwem Chas. B. Ewalt H. C. Forbes Mary J. Snyder W. G. Johnson C. A. Hart C. W. Foster The Technograph Standard Oil Co. J Hamilton & Son. Jones & Laughlins Hyden Bros The Decatur Coal Co. Electric Lighting and Power Co Orr & Lockett Hardware Co. Howe, Brown & Co. T. H. Trevett. Sheldon Brick Co. Albany Perf'd Wr'p'g Pap'r Co C. H. Baddeley A. M. Paige Western Electric Co. Inland Publishing Co. American Printing Association A. C. McClurg & Co. American Printing Association A. C. McClurg & Co. American Printing Association A. C. McClurg & Co. American Printing Association A. C. McClurg & Co. American Printing Association A. C. McClurg & Co. American Printing Association A. C. McClurg & Co. Affred C. Kemper. Office Specialty Co. Office Specialty Co.	Tron		• • • • • • • • • • • • • • • • • • • •	67
75	4.4	ľ	Hyden Bros	Lumber		• • • • • • • • • • • • • • • • • • •	26
	April	15	The Decatur Coal Co	Coal		• • • • • • • • • • • • • • • • • • • •	84
77		- 1	Electric Lighting and Power Co	Power,			74
8		- 1	Orr & Lockett Hardware Co	Hardware			19
9	• • • • • • • • • • • • • • • • • • • •		Howe, Brown & Co	Tools	• • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	40
0	4.6	- 1	T. H. Trevett	nardware,.	• • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	11
1	4.6	- 1	Albany Porf'd Ww'n's Pan's Ca	Drick Papar	• • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	18 16
3	4.6		C H Raddelev	Lamne ete			14
4	4 4	- 1	A. M. Paige	Tuning pia	nos		10
5	• •	- 1	Western Electric Co	Wire, lamp	s, etc	· · · · · · · · · · · · · · · · · · ·	$\tilde{64}$
6	4.6	1	Inland Publishing Co	Subscriptio	n		8
37	* *		American Printing Association	Plates			33
8	• •	-	A. C. McClurg & Co	Books		• • • • • • • • • • • • • • • • • • • •	62
39	• • • • • • • • • • • • • • • • • • • •		Am. Society of Civil Eng'n'ing	Transaction	18		6
90	**	-	Maintagh Bath and Ontical Co	Apparatus,	etc	• • • • • • • • • • • • • • • • • • • •	573 11
)1 )2		1	Alfred C. Kemper	waten Magnagia e	overing	• • • • • • • • • • • • • • • • • • • •	6
3	4.4	1	Office Specialty Co	magnesia c Furniture	ete		19
4		- 1	Office Specialty Co	Pipe and fit	tings		12
)5	* *	- 1	C. T. Wilder	Work in lah	oratory.	etc	38
6	4 4	- 1.	O! P O	Poolea			

0.	Date.		To whom.		For what		Amou
Ť	1895.						
97 P	April	15	The Edwards & Docker Co Thomas Naughton E. H. Sargent & Co J. Manz & Co W. Grebern	American ·	Naturalist.		\$
98	• • •		Thomas Naughton	Photograpl	hs		
99	4.4		E. H. Sargent & Co	Chemical s	supplies		
00			J. Manz & Co. N. W. Graham. S. W. Shattuck. H. I. Green. John Mayer. N. C. Ricker.	Plates			Ι.
01			N. W. Graham	Expense to	Board and	Com. meet'gs	2
02			S. W. Shattuck	Petty expe	nses, $3 mos$ .	, March, '95	4 2
03			H. I. Green	Salary, Ma	rch, 1895		4
04	4.6		John Mayer	Salary, Fel	bruary, 1895		2
05	4.4		N. C. Ricker	Expenses.		<b>.</b> . <b></b>	
06			N. C. Ricker. W. R. Howe. Steamer; Strassburg. E. H. Renner & Bro. W. H. VanDervort. Anita M. Kellogg.	Dravage			3 1
07	6.6		Steamer Strassburg	General av	erage charg	es	1
08	4.4		E. H. Renner & Bro.	Carriages.			1
9			W. H. VanDervort	Expenses.			
10			Anita M Kellogg	Ling.		ools	
11			T A Clark	'' v	isiting scho	ols	2
12	4.4		T I Burrill	"	TOTAL BOTT		[ ]
13	4.4		C W Rolfe		66 66		
14			C. W. Foster				2
			France Devenment	Erronges			-
15	4.4		Mayma Hill	Solony Mo-	reh 1895		1
6	6.6		Lydio M. Hort	Drowings	1011, 1000	· · · · · · · · · · · · · · · · · · ·	4
17	6.6		F I Dilla	Dogte co	• • • • • • • • • • • • •		9
8	6.6		Anita M. Kellogg T. A. Clark. T. J. Burrill. C. W. Rolfe. C. W. Foster. Eugene Davenport. Mayme Hill. Lydia M. Hart. F. L. Bills. Pacific Express Co. American Express Co. C., C., C. & St. L. R'y Co. Wabash R. R. Co. Illinois Central R. R. Co. Pay roll of men, March, 1895.	I Ustage			1
9	4.6		A manian Empress Co	r tergurage	,		1 2
30	6.6		American Express Co		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	2 2
1	6.6		Wakash P. P. C.		• • • • • • • • • • • • • • • • • • • •		4
22			wanash r. r. Co		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	
23	6.6		Illinois Central R. R. Co				5
24			Pay roll of men, March, 1895	Labor			36
25			A. S. Draper T. J. Burrill S. W. Shattuck	~ ''			18
6 A	April	30	A. S. Draper	Salary for .	April, 1895 .		58 22
27			T. J. Burrill				22
8	4.4		S. W. Shattuck	•••			16
29			S. W. Shattuck E. Snyder N. C. Ricker I. O. Baker		:: .		8 16
80	4.4		N. C. Ricker	• • •			16
1	6.6		I. O. Baker				16
2	4.4		S. A. Forbes		"		8
3	• ••		I. O. Baker. S. A. Forbes. C. W. Rolfe. D. McIntosh. A. N. Tallot, A. W. Palmer. F. F. Frederick S. W. Parr. H. J. Barton. Charles M. Moss		•• :		16 15
34	"		D. McIntosh		• • • • • • • • • • • • • • • • • • • •		15
5	4 4		A. N. Talbot.	6.6	4.6		16
6			A. W. Palmer	4.6	"		16
37			F. F. Frederick	4.4	• • • • • • • • • • • • • • • • • • • •		15
8			S. W. Parr				16
9			H. J. Barton		4.6		16
Ŏ			Charles M. Moss.	4.6	* *	• • • • • • • • • • • • • • • • • • • •	16
1			D. K. Dodge		• • • • • • • • • • • • • • • • • • • •		16
2			L. P. Breckenridge.				16
3			D W Shea	4.4	• •		16
4	4.4		H. J., Barton Charles M. Moss. D. K. Dodge. L. P. Breckenridge. D. W. Shea. David Kinley. L. P. Bruger		6.6		16
5	4.4		J. D. Bruner	6.6			15
6	4.4		William J Eckoff	4.6			15
7	4.4		Eugene Davenport				8
8	6.6		J. D. Bruner William J. Eckoff Eugene Davenport Katharine Merrill				10
9	4 4		W O Krohn				15
ő	4.4		W. O. Krohn Mrs. J. D, Bruner H. E. Summers E. J. Townsend				19
1	4.4		H E Summere	4.6			13 12
2			F I Townsond	4 4			12
3	6.6		W H Ver Denvessed	4.4			12
			W. H. VanDervoort				
4	4.6		W. D. Pence	6.6			10
5			E. B. Greene F. H. Dodge Percy F. Bicknell E. G. Howe				13
6			г. п. Doage				13
7			rercy r. Bicknell				12
8			ь. ы. ноже				15
9	• • •		Anıta M. Kellogg	••			11
0	• • •		A. H. Daniels	• • •			10.
1			G. W. Parker		•• .		11.
2	4.6		A. H. W. Kellogg A. H. Daniels G. W. Parker H. S. Grindley		"		10
3			T. A. Clark		* *		110
4			T. A. Clark. C. D. McLane.	4.4	6.6		10
5			Frank Smith. R. P. Smith. G. P. Clinton.		* *		10
6			R. P. Smith	4.4	4.4		10
7	4.4		G. P. Clinton.	4.6	**		8
8	4.4		G. P. Clinton. J. D. Phillips C. B. Clark. W. E. Sandford Alice M. Barber. H. S Piatt. H. E. Parker				8
9			C B Clork	4.4			7
ŏ			W E Condford				7: 8:
V			Alice M. Berber				6
41			Ance M. Darber				0
2	4.4		TT C D:-44				8

o.	Date.		To whom.		For	what.	Amour
	1895.						
374	April 3	30 (	Chas. A. Gunn	Salary for	April,	1895	\$75
375	! ::	4	Alfred H. White	!			75
376 377		- li	William Esty B. V. Swenson A. R. Curtiss Fred. A. Sager L. W. Peabody G. W. McCluer Helen E. Butterfield				100
378		1	A R Curties				85 75
379		lí	Fred A Sager		4.4		80
80		li	L W Peahody				70
81	**	ĺ	G. W. McCluer.		4.4		15
382		j	Helen E. Butterfield				60
$\bar{8}\bar{3}$	••	- 12	i etei mogensen	**			75
84			R. Vial				60
85	::	- 13	E. J. Lake				45
86	::		J. G. Mosier H. E. Reeves	;;			60
87		1	H. E. Reeves				10
88		1	Henry Jones A. C. Burnham Gertrude Shawhan	٠.		• • • • • • • • • • • • • • • • • • • •	50 80
$\frac{89}{90}$		1	A. C. Durillaili		4 4		20
91		1	N A Weston	6.6	4.4		80
$\frac{31}{92}$		- 11	Adelle Clendenin Robt, A. Wood.				60
$9\overline{3}$		lí	Robt. A. Wood	• •			40
94		10	G. C. Miller				40
$9\bar{5}$			Chas. F. Hottes		4.4		40
96		- 0	Koot. A. Wood. G. C. Miller. Chas. F. Hottes. Ola C. Woolsey. W. S. McGee Marion Thompson. Chas. T. Wilder. L. D. Brode. W. L. Pillsbury. Lillis Hooth	**			40
97	::	- 17	W. S. McGee				40
98	l ::		Marion Thompson				25
99	::	- 19	Unas. T. Wilder				30
00	::		L. D. Brode	::			50 100
$\frac{01}{02}$		- 1	W. L. Pillsbury				45
03		1	Lillie Heath				45
03		ď	A R Raker				70
$0\overline{5}$		li	A. B. Baker F. J. Foote				60
$\tilde{06}$		ĺ	H. I. Green				45
07	••		John F. Creek				50
08			L. G. Lathrop				30
09			J. Morrow	::			65
10		į	H. I. Green. John F. Creek L. G. Lathrop. J. Morrow M. F. Lindsey. L. H. Walden.	1 ::			30
11		IJ	L. H. Walden				25
$\frac{12}{12}$		15	I TT All				25 30
$\frac{13}{14}$		- 1	F W Instruc				45
$\frac{14}{15}$		1	Philip Schwem				25
16			Chas. B. Ewalt		4.4		13
$\tilde{17}$		1	H. C. Forbes	• • •			83
18		j	H. Alten. E. W. Justus. Philip Schwem. Chas. B. Ewalt. H. C. Forbes. Mary J. Snyder. W. G. Johnson. C. A. Hart. C. M. Moss.				62
19		1	W. G. Johnson				100
20		- 10	C. A. Hart		• •		62
$^{21}$	1 ::	- 1	C. M. Moss	T	. ••	.,	10
22	;;	-	A. J. Herbst	Ribbons fo	or type	writer	1 7
23		-1	T. J. Burrill	Expenses			15 22
24		- 1:	A. J. Herbst T. J. Burrill. Heinly & Purcell Central Electric Co	Appender	ges	vices	14
$\frac{25}{26}$		- 13	Central Electric Co	Cheese	th eta	• • • • • • • • • • • • • • • • • • • •	4
$\frac{26}{27}$			C. T. Willder	Negative of	and ser	vices	20
$\frac{21}{28}$		- [:	New York Entom Society	Subscripti	on		2
$\frac{20}{29}$		1:	Henry C. McCook	Books			10
$\tilde{30}$		- 1-	Franklin Eng. Electotyping Co.	Half-tone	book		12
$\tilde{31}$	6.6		Photo Engraving Co	Plates			667
32			H. W. Rokker	Vol. 2, Orr	nitholog	gy of Illinois	667
33		- [	Central Electric Co G. C. Willis G. C. Willis C. T. Wilder New York Entom. Society Henry C. McCook Franklin Eng. Electotyping Co. Photo Engraving Co. H. W. Rokker H. C. Forbes Rand, McNally Co Mittendorf & Kiler Bausch & Lomb Optical Co E. H. Sargent & Co F. L. Bills S. A. Forbes	Expenses.			6
34			Rand, McNally Co	Map			10
$\frac{35}{2}$	1	- [:	Mittendorf & Kiler	Tables, etc	3,		29
36		:	Bausen & Lomb Optical Co	Laborator	y supp	nes	29
$\frac{37}{20}$		- 1:	E. H. Sargent & Co	Laborator:	y supp	пев	2
$\frac{38}{39}$		- 1:	F. L. DIIIS S. A. Forbos	Expenses	• • • • • • •		55 72
	١	- 12	S. A. Forbes W. G. Johnson K. F. Koehler's Antiquarium R. Friedlander & Son.	Books	• • • • • • •		123
$\frac{40}{41}$		-  -	W. G. Juliisun	Book			2
$\frac{41}{42}$		-	R. Friedlander & Son	Books			950
43					0000		1 2
44		1	W.R. Flowe. Mary H. Steele. William Esty. H. J. Barton. W. L. Pillsbury. Alex. McLean. J. F. Armstrong.	Dravage			11
45		- 1-	Mary H. Steele	Music fees			60
46	6.6	:	William Esty	Postage			1
47	• • •	Į.	H. J. Barton	Expense v	isiting	schools	12
48	• • •	į.	W. L. Pillsbury	Expenses			15
49			Alex. McLean	1			45 28
50							

о.	Date.	To whom.	For what.	Amou
Ī	1895.			
52	May, 1	5 The Smith Premier Typew'r C	o. Typewriter supplies Coal Ladder, etc Blank keys	\$
ગ્ર		C. J. Sabin. J. W. Shuck The Yale & Towne Mfg Co Hamilton & Russell	. Coal	
54	• • •	J. W. Shuck	Ladder, etc	-
55		The Yale & Towne Mig Co	Blank keys Hardware Machinists supplies Bevel gear cutter Subscription Plastering Music Pipe and fittings Aluminum Rubber tubing	1
6			. Hardware	1
8		Drown & Charge Mfg. Co	Povol goog autton	1
$\ddot{9}$		The Power Publishing Co	Subscription	
ŏ	4.4	J H Bainum	Plastering	2
1		The John Church Co	Music	
$\bar{2}$	4.6	Crane Company	. Pipe and fittings	.
3	" "	Chas. H. Besly & Co	. Aluminum	
4		Goodyear Rubber Co	Rubber tubing Chemical supplies Soap, matches Crash Carriage Valves Rent	1
5		Henry Heil Chemical Co	. Chemical supplies	4
6		The Kariher Cooper'n Groc. Co	Soap, matches	
7	4.6	E. Miller & Son	. Crash	
8		E. H. Kenner & Bro	. Carriage	1
9		A. S. Cameron St. Pump w'ks	Valves	1
0		Conta Lumband & Co	. Rent	. 1
1		The Power Publishing Co. J. H. Bainum The John Church Co. Crane Company. Chas. H. Besly & Co. Goodyear Rubber Co. Henry Heil Chemical Co. The Kariher Coöper'n Groc. C. E. Miller & Son E. H. Renner & Bro. A. S. Cameron St. Pump W'ks B. Zelle Gerts, Lumbard & Co. C. T. Busch. Vane-Calvert Paint Co. Utica Steam Gage Co. Quincy Show Case Works. Western Electric Co. Maltby & Wallace Co. Edwin Hunt's Sons Bacon, Mittendorf & Hall Augustine & Co. Co. C. Maltby & Wallace Co. Bacon, Mittendorf & Hall Augustine & Co.	Brooms Towel racks Paint Gages	
$\frac{2}{3}$		Vane-Calvert Point Co	Paint	1
4		Utica Steam Gage Co	Gages	1 1
5		Quincy Show Case Works	Cases	
6		Western Electric Co	Wire	5
7		Maltby & Wallace Co	. Wire . Gas contract, etc.	5
$\dot{s}$		Edwin Hunt's Sons	Hardware	1
9		Bacon, Mittendorf & Hall	Shades	
0	"	Bacon, Mittendorf & Hall Augustine & Co. Chas. K. Worthen F. H. Dodge A. A. Beal & Co. The Nautilus McMillan & Co. Mayme Hill.	Shades Trees Mounting a bird. Camera and outfit. Half-tone plates Subscription Nature Salary for April, 1895 Telegrams Expenses Expenses	.
1		Chas. K. Worthen	. Mounting a bird	2
2		F. H. Dodge	. Camera and outfit	. 2
3	• • •	A. A. Beal & Co	. Half-tone plates	1
4		The Nautilus	. Subscription	. [
5		McMillan & Co	Nature	
6		Mayme Hill	.   Salary for April, 1895	. 1
7		Western Union Telegraph Co	. Telegrams	1
8		W. L. Pillsbury	. Expenses	. 4
9		W. O. Karalan	Expenses Expenses visiting schools	. 2
0		W. O. Kronn	Expenses visiting schools	
2		Katharina Marrill	Expenses	
$\bar{3}$		Mayme Hill Western Union Telegraph Co W. L. Pillsbury T. J. Burrill W. O. Krohn E. G. Howe Katharine Merrill Lydia M. Hart C. A. Hart	Expenses  Drawings and expenses	1 1 4 2 2 7 7
4		C. A. Hart	Drawings and expenses	1 9
5		Bernard Quaritch	Books	1 7
6		Jessie A. Griswold	Typewriting	1
7		Isaac Fielding	Books. Typewriting Postage Postage Labor	22
8	**	F. L. Bills	. Postage	50
9	::	Payroll of men, April, 1895	. Labor	. 50
0	::	Payroll of students, April, 1895	Labor	. 19
1		A. S. Draper	. Salary for May, 1895	19 58 22
2		Lydia M. Hart C. A. Hart Bernard Quaritch Jessie A. Griswold Lsaac Fielding F. L. Bills Payroll of men, April, 1895 A. S. Draper T. J. Burrill S. W. Shattuck E. Snyder	Labor. Salary for May, 1895.	. 22
3  4		S. w. Snattuck		16
4 5		N. C. Bieken		ح ا.
6		I O Rakar	**	. 16
7	**	S A Forbes		. 16
8	••	S. W. Shattuck E. Snyder N. C. Ricker I. O. Baker S. A. Forbes C. W. Rolfe D. McIntosh A. N. Talbot A. W. Palmer F. F. Frederick S. W. Parr H. J. Barton Chas. M. Moss.		
9		D. McIntosh		16
ŏ	• •	A. N. Talbot .		16
ĭ		A. W. Palmer		16
$\tilde{2}$		F. F. Frederick		
$\bar{3}$		S. W. Parr	44 44	
4		H. J. Barton		
5	• • •	Chas. M. Moss.		
6	**	D. K. Dodge		. 16
7	**	L. P. Breckenridge		. 16
8		D. W. Shea	44	. 16
9	::	D. K. Dodge. L. P. Breckenridge D. W. Shea David Kinley		. 16
0		J. D. Bruner		. 15
1	1 ::	J. D. Bruner Wm. J. Eckoff Eugene Davenport		. 15
2		Eugene Davenport		.] 8
3		Katharine Merrill		10
4		Ratharine Merrill W. O. Krohn Mrs. J. D. Bruner 31 H. E. Summers E. J Townsend. W. H. Van Dervoort W. D. Pence O U. I.		.\ 18
25		Mrs. J. D. Bruner		.] 18
:6	May	31 <u>н</u> . Е. Summers		. 12
56		E. J. Townsend		.] 12
28 29		W. H. Van Dervoort		
		tw. D. Pence		. 10

٠.	Date.	To whom.		For	what.	Amou
	1895.					
oi	May 31	E. B. Greene F. H. Dodge Percy F. Bicknell E. G. Howe Anita M. Kellogg	Salary	for May.	1895	\$13
1	D103 01	F. H. Dodge	Carary,	ioi nių,,	1000	\$13 13
12		Percy F. Bicknell	• •			12
3	• •	E. G. Howe	• • •			15
4	••	Anita M. Kellogg		* *		11
5	• •	A. H. Daniels				10
6	• •	G. W. Parker	• •	• •		11
7	••	H. S. Grindley	• •			10
8	• •	T. A. Clark		• •		11
9	••	Anita M. Keilogg A. H. Daniels. G. W. Parker H. S. Grindley T. A. Clark C. D. McLane Frank Smith R. P. Smith		4.4		10.
)	••	Frank Smith				10
1	••	R. P. Smith	4.6			10
2	• •	G. P. Clinton		• •		8
3	• •	J. D. Phillips		• • •		8
1	• •	C. B, Clark		• • •		7
5	• •	W. E. Sandford	• •	• • •		8
3	• •	Alice M. Barber		• • •		6
7	• •	Frank Smith R. P. Smith G. P. Clinton J. D. Phillips C. B. Clark W. E. Sandford Alice M. Barber H. S Piatt H. E. Parker				8
3	••	H. E. Parker		• • •		3
)		Chas. A. Gunn				7
)	• •	Alfred H. White		• • • • • • • • • • • • • • • • • • • •		7
L	• •	Chas. A. Gunn. Alfred H. White. William Esty. B. V. Swenson A. R. Curtiss		• • •		10
1	• •	B. V. Swenson		• • • • • • • • • • • • • • • • • • • •		8
3	• •	A. R. Curtiss		• • • • • • • • • • • • • • • • • • • •		7
Ę	• •	A. R. Cuross Fred A. Sager L. W. Peabody G. W. McCluer Helen E. Butterfield Peter Mogenson		• • • • • • • • • • • • • • • • • • • •		8
5	•••	L. W. Peabody		• • •		7
1	••	G. W. McCluer				1
i	•••	Helen E. Butterfield				6
3	::	Peter Mogenson		4.4		7 6
		R. Vial E. J. Lake	• •	4.6		6
)	::	토. J. Lake				4
		H. E. Reeves Henry Jones A. C. Burnham Gertrude Shawhan		4.6	• • • • • • • • • • • • • • • • • • • •	6
2		H. E. Reeves				5
3		Henry Jones				
L		A. C. Burnnam		4.6		8 2
-		Gertrude Shawhan N. A. Weston Adelle Clendenin Robt. A. Wood G. C. Miller Chas. F. Hottes Ola C Woolsey W. S. McGee Marion Thompson L. D. Brode Lillie Heath		4.6		8
•		Adollo Clondonin		4.6		6
3		Pobt A Wood		4.6		4
		G C Millon		4.4		4
)	• •	Chas E Hottes		4.4		4
)		Ola C Woolsey	4.6	4 4		4
2		W.S. McGee				4
3	* **	Marion Thompson		• •		2
L	• •	L. D. Brode		• •		5
5	••	Lillie Heath				4.
3		Fire Planet	4.4	4.4		4
7		A. B. Baker		• •		7
3	• •	F. J. Foote				6
)	• •	E. V. Boldini A. B. Baker F. J. Foote H. I. Green John F. Creek L. G. Lathrop	4.6	• •		4
)		John F. Creek	4.4	• • • • • • • • • • • • • • • • • • • •		5
ĺ	• •	L. G. Lathrop		• •		3
2	• •	J. Morrow				6
3	• •	M. F. Lindsey				3
Ĺ		L. H. Walden		4.6		2
5		L. G. Lathrop. J. Morrow M. F. Lindsey L. H. Walden A. Iten I. H. Allen E. W. Justus	6.6	• •		1 2
3	• •	I. H. Allen	4.4			3
7		E. W. Justus		• •		4
3	• •	Philip Schwehm	• • •	• •		2
)	••	George Harding		• •		3
)	••	Chas, B. Ewalt				1
1	••	L. P. Breckenridge	Salary t	hree mon	ths to date	6
2	• •	W. L. Pillsbury	IV	1ay, 1895		10
3	• •	S. W. Shattuck	' t	hree mon	ths to date	15
Ļ		C. A. Hart	N	1ay, 1895.		6
5	• •	H. C. Forbes	f f	or May. 1	895	8
3		Mary J. Snyder	• •	• •		6
7	**	W. G. Johnson	_ ''			10
3		N. W. Graham	Expense	s	<i></i>	18
)	• •	E. W. Justus Philip Schwehm. George Harding Chas, B. Ewalt L. P. Breckenridge W. L. Pillsbury S. W. Shattuck C. A. Hart H. C. Forbes Mary J. Snyder W. G. Johnson N. W. Graham R. P. Morgan James E. Armstrong. Richards & Co.				30
)		James E. Armstrong				1
1		Richards & Co	Chemica	ıl appara	tus, etc	10
2		Hornstein Bros	Printing			38
3		The Illini	Subscrip	otions		22
L		Frank Smith	Expense	es		4
	• •	R. P. Morgan James E. Armstrong Richards & Co. Hornstein Bros. The Illini Frank Smith McLean County Coal Co. Isaac Fielding Crescent and Star Distilleries.	Coal			700 10
6						

о.	Date.		To whom.	For what.	Amou
i	1895.				
മ	May.	31	F L Bills	Postage	\$80
09	may,,	0.1	F. L. Bills Lydia M. Hart	Postage Drawings and expenses	34
10	4.4		W G Johnson	Expenses	44
11			American Express Co.	Drawings and expenses. Expenses. Expenses. Expressage. Stationery. Subscription Repairs, etc. Boat hire. Supplies. Fishes of North America. Naturalists' Directory. Expenses, music for gymnasium. Expenses, Supplies for laboratories Hose, etc. Sewer brush Charges onmicrometer.	- 5
12			D. H. Lloyde & Son.	Stationery	25 5 2 8 2 6 2
13			Rait. Henderson & Co.	Subscription	- 9
14			Hubbard & Sons	Renairs, etc.	5
15			Geo. E. McHose	Boat hire	5
16			National Typewriter Exchange	Supplies	9
17			The Harris Publishing Co	Fishes of North America	-
18			S E Cassino	Naturalists' Directory	9
19			Anita M. Kellogg	Expenses music for exmassium	12
20			A N Talbot	Expenses	36
21			W. A. Olmsted	Supplies for laboratories	32 50
22			Gutta Percha Rubber Mfg. Co.	Hose etc	50
23			St. Louis Steel Wire Brush Co.	Sewer brush	4
24	4.4		E. G. Smith	Charges onmicrometer	_2
25					
26			Eimer & Amend	Apparatus etc	122
27	4.4		Bausch & Lomb Ontical Co	Expenses, music for gymnasium. Expenses Supplies for laboratories Hose, etc Sewer brush Charges onmicrometer Mimeograph Apparatus, etc. Apparatus.	345
28			E. C. Shifted A. B. Dick & Co Eimer & Amend. Bausch & Lomb Optical Co. J. W. Butler Paper Co Hohmann & Maurer Mfg, Co Library Bureau Knowlton & Bennett.	Mimeograph Apparatus, etc. Apparatus Photo mounting board. Vacuum gauge, etc Apparatus Dusters. Apparatus Vises Jars, etc. Hardware, etc. Books, etc. American Cyclopedia. American Literary Index Subscription  Hardware Services and expenses Expenses Rooks	40
29	* *		Hohmann & Maurer Mfg Co	Vacuum gange etc	19
30	4.4		Library Rureau	Annaratus	5
31	4.4"		Knowlton & Rennett	Dusters	38
2	4.4		Oneen & Co	Annaratus	5
33	4.4		Wyman & Gordon	Vises	5
34			C H Baddeley	Jars etc	2
35	• •		T H Trevett	Hardware etc	83
86			G E Stechert	Rooks etc	160
37	4.4		A. C. McClurer & Co	Dooks, etc	393
8			D. Appleton & Co	American Cyclonedia	6
9			R R Rowker	American Cyclopedia	3
0	• •		Aged of Natural Science Phil	Subscription	2
1	4.4		Kaccon & Palmar	Subscription	2
2			The Western News Co	4.4	15
3			Hanry Trevett	Hardware	43
4	4.		C T Wilder	Sarviace and avnances	30
5			S. A. Forbes	Expenses Books Chemical supplies Labor, material, and power	38
6			R Friedlander & Son	Rooke	191
17			Chemical Department II of I	Chemical supplies	
18			R. Friedlander & Son Chemical Department, U. of I Mechanical Department, U. of I. Architectural Departm't, U. of I.	Labor material and nower	44 322
19			Architectural Department, U. of I	inatorial, and power	43
0	4.6		Tiromicocurum 2 opinion t, c in 1.		468
51	June	15	La Favette Lumber M'f'g Co	Balance on contract	
52	o uno.	10	Yeager & Schultz	Payment on contract	2, 783 580 22
3			N. W. Graham.	Expenses to Board meeting	22
4			Alex. McLean		33
55			N. B. Morrison.		68
6			La Fayette Lumber M'f'g Co Yeager & Schultz. N. W. Graham. Alex. McLean. N. B. Morrison. S. A. Bullard.		68 20
7					22
8			I. S. Raymond		
9	6.6		J. E. Armstrong.		17
ő			Military Band .	Service at commencement	50
1	4.6		I. S. Raymond J. E. Armstrong. Military Band T. J. Burrill W. L. Pillsbury. A. S. Draper. J. H. J. Wyters	Service at commencement Expenses to Springfield	7
2	. 6.6		W. L. Pillsbury	Expenses to opinigheid	
3			A S Draper	Expenses	82
4	4.4		H. J. Waters	1342011303111111111111111111111111111111	54
5			Adeline W Rowley	**	(
6	4.6		Asso Am Ac Coll Exp Stat	Station membership fee Expenses	10
7	**		O C Horney	Expenses	14
8	4.4		T Rannitt	Trybouses	18
	4.4		A I. Dilleburg	Lettering diplomas and certificates	84
9			F G Howa	Expenses	29
0	4.6		Promill & Davis	Windmill oto	146
1			H. J. Waters Adeline W. Rowley Asso. Am. Ag. Coll., Exp. Stat. O. C. Horney. T. Bennitt A. L. Pillsbury E. G. Howe Burrill & Davis W. O. Hall Mayme Hill F. F. Frederick W. H. VanDervoort Central Union Telephone Co. Western Union Telegraph Co. F. L. Bills	Expenses. Windmill, etc. Putting down well, etc. Salary, May and June, 1895 Expenses.	140
2			W. O. Hall	rutting down well, etc	41
3	4.4		Mayme Hill	Salary, May and June, 1895	20
4			F. F. Frederick	Expenses	10
			w. н. yanDervoort		
			Central Union Telephone Co	Kent, 3 months to June 30, 1895	16
6			Western Union Telegraph Co	Telegrams	11
6 7			F. L. Bills	Postage	38
16 17 18	• •		TT 43 TS - 1	Expenses	۱ 4
76 77 78			H. C. Forbes	LIAPCHSCS	
75 76 77 78 79			Frank Smith	HADOLISCS	4 17
76 77 78 79 80	"		Frank Smith Keen & DeLang	Copy book	17
76 77 78 79			H. C. Fordes Frank Smith Keen & DeLang Franklin Engr. & Electyo. Co	Expenses Rent, 3 months to June 30, 1895 Telegrams Postage Expenses Copy book Half-tones Expressage Subscription	17 2 11 6

0.	Date.		To whom.	Fo	r what.	Amou
	1895.					
25	June	15	E. H. Sargent & Co The Deming Co Franklin Engr. & Electro. Co Richards & Co J. W. Franks & Sons Bacon, Mittendorf & Hall. Library Bureau Narragansett Machine Co. Schaeffer & Budenberg G. Cramer. Standard Oil Co. S. W. Parr E. H. Renner & Bro W. R. Howe	Laboratory sun	nlies	\$8
86	o unic	10	The Demine Co	Box numn	phes	i
87	6.6		Franklin Engr. & Electro. Co	Half-tones		10
88	• •		Richards & Co	Gas regulator		1 3
89	* *		J. W. Franks & Sons	Printing		25
$\tilde{90}$			Bacon, Mittendorf & Hall	Frame, etc		
91			Library Bureau	Library supplie		13 26 32
$9\overline{2}$			Narragansett Machine Co	Gymnasium an	naratus	26
$9\overline{3}$			Schaeffer & Budenherg	Ganges etc	paracas	39
94			G Cramer	Dry plates		"
95			Standard Oil Co	Oil places		
6			S W Parr	Evnenges		1 8
77			E H Renner & Bro	Carriage		
98			W. R. Howe Payroll of men, May, 1895 Payroll of students, May, 1895 A. S. Draper T. J. Burrill	Dravage		38
<b>9</b> 9	**		Payroll of men May 1895	Dahor		320
M			Payroll of students May 1895	Labor and schol	anchine	41
)U	July	4	A S Droper	Solomy for Typ	a 1905	583
$\vec{0}$	oury,	1	T I Burmill	Salary for our	e, 1030	22
) <u>3</u>	••		S W Shattuck	6.6	**	166
			F Sprder	6.6	44	8
)4			S. W. Shattuck E. Snyder N. C. Ricker I. O. Baker	* *		166
)5			I O Paker		"	100
6	• •		C A Forbog		"	160 83
)7			S. A. Forbes C. W. Rolfe D. McIntosh A. N. Talbot			166
8			D. Walntoch		**	150
9			D. McIntosh			
0			A. N. Talbot A. W. Palmer F. F. Frederick S. W. Parr H. J. Barton Clas M. Moss		**	160 160
1			A. W. Palmer F. F. Frederick			
2			F. F. Frederick		**	158 160
3			U. I. Douton			16
4			H. J. Barton		"	16
5				6.6		16
6			I D Dweekenwidge	6.6	**	16
7			D. K. Dodge. L. P. Breckenridge D. O. Shea.		44	16
18 19			David Kinler			16
			David K1nley	4.6	44	150
20			J. D. Bruner Wm. J. Eckoff. Eugene Davenport. Katharine Merrill	4.6		150
21			Engage Devempent		44	83
$\frac{22}{23}$			Vothonino Monnill	4.6	**	100
4			Ratiafine Merrin W. G. Krohn Mrs. J. D. Bruner. H. E. Summers. L. J Townsend W. H. VanDervort W. D. Pence E. B. Greene F. H. Dodge		***	150
5			Mrs I D Rmnon		4.6	199
26 26			H F Summore		44	13 12
20 27			F I Townsond	**	"	12
28			W H Van Dorwort			129
29			W D Ponce	4.6		10
S			F D Croops			13
30			E. D. Greene			13
31			Donor E Dielroll		**	
32			Percy F. Bicknell			
33			Anita M. Kallaga			
34			Anita M. Kellogg			110
35			A. II. Dalliels		"	10 11
36			G. W, Farker			
37			m A Clark			10
8			C D Malana			110
39			A. H. Daniels G. W. Parker H. S. Grindley T. A. Clark C. D. McLane		44	10
10						10
1			R. P. Smith G. P. Clinton			100
12	::		G. P. Clinton			8
l3	1		J. D. Phillips C. B. Clark W. E. Sandford	•		8
4			<u>  U. B. Clark</u>			7
5	::		W. E. Sandford			8
16			IAlice M Barber			6.
7	1 ::		H. S Piatt	l ::		8
8	! ::		H. E. Parker	::		3
19	1 ::		Chas. A. Gunn			7
60	::		H. S Piatt H. E. Parker Chas. A. Gunn Alfred H. William Fatty	**		7
51	ì		( W 1111aiii 128ty			10
52	"		B. V. Swenson	• •		8
53			B. V. Swenson A. R. Curtiss.			7.
54	• •		Fred A. Sager	. "	**	. 8
55			L. W. Peabody	**	**	7
56	**		Fred A. Sager. L. W. Peabody G. W. McCluer Helen E. Butterfield	4.4	44	1
57			Helen E. Butterfield	**		6
58	•••		Peter MogensonR. Vial.	**	**	7.
59			R. Vial	**	**	6
30	::		E. J. Lake	• •	**	4
			le orașe i	4.4	* *	

о.	Date.		To whom.	]	For what.		Amour
	1895.		H. E. Reeves. Henry Jones. A. C. Burnham Gertrude Shawhan N. A. Weston Adelle Clendenin Robert A. Wood G. C. Miller Chas. F. Hottes Ola C Woolsey. W. S. McGee Marion Thompson Frank Smith C. A. Hart Lillie Heath, Elva Blount A. B. Baker F. J. Foote H. I. Green John F. Creek L. G. Lathrop J. Morrow M. T. Lindsey				1
62	July	1	H. E. Reeves	Salary for Ju	une, 1895		\$10
63	J 415, 6		Henry Jones				50
64	• •	j	A. C. Burnham	•••			80
65		1	Gertrude Shawhan	•••			20
66		J	N. A. Weston		* *		80
67	4.4	1	Adelle Clendenin	••	**		60
68	4.6	- 1	Robert A Wood	•••	6.6		40
69		1	G C Miller	• •	**		40
70			Chag F Hottos	• •		• • • •	40 40
71	4.6	1	Ole C Woolcov		**	• • • •	40
$\frac{1}{2}$		1	W S MaGaa			• • • •	40
			Manion Thomason			• • • •	25
73		1	Marion Thompson			• • • •	100
74		1	rrank Smith			• • • •	62
75		- 1	C. A. Hart			• • • •	45
76		- 1	Line Heath,	1 44		• • • •	45
77	1 11		Elva Blount	1		• • • •	45
78	1.		A. B. Baker	1		• • • •	70
79			F. J. Foote	1			60
80	::	-	H. I. Green	1 ::			45
81		-	John F. Creek	1	· ;; · · · · · · · · · · · · · · · · ·		50
82		- (	L. G. Lathrop	1 ::			30
83	**	- 1	J. Morrow M. T. Lindsey L. H. Walden	::			65
84	• • •	- 1	M. T. Lindsey				
$8\overline{5}$	**	- 1	L. H. Walden		**		12
86		- 1	I. H. Waldell A. Iten I. H. Allen E. W. Justus George Harding	•••	4.4		12
87	••	- 1	I. H. Allen				30
88			E. W. Justus	•••	4.6		
$\widetilde{89}$		- 1	George Harding		"		30
$\tilde{90}$		- 1	Chag B Ewelt			• • • •	13
91		- 1	Electric Lighting & Power Co.	Power Sent	to Oct 1894 March	1895	122
$9\overline{2}$			Odin Coal Co	Coal	10 0001, 1002, 11th on,	1000	604
$\frac{92}{93}$		1	Union Mfg. Co.	Water 3 mon	the June 30 1805	• • • •	125
94			C H Franc Co	Advortising	1005	• • • •	837 6
∂4 ∩=			Dente grant Co	Drinting anto	Jamaa	• • • •	697
95			Fantagraph Co Dah Co	r rinting cata	nogues	• • • •	001
96 97			Engineering News Pub. Co	Advertising .		• • • •	1 9
			Katharine Merrin	Expenses		• • • •	6
98			Oscar 1. Spanioing	meais		• • • •	2
99			H. E. Summers	Expenses		• • • •	7
00 01			W. f. Dillabarana Co	Grue, etc	1005	• • • •	100
			O T Cabin	Salary, June	, 1099	• • • •	100
$\frac{02}{03}$			U. J. Saum	Coar		<u></u>	79
	4.		Character County Deighting Co	Gas for reor	uary and march, 18	95	284 6 11 2
04 05			Champaign County Printing Co	Printing		• • • •	1 0
			Standard Off Co	011		• • • •	1 1
06			Brown & Sharpe Mig. Co	Gear cutter,	ete	• • • •	1 10
07	4.6		Crescent Steel Co	Steel		• • • •	10
<u>8</u> 0			J. Hamilton & Son	Lumper		• • • •	71
<b>0</b> 9		-	T. H. Trevett	Hardware		• • • •	10
10			Speigou Brick Co	Brick		• • • •	20
11		-	guner & Fuller Co	Unemical su	ppnes		63 200
12		-	Geo. Besore	Lumber	. ;		200
13		-	E. W. Justus George Harding. Chas. B. Ewalt Electric Lighting & Power Co. Odin Coal Co. Union Mfg. Co. C. H. Evans Co. Pantagraph Co. Engineering News Pub. Co. Katharine Merrill Oscar T. Spaulding H. E. Summers Orr & Lockett Hardware Co. W. L. Pillsbury C. J. Sabin T. R. White Champaign County Printing Co Standard Oil Co. Brown & Sharpe Mfg. Co Crescent Steel Co. J. Hamilton & Son T. H. Trevett Sheldon Brick Co. Fuller & Fuller Co Geo. Besore. Lyon & Healy Richards & Co.	prum nead,	етс		2
14		-	Kichards & Co	Glass tubing		• • • •	1
15		-	Huppard & Sons	Flumbing			54
16			U. T. Wilder	Negative and	ı prınt	• • • •	54 2 6
17			Am. Arch. and Build. News Co.	Subscription	٠ • • • • • • • • • • • • • • • • • • •		6
18			F. K. Robeson & Bros	Toweling, et	с		111
19			Crosby St'm Gauge & Valve Co	Hose and cou	ıpling		11
20	1 ::		F. A. Sackmann	Stamps			3
$^{21}$			Bullard & Gormley Co	Letter box pl	lates		2
22			Maltby & Wallace Co	Pipe and fifti	ings		262
23			H. C. Forbes	Salary for Ju	ine. 1895		83
$^{24}$	••		Mary J. Snyder	3,			62
25		- 1	Geo. Besore. Lyon & Healy Richards & Co. Hubbard & Sons C. T. Wilder. Am. Arch. and Build. News Co. F. K. Robeson & Bros. Crosby St'm Gauge & Valve Co F. A. Sackmann Bullard & Gormley Co. Maltby & Wallace Co. H. C. Forbes. Mary J. Snyder. W. G. Johnson N. W. Graham R. P. Morgan Lucy L. Flower. U. F. Pillsbury U. S. Raymond Alex. McLean		44		100
26	July :	15	N. W. Graham	Expenses to	Board meeting		57
27		-	R. P. Morgan				90
$\frac{1}{28}$	• •		Lucy L. Flower				25
$\widetilde{29}$			W. L. Pillsbury			• • • •	25 17 22
$\tilde{3}$	• •		I S Raymond			• • • •	99
$\frac{30}{31}$	**		Alex McLean		••	• • • •	43
$\frac{31}{32}$			TohniMaron	Colony Tuno	1905	• • • •	20
33			ouninayer	Bastogs June	, 1000	• • • •	20
34 34			Tana Fielding	r ostage		• • • •	60 10
			W D Howe	Duoro		• • • •	10
			м. т. поме	prayage		• • • •	15
							1 75
35			M. T. Lindsey	Salary for of	ie-nair month	• • • •	10
			I. S. Kaymond Alex. McLean John Mayer. F. L. Bills Isaac Fielding W. R. Howe M. T. Lindsey National Educational Ass'n Renner Bros Western Union Telegraph Co.	Advertising	ie-nair month		10

о.	Date.		To whom.	Freightage   Expenses Music fees  Expenses Labor  Taxes, Minnesota lands, 1894 Case Skiffs Expenses Storage Insurance Printing Duck Ice Fence wire Stationery Painting, etc Drayage Chairs, etc Repairs, etc April, May, and June, 1895 Coal  Harris vise Gauges, etc Balances Thermometer, etc Siphon Scale Expenses Salary, spring term, 1895 Services as typewriter Key blanks Advertising Drills Drawer pulls Mercury Minerals Laboratory supplies Lamp chimneys, etc Advertising Cards Repairing clock Apparatus Gages, etc Test gages Cards Springs Printing, etc Subscription Trans. Am. Phil. Association Stationery and books Books Salary, July, 1895	Amou
	1895.	-			
340	July 1	15	C., C., C. & St. L. R'v Co	Freightage	\$21
41	- uns		Wabash R. R. Co	2.10.13.11.10.11.11.11.11.11.11.11.11.11.11.11.	26
42	• •		Illinois Central R. R. Co	**	12
43	••	-	Pacific Express Co	"	19
44	**	- 1	American Express Co	"	37
45	• •		S. W. Shattuck	Expenses	74
46	::	- 1	Mary H. Steele	Music fees	50
47	l <b>::</b>	- 1	Mrs. C. W. Foster		30
48			H. E. Summers.	Expenses	289
49		- (	Payroll of men, June, 1895	Labor	289
50			Payroll of students, June, 1895	m	203
51		1	C. W. Spaiding	Taxes, Minnesota lands, 1894	1,630
52			Dasing Vacht and Bast Works	Clase	9 48
53 54			Chas A Hart	Fynongog	45
55 55		1	Alexander Stuart	Ctorogo	9
99 56			H T Sparry & Son	Incurance	62
90 57	••	1	Champsian County Hareld	Printing	172
58			Geo R Carnenter Co	Duck	112
59	• •		Twin City I and C Storage Co.	Tee	4
30 30	••	1	Wm Michach	Fence wire	2
31			A P. Cunningham & Son	Stationery	10
32			Wm Price	Painting etc	117
3	••	1	R. S. Wilber	Dravage	110
;4	•••	- [	Walker & Mulliken	Chairs, etc	40 56
35		Ì	Robinson & Burr	Repairs, etc	94
36	••		Electric Lighting and Power Co.	April, May, and June. 1895	120
5 <b>7</b>	••		Odin Coal Co	Coal	37
8		- 1	McLean County Coal Co	0 7,72	806
<u>39</u>	• •	ı	Samuel Harris Co.	Harris vise	4 36
7Ŏ	••	-	Crosby St'm Gauge & Valve Co	Gauges, etc.	36
1	••	- }	John Chatillon's Sons	Balances	24
$\bar{2}$	••	- 1	McIntosh Battery & Optical Co	Thermometer, etc	21
$\bar{3}$	**		Ashcroft Mfg. Co	Siphon	-9
4	• •	1	Buffalo Scales Co	Scale	27
15			L. W. Peabody	Expenses	4
16	**		C. W. Foster	Salary, spring term, 1895	100
7	**		H. I. Green	Services as typewriter	5 3
18			Yale & Town Mfg. Co	Key blanks	3
(9	::		Engineering News Pub. Co	Advertising	6
30	::		J. T. Slocumb Co	Drills	1
31	1	-	Orr & Lockett Hardware Co	Drawer pulls	2
32		-	Eimer & Amend	Mercury	13
33			Geo. L. English Co	Minerals	13
34		- 1	ward's Nat. Science Est blish t	T 3	13
35			Bausen & Lomp Optical Co	Laboratory supplies	18
36 37	**		o. n. Greennaigh	Lamps	3
57 18			Champaign Times	Advortiging	4
9		l	Dublic School Publishing Co	Advertising	13
K)			I. C. Carmood	Popoining aloak	13
1		- 1	E. H. Sargant Co.	A properties	30
2			Schooffer & Rudenhere	Corps ate	33
3			Thos Show	Tast maras	90
4		-	Library Bureau	Carde	39 21
5		- 1	American Steam Gage Co	Springs	66
6			Pantagraph Co	Printing ete	28
7		١	Nat'n'l Car & Locomot've Bldr	Subscription	2
8			Ginn & Co	Trans. Am. Phil. Association	2
9	••		A. C. McClurg Co	Stationery and books	132
Ň	• •		Gustave E. Stechert	Books	487
ĭ	July, 3	31	A. S. Draper	Salary, July, 1895.	583
2	- u.s.	-	T. J. Burrill		225
3			S. W. Shattuck		166
)3 )4	• •	1	E. Snyder	**	83
)5	••		N. C. Ricker	**	166
6	• •	1	I. O. Baker	**	166
)7			N. C. Ricker I. O. Baker S. A. Forbes C. W. Rolfe D. McIntosh A. N. Talbot A. W. Palmer F. F. Frederick S. W. Parr H. J. Barton Chas. M. Moss	6.4	89
18	••		C. W. Rolfe		166 83 166 150
$\widetilde{9}$	1	Ì	D. McIntosh		150
ίŎ	4.6	١	A. N. Talbot	**	166
11	• •		A. W. Palmer	**	166
12	••	1	F. F. Frederick	44	158
13	••	Į	S. W. Parr	**	166 166 166
14	• •		H. J. Barton	44	166
	••		01 . 36 36	**	166

# ${\it List~of~Warrants}{\it --} {\it Continued}.$

Date.	To whom.	For what.	Amou
1895.			
6 July	81 D. K. Dodge	Salary, July 1895	\$166
7	L. P. Breckenridge		166
8 ''	D. W. Shea		166
ğ ''	David Kinley		166
ŏ	Wm. J. Eckhoff		150
ĭ ''	Eugene Davenport	* *	88
2 ''	Katharine Merrill	* *	100
	W. O. Krohn		150
4 ''	W. O. Krohn H. E. Summers E. J Townsend W. H. VanDervoot W. D. Pence	4.4	125 125
5 ''	E. J Townsend	**	125
6 ''	W. H. VanDervoot	4.4	129
7 ''	W. D. Pence		104
8 ''	E. B. Greene F. H. Dodge Percy F. Bicknell Edward G. Howe		133
9 ''	F. H. Dodge	4.	133
0 ''	Percy F. Bicknell		125
1 ''	Edward G. Howe		150
2 ''	Geo. W. Parker		113
3 ''	G. W. McCluer		1.5
4 ''	David Kinley	Salary summer school	266
5	Wm J Eckoff	Salary, summer school	150
6 ''	Katharine Merrill		100
7	H E Summere		123
8	A M Kallogg		110
	H C Cwindless		100
9	Chas A Gunr		73
	C P Clinton		66
$\frac{1}{2}$ $\vdots$	H. E. Summers. A. M. Kellogg. H. S. Grindley. Chas. A. Gunn. G. P. Clinton. H. E. Parker. W. L. Pillsbury. Geo. W. Graham Lillie Heath. Elva Blount. A. R. Baker.		13
	W I Dillaham	Calaur Inly 1905	100
3	W. L. Pillsbury	Salary, July, 1895	
44	Geo. w. Granam	Salary, July, 1895. Salary, part July, 1895. Salary, July, 1895.	77
5	Lime Heath	Salary, July, 1895	4:
6	Elva Blount	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	45
7	A. B. Baker. Wm. M. Galvin.		70
8	Wm. M. Galvin	**************	39
9	L. G. Lathrop		33
Ui	John Mayer	**	20
1	Mary J. Snyder		62
2	L. G. Lathrop John Mayer Mary J. Snyder Chas. A. Hart.	**	62
3	Chas. A. Hart. W. G. Johnson. H. C. Forbes. B. M. Duggar. C. A. Kofoid. Adolph Hempel Frank Smith. F. D. Wilson.		100
4	<u>H. C. Forbes</u>		8
5	B. M. Duggar		88
0	C. A. Kofoid		100
7	Adolph Hempel		60
o	Frank Smith		100
9	F. D. Wilson	Writing	
U <sub>1</sub>	<b>E. B. Forbes</b>	Work in laboratory	12
1	W. D. Conkle		4
2	B. Zelle		2:
อ	H. C. Forbes	Expenses  Work in laboratory	
4 ''	W. E. Jackson	Work in laboratory	18
5 ''	C. T. Wilder	" and expenses	20
6	F. D. Wilson E. B. Forbes W. D. Conkle B. Zelle H. C. Forbes W. E. Jackson C. T. Wilder W. G. Johnson Ginn & Co. A. A. Beal Co. D. Appleton Co.	Expenses Biological Lectures Plates of insects Chapman Birds Half-tones Subscription Collecting dead chinch bugs Baddard's mimeograph Boxes. Contract of machine shop building Balance on contract. Expense to committee meeting	2
7	Ginn & Co	Biological Lectures	
8 ''	A. A. Beal Co	Plates of insects	50
9 '' ·	D. Appleton Co	Chapman Birds	2
0 ''	Franklin Eng'v'g and Elec. Co.	Half-tones	116
ĭ ''	National R'y Publication Co	Subscription	
2 ''	G. C. Wells	Collecting dead chinch bugs	38
3 ''	Macmillan Co	Baddard's mimeograph	1,428
4 ''	Wm. A. Gill Co	Boxes	1 6
5 **	Bevis Co	Contract of machine shop building.	1,428
6 Aug.	5 Yeager & Schultz	Balance on contract	1, 194
41	I. S. Raymond	Expense to committee meeting	1 ,
8	Alex. McLean		1
ā '	S. A. Forbes.	Ernongog	( Or
ŏ .,	F. L. Bills	Postage	86
1 ''	I. S. Raymond Alex. McLean S. A. Forbes. F. L. Bills W. G. Johnson	Expenses	15 8 26 28
		Liaponisco	1 3
3	F D Wilson	Work in laboratory	96
4 "	Mrs F W Isakman	TOTA III IADULAULY	90
5 "	F. D. Wilson Mrs. E. W. Jackman O. H. Harpham	Postage Expenses  Work in laboratory  Pump and fittings.	2
	Г В Божьов	Work in laboratory	2
6	E. B. Forbes Bausch & Lomb Optical Co	Work in laboratory	
4	Dausen & Lomb Optical Co	Apparatus	10
8	U.B. Thorp	Gasoline stove, etc	00
9	O. B. Thorp	w attmeter, etc	301
0 ::	The Lacon Co. National Electric Co. Louisville Electric Works. Diamond Electric Co.	Work in taboratory Apparatus Gasoline stove, etc Wattmeter, etc. Transformers	15
11 .,	National Electric Co	**	29 22
2 ''			

0.	Date.	To whom.	For what.	Amoun
Ì	1895.			
994	Aug. 5	Stanley Electric Mfg. Co	Transformer	\$32
195		F. A. Sager	Work in laboratory	66 63
996		[ <u>F</u> . <u>H</u> Everett	Transformer Work in laboratory  Minerals  Blue prints	63
997		F. J. Foote. A. E. Foote C. W. Noble. S. W. Shattuck. Baker & Adamson F. K. Robeson & Bros. Price & Sandford. The Kariher Grocery Co. Richard Key & Co Richard & Co. Lillie McCain T. H. Trevett. Chicago Legal News Co. Mayme A. Hill H. C. Forbes.	3611	67
998	6.6	A. E. Foote	Minerals	44 37
999	4.4	C. W. Noble	Minerals Blue prints Petty expense, 3 months to May 3, 1895 Chemical supplies. Crash Chemical supplies. Syrup, etc. Pippettes Chemical supplies Lantern slides. Hardware	1,190
101	Aug., 15	Baker & Adamson	Chemical supplies	93
002		F. K. Robeson & Bros	Crash	3
003		Price & Sandford	Chemical supplies	6
004	4.4	The Kariher Grocery Co	Syrup, etc	2
005	• •	Richard Key & Co	Pippettes	2
006	4.4	Richards & Co	Chemical supplies	1,190
007	6.6	Lillie McCain	Lantern slides	6 3 2
009	4.4	Chiango Logal Nows Co	Hardware Session Laws,1895. Services as pianist Expenses Telegrams.	9
010	4.4	Mayma A Hill	Services as pignist	5
011	6.6	H C Forbes	Evnonces	1
012	6 6	H. C. Forbes Western Union Telegraph Co Franklin Engraving and Elec-	Telegrams	4
	" "	Franklin Engraving and Elec-	Lorograms	-
		trotyping Co	Half-tones. etc. Mialls Aquatic Insects Plates Ice Photographs Freightage  " Printing Laboratory supplies  Traveling expenses. Expenses Repairs. pipe, and fittings. Repairs. Safety caps. Rings and patterns Tapes. Wire, etc Laboratory supplies Potash, etc. Repairs on skylights Steam launch Plans Calsomining Water. 3 months, October, 1895. Labor Rent, 3 months, Sept. 1, 1895. Advertisement. Expenses Carbon sheets Record book Linoleum Hardware Salary part of August, 1895 Salary for August, 1895. Labor Salary for August, 1895.	2
14		trotyping Co	Half-tones, etcMialls Aquatic Insects	20
15		A. A. Beal & Co	Plates	20
16	4.4	Twin City I. and C. Storage Co.	Ice	4
17		Chas. T. Wilder	Photographs	7
18	• • •	Adams Express Co	Freightage	5 17 22
19 20		Pacific Express Co	4.4	17
21	4.4	Champaign County Harald	Drinting	46
22	4.4	Bausch & Lomb Ontical Co	Laboratory supplies	46 38
23		E. H. Sargent & Co	Laboratory supplies	50
24	* *	Eugene Davenport	Traveling expenses	70
25	• •	L. P. Breckenridge	Expenses	20
26	4.6	Robinson & Burr	Repairs, pipe, and fittings	129
27	**	Western Electric Instrument Co	Repairs	7
28	• • • • • • • • • • • • • • • • • • • •	A. L. Ide & Son	Safety caps	9
29	**	Chester Steel Casting Co	Rings and patterns	38 50 70 20 129 7 9 2 2 37
30		Unas. S. Besiy Co	Tapes	97
32		MaIntoch Rettory & Ontical Co	Laboratory supplies	16
33		Richards & Co	Potech etc	10
34	4.6	Gordon & Kimball	Repairs on skylights	60
35	• •	Racine Boat Mfg. Co	Steam launch	60 600
36		A. L. Pillsbury	Plans	20
37	• •	Wm. Price	Calsomining	234 125
38		Union Mfg. Co	Water, 3 months, October, 1895	125
39		Miles Newberry	Labor	43 12 2
40		Central Union Telephone Co	Rent, 3 months, Sept. 1, 1895	12
41	4.4	Urbana Weekly Courier	Advertisement	1 2
42 43	4.4	A I Howbat Co	Carbon shoots	1
44	6.6	Geo. E. Marshall & Co.	Record book	1 4
45	4.6	Chicago Carpet Co	Linoleum	24
46		Henry Trevett	Hardware	24 97
47	4 4	W. M. Galvin	Salary part of August, 1895	5 45
48	• •	W. F. Marker	Salary for July, 1895	45
49	• •	Payrolls of men, July, 1895	Labor	911
50		Payrolls of students, July, 1895.	G :	164
51	August 31	A. S. Draper	Salary for August, 1895	583 225
52		T. J. Burrill		100
53 54	4.4	Edward Snyder		166 83
55	4.4	N C Ricker		166
56		I. O. Baker.	**	166
57	4 4	S. A. Forbes	44	83
58		C. W. Rolfe	**	166
59		D. McIntosh	44	150
60		A. N. Talbot	**	166
61		A. W. Palmer	**	166
62		F. F. Frederick	***	158
63	"	S. W. Parr	44	166 166
64	"	I. O. Baker. S. A. Forbes. C. W. Rolfe D. McIntosh A. N. Talbot. A. W. Palmer F. F. Frederick S. W. Parr. H. J. Barton. Charles M. Moss. D. K. Dodge. L. P. Breckenridge D. W. Shea.	44	166
)65	• •	Charles M. Moss		
)66		D. K. Dodge	::	
)67				

To.	Date.	To whom.	For what.	Amour
	1895.			
069	August 31	David KinleyWilliam J. Eckoff	Salary for August, 1895	\$166
070		William J. Eckoff	***	150
071	1 ::	William J. Eckoff. Eugene Davenport. Katharine Merrill. W. O. Krohn. H. E. Summers. E. J. Townsend. W. H. VanDervoort. W. D. Pence. E. B. Greene. F. H. Dodge		83
072	1	Katharine Merrill	::	100
073 074		W. U. Kronn		150 125 125
775		E. I Townsend		125
76	4.4	W. H. Van Dervoort.		129
77	**	W. D. Pence.	' '	104
78	4.4	E. B. Greene		133
79	44	E. R. Greene. F. H. Dodge. Percy F. Bicknell. Edward G. Howe. G. W. Parker. G. W. McCluer. George W. Graham.	***	133
80		Percy F. Bicknell		125 150
81		Edward G. Howe		150
$\frac{82}{83}$		G. W. Parker		115
84 84	4.4	George W Graham	"	15 100
85	"	Lillie Heath		1 45
86	4.4	Elva Blount	4.4	45 70 39
87	**	A. B. Baker H. I. Green L. G. Lathrop.	**	70
88		H. I. Green	**	39
89		L. G. Lathrop		1 35
90	1 ::	W. L. Pillsbury	a,	100 62 150
91		L. P. Breckenridge	Salary, 3 months, to date	150
92 93		S. W. Shattuck	Salary for August, 1895	100
94	4.4	R M Dugger	Salary for August, 1095	100 83
95		C A Hart		62
96		M. J. Snyder	**	62 62 83
97		H. C. Forbes	4.6	83
98	4.6	Frank Smith	44	
99	"	C. A. Kofoid	***	100
90	1 ::	Adolph Hempel		60
01	4.4	E. B. Forbes	Doord	35
$\frac{01}{03}$		Miles Newborns	Solomy Angust 1905	1 46
03		L. G. Lathrop. W. L. Pillsbury. L. P. Breckenridge. S. W. Shattuck. W. G. Johnson. B. M. Duggar. C. A. Hart. M. J. Snyder. H. C. Forbes. Frank Smith. C. A. Kofoid. Adolph Hempel. E. B. Forbes. The Taylor House. Miles Newberry. C. P. & St. L. R'y Co Mrs. L. E. Browning. The Monarch Distillery. F. M. Everett. F. A. Sager. Bevis & Co.	Board Salary, August, 1895 Freightage Room rent	100 100 60 35 46 40
05		Mrs. L. E. Browning	Room rent	F
06		The Monarch Distillery	Alcohol Work on apparatus	36
07		F. M. Everett	Work on apparatus	36
US	**	F. A. Sager		3, 163
09		Bevis & Co	On contract for machine shop	3, 163
10		E. B. Forbes	Expenses	13 25
11 12	* *	Bausen & Lomb Optical Co	Laboratory supplies	16
13	4.6	S A Forbes	Expenses	75
14	6 6	Thaver Jackson	Reporters' book	1 1
15		Forest and Stream Pub. Co	Steam Yachts and Launches	1
16		Central Union Telephone Co	Rent to September, 1895	4
17		Franklin Eng. and Electro. Co.	Half-tones	81
18		F. L. Bills	Postage	81
19		Mittendori & Kiler	vv aste baskets	90
20 21		W & L E Gurley	Alconol Work on apparatus On contract for machine shop Expenses Apparatus Laboratory supplies Expenses Reporters' book Steam Yachts and Launches Rent to September, 1895 Half-tones Postage Waste baskets Card cases, etc. Compasses, etc. Compasses, etc. Repairs Directories Tablet chair Lumber Stationery Registry book Postage. Coal Repairs and keys Repairing platinum ware. Labels Advertisement Stationery. Towels, etc. Repairing skylight Brush brooms, etc Painting, etc Glass Drawer pulls Wire guards. Rent and towing.	25 200
22		Peter Heer	Renairs	200
3	* *	Hardie & Scharle	Directories	10
24	4.4	A. H. Andrews Co.	Tablet chair	1
25	"	Chas. A. Besore	Lumber.	357
26	4.4	A. C. McClurg & Co	Stationery	51
7	* * *	Geo. E. Marshall & Co	Registry book	10
8	::	Isaac Fielding	Postage	10
9		Horns' Coalery Co	{Coal	64
0		I Bighen & Co	Repairs and Keys	35 43
5		Dennison Mfg. Co	Labels	4.0
32 33	4.4	Public School Publishing Co.	Advertisement	
34		D H Lloyde & Son	Stationery	22 53
35	4.6	G. C. Willis	Towels, etc.	59
36	4.6	J. W. Keller	Repairing skylight	1 12
27	4.6	E. Henry.	Brush brooms, etc	38
38		Wm. Price	Painting, etc	12 38 41
39		Fuller & Fuller Co	Glass	14
40 41	::	Bullard & Gormley Co	Drawer pulls	1 19
		II P Smith Wire Iron Works	Wire guards	1 19

No.	Date.	To whom.	For what.	Amount.
2143 2144 2145 2146 2147 2148 2149 2150	**	Wagner Electric Mfg. Co	Expenses Transformers Lantern slides Pipe, fittings, etc Labor, material, and power	16 00 70 00

Financial Statement of the University of Illinois [not including State Laboratory of Natural History or the Agricultural Experiment Station] for the year ending August 31, 1895.

Balances—		
State appropriations. United States appropriations	\$118,615 79 20,346 50	
Other funds	2,650 26	
From State Ammonwiations-		\$141,612 55
Taxes on Minnesota lands	\$1,600 00	
Salaries, etcLibrary	\$1,600 00 90,000 00 3,000 00	
From State Appropriations— Taxes on Minnesota lands	3,000 00	
Shop practice	1,500 00 1,000 00	
Fitting and furnishing Engineering Hall	5,000 00 25,000 00	
Snop practice. Cabinets Fitting and furnishing Engineering Hall Engineering College Chemical Laboratory Laboratory Vegetable Physiology Fire protection Building and equipping Biological Experiment Station Biological Experiment Station expenses Astronomical Observatory	E (WA) (A)	
Laboratory Vegetable Physiology	2,000 00 2,000 00 2,500 00	
Building and equipping Biological Experiment Station	2,000 00	
Biological Experiment Station expenses	1,500 00 5,000 00	
Astronomical Observatory Paving street, etc.	9,300 00	
		157, 400 OF
From United States Appropriation— For instruction and the facilities therefor		21,000 00
From other sources—		
Interest on andowment and other funds	\$28,499 61	
Rents Fees of University students Fees of Preparatory students Gross receipts of of business departments and laboratories Bonds Miscellaneous	\$28,499 61 2,792 28 15,102 50	
Fees of Preparatory students.	3,557 20	
Gross receipts of of business departments and laboratories	7,515 53	
Miscellaneous	3, 557 20 7, 515 53 13, 000 00 1, 188 91 5, 725 98	
Overdraft	5,725 98	77,382 01
	-	
	=	\$397,394 56
Expenditures, September 1, 1894—August 31, 1895.		
Of United States Appropriations—	- 1	
	!	
Agricultural department Engineering College	$\begin{array}{c} 7774 \\ 1.24038 \end{array}$	
Engineering College Natural history	1,240 38 109 47	
Engineering College. Natural history. Salaries for instruction.	1.240 38	\$25, 626 <b>37</b>
Engineering College Natural history Salaries for instruction Of State Appropriations	1,240 38 109 47 24,198 78	\$25,626 <b>37</b>
Engineering College Natural history Salaries for instruction Of State Appropriations	1,240 38 109 47 24,198 78	\$25, 626 <i>3</i> 7
Engineering College Natural history Salaries for instruction Of State Appropriations	1,240 38 109 47 24,198 78	\$25, 626 <b>37</b>
Engineering College Natural history. Salaries for instruction  Of State Appropriations— Taxes on Minnesota lands. Buildings and grounds Salaries for instruction Mechanical shops	1, 240 38 109 47 24, 198 78 31, 600 00 2, 943 85 29, 211 83 900 00 91 65	\$25, 626 <b>37</b>
Engineering College Natural history Salaries for instruction  Of State Appropriations— Taxes on Minnesota lands. Buildings and grounds Salaries for instruction Mechanical shops Museums Apparatus and material	1, 240 38 109 47 24, 198 78 \$1, 600 00 2, 943 85 29, 211 83 900 00 91 65 1, 647 21	\$25, 626 <b>37</b>
Engineering College Natural history. Salaries for instruction  Of State Appropriations— Taxes on Minnesota lands Buildings and grounds Salaries for instruction Mechanical shops Museums Apparatus and material Library	1, 240 38 109 47 24, 198 78 31, 600 00 2, 943 85 29, 211 83 29, 211 83 91 65 1, 647 21 5, 621 55	\$25, 626 <b>37</b>
Engineering College Natural history. Salaries for instruction  Of State Appropriations— Taxes on Minnesota lands Buildings and grounds Salaries for instruction. Mechanical shops Museums Apparatus and material Library Laboratories. Hecting and formishing Natural History Hell	1, 240 38 109 47 24, 198 78 31, 600 00 2, 943 85 29, 211 83 900 00 91 65 1, 647 21 5, 621 55 6, 663 54	\$25, 626 3 <b>7</b>
Engineering College Natural history. Salaries for instruction  Of State Appropriations— Taxes on Minnesota lands Buildings and grounds Salaries for instruction. Mechanical shops Museums Apparatus and material Library Laboratories. Hecting and formishing Natural History Hell	1, 240 38 109 47 24, 198 78 31, 600 00 2, 943 85 29, 211 83 29, 211 83 91 65 1, 647 21 5, 621 55 6, 663 25 4, 669 45	\$25, 626 3 <b>7</b>
Engineering College Natural history. Salaries for instruction  Of State Appropriations— Taxes on Minnesota lands Buildings and grounds Salaries for instruction. Mechanical shops Museums Apparatus and material Library Laboratories. Hecting and formishing Natural History Hell	\$1,240 38 109 47 24,198 78 \$1,600 00 2,943 85 29,211 83 900 00 91 65 1,647 21 5,621 55 6,663 54 342 85 6,500 00 66,669 45 4,607 84	\$25,626 <b>37</b>
Engineering College Natural history. Salaries for instruction  Of State Appropriations— Taxes on Minnesota lands. Buildings and grounds Salaries for instruction Mechanical shops Museums Apparatus and material Library Laboratories Heating and furnishing Natural History Hall Boilers and coal house Engineering Hall New machine shop Equipment Biological Experiment Station Biological Experiment Station Biological Experiment Station	\$1,240 38 109 47 24,198 78 \$1,600 00 2,943 85 29,211 83 900 00 91 65, 1,647 21, 5,621 55 6,663 54 342 85 6,500 00 66,669 45 4,607 84 675 80 336 73	\$25,626 <b>37</b>
Engineering College Natural history. Salaries for instruction  Of State Appropriations— Taxes on Minnesota lands. Buildings and grounds Salaries for instruction. Mechanical shops Museums Apparatus and material Library. Laboratories. Heating and furnishing Natural History Hall Boilers and coal house Engineering Hall New machine shop Equipment Biological Experiment Station Biological Experiment Station Street paving	1, 240 38 109 47 24, 198 78 31, 600 00 2, 943 85 29, 211 83 900 00 91 65 1, 647 21 5, 621 5 6, 663 54 342 85 6, 500 00 66, 669 45 4, 607 84	
Engineering College Natural history. Salaries for instruction  Of State Appropriations— Taxes on Minnesota lands. Buildings and grounds Salaries for instruction. Mechanical shops Museums Apparatus and material Library. Laboratories. Heating and furnishing Natural History Hall Boilers and coal house Engineering Hall New machine shop Equipment Biological Experiment Station Biological Experiment Station Street paving	1, 240 38 109 47 24, 198 78 21, 600 00 2, 943 85 29, 211 83 900 00 91 65 1, 647 21 5, 621 55 6, 663 54 342 85 6, 500 00 66, 669 45 4, 607 84 675 80 336 73 2 64	
Engineering College Natural history. Salaries for instruction  Of State Appropriations— Taxes on Minnesota lands. Buildings and grounds Salaries for instruction. Mechanical shops Museums Apparatus and material Library. Laboratories. Heating and furnishing Natural History Hall Boilers and coal house Engineering Hall New machine shop Equipment Biological Experiment Station Biological Experiment Station Street paving	1, 240 38 109 47 24, 198 78 21, 600 00 2, 943 85 29, 211 83 900 00 91 65 1, 647 21 5, 621 55 6, 663 54 342 85 6, 500 00 66, 669 45 4, 607 84 675 80 336 73 2 64	
Engineering College Natural history. Salaries for instruction  Of State Appropriations— Taxes on Minnesota lands. Buildings and grounds Salaries for instruction. Mechanical shops Museums Apparatus and material Library. Laboratories. Heating and furnishing Natural History Hall Boilers and coal house Engineering Hall New machine shop Equipment Biological Experiment Station Biological Experiment Station Street paving	1, 240 38 109 47 24, 198 78 21, 600 00 2, 943 85 29, 211 83 900 00 91 65 1, 647 21 5, 621 55 6, 663 54 342 85 6, 500 00 66, 669 45 4, 607 84 675 80 336 73 2 64	
Engineering College Natural history. Salaries for instruction  Of State Appropriations— Taxes on Minnesota lands. Buildings and grounds Salaries for instruction Mechanical shops Museums Apparatus and material Library Laboratories. Heating and furnishing Natural History Hall Boilers and coal house Engineering Hall New machine shop Equipment Biological Experiment Station Biological Experiment Station expenses. Street paving.  Of other funds— Board expense Salaries for instruction Salaries for services Buildings and grounds	\$1, 240 38 1, 240 38 24, 198 78 \$1, 600 00 2, 943 85 29, 211 83 900 00 91 65 1, 647 21 5, 621 55 6, 663 54 342 85 6, 500 00 66, 669 45 4, 607 84 675 80 336 73 2 64 \$1, 704 95 31, 905 61 10, 179 99 1, 909 36 6, 930 55	
Engineering College Natural history. Salaries for instruction.  Of State Appropriations— Taxes on Minnesota lands. Buildings and grounds Salaries for instruction Mechanical shops Museums Apparatus and material Library Laboratories Heating and furnishing Natural History Hall Boilers and coal house Engineering Hall New machine shop Equipment Biological Experiment Station Biological Experiment Station expenses Street paving  Of other funds— Board expense Salaries for instruction Salaries for services Buildings and grounds Fuel and lights Stationery, printing, and postage	\$1, 240 38 1, 294 78 \$1, 600 00 2, 943 85 29, 211 83 29, 211 83 1, 647 21 5, 621 55 6, 663 54 4, 607 84 675 80 336 73 2 64 \$1, 704 95 31, 905 61 10, 179 99 1, 909 38 6, 930 55 3, 931 73	
Engineering College Natural history. Salaries for instruction  Of State Appropriations— Taxes on Minnesota lands. Buildings and grounds Salaries for instruction Mechanical shops Museums Apparatus and material Library. Laboratories Heating and furnishing Natural History Hall Boilers and coal house Engineering Hall New machine shop Equipment Biological Experiment Station Biological Experiment Station expenses Street paving  Of other funds— Board expense. Salaries for instruction Salaries for services Buildings and grounds Fuel and lights Stationery, printing, and postage Preparatory school Gross expenses of business departments	1, 240 381 109 47 24, 198 78 21, 198 78 29, 211 83 900 00 91 65 1, 647 21 5, 621 55 6, 663 54 342 85 6, 500 00 66, 669 45 4, 607 84 675 80 336 73 2 64 2 10, 179 99 1, 909 38 6, 930 55 3, 051 73 4, 448 91 10, 122 74	
Engineering College Natural history. Salaries for instruction  Of State Appropriations— Taxes on Minnesota lands. Buildings and grounds Salaries for instruction Mechanical shops Museums Apparatus and material Library Laboratories. Heating and furnishing Natural History Hall Boilers and coal house Engineering Hall New machine shop Equipment Biological Experiment Station Biological Experiment Station expenses. Street paving.  Of other funds— Board expense Salaries for instruction Salaries for services Buildings and grounds	\$1, 240 38 1, 240 38 1, 600 00 2, 943 85 29, 211 83 900 00 91 65 1, 647 21 5, 621 55 6, 663 54 4, 607 84 675 80 336 73 2 64 \$1, 704 95 31, 905 61 10, 179 99 1, 909 38 6, 930 55 3, 051 73 4, 448 91	\$25, 626 3 <b>7</b>

# Financial Statement—Continued.

Of other funds—Continued: Military scholarships Summer School Accredited schools Biological Station Miscellaneous  Balances—State appropriations United States appropriation.	390 97 1,165 25 3,734 26	\$80.032.27
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# Financial Statement of the Illinois State Laboratory of Natural History, for the fiscal year ending June 30, 1895.

RECEIPTS.	
Balance from last report.       \$1,482 20         For field, office, and incidental expenses       1,500 00         For improvement of library.       1,000 00         For salaries and assistance       3,500 00         For illustration of State Entomologist's report       250 00         For publication of bulletins       500 00	
EXPENDITURES.	
For field, office, and incidental expenses For improvement of library For salaries and assistance For illustration of State Entomologist's report For publication of bulletins For publication of bulletins (supplementary report) For lapsed to treasury, for bulletin appropriations Balance	3,500 00 250 88 605 57 604 74 500 00
\$8,232 20	\$8,232 20

# Financial Statement of the Agricultural Experiment Station, University of Illinois, for the year ending June 30, 1895.

RECEIPTS.		
Appropriated by Congress Balance, other funds From State Board of Agriculture for analyses of fertilizers From Station farm, etc.	\$15,000 00 393 54 90 00 2,240 36	
EXPENDITURES.		
Board expense Books and publication Botanical apparatus Bulletins. Chemical apparatus and supplies Fertilizers Fuel and lights Incidentals. Meteorological apparatus Printing, stationery, and postage Salaries Seeds and trees Tools and supplies Wages Special expenditures on chinch bug, wood durability, and irrigation experiments Other funds Balance, other funds		\$105 8 284 9 21 8 2, 228 8 275 6 21 1 336 6 21 8 8 0 6, 483 147 781 3, 858 6 344 2, 519 2 204 2

# **PROCEEDINGS**

OF THE

# BOARD OF TRUSTEES

OF THE

# UNIVERSITY OF ILLINOIS,

FOR THE

# Year Ending August 31, 1896.

## MEETING OF SEPTEMBER 4, 1895.

The Board of Trustees of the University of Illinois, met in the University parlor, in Urbana, at 9 o'clock a.m., Wednesday, September 4, 1895.

The members present were Messrs. Graham, McLean, Morgan, and Morrison.

Mr. Morgan, Chairman of the Committee on Buildings and Grounds, announced that the Committee preferred not to select one from the designs for the library, thirty-two of which had been handed in to the Secretary of the Board, but that the Board itself should make the selection.

There being no quorum present, the Board adjourned to meet at 2 o'clock p. m.

### AFTERNOON SESSION.

When the Board met, pursuant to adjournment, there were present Messrs. Bullard, Graham, McLean, Morgan, Morrison, and Dr. Smith.

On motion of Mr. Morgan, the minutes of the last meeting were approved as presented by the Secretary.

Mr. B. F. Harris, Jr., having asked the privilege of so doing, made a statement on behalf of the Urbana and Champaign Electric Railway Company. He also made a statement on behalf of the Champaign and Urbana Gas Light and fuel Company, with regard to the price at which the company would furnish gas to the University, and

a further statement with regard to the electric power and lighting furnished by the Electric Lighting and Power Company.

The Board then took a recess until 4 o'clock p. m. in order to inspect the plans, which had been presented for the library building. Afterwards the Board adjourned to meet at 8:30 o'clock a. m.

## SESSION OF THURSDAY.

When the Board was called to order, pursuant to adjournment, there were present Messrs. Bullard, Graham, McLean, Morgan, Morrison, Raymond, and Dr. Smith.

As the Secretary, Mr. Pillsbury, was compelled to be away in charge of the examination of new students, Mr. Bullard was appointed Secretary pro tem. by President Graham.

The following resolution was adopted on motion of Mr. Bullard:

Resolved, That George A. Goodenough be appointed instructor in mechanical engineering, at a salary of \$75 a month; that Joseph R. Wilson be appointed foreman in the foundry, at \$50 a month; that Oscar Quick be appointed instructor in physics, at \$75 a month; that Paul Chipman be appointed assistant in the testing laboratory, at \$70 a month (in place of Mr. Peabody, who was appointed in June, but who has resigned); and that Reuben S. Douglass be appointed assistant in the preparatory department, at \$75 a month. All of the foregoing appointments are for ten months.

Professor Davenport's bill of \$6.31, for expenses incurred in attending the meeting of the Farmers' Institute Association, at Springfield, was ordered paid on motion of Mr. Raymond.

On motion of Mr. Raymond, \$250 was appropriated for the use of the mechanical shops, the money to come from the state appropriation for that purpose.

President Graham then asked Mr. Raymond to occupy the chair.

On motion of Mr. Morgan, it was voted that the matter of selling five machines no longer needed in the machine shops be referred to the Committee on Buildings and Grounds, with power to act. The machines referred to were: 1 iron top wood shaper; 1 wooden saw bench; 1 multiple spindle drill; 2 centering lathes.

The moving of the mechanical laboratory from the Chemical Laboratory and installing it in the new shops, and the moving of machines in the old shops to other parts of the building, were, on motion of Dr. Smith, referred to the Committee on Buildings and Grounds, with power to act,

On motion of Mr. Morgan, \$100 was appropriated for the purchase of maps, etc., for the Preparatory School.

On motion of Mr. Morrison, \$75 was appropriated for the use of the committee of the Faculty on accredited schools.

On motion of Mr. Morrison, an appropriation of \$100 was made for the purchase of additional gas fixtures for Natural History Hall, the money to be expended by the Business Agent.

A communication was received from Professor Forbes, Director of the State Laboratory of Natural History, with regard to the appropriation made by the last session of the legislature for the use of the laboratory. It was agreed that it would be advisable for President Draper to prepare a communication to the Governor and Auditor of Public Accounts, and that Professor Forbes should take this to Springfield and endeavor to secure the payment of this appropriation by the State Treasurer.

President Draper spoke at some length in explanation of the condition of affairs in regard to the vaccine farm and the examination of candidates for entrance to medical colleges.

A communication, presented by President Draper, from Professor Davenport, of the department of agriculture, was referred to the Farm Committee. The following is a summary of this communication:

SUMMARY OF PLANS FOR REORGANIZATION OF THE COLLEGE OF AGRICULTURE IN ITS RELATION TO THE EXPERIMENT STATION.

- 1. This reorganization should be on a basis in accordance with the needs of the subject, the richness of the endowment, and the dignity of the institution as a whole.
- 2. The Experiment Station exists for the purpose of original investigation only, and must not be called upon to illustrate, or to teach the principles of agricultural practice.
- 3. For purposes of instruction, and experimentation as well, the subject of agriculture, like all subjects, should be so divided that each division may be within the compass of the ability of one individual.
- 4. To this end the plan that has been begun should be completed, establishing the following divisions: (1) Agriculture, as limited to soils and crops; (2) Animal Husbandry; (3) Dairy Manufactures; (4) Horticulture, with a responsible and able head in charge of each division.
- 5. The College of Agriculture, like the other colleges, should have: (1) housing; and (2) equipment.
- 6. For housing it should have an Agricultural Hall, with class rooms, offices, and laboratories, and laboratory apparatus, including a dairy plant. The same hall should supply the Experiment Station with offices and laboratories.
- 7. For equipment, besides laboratory apparatus, the College needs lands, crops, farm implements, and live stock for illustration and for instruction of students.
- 8. In the interest of economy the same property and employés should serve the interests of both College and Station whenever possible. But this is proper only when both interests share in expense of maintenance.
- 9. Proper adjustment should be made between the College and the Station and a fair proportion of expense assessed to each. The present adjustment is infair to the Station and inadequate for College purposes.
- 10. High standards of neatness and order should be insisted upon and obectionable practices discontinued. These are: (1) Housing horses and exberiment cattle in the same building; (2) Exposing the farm implements to
  the elements at all seasons for lack of shelter; (3) Breeding to grade bulls
  and establishing a herd of scrub cattle.
- 11. The first and second reforms should be accomplished by removing the lorses into a separate barn, having a tool barn contiguous and commodious mough to shelter every implement needed.
  - 12. The third should be relieved by using only pure-bred, registered bulls.

- 13. For purposes of illustration a small herd of three breeds of cattle, and one of hogs should be maintained. Foundations for these herds should be purchased, and ultimately no grade stock should be kept except for the purpose of experiment or special illustration. I would recommend no sheep, and no horses, except for actual labor.
- 14. The present barn should be ultimately fitted up as a cattle barn, but the first expense should be for separate quarters for horses.
- 15. Good drainage should be provided for all buildings, and no buildings should be allowed out of repair. It is not proper that the Experiment Station should bear all the burden of repairs of buildings.
- 16. This organization and equipment should go on until the good farmer will find no just cause for criticism.
- 17. Those things should be done first that mean most for the money outlay, or that remove particularly objectionable features. These are to my mind:
  - (a) To complete the proper division of the subject.
  - (b) To secure a few well bred cattle and swine.
  - (c) To provide shelter for tools.
  - (d) To separate work horses from cows and experimental feeding.
  - (e) To provide drainage from buildings.
  - (f) To put all buildings in good condition.
- 18. We ought to offer a course in Farm Dairying the coming winter, and a sum should be set apart to equip for this and for further instruction of regular and special students.
- 19. Commercial operations should be avoided as outside of either experimentation or instruction, except when they naturally arise in connection with necessary equipment.
- 20. If I were to say what we need most, as soon as it can be provided, and what would do us most credit outside, in our state and abroad, I should say an Agricultural Hall, costing for building and equipment not less than \$100,000.00.

### Items of Expense Involved in Recommendations.

- 1. Division of subject—Agriculture proper; Animal Husbandry; Dairy Manufactures; Horticulture.
  - 2. Fund for instruction, \$500.00.
  - 3. Foundation purchase of pure-bred live stock, \$1,000.00.
  - 4. Horse and tool barn, \$1.450.00.
  - 5. Drainage about buildings, \$75.00.
- 6. Repairs of buildings, painting of farm house, \$60.00; heater for same \$400.00.

In order of importance, except that if (4) is not provided for, at least \$300.00 will be surely needed for a separate tool shed.

Mr. Bullard moved to appropriate, not to exceed \$800.00, for a piano. Mr. McLean moved to amend by making the amount \$250.00. The amendment was lost. The original amendment was passed by the following vote: Yeas, Messrs. Bullard, Graham, Morgan, and Dr. Smith; nays, Messrs. McLean, Morrison, and Raymond.

On motion of Mr. Bullard, the purchase of the piano was referred to President Draper, the Business Agent, Professor Shattuck, Di Smith, and Professor Jones, as a committee.

On motion of Mr. Morgan, the following resolution was adopted:

Resolved, That the Board of Trustees, in committee of the whole, now take up the consideration of the plans submitted in competition for the new University library building, and that the decision awarding the premiums be made by the full Board.

The Committee on Buildings and Grounds made the following report:

#### REPORT OF COMMITTEE ON BUILDINGS AND GROUNDS.

URBANA, ILL., September 4, 1895.

To the Board of Trustees of the University of Illinois.

GENTLEMEN: The Buildings and Grounds Committee respectfully presents the following report of its action in carrying into effect special instructions received from the Board, and also other matters properly belonging to the functions of the Committee.

First. After careful consideration and consultation with President Draper in respect to the improvements instructed by the Board to be made on Green street, it was decided to pave and curb thirty-two feet in width of the south half of Green street, centrally located, leaving a margin of five feet on each side between the curb line and the trees.

Proposals for doing this work were invited and several bids were received—the lowest and best bidder being Robert Clark, of Peoria, to whom the contract was awarded. A copy of the contract, together with the bond and correspondence, is herewith presented. The work to be completed on the fifteenth of September.

The Committee and President Draper also upon due consideration determined upon a plan for parking the north half of Green street, and passed the following resolution, which its Chairman communicated to Mr. B. F. Harris, Jr., President of the Urbana and Champaign Electric Street Railroad Co., on the 27th of July last, in the following letter:

### [Copy.]

July 17, 1895.

B. F. Harris, Jr., President Urbana and Champaign Electric Street R. R. Co., Champaign, Ill.

DEAR SIR: I am instructed to present to you the following resolution which was adopted by the Buildings and Grounds Committee of the University of Illinois on the 27th of June, 1895:

"Resolved, That in view of the new pavement and walks about to be laid on Green street and of the changes in grades and in the arrangement of grounds for the beautifying of the same, the Committee on Buildings and Grounds is of the opinion that it is incompatible with the interests of the University to permit more than a single line of street railway track through the University grounds, and that if the same is to be continued the track is to be moved to the middle of the northern thoroughfare which it now occupies.

"The poles now in use should be removed and iron poles of an ornamental character substituted, and also the switch upon University grounds should be removed; and if the railway company should not approve of the course and should prefer to remove their track from Green street altogether and go back to the use of their old line, the Committee would not look with disfavor on their doing so."

Inasmuch as the improvements spoken of in the resolution are to be proceeded with at once, you will see the importance of prompt action on your

part, so that should you decide to continue the privilege to you of maintaining a track on Green street all of the work, including that devolving upon you, may be carried forward simultaneously and completed on the earliest practicable date.

Kindly advise me as promptly as practicable of your decision, and oblige.

Yours very truly,

RICH. P. MORGAN,

Chairman Buildings and Grounds Committee, University of Illinois.

The correspondence succeeding this letter, between Mr. Harris and the Chairman, is herewith submitted as the result of the action of the Committee, nothing further having been accomplished.

Second. In regard to the construction of the walks, careful investigation has been made by the Committee and proposals for their construction invited. Bids have been received from Simpson Bros. & Co., of Chicago, P. E. Taintor, of Springfield, and W. McDonald, of DuQuoin. Also a letter has been received from Hon. Nelson W. Graham, Chairman of the Board of Trustees, in regard to brick walks, all of which are herewith presented.

Third. Further complying with the instructions of the Board, a plan for the machine shop was prepared by Professor Ricker, and proposals for its construction were invited, Bevis & Co., of Urbana, being the lowest and best bidder, that firm was awarded all of the work, excepting the roof. By the terms of the contract the building is to be ready for the roof on the 3d day of September, 1895.

The contract for the roof was let to the well-known constructor of roofs, C. L. Strobel, of Chicago. The work to be completed as quickly as the obtaining of the iron work would permit.

The plans and contracts for erecting the machine shop are herewith submitted, together with the correspondence.

Payments on account of the contracts have been made aggregating \$4,607.84.

Fourth. The contract with Geo. L. Batchelder, of July 12, 1894, for wiring and conduiting for incandescent lights in Engineering Hall, was claimed by him to have been completed August 20, 1895. His final statement in detail, and a copy of the contract and correspondence are herewith presented, showing a balance due to him of \$1,566.39, including extra, \$56.91.

Fifth. The improvements made in the Chemical Laboratory, for which \$1,000.00 was appropriated, have been done by day labor under the personal supervision of Professor Palmer and the Buildings and Grounds Committee, and a statement of the cost of the labor and material is herewith presented.

Sixth. The construction of the glass addition to the laboratory for vegetable physiology has necessarily been in the care of Dr. Burrill, and his report of progress is herewith submitted.

Seventh. The bond for the new arms for the military department was made by Trustees Raymond and Morgan and delivered to Mr. Pillsbury for transmission to the Secretary of War.

Eigth. Immediately after the adjourned meeting of the Trustees June 27, 1895, at which the library building was located and instructions as to the character of the building were given, President Draper and the Chairman of the Buildings and Grounds Committee visited Chicago and Minneapolis for the purpose of acquiring as full information as practicable in regard to library buildings for universities. Much valuable knowledge was obtained, and it was deemed best to recommend to the Trustees that the building be entirely of fire-proof construction. Therefore the Chairman of the Buildings and Grounds Committee wrote to each member of the Board upon that subject, and received approval of the recommendation from all excepting one. Therefore the invitation of the Buildings and Grounds Committee to architects for competitive plans for the library building, which was issued July 20, 1895, provided that the building should be fire-proof throughout. The invita-

tion requires that the designs be in the hands of Mr. Pillsbury, Secretary of the Board of Trustees, on or before 12 o'clock noon Wednesday, September 4, 1895.

Ninth. In compliance with the instructions of the Board of Trustees June 27, 1895, the Buildings and Grounds Committee met with Professor S. A. Forbes at the Biological Station of the University, in Havana, Ill., for consultation in respect to the expenditures of the appropriation made for the temporary building and the equipment of the Station. The plans and estimates which Professor Forbes had obtained were carefully considered and approved.

The proposition of one contractor for the cabin boat was accepted and concluded, and is herewith presented, together with the report of Professor Forbes.

Tenth. Acting upon the resolution of the Board June 27, 1895, in regard to the sale of land and application of the proceeds to the construction of the residence of the President of the University, it was first ascertained that the land could be sold for as much as \$80 per acre. Eighty dollars per acre for half of the land is offered, payable October 1 next; also an offer of \$80 per acre for the whole, \$2,000 in cash and balance in payments with interest.

President Draper and the Chairman of the Committee on buildings and Grounds had a brief interview with S. S. Beman, architect, of Chicago, outlining what has been proposed to be done, and thereupon Mr. Beman accompanied the President to Urbana for the purpose of examining the site of the proposed residence and for further conference, all of which resulted in the engagement of Mr. Beman to make the plans and prepare specifications for the building upon which contractors might predicate bids for its construction. The plans and specifications have been in the hands of a number of builders and their proposals are to be submitted by 12 o'clock noon September 5, 1895. The plans and specifications are herewith presented.

Eleventh. It is found that the earth to be excavated for the pavement on Green street will be insufficient to complete the parking and grading about Engineering Hall and the President's residence. Therefore, as no provision has been made for moving the earth, as recommended by Professor Ricker, from the lower basement of Engineering Hall, an appropriation of \$500.00 is asked for this purpose, so that the earth may be used to make up the deficiency.

Twelfth. In regard to the construction of the Astronomical Observatory no actual progress has been made, further than to collect information in respect to the latest designs for structures of like character and for the equipment of the same. The Committee, however, intends to proceed without delay, so that the foundations may be all in and stand through the winter for settlement, before the completion and furnishing of the building.

RICHARD P. MORGAN, ALEX. McLEAN, ISAAC S. RAYMOND, N. B. MORRISON,

Committee on Buildings and Grounds.

. The resolution, which forms a part of the letter addressed to the President of the Urbana and Champaign Street Railroad Company, quoted in the above report, was presented to the Board for separate action and was affirmed, on motion of Mr. McLean, and to it was added the following resolution:

Resolved, That the Urbana and Champaign Electric Railroad Company can not be permitted occupation, with its tracks or otherwise, of any part of the grounds of the University of Illinois, except as a tenant at will.

The report of the Committee on Buildings and Grounds was then approved.

Bids, which had been received for building a President's house, were then opened. They were as follows:

For plumbing, gas, etc.— Robert Loudon, Bloomington	\$1,850 00
For carpentry work— Edwards Mfg. Co., Chicago	8,923 00
For whole job— Chas. H. Post, Chicago. William Mavor Co., Chicago S. McKee, Springfield. F. M. Walton, Danville C. A. Besore, Urbana Frank H. Jahr, Urbana. L. M. Moore & Son, Danville Bevis & Co., Urbana.	15,571 00

Bids offered for the construction of sidewalks were opened and found to be as follows:

Wm. McDonald, DuQuoin—Granitoid, 8 inches cinders, 3<sup>1</sup>2 inches crushed granite, <sup>3</sup>4 inch granite siftings; three years' guarantee—21 cents per square foot.

Simpson Bros. Co., Chicago—6 inches cinders, 3½ inches concrete 1 and 6, ½ inch cement and sand 1 and 1—15 cents per square foot, materials at Champaign; 17 cents per square foot, materials at Chicago.

Six inches einders, 4 inches concrete,  $^{1}_{2}$  inch cement and sand— $17^{1}_{2}$  cents per square foot, materials at Champaign; 20 cents per square foot, materials at Chicago.

P. E. Taintor, Springfield—8 inches cinders, 3 inches concrete 1 to 5, 1 inch cement and sand 1 and 2—15 cents per square foot.

The Board then adjourned to meet at 2 o'clock p. m.

#### AFTERNOON SESSION.

When the Board met pursuant to adjournment the same members were present as in the morning and, besides, Mrs. Flower.

On motion of Mr. Morgan, the bid of Mr. P. E. Taintor, of Springfield, for cement walks, was accepted.

On motion of Mr. McLean, it was voted that the Committee on Buildings and Grounds be authorized to expend \$500.00 for the excavation under Engineering Hall, if the Committee thinks best to do so, and the amount of \$500.00 was appropriated for that purpose.

The following report in relation to the Summer School was presented by President Draper:

University of Illinois, September 5, 1895.

To the Board of Trustees of the University of Illinois.

LADIES AND GENTLEMEN: I beg leave to submit the following report of the last session of the summer school:

The total number of students enrolled was thirty-two. Of these three left within a day or two of registration because they wanted to study subjects for which we had not made provision, and three were students who wished private instruction under the auspices of the school. This left twenty-six regularly enrolled and paying fees. Of these four were University students, and the others were teachers in the public schools.

The numbers taking the various subjects were as follows: Botany, 10; Mathematics, 10; Physiology, 7; Chemistry and Zoölogy, 6 each; English Literature, History, Pedagogy, 5 each; Rhetoric and Physical Culture, 4 each; Political Economy, 3; Psychology and German, 2 each; Manual Training, 1.

The total expenditures, as shown by the statement of the business agent were over \$100.00 less than the appropriation and the fees.

The facts show that the session was a failure. The number enrolled was twelve less than last year. All the indications pointed to an increase, and your director expected between seventy-five and one hundred students. The school had been more widely advertised than before, advertisements having been inserted in two of the leading educational journals and between fifteen and twenty thousand circulars having been distributed among the teachers of the state.

From conversations with those who attended and from reports from surrounding towns, I believe that the cause of the small attendance was the "small-pox scare" from which Champaign and Urbana suffered in the early part of the summer.

I have no recommendation to make as to the continuance of the summer school. I regard it, however, as exceedingly doubtful whether a large number can ever be gotten together here during the summer. If the school should be continued the session should last six weeks.

Respectfully submitted,

DAVID KINLEY,

Director.

President Graham presented a report upon withholding warrants for salary for several months from certain professors and employés who had resigned.

On motion of Mr. McLean, it was ordered that the salaries of Professor Eckhoff, Mrs. Bruner, and Mr. F. H. Dodge, be paid to September 1, 1895.

On motion of Mr. McLean, it was ordered that Professor Bruner be not paid for the months of July and August, 1895.

On motion of Mr. McLean, it was ordered that Mr. Parker's salary be paid to September 1, 1895, and that his services cease at that time, except as he may be employed at a fixed salary by the Chairman of the Committee on Buildings and Grounds.

On motion of Mr. Morgan. it was ordered that Mr. A. B. Baker be paid at the rate of \$500 a year from and after August 1, 1895.

On motion of Mr. McLean, it was ordered that the expenses of persons in charge of the examination of candidates for admission to medical colleges be paid.

On motion of Dr. Smith, it was voted that \$100 be appropriated for compensation of an assistant in the military department, the appointment to be made by President Draper.

President Draper presented the report of the Agricultural Experiment Station.

#### AGRICULTURAL EXPERIMENT STATION REPORT.

University of Illinois, September 3, 1895.

## Dr. A. S. Draper, President of the University of Illinois,

SIR:—I beg leave to submit from the Board of Direction of the Agricultural Experiment Station the following:

Paper A is a statement of expenditures for the quarter ending June 30, 1895.

Paper B is a statement of expenditures for the year ending June 30, 1895.

Paper C is a list of warrants drawn, Nos. 266 to 362, inclusive, for the quarter ending June 30, 1895, and is accompanied with vouchers for the same for audit.

 $Paper\ D$  is a statement of expenditures for the current quarter, ending September 30, 1895.

 $Paper\ E$  is a statement of appropriations asked for the current and next quarters.

#### Paper A-Statement of Expenditures for Quarter ending June 30, 1895.

Board expense	\$24 55
Books and publications Botanical apparatus	4 96
Botanical apparatus	12 62
Bulletins	520 69
Chemical apparatus and supplies	60 82
Tuel and lights	107 02
ncidentals	14 62
Meteorological apparatus	8 40
rinting, stationery, and postage	21.50
alaries Seeds and trees	1,576 66
Seeds and trees	68 97
Fools and supplies	210 56
Wages	1.360 92
Sundry—	1,000 02
Sundry— rrigation experiment	53 55
Tigation caperiment	
Total.	84,045 84

#### PAPER B-STATEMENT OF EXPENDITURES FOR THE YEAR ENDING JUNE 30, 1895.

rd expense					\$105 8
rd expenseks and publications					284 9
anical apparatus					21 8
letins					2, 228
mical apparatus and suppl	lies	• • • • • • • • • • • • • • • • • • • •		•••••	275
tilizers	1100	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		21
l and lights	, <b></b> .	• • • • • • • • • • • • • • • • • • • •			336
dentals	, <b></b> .	• • • • • • • • • • • • • • • • • • • •			21
eorological apparatus	• • • • • • • • • • • • • • • • • • • •				8
nting, stationery, and post	+n.m.				. 80
ries	lage	• • • • • • • • • • • • • • • • • • • •			6, 483
ds and trees	• • • • • • • • • • • • • • • • • • • •			• • • • • • • • •	147
la and aumplica	• • • • • • • • • • • • • • • • • • • •				
ls and supplies	• • • • • • • • • • • • • • • • • • • •				3,858
ges Sundry—				1	
nch bug experiment			V' .		232
ach bug experiment		• • • • • • • • • • • • • • • • • • • •			232 58
od durability experiment					98
gation experiment	<b></b>				53
					045 000
rotal					\$15,000
Total		7			

Paper D-Statement of Appropriations, Expenditures and Balances, Quarter ending September 30, 1895.

	Appropriated.	Expended.	Balances.
Board expense Books and publications Botanical apparatus Botlings and repairs Buildings and repairs. Bulletins Chemical apparatus and supplies Fruel and lights Incidentals Printing, stationery, and postage Salaries Seeds and trees. Tools and supplies Wood durability experiment Wages	50 00 60 00 25 00 150 00 275 00 60 00 95 65 25 00 1,660 00 25 00 50 00	202 51 11 85 70 65 1,106 65	18 00 150 00 72 49 48 10 25 00 553 30 25 00
Total	\$3,915 65	\$2,016 87	1

#### PAPER E-ESTIMATES.

Quarter ending September 30, 1895.	
From farm fund— Tools and supplies	\$250 0
Quarter ending December 31, 1895.	
From general fund— Board expense Books and publications Botanical apparatus Buildings and repairs Bulletins Chemical apparatus Fuel and lights Incidentals Printing, stationery, and postage Salaries Seeds and trees Tools and supplies Wood durability experiment. Wages	\$40 00 225 00 25 00 25 00 300 00 50 00 100 00 25 00 25 00 20 00 50 00 1,660 00
Total	<b>\$3,750 0</b>
From farm fund—	
Dairy fittings. Selection of land in southern Illinois. Tools and supplies. Wages	\$200 0 50 0 175 0 300 0
Total	\$725 0

The Board of Direction asks that the Trustees appropriate Experiment Station funds to meet these estimates.

The Board also reports that it has adopted the following resolutions with regard to experiments with Indian corn:

Resolved, That the Station staff of the Illinois Experiment Station recognizes in Indian corn the most valuable food crop of temperate regions; and, inasmuch as the State of Illinois is in the center of the great corn region of the world, it is further

Resolved, That Indian corn and its relations from every conceivable point of view ought to be considered the foremost subject for experimentation at this Station, including among other things the following items:

- 1. Its botanical, chemical, and physiological characters and requirements.
- 2. Its culture.
- 3. Breeding.
- 4. Its relations to the elements of fertility.
- 5. Ascertaining what rotations or systems of cropping are best adapted to the largest practicable production of corn both in acreage and yield, and to maintaining the fertility of corn lands.

To the latter object all field experiments ought to be directed.

Respectfully submitted,

T. J. Burrill.

President Board of Direction.

On motion or Mr. McLean, the vouchers presented were referred to the Committee on Finance, and appropriations of Experiment Station funds were made according to the estimates in *Paper E*, above.

The Executive Committee reported action taken as follows:

#### EXECUTIVE COMMITTEE REPORT.

URBANA, ILLINOIS, Sept. 4, 1895.

To the Board of Trustees of the University of Illinois.

Gentlemen: Your Executive Committee held a meeting at the University, July 2, 1895, at which all the members of the Committee were present. Messrs. Morgan and Raymond were also present.

The following business was transacted:

Resolved, That Mr. Pence, in conjunction with the county surveyor of Champaign county, proceed to establish the corners of all the lands belonging to the University and that stones be placed in each corner, and said corners recorded.

WHEREAS, Overtures are made to the Trustees indicating that the Board is not justified in paying more than \$1.00 per M feet for the gas consumed by the University, therefore

Resolved, That the Business Agent be directed to communicate with the company supplying gas to the University buildings and seek a reduction to \$1.00 per M in the price of gas consumed by the University before further negotiations are prosecuted, and notify the Committee on Buildings and Grounds of the result as soon as practicable. Adopted.

Your Executive Committee also held a meeting, at which all the members were present, at the Doane House, in Champaign, on the evening of July 2, 1895. At this meeting the Committee appointed Mr. George W. Graham as Superintendent of Buildings and Grounds at a salary of \$100.00 a month; same to take effect Monday, July 8th.

On motion of Mr. McLean, \$62.50 was appropriated for premium on insurance on arms.

NELSON W. GRAHAM, ALEX. McLEAN, N. B. MORRISON,

Executive Committee.

This action of the Executive Committee was confirmed.

The Farm Committee reported back the communication from Professor Davenport with regard to the agricultural department with the recommendation that the matter be considered by the full Board. The recommendation was adopted.

The Board adjourn to meet at 8 o'clock p. m., at the Doane House in Champaign.

#### EVENING SESSION.

After the call to order, President Graham asked Mr. McLean to occupy the chair for the evening.

#### AGRICULTURAL DEPARTMENT.

After a prolonged consideration of Professor Davenport's communication with regard to the farm and the Agricultural Experiment Station, on motion of Mr. Raymond, it was voted that \$1,000 be appropriated, together with the \$2,000 appropriated at the June meeting of the Board to be expended under the direction of the Farm Committee.

The Board then adjourned to meet at 8:30 o'clock the next morning.

#### SESSION OF FRIDAY.

When the Board was called to order pursuant to the adjournment, the same members were present as on Thursday, except Dr. Smith.

The following resolution, offered by Mr. Morgan, was adopted:

Resolved, That the members of the Board proceed to examine, individually, the plans submitted for the new library building, and that each select as many sets of plans as seem most meritorious, up to the number of ten or twelve; that the Board then reassemble and the members compare notes and agree upon the plans which seem most meritorious to the majority of the members; that such selected plans be then submitted to the chief of the architectural department and the librarian of the University to examine critically and report as to any technical questions which may be involved, and as to whether they can be executed within the appropriation; and also that such chief and the librarian examine generally all the plans submitted, and if any set which has not been selected by the Board seem to them as having merits which have been overlooked, in whole or in any particular features, by the Trustees, they call the attention of the Board to the same in their report, and that the Board adjourn and as soon as the report of the experts is ready the Board reconvene for the purpose of determining the matter.

The Treasurer's report was submitted and referred to the Finance Committee, it was as follows:

### TREASURER'S REPORT.

University of Illinois in Account with Charles W. Spalding, Treasurer, August 31, 1895.

1895.	DR.		
Мау	31 Balance		\$55,148 5
June	6 Interest due January 1, 1894, contract 23, James Lowe.	\$133 60	
**	7 Bond No. 3, City of Urbana, due June 1, 1895	1,000 00	,
4.6	7 Urbana interest coupons, due June 1, 1895.	440 00	
4.4	18 Morgan county coupons, due June 15, 1895	1,400 00	
44	21 Montgomery county councing due Tune 15 1805	190.00	
4.4	24 Champaign county coupons, due June 1, 1895. 25 From S. W. Shattuck, on general fund account. 1 Austin coupons, due July 1, 1895. 1 Champaign county coupons, due June 14, 1895. 1 Champaign county coupons, due July 1, 1895.	182 50	
• •	25 From S. W. Shattuck, on general fund account	1(394 52	!
uly	1 Austin coupons, due July 1, 1895	575 00	
• •	1 Homer township coupons, due June 14, 1895	375 00	ļ
**	1 Champaign county coupons, due July 1, 1895	2,250 00	1
• •			
	2 Logon county country due July 1 1905	722 39 750 00	
4.4	3 Kankakae county coupons, due July 1, 1895	2,400 00	
• •	3 Macoupin county coupons, due July 1, 1895	618 00	
**	3 Pittsfield school coupons, due July 1, 1895	630 00	
••	5 Montgomery county bond No. 11, due July 1, 1895	1,000 00	i
44	5 Montgomery county coupons, due July 1, 1895	195 00	i
••	5 Sangamon county coupons, due July 1, 1895	250 00	
	Elitchneid school coupons, due July 1, 1895	440 00	-
**	3 From W. L. Pillsbury, on farm account, 3 Logan county coupons, due July 1, 1895. 3 Kankakee county coupons, due July 1, 1895. 3 Macoupin county coupons, due July 1, 1895. 3 Pittsfield school coupons, due July 1, 1895. 5 Montgomery county bond No. 11, due July 1, 1895. 5 Montgomery county coupons, due July 1, 1895. 5 Sangamon county coupons, due July 1, 1895. 5 Litchfield school coupons, due July 1, 1895. 8 Gallatin county coupons, due July 1, 1895. 8 From U. S.—quarterly Experiment Station warrant. 11 Principal contract No. 46, W. T. Gore, assignee. 12 U. S. appropriation, due July 1, 1895. 15 Sangamon county bond No. 3. due July 11, 1895. 16 Sangamon county coupons, due July 11, 1895.	630 00	ĺ
	11 Principal contract No. 46 W. T. Comp. aggirment	3,750 00	
44 -	11 Interest on above contract to date	1,200 00 52 00	
	12 II S appropriation due July 1 1895	21,000 00	
• •	15 Sangamon county bond No. 3, due July 11, 1895.	1,000 00	
* *	16 Sangamon county coupons, due July 11, 1895	150 00	
• •			
44	26 State appropriation for salaries, etc. 26 State appropriation for additions to library 26 State appropriation for apparatus and appliances	1,600 00 99,000 00	
	26 State appropriation for additions to library	3,000 00 3,000 00	
44	26 State appropriation for apparatus and appliances	3,000 00	ł
4.4	25 State appropriation for material and shop practice 26 State appropriation for cabinets. 26 State appropriation for fitting and furnishing Enginee	1,500 00	į.
4.4	26 State appropriation for detting and furnishing Engine	1,000 00	ĺ
	ingHell	5,000 00	Į.
**	26 State appropriation College of Engineering	15,000 00	
. 4 4	ingHall 26 State appropriation, College of Engineering 26 State appropriation, improvements in Chemical Laboratory	r- 15,000 00	
	atory.  State appropriation, laboratory of vegetable physiologous	5,000 00	
44	26 State appropriation, laboratory of vegetable physiological	gy 2,000 00	
::	20 State appropriation, are protection	2.000 001	
	26 State appropriation, building and equipment of Biolo	g-	
	ical Experiment Station	2,500 00	1
	20 State appropriation, one-nail operating expenses	1 500 00	
4.4	above	1,500 00	
	equipment	5,000 00	
4.4	26 State appropriation, paving street and walks	9,300 00	
ugust	1 Champaign county coupon, due July 1, 1895	50 00	1
••	1 Taylorville coupons, due August 1, 1895	1,200 00	
	1 Taylorville coupons, due August 1, 1895	27,	
44			ĺ
44	2 Pike county coupons, due July 1, 1895. 2 Mattoon coupons, due August 1, 1895. Champaign county bonds Nos, 21, 22, 23, and 28, d August 1, 1895.	2,730 00 150 00	1
44	2 Mattoon coupons, due August 1. 1895	150 00	1
	5 Champaign county bonds Nos, 21, 22, 23, and 28, d	10,000,00	
	5 Champaign county coupons, due August 1, 1895	2,000 00 450 00	
**	7 Morgan county bond No. 3, due August 1, 1895	400 00	
			t ·
4.4	7 Montgomery county coupons, due August 1, 1895	60 00	
	11 Return of '93 tax. Dale & Roise.	15 81	<b>,</b>
44	11 Return of '93 tax, Nels Olson	9 39	
44	11 Rebate of '93 tax, Pope county	17 12	
4.4	7 Morgan county coupons, due August 1, 1895. 7 Montgomery county coupons, due August 1, 1895. 11 Return of '93 tax, Dale & Roise. 11 Return of '93 tax, Nels Olson. 11 Rebate of '93 tax, Pope county. 11 Rebate of '94 tax, Pope county. 13 Taylorville bond No. 1, due August 1, 1895, on option. 20 Mansfield coupons, due July 1, 1895.	3 24	
44	Taylorville bond No. 1, due August 1, 1895, on option.	1,000 00	
4.6			
4.4	29 From S. W. Shattuck, on general fund	1,820 56	1
-	31 Interest, June, July, and August, on endowment fur	305 09	
	4 per cent		1
	or inverest, dune, dury, and August, on other funds, a	-761	1
••		A5Q 71	
**	per cent	459 71	\$223, 533
••		459 71	\$223,533

1895.	CR.		
August	31 By amount paid out of general fund as per list of war-		
	rants attached hereto	\$33, 136 66	
• •	as per list of warrants attached hereto	3,789 06	
	fund as per list of warrants attached hereto	865 36	
	31 By amount paid out of state appropriation for salaries as per list of warrants attached hereto	3,855 00	
1.	By amount paid out of state appropriation for Engineering Hall as per list of warrants attached hereto By amount paid out of state appropriation for Natural History Hall as per list of warrants attached hereto	4,613 94	
••	31 By amount paid out of state appropriation for Natural History Hall as per list of warrants attached hereto	216 18	
4.4	31 By amount paid out of state appropriation for Labora- tory of Natural History as per list of warrants at- tached hereto	2,317 10	
• •	31 By amount paid out of U. S. fund as per list of warrants	·	
4.6	attached hereto	2,655 44	?
4.4	as ner list of warrants attached hereto	44 25	
**	31 By amount paid out of state appropriation for Engineering College as per list of warrants attached hereto 31 By amount paid out of state appropriation for fitting and furnishing Engineering Hall as per list of war	2,430 59	
**		24 65	
	31 By amount paid out of state appropriation for building and equipment of Biological Experiment Station as per list of warrants attached hereto	635 00	
	31 By amount paid out of state appropriation for Biological Experiment Station as per list of warrants attached		
. • •	hereto	117 54	
4.6	By amount paid out of state appropriation for Chemical Laboratory as per list of warrants attached hereto By amount paid out of state appropriation for Minnesota taxes as per list of warrants attached hereto	41 11	
	sota taxes as per list of warrants attached hereto	1,600 00	
	31 By amount paid out of state appropriation for apparatus and material as per list of warrants attached hereto	2 85	\$56,344 7
August	31 By amount paid out of endowment fund for Sidney		
. • •	bonds	\$4,200 00	
	county bonds.	30,000 00	34,200 0
	Balances—		\$90,544 7
	Balances—	004 044 00	φου, σεε ι
	Endowment fund. U. S. Experiment Station fund account. U. S. fund.	\$21,244 90 2,688 61	
	U. S. Experiment Station farm account	18, 375 05 89 10	
	State appropriations—	90,027 94	
	Current fund. Engineering Hall Furnishing and heating Natural History Hall	420 12	·
	Additions to library	415 39 3,000 00	
	Cabinets	1,002 74 22,569 41	
	Cabinets. Engineering College. Astronomical Observatory.	5,000 00	
	Fitting and furnishing Engineering Hall Building and equipment, Biological Experiment	4,975 35	
	Station.  Biological Experiment Station, operating expenses.	1,865 00	
	Apparatus and material	1,382 46 2,997 15	
	Shop practice	1,500 00 4,958 89	
	Laboratory of Vegetable Physiology	2,000 00	
	Laboratory of Vegetable Physiology	2,000 00 9,300 00	
		\$195,812 11	
	Less overdrafts—		
	General fund		
		7,675 09	188, 137 0

Professor Shattuck, Business Agent, presented his report as fol-fows:

## BUSINESS AGENT'S REPORT.

University of Illinois, September 4, 1895.

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

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

Paper A, a statement of the current appropriations for the three months ending September 1, 1895.

Paper B, a showing of the state appropriations September 1, 1895.

Paper C, the same for the U.S. fund.

Paper D, the list of vouchers presented for audit, being numbers 1,151 to 1,650, inclusive.

PAPER A-CURRENT APPROPRIATIONS.

June 11 and 27, 1895.	Appropriated.	Receipts appropriated.	Expended.	Balance.
Board expense Salaries for instruction and for President \ U. S. fund Salaries for services Buildings and grounds Fuel and lights Stationery and printing. Preparatory School. Mechanical department Architectural department Horticultural department Agricultural department Military department Laboratories Library and apparatus Incidentals.	19, 305 00 2, 177 42 125 06 2, 000 00 1, 500 00 695 00 356 92 98 47 13 19 2, 025 00 31 42 1, 000 00 500 546 06	\$15 00 43 00 133 45 384 32 1, 131 50 96 60	2,037 18 1,343 90 728 01 732 99 1,229 97 109 79 7 40 31 42 1,618 89 14 04	
Sundries— Water supply. Furniture and fixtures. Heating apparatus. Advertising. Biological Station. Art department. Military scholarships. Minnesota lands. Commencement. A. Am. Agr'l Coll. and Expt. Stations. Agricultural convention. Insurance. Summer school. South farm. Music fees South farm. Music fees Senator Morrill's bust. University magazine.  Illini Oratorical contest.	300 00 500 00 2, 060 82 446 53 57 83 285 00 100 00 200 00 10 00 70 65	270.00 700.00 80.00	109 33 217 02 101 13 419 27 40 58 285 00 105 10 200 00 10 00 70 65 62 50 1,029 54 192 82	144 48 707 18

#### PAPER B-STATE APPROPRIATIONS.

For the years 1893-1895.

August 31, 1895.	Received.	Expended.	Balance.	Assigned
Closed out.	\$109,496 14	\$109,496 14		
Cabinets	1,000 00			\$46 9
Furnishing and heating Natural History Hall	6,000 00			
Engineering building	160,000 00			
Applied mechanics	472 00			140 1
livil engineering	233 00			
3otany	450 00			72 5
ibrary	10,000 00	10,000 00		
loölogy	1,200 00			
leology	500 00			21 2
Buildings and grounds	2,100 00	2,100 00		
dechanical engineering	4,000 00			
Iunicipal and sanitary engineering	50 00	50 00		
deology cases	300 00			
Pedagogy	150 00			
treek	150 00			
Woman's gymnasium	300 00	145 37	154 63	154 6
Total	\$296, 401 14	\$294,802 58	\$1,598 56	\$1,598 5
llinois State Laboratory of Natural History	\$15,313 26	\$15,313 26		

For the years 1895-1897.

Taxes on lands	\$1,600 (	00	\$1,600 00		<del></del>
Salaries, etc.— Heating apparatus Library catalogue. Buildings and grounds Art and design Physical culture School of music Lectures Unassigned	600 ( 250 ( 1,000 (	00 94 00 00 00 00 06	199 92 574 94	\$241 40 08 250 00 600 00 250 00 1,000 00 86,625 06 \$88,966 54	250 00 600 00 250 00 1,000 00
Apparatus and Materials— Psychology Zoölogy Chemistry Applied chemistry Geology Physiology Botany and horticulture Unassigned	500 ( 500 ( 500 ( 300 ( 500 (	00 00 00 00 00 00		\$300 00 500 00 500 00 497 15 300 00 500 00 300 00 100 00 \$2,997 15	500 00 300 00
Cabinets. Geology Unassigned	\$500 ( 500 ( \$1,000 (	00	\$44 25  \$44 25	\$455 75 500 00 \$955 75	
Library		=			
Shop Practice, Mechanical shop Unassigned	1,000	00		\$500 00 1,000 00 \$1,500 00	

# $Paper\ B-State\ Appropriations- {\bf Continued.}$

August 31, 1895.	Received.	Expended.	Balance.	Assigned.
Chemical Laboratory— Salary. Changes and furniture Apparatus and chemicals Expenses. Unassigned.	1,750 00 1,100 00 300 00 1,250 00		\$600 00 850 29 1,100 00 300 00 1,250 00	850 29 1,100 00 300 00
Vegetable physiology			\$4,100 29 \$2,000 00	
Biological station	\$2,500 00	\$675 80	\$1,824 20	\$1,824 20
Operating Biological Station— Expenses Unassigned	ļ		<del></del>	\$38 27
Furnishing and Fitting Engineering Hall— Electric wiring. Furniture. Unassigned.	2,288 64	\$55 35		\$1,194 03 2,233 29
College of Engineering— Machine shops Equipment	\$15,000 00 10,000 00	\$4,607 84	\$10,392 16 8,460 92	
Astronomical observatory	\$25,000 00 \$5,000 00	\$6,146 92	\$18,853 08 \$5,000 00	
Paving street, etc.			\$9,297 36	
Fire protection	\$2,000 00		\$2,000 00	

## PAPER C-UNITED STATES FUND.

	Received.	Expended.	Balance.	Assigned
Year ending June 30, 1894.				
Before reported uponArchitecture	\$18,500 00 500 00		\$29 97	
	\$19,000 00	\$18,970 03	\$29 97	\$29 9
Year ending June 30, 1895.				
Salaries for instruction	\$18,865 00 135 00 1,000 00	\$18,865 00 135 00 1,000 00		
	\$20,000 00	\$20,000 00		
Year ending June 30, 1896.				
Salaries for instruction	\$5,309 84 15,690 16	\$5,309 84	\$15,690 16	
	\$21,000 00	\$5,309 84	\$15,690 16	

Paper E, an estimate of receipts and expenses for the twelve months from September 1, 1895, to September 1, 1896.

Paper F, the appropriations the Board is requested to make for the three months ending November 30, 1895.

The Board is also requested to assign the state appropriation of \$3,000 for the library.

Paper G, is a number of bills, which the Board is requested to act upon, those of Mr. Spalding's in particular.

I should be glad if a definite contract could be made for the use of electric power, as there has been more or less friction in the settlement of bills on that account.

I have also to report that I have been unable to come to any understanding with the gas company, for the price of gas, in the future. The papers in this connection have been handed to Col. Morgan, at his request.

Paper H, is the inventory of apparatus and stock in the several departments of the University.

The Superintendent of Buildings and Grounds requests that the powder stored in the cannon house be placed elsewhere.

Respectfully submitted,

S. W. SHATTUCK,

Business Agent.

The vouchers and the statement of appropriations that should be made were referred to the Finance Committee.

The request of Professor Forbes, Director of the State Laboratory of Natural History, for appropriations to the Laboratory, was referred to the Finance Committee.

The following rules with regard to the employment of instructors in the University and their duties, were adopted, on motion of Mr. McLean:

#### INSTRUCTORS, TERM OF EMPLOYMENT AND DUTIES.

In the absence of some special arrangement, the employment of members of the Corps of Instruction will be either continuous or for a period of ten months. Those continuously employed must hold themselves in readiness for service at any time during the year and will receive their salary in twelve monthly installments. The others will receive their salary in ten installments and their employment will be from September 1st to July 1st, within which period they must at all times be in readiness for any required services.

It is assumed that all persons worthy of continuous employment will be interested above all else in developing the work of their departments, will have no interest incompatible therewith, and will give the utmost of their powers, at all times, to the promotion of that end.

The importance of rest and recreation to teachers is recognized, and it is desired that all shall have reasonable vacations and shall use their vacations rationally to promote the ends for which they are afforded; but it must not be supposed that the vacation of the Corps of Instruction extends from commencement day to the day when instruction begins in September. All members of the corps will be expected to be in actual attendance up to the first day of July, and on and after the first day of September, except upon leave extended, for special reasons, by the President of the University, and that in July and August all will keep the President notified of their whereabouts and will respond quickly to any call for service.

The Board of Trustees reserves the right to terminate services at any time, with or without notice, and employment must be accepted upon this condi-

tion. When service is terminated by the Board, notice will be given, however, at the earliest time practicable, and in case a member of the corps intends to leave the service of the University it is but fair that the President of the University should be advised at least as soon as such purpose has been determined upon. In case a resignation is presented to take effect at some future time, the Board will exercise its right to terminate the service at that time, or at some earlier date, as may seem just to all the interests involved. In case a member of the Corps of Instruction enters upon regular employment elsewhere before the termination of service here, that fact will work a termination of service and a cessation of salary here. And for any failure to comply with all of the conditions of loyal and interested service, which are an honorable obligation upon all members of the Corps of Instruction, the Board of Trustees will feel free to withhold salary so far as the interests of the University and justice to others may seem to demand.

The Committee on Finance offered the following resolution with regard to telephones:

Resolved, That the Committee on Finance determine upon the ornamental design for poles for the new telephone system to be erected on the campus, and that the ten telephones contracted for be located as follows, viz.: Military Hall, Mechanical Shops, Engineering Hall, President's House, Chemical Laboratory, Natural History Hall, President's office, the barns, office of Superintendent of Buildings and Grounds, the central heating station; and that the old telephones be removed when the new system is in working order, and that the Business Agent settle the bills at the agreed-upon price, provided the service is satisfactory.

The resolution was adopted.

On motion of Mr. McLean, the following appropriations were made, as asked for by the Business Agent.

Sundry balances—Paper A— Agricultural department. Advertising and catalogue. Senator Morrill's bust University magazine. Illini. Oratorical contest.		\$5,407 29
Board expenses Salaries for instruction and President. Salaries for services. Buildings and grounds. Fuel and lights Stationery, printing and postage. Mechanical, architectural, and horticultural departments. Military department. Laboratories Library and apparatus.	25,730 00 3,150 00 1,000 00 3,000 00 1,000 00 600 00 100 00 500 00	
Inoidentals. Heating apparatus. Furniture and fixtures. Water supply. Military scholarship Gymnasium	400 00 500 00 300 00 125 00	37,077 50
Total		\$42,484 79

The state appropriation of \$3,000.00 was assigned for the use of the library.

## It was ordered that the bill of the Treasurer, Mr. Spalding, for-

Accrued interest on Sidney school bonds. Premium on Macoupin county bonds Accrued interest on same Expenses.	125 00
Total	\$2,523 28

be paid.

The bill of the Electric Lighting and Power Co. for power from July 1 to August 1, 1895, amounting to \$40.00 was ordered paid.

On motion of Mr. McLean, the matter of storing powder was referred to the Superintendent of Buildings and Grounds and to Captain Brush.

Appropriations for the State Laboratory of Natural History were made as follows:

For library 2  Tor salaries and assistance. 5  For bulletins 2  For illustrations of State Entomologist's report. 5  For investigation of contagious diseases of insects 7  For expenses of Biological Station (State Laboratory) 3	375 0 250 0 912 5 250 0 62 5 375 0 375 0	00 50 00 50 00 00	00 50 00 50 50 00
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## Mr. McLean offered the following resolution, which was adopted:

Resolved, That the Committee on Buildings and Grounds is hereby authorized, after advising with the architect and comparing the bids which have been received, and investigating the responsibilities and qualifications of bidders, to enter into a contract for the erection of a President's house with the responsible bidder whose proposition shall be found most favorable to the University.

On motion of Mr. Morgan, \$175.00 was appropriated for heating, Professor Davenport's house.

The Committee on Buildings and Grounds was authorized to extend water mains.

The Finance Committee made the following reports with regard to the Treasurer's report, and upon the vouchers of the Experiment Station, and they were severally adopted:

Urbana, Ill., September 6, 1895.

To the Board of Trustees of the University of Illinois.

Gentlemen: Your Committee on Finance begs leave to report that it has examined the report submitted by the Treasurer, Mr. C. W. Spalding, bearing date August 31, 1895. This report shows balance on hand May 31, 1895, of \$55,148.57, and a total of balance and receipts to date of \$278,681.75.

It shows expenditures amounting to \$90,544.73; balances, \$195,812.11; overdrafts, \$7,675.09, making a total of expenditures, balances, and overdrafts, of \$278,681.75.

Respectfully submitted,

N. B. Morrison, S. A. Bullard,

Committee on Finance.

URBANA, ILL., September 6, 1895.

To the Board of Trustees of the University of Illinois.

GENTLEMEN: Your Finance Committee begs leave to report that it has examined Agricultural Experiment Station vouchers numbers 172 to 362, inclusive, and has found the same correct and correctly receipted.

Respectfully submitted,

N. B. Morrison, S. A. Bullard,

Committee on Finance.

The following resolution, with regard to the choice of plans for the library building, was adopted on motion of Mr. Morgan:

Resolved, That the twelve plans designated respectively by "America," a black fleur-de-lis, "Via Veritas Vita," a six pointed star in a circle, "Liber," "Meliora Speramus," "Libre," "Rex," a white triangle in a circle, "Veritas," "Ste. Genevieve," and "Keys," be selected as the ones which seem most meritorious to the Board, pursuant to resolution previously adopted, and that the architectural experts be requested to proceed with all practicable speed to carry out said resolution so far as the said plans are concerned.

The Board adjourned.

Secretary.

W. L. PILLSBURY,

N. W. GRAHAM.

President.

## METING OF SEPTEMBER 19, 1895.

The Board of Trustees of the University of Illinois met in special session in the University Parlor in Urbana, Ill., at 3 o'clock p. m., Thursday, September 19, 1895, pursuant to the following call issued by the Secretary September 14, 1895:

"By the order of the President, Mr. Nelson W. Graham, the Board of Trustees of the University of Illinois is hereby called to meet in special session at the University Parlor in Urbana, Ill., at 3 o'clock p. m., Thursday, September 19, 1895, to consider the report of the architects upon designs submitted for the new library building, and to transact such other business as may be duly presented."

There were present Messrs. Armstrong, Bullard, Graham, McLean, Morgan, Morrison, Raymond, and Dr. Smith. Absent, Governor Altgeld, Messrs. Inglis and Judy and Mrs. Flower.

On motion of Mr. Bullard it was voted that the Board hear the report of the committee of experts appointed to examine the plans submitted for the new library building.

Before this was read, however, President Draper announced that Assistant Professor Frank Zinkeisen had sent in his resignation on account of ill health. The resignation was accepted, and Mr. George Daniel Hammond, A. B., was appointed his successor at a salary of \$1,000.00 a year from September 1st.

REPORT ON DESIGNS FOR LIBRARY BUILDING.

URBANA, ILLINOIS, September 18, 1895.

To the President and Board of Trustees of the University of Illinois.

Gentlemen: The committee appointed by your body to make a careful study of the twelve selected designs for the proposed University library, begs leave to present the following report:

In accordance with your instructions the twenty-six other designs were first carefully examined and two of them were chosen for study, those marked "J'ai étudié and "Messenger." These were subjected to precisely the same examination and criticism as the twelve designs selected by your body and especially referred to this committee.

Each one of the fourteen designs was first carefully examined to determine whether it satisfied each requirement of the program, and the results entered on a check list.

Since neither the areas of the rooms nor the number of persons using them was specified, but was left to the discretion of the architect, it became necessary to adopt a series of standards in accordance with experience in the old library, and the probable future requirements for this building.

## 1. Capacity of Library.

The book cases are required to have a capacity of 150,000 volumes. As an average of measurements in the old library, we found seven books per lineal foot of shelf. But since eight books are commonly allowed per lineal foot of shelf that ratio has been adopted. The capacity of the stack room has been determined in each case by using length of cases as shown, assuming seven shelves in height as usual, and thus allowing 112 volumes per lineal foot of double book cases shown on plan. It was found also that a convenient and reasonably economical arrangement of the cases allowed about 2.25 volumes per cubic foot of space in stack room. A larger proportion is evidence of crowding and a smaller one shows a lack of economy in arrangement.

#### 2. Generel Reading Room.

It has been presumed that to provide sufficiently for a reasonable increase in number 175 sittings should be provided in this room, which is an increase of 55 over the number in the present library. An area of 20 square feet is allowed to each sitting, including space occupied by tables and aisles. In some of the best libraries 25 square feet is allowed, though this is perhaps luxurious.

- 3. The Periodical Reading Room should seat fifty persons, and the same area is allowed per sitting.
- 4. The Reception Parlor should seat at least thirty persons, allowing 15 square feet per sitting, as it would only be partially filled, which would make a minimum area of 450 square feet; at the very least this room should have an area of 400 square feet.
- 5. The Seminary Rooms should seat from twenty to twenty-five feet each, and on account of the comparatively large space occupied by the long table and the wall book cases, 25 square feet has been allowed per sitting.
- 6. The suites of administrative offices should be composed of rooms of proper size, easily found and accessible, arranged in proper sequence, and each suite should have its toilet room, closet, and vault, or a compartment in a common vault, or a special toilet and clothes room should be provided near the offices. Of course all these rooms must be well lighted.

The Trustees' room would sometimes be required to seat sixteen persons, arranged around a long or a cross-shaped table, and with due allowance for convenience and propriety, its area should not be less than 450 square feet. Its shape and dimensions must also conform to the desired arrangement of the table, though this latter part has not been insisted upon.

- 7. With due respect to economy in the arrangement and cost of the building, the central halls and corridors of the building must not be cramped, but, on the other hand, they should not be wastefully enlarged at the expense of the usable rooms in the building.
- 8. The stairways must be conspicuous, easily found, effective in design, and of sufficient dimensions. Two stairways are preferable to a single one, for security in case of fire.
- 9. The entrances on eastern and western façades should be dignified and imposing, with direct access to the central halls and stairways on main floor. This condition can hardly be fulfilled by any design having its stack room arranged as an external addition on either east or west front. But due allowance was made therefor.
- 10. To secure the best arrangement, it has been assumed that the general toilet rooms should be placed in the basement, with a common clothes check room on the first floor.
- 11. For greatest convenience in use the library room should be arranged on the first or principal floor, with the offices and seminary rooms on the second. The library rooms must be capable of being closed, but without preventing access to the offices and seminary rooms.
- 12. Proper and sufficient lighting of all rooms has been made the subject of special and careful examination.

- 13. The delivery room should have a proper oversight of the reading room so far as possible.
- 14. The cost of the building is limited to \$150,000.00. It is not possible to construct a strictly fire-proof building, with steel beams and tile floors, tile partitioning, iron and slate roof, and stone-faced external walls, in a good and durable manner, for less than 20 cents per cubic foot. The cost of each design has therefore been approximately determined on that basis, multiplying this price (which has been increased in some cases in order to make due allowance for a more expensive interior or exterior) by its actual total volume. Therefore, the volume of this building cannot exceed 750,000 cubic feet, taken from bottom of foundations to average height of roof. Your committee is well aware that many cheaper methods of non-burning construction are now in use for important buildings, but their durability remains to be proved by time and experience in good buildings, and it is wisest not to employ any construction that has not been proved at least equal to that now in use in good fire-proof office and public buildings.

In criticising the external walls of these designs, this committee has been guided by the following principles:

- a. The design must be well balanced, with all its parts at a common scale.
- b. The eastern and western façades must be both pleasing and satisfactory.
- c. The general reading room should be at the north end of the building.
- d. A stack room added to either eastern or western front would be somewhat objectionable.
- e. General effect of building must be noble, dignified, and strong, yet quiet and reposeful, free from pretentiousness or show.

The committee presents herewith the results of its study of each of the fourteen designs subjected to special examination.

After completing these special studies and a comparison of the results, and of the best designs, this committee begs leave to present its final conclusions, as follows:

- 1. That the first prize be awarded to the design marked "Via Veritas Vita," as exhibiting the best and most available design for the purpose, its plan being especially commendable.
- 2. That the second prize be awarded to the design marked "Ste. Genevieve," on account of its very noble and pleasing exterior, and its generally good arrangement of plan, whose defects can be remedied as suggested.
- Mr. Bicknell dissents from this recommendation and would place the design marked "Meliora Speramus" second, on account of its plan, somewhat preferable in arrangement, placing library rooms on first floor.
- 3. That the third prize be awarded to the design marked "Meliora Speramus," on account of its good plan and capability of future enlargement as may be required, as well as its effective exterior.
- Mr. Bicknell dissents and would place the design marked "Ste. Genevieve" third, because its library rooms are on the second floor, and it has other serious defects of arrangement.
- 4. That the fourth prize be awarded to the design marked "America" for its effective exterior and interior, though some rooms are too small. These can be enlarged as suggested.

For your information, the committee appends to this report a full statement of the results of the examination of each one of the twelve designs referred to it for consideration, and also of the two additional designs, which were thought worthy of equally careful examination.

Very respectfully submitted,

N. C. RICKER, JAMES M. WHITE, PERCY F. BICKNELL,

On motion of Mr. Raymond, it was voted that premiums be awarded as recommended by the committee of experts. The envelopes containing the names of the competitors were then opened and it was found that the first premium had been awarded to—

Edward G. Bolles, Springfield, Ill.

The second to Arms & Hart, Chicago, Ill.

The third to Clinton J. Warren, Chicago, Ill.

The fourth to Messrs. Osgood & Stone, Grand Rapids, Mich.

On motion of Mr. Morrison, it was voted that when the Board adjourn it should adjourn to meet at 10 o'clock a.m., Wednesday, September 25, 1895, in the office of the Superintendent of Public Instruction, Springfield, Ill.

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

Resolved, That the Business Agent be instructed to purchase ladders, buckets, hose, and ten Babcock fire extinguishers, to be distributed as the President may deem best; and that the Superintendent of Buildings and Grounds take charge of the same and provide suitable shelves and housing.

Resolved, That the said Superintendent of Buildings and Grounds organize his janitor force into a fire company prepared for instant action.

On motion of Mr. Morrison, it was voted that so much of the state appropriation of \$2,000 for fire protection as may be needed be appropriated for the purchase of ladders, buckets, etc., enumerated in the foregoing resolution.

The Board then adjourned to meet at 8 o'clock in the evening.

#### EVENING SESSION.

On motion of Mr. Morrison, it was voted that the Committee on Buildings and Grounds and the Business Agent make a contract with the Electric Lighting and Power Co. for light and power furnished for one year from August 1, 1895.

A resolution offered by Mr. Morrison, proposing to give a name to the avenue running south from military hall, was referred to the Committee on Buildings and Grounds for a report at the next meeting.

The Finance Committee made the following report:

Urbana, Ill., September 11, 1895.

To the Board of Trustees of the University of Illinois.

GENTLEMEN:—Your Committee on Finance, to which were referred the vouchers submitted by the Business Agent, begs leave to report that it has examined vouchers Nos. 1,651 to 2,125 for the quarter ending September 1, 1894; also vouchers Nos. 1 to 500 for the quarter ending December 1, 1894; and also vouchers Nos. 501 to 1,150 for the quarter ending March 1, 1895, and has found the same correct and correctly receipted.

Respectfully submitted.

N. B. Morrison, S. A. Bullard, J. E. Armstrong,

Committee on Finance.

The Secretary presented a bill amounting to \$4.50 from R. A. Webber, for continuation of abstract of title. The bill was ordered paid from the general fund.

The following resolution, offered by Mr. Morrison, was, on his motion, adopted:

Resolved, That all moneys belonging to the University, from whatever source derived, should be credited to some fund, either general or special, and that all appropriations should be for the full amount needed for the objects named. This resolution to take effect from and after December 1, 1895.

The following resolution offered by Mr. Graham was, on his motion adopted:

Resolved, That President Draper, Mr. Morgan, and Mr. Bullard be and are hereby appointed a committee to investigate the business methods of the University, provided for in the rules of the Board of Trustees as well as any, if any such there be, not so provided for, and report to the Board the result of their investigation with such recommendations for the future as in their opinion will promote greater efficiency, economy, and safety in the management of the material interests of the University.

It was voted that the Superintendent of Buildings and Grounds, Mr. G. W. Graham, be authorized to pay the janitor in University Hall at the rate of \$35.00 per month, from the time he began work.

On motion of Mr. Morrison, it was voted that the bond of the Business Agent be \$10,000 instead of \$15,000 as ordered at the meeting of June 27, 1895, and that Professor S. W. Shattuck be re-appointed Business Agent for the year beginning September 1, 1895.

An appropriation of \$200, from the general fund, was made for use of the librarian in cataloguing.

An appropriation of \$75 was made for an assistant to Professor Frederick.

The purchase of five swords and belts for the military department was authorized, and payment for them from the general fund.

President Draper presented the following report with regard to the examination of medical students:

URBANA, ILLINOIS, Sept. 19, 1895.

To the Board of Trustees of the University of Illinois.

Gentlemen: The undersigned committee, directed at your June meeting to report a plan for medical entrance examinations and suggestions in relation thereto, begs respectfully to submit the following:

We advise that a Faculty Committee on examinations be appointed by the President of the University, whose duty it shall be to provide questions, in accordance with requests from the State Board of Health; to conduct examinations or assist in their management at the call of the Board; to mark examination papers, or to revise such markings if made by other members of the Faculty, and to sign reports on examinations as representatives of the Faculty of the University.

We submit herewith, with our approval, a copy of a blank application for examination, as prepared and printed by the State Board of Health.

We advise that the time and place of holding examinations be left wholly to the judgment of the said State Board of Health, but that the Trustees re-

quest that these be so regulated that the University shall have at least two weeks' notice in advance, and if practicable, that for the present no more than three examinations per annum may be made necessary.

A. S. Draper, Chairman of Committee.

The report was approved and its recommendations adopted.

Professor D. W. Shea handed in his resignation, and it was accepted, to take effect when President Draper could arrange for taking care of his classes.

A request was received from Captain W. R. Courtney, Company D, Fifth Infantry, Illinois National Guard, asking permission to use the rifle range for the present season. The Secretary was directed to write Captain Courtney that the request could not be granted, inasmuch as the tenant of the south farm, on which the range is, objects to such use.

Mr. Morgan reported from the Committee on Buildings and Grounds that the work of paving, making walks, and carrying forward other improvements in charge of the committee, was progressing satisfactorily. He said further that he had asked permission of the Urbana and Champaign Electric Railroad Company to extend across their track the walk running from Green street to Military Hall, and that the request had been cheerfully granted.

He also stated that he had received a communication from B. F. Harris, Jr., making the following proposition in regard to furnishing gas:

"I propose to furnish gas at the rate of \$1.40 per 1,000 cubic feet for all gas used up to one million feet per year. When the total yearly consumption reaches or exceeds one million feet, the price on the whole amount to be \$1.25 per 1,000. When the total yearly consumption reaches or exceeds one million and a half feet, the price on the whole consumption to be \$1.00 per 1,000 feet."

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

Resolved, That it is the intention of the Board that the Superintendent of Buildings and Grounds shall have general supervision of the greenhouse and gardener and of the plants and flowers about the buildings and grounds of the University, excepting, however, the scientific instructions of Doctor Burrill to the gardener, which are paramount as to the cultivation and propagation of the flowers and plants.

On motion of Mr. McLean, it was voted that Mr. Armstrong see the Illinois Heating and Lighting Company, of Chicago, and invite a proposition to heat and light the University, and that he submit such proposition to the Board at its next meeting.

On motion of Mr. McLean, it was voted to extend the sewer pipe along the creek through the Arboretum.

The following resolution, offered by Mr. Morrison, was adopted:

Resolved, That the design submitted by Edward G. Bolles for a library building be referred to the Committee on Buildings and Grounds with directions to secure the coöperation of Governor Altgeld, and then advise with Mr. Bolles touching some modifications of the design; and that such committee have authority to contract with said architect for plans and specifications

and for supervision of the construction of the building, if in their opinion he has judgment and experience to satisfy his employment in that capacity, and if not to make such other arrangement for architectural assistance and for the erection of the building as it may think proper; and that the committee shall then proceed to secure bids for the construction and make a contract therefor which shall be as favorable to the University as possible, and report all proceedings to this Board whenever practicable.

It was then voted to reconsider the motion by which the Board had voted to adjourn when it adjourned to meet in Springfield, September 25th, and the original motion was thereupon lost.

The Board adjourned.

N. W. GRAHAM,

W. L. PILLSBURY,

President.

Secretary.

# MEETING OF DECEMBER 10, 1895.

The Board of Trustees of the University of Illinois met in the University Parlor, in Urbana, Illinois, at 3 o'clock p. m. Tuesday, December 10, 1895.

The members present were Messrs. Armstrong, Bullard, Graham, Inglis, McLean, Morgan, Morrison, and Raymond, and Dr. Smith and Mrs. Flower, those absent were Gov. Altgeld and Mr. Judy.

The minutes of the last meeting were approved as presented by the Secretary.

President Draper, being called upon for his report, made an informal statement, verbally, with regard to the condition of affairs in the University since the last meeting of the Board.

He then made recommendations as follows:

I recommend that the fourth paragraph in the rules with regard to the employment of instructors in the University and their duties (see page 175, report of meeting of September 4, 1895,) be amended to read as follows:

#### INSTRUCTORS' TERM OF EMPLOYMENT AND DUTIES.

It is the desire and intention of the Board that all competent and effective teachers shall feel secure in their positions and remain permanently in the service of the University, but experience shows that it is necessary to reserve the legal right to terminate service at any time for any reason which in the judgment of the Board may be sufficient, and all employment must be accepted upon this condition. No summary dismissal will be made except for conduct prejudicial to the University, nor without opportunity for a hearing, if the facts are disputed. When service is terminated by the Board for other cause than misconduct, notice will be given at the earliest time practicable; and, in case a member of the corps of instruction intends to leave the service of the University, it is but fair that the President of the University should be advised, at least as soon as such purpose has been determined upon. In case a resignation is presented to take effect at some future time the Board will exercise its right to terminate the service at that time, or at some earlier date, as may seem just to all the interests involved. In case a member of the corps of instruction enters upon regular employment elsewhere before the termination of service here, that fact will work a termination of service and cessation of salary here. Absence from ordinary service in the University, for any other cause than sickness, must be with the approval of the President, if for less than ten days; and if for a longer time, with the approval of the Board of Trustees. And for any failure to comply with all the conditions of loyal and interested service, which are an honorable obligation upon all members of the corps of instruction, the Board of Trustees will feel free to withhold salary so far as the interests of the University and justice to others may seem to demand.

A. S. Draper, President.

#### DEPARTMENTS OF PHYSICS AND ELECTRICAL ENGINEERING.

Touching the instructional force, I recommend;

- 1. That for the rest of the year, at least, the work in the department of physics, be divided into two departments, to be known as (a) physics, and (b) electrical engineering.
- 2. That Mr. Fred A. Sager, instructor in physics, be promoted to the rank of assistant professor of physics, with a salary of \$1,100 per year, and that for the rest of the year, or until otherwise ordered, he be placed in charge of the department of physics.
- 3. That Mr. Burton E. Moore be appointed instructor in physics at a salary of \$80 per month until the first of July next.
- 4. That assistant professor Bernard V. Swenson be placed in charge of the department of electrical engineering for the rest of the year.
- 5. That William Esty, instructor in electrical engineering, be promoted to the rank of assistant professor in electrical engineering at a salary of \$1,100 per year.
  - 6. That the foregoing action take effect from November 1, 1895.
- 7. That authority be given the president to employ an instructor in electrical engineering through the winter and spring terms at not to exceed \$80 per month.

A. S. Draper, President.

These recommendations, with regard to the departments of physics and electrical engineering, were referred to the Committee on Instruction, and later, upon approval of this Committee, were adopted by the Board.

#### LIBRARY POLICY.

For the purpose of determining the library policy of the University, it is recommended—

- 1. That all books, pamphlets, maps, etc. (other than account books), purchased with university moneys, shall be deemed to belong to the University library.
- 2. That all parts of the library shall be in the custody of the Librarian and he shall be responsible for the condition of the same.
- 3. That all reference books and all periodicals, magazines, and newspapers shall be made as easy of access as practicable to all patrons of the library, and that no limitations not necessary to their preservation shall be placed upon their free use.
- 4. That all other books, except such as are referred to in the next paragraph, shall be delivered for use by the Librarian or assistant only, upon a proper call.
- 5. That books which are purely technical and relate only to the work of a single department may be taken to that department under such regulations and for such time as the Librarian may determine; but he shall not thereby cease to be responsible for their safe keeping and proper use.
- 6. The Librarian may make and enforce such rules for the government of the library as are approved by the President.

A. S. Draper, President.

These recommendations were referred to the Committee on Library and later during the session of the Board were returned with the approval of the Committee, and were then adopted by the Board.

#### APPROPRIATIONS NEEDED.

Touching the necessity of appropriations for the different University departments, I have this to say:

At the June meeting of the Board there was appropriated, from the special appropriation of \$30,000 for extending the engineering equipment, the sum of \$15,000 for the purpose of building a new shop. I am not advised as to whether this sum will complete the building. The report of the Committee on Buildings and grounds will doubtless show this. At the same time there was appropriated from the same special appropriation the sum of \$10,000 to be expended this year in extending the engineering equipment. The chiefs of the engineering departments allotted this sum between themselves. They then prepared a schedule of articles the purchase of which they recommended. This schedule was examined by the chairman of the Committee on Buildings and Grounds and myself, and was partially approved and partially disapproved. So far as the articles were approved they have generally been purchased. The fact that so many were disapproved has left a considerable balance to the credit of this fund. The different departments now file applications for additional purchases. I am glad to be able to say that I think they are more conservatively made than heretofore. I presume that the balances remaining unexpended, to which I have referred, will be reappropriated, if necessary, for the same purposes to which they were originally appropriated.

I submit a communication from Professor Ricker earnestly recommending the purchase of reference books for the College of Engineering, at a cost of \$212.50. There is a balance of \$250 which was set aside for this purpose. This purchase was not approved last summer, pending the settlement of general library policy in the University. The larger number of books in the list are already in the library, but they are generally mathematical works and are constantly referred to by others than engineers, so they cannot properly be removed from the library. It is doubtless true, also that they are of special importance to engineers, being needed for almost daily reference. All of the engineering chiefs are intensely interested in this matter and I think their opinions touching it are entitled to great respect. I am therefore led to recommend that the appropriation be made, as requested. Probably no action is necessary.

The department of architecture requests leave to expend \$397 for apparatus. Under the arrangement to which I have alluded there is a balance of \$873 to their credit, so no action is necessary.

The department of theoretical and applied mechanics requests an appropriation of \$1,500. There is a balance of \$1,600 to the credit of this department, so no special action is necessary.

The department of physics and electrical engineering combined requests appropriations amounting to \$1,135. There is a balance to the credit of this department of \$1,009.45. I recommend the appropriation of \$125 more, if necessary, and that the same be paid from the special appropriation for engineering equipment.

The department of mechanical engineering requests appropriations aggregating \$1,652.70. There is a balance to the credit of this department of \$656. The purpose for which this appropriation is asked covers the entire reorganization of the new shop, extending to the purchase of new machinery, the transmission of power from the old shop to the new, the installation of old machinery, the construction of lockers, the purchase of tools, of office and lecture room furniture, etc. I see no alternative to this, and recommend the appropriation of \$1,000 for the purpose.

I had hoped that we might be able to hold the remaining \$5,000 of the special appropriation of \$30,000 intact for the next year, but if we are obliged to make this extra appropriation, as I think we are, it seems to me that it should be charged against that fund.

There is a balance of \$750 to the credit of the special appropriation for materials for shop practice for the current year. I recommend that the sum of \$500 thereof be appropriated for the coming quarter.

The civil engineering department requests an appropriation of \$12 for additional window shades. I recommend that it be granted and charged against the special appropriation for furnishing engineering hall.

Applications are herewith submitted from the junior class for the appropriation of \$200 to aid in the publication of the *Illio*, and also from the board of the *Technograph* for a like sum to aid that publication. It has been customary, I think, to appropriate \$100 to each of these purposes. I recommend that that course be pursued now.

I transmit an application from the professor of physical training for an appropriation of \$220 for additional apparatus in that department. There was no apparatus in this department at the beginning of the year. An appropriation of \$600 was made last summer for this purpose. It had to cover apparatus in both the men's and women's departments of physical training, although the women's department had had the benefit of a balance of \$100 from a former appropriation. I am glad to be able to say that I think the work in both the men's and women's departments has fallen into excellent hands, There is manifest intelligence, energy, and new interest about it. The equipment for these departments is nothing compared with that of other similar institutions. It can hardly be said that they are respectably housed. In view of all the circumstances I respectfully recommend the appropriation of the sum asked for by Professor Everett.

I respectfully recommend the appropriation of \$170 to defray the expenses of inspecting high schools.

I transmit a request from the professor of military science asking for an appropriation of \$65 for the purchase of a silk flag (national colors) for the University Battalion. The colors now on hand are entirely worn out. I recommend that the request be granted.

I transmit also a request from the professor of applied chemistry, asking for an appropriation of \$150. Fifty dollars of this is for heating a room which has been arranged for the photographic work, and the other \$100 for expenditures made at my instance for perfecting a photographic outfit for University purposes. I recommend that the appropriation be granted.

Professor S. A. Forbes requests an appropriation of \$200 for furnishing a room in Natural History Hall. This room was until recently occupied by Professor Krohn. He has vacated it and the furniture which he used has been moved to the room he now occupies. It is necessary to do more than furnish the room in the ordinary meaning of the term. It is to be used for entomological purposes, and some special fixtures and necessary plumbing are requisite. I respectfully recommend that the appropriation be made.

I have received several very urgent requests for books in the different departments of the College of Literature and Arts. I have sifted these requests to the point of ascertaining what books are "imperatively necessary to the proper carrying on of the work in this college during the next term and are not owned by the University." With this very severe treatment the list has been reduced to a cost of \$184.40. I respectfully recommend the appropriation of \$200 for this purpose.

I make the foregoing recommendation upon the condition and understanding that no specific purchases shall be made without my special approval. In the discharge of this duty I should of course be glad to be associated with any members of the Board who can give it their attention, for I think all purchases should be scrutinized by some general University authority and the more the better. Experience shows that heads of departments will make recommendations and purchases without regard to other interests. They unduly magnify the importance of the interests under their own charge. This is very naturally so and perhaps they ought not to be criticized for it. There has unquestionably been too much haste in making purchases here, and there has also been frequent duplication of the same material. I am sure great advantage resulted to the University last summer through the operation of the principles to which I allude.

From the foregoing I do not wish to be understood as saying that we have more than the needed equipment in our several departments. We have more than we need in some lines and far less in others. There is no duty connected with University administration which calls for more deliberation and sound judgment; for more of expert knowledge on the one hand and of general knowledge on the other, for more of both department enthusiasm and general University conservatism, than the duty of purchasing materials for equipment.

A. S. Draper.

President.

This statement with regard to appropriations was referred to the Committee on Finance, and later during the session of the Board was reported back with the approval of the Committee, and thereupon the recommendations were adopted, and the appropriations asked for were made.

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

## EVENING SESSION.

When the Board met pursuant to adjournment, the Committee on Buildings and Grounds presented the following report:

#### THE NEW LIBRARY BUILDING.

Urbana, Ill., December 10, 1895.

To the Board of Trustees of the University of Illinois.

GENTLEMEN: The Committee on Buildings and Grounds makes the following report in regard to the proposed library building in compliance with the following resolution, adopted by the Board of Trustees on the 19th of September last:

"Resolved, That the design submitted by Edward G. Bolles for a library building be referred to the Committee on Buildings and Grounds with directions to secure the coöperation of Governor Altgeld, and then advise with Mr. Bolles touching some modifications of the design, and that such Committee have authority to contract with said architect for plans and specifications and for supervision of the construction of the building, if in their opinion he has judgment and experience to justify his employment in that capacity, and if not, to make such other arrangements for architectural assistance and for the erection of the building as they may think proper; and that the Committee shall then proceed to secure bids for the construction and make a contract therefor, which shall be as favorable to the University as possible, and report all proceedings to this Board whenever practicable."

The Committee went to Springfield for the purpose of securing the coöperation of Governor Altgeld and also to advise with Mr. Bolles, as instructed.

The interview with Mr. Bolles, which first took place, resulted in his declaring that he was inexperienced in the construction of buildings, and that without assistance he would be unable to carry into execution the design for the library building which he had presented, and which received the approval of the Trustees as to the choice of the premiated designs that had been submitted under the call; whereupon it was stated to Mr. Bolles by the Committee that his design, specification, and estimated cost being as complete as he could make them the interview might be terminated. But Mr. Bolles then introduced a gentleman as a partner who had been a practical constructor, and thereupon claimed that with his assistance he would be quite able to construct the building satisfactorily.

The Committee not deeming it advisable to allow Mr. Bolles to select for them a constructor, and because of their further instructions from the Trustees to consult with Governor Altgeld, declined to consider Mr. Bolles' suggestion and terminated the interview.

On the evening of the same day, September 25th, the Committee called upon Governor Altgeld at the Mansion, and thoroughly considered the situation and the designs which had been most approved; whereupon Governor Altgeld presented the following resolution, which was seconded by Mr. Morrison:

Resolved, That all of the plans for the library building presented to the Board be and are hereby rejected.

The resolution was unanimously adopted.

The following resolution was presented by Governor Altgeld, and on motion was unanimously adopted.

Resolved, That the Committee do at once employ an architect to draw plans and specifications for the new library and museum building, embodying in such plans any feature that may be thought desirable in any of the sketches that the Board now has, and embodying in such plans such other features as the Committee may suggest, and that when plans and specifications have been presented that are entirely satisfactory, then the Committee do at once proceed to take bids and let the contracts.

On motion, Mr. Morgan and Mr. Morrison were appointed a sub-committee to confer with one or more architects relative to plans and specifications and to report to the Committee at the earliest practicable moment with their recommendation as to who should be engaged to make out new plans and take charge of the construction of the library building.

On motion, the Committee adjourned, subject to call of sub-committee.

On the 30th of September the sub-committee met at Chicago and had an interview with prominent architects, and on the 1st of October, after a second interview with D. H. Burnham & Co., an understanding was reached and a formal proposition was made by Burnham & Co. to the sub-committee as follows, the understanding being that if satisfactory to the Buildings and Grounds Committee it would be formally accepted:

October 1, 1895.

Mr. Richard Price Morgan and Mr. N. B. Morrison, Sub-committee of the Buildings and Grounds Committee of the University of Illinois,

GENTLEMEN: For five per cent. of its actual cost and our traveling expenses, we will design and supervise the library building proposed to be erected by you, and we agree that our traveling expenses shall not exceed three hundred dollars.

We will proceed at once with plans, and will prepare and perfect a design satisfactory to the Trustees at the earliest practicable moment.

Yours very truly,

D. H. Burnham & Co.

After receiving the approval of Messrs. McLean and Raymond the proposition was formally accepted in the following letter:

October 4, 1895.

D. H. Burnham & Co., Architects, The Rookery Building, Chicago, Illinois,

Gentlemen: I am pleased to inform you that your proposition to this Committee to design and supervise the construction of the library building, proposed to be erected at Urbana for the University of Illinois, is accepted.

As considerable delay has already occurred through the effort of the Trustees to obtain a satisfactory design by inviting competitive plans, the Committee respectfully urges as prompt action on your part as feasible.

Although not a member of this Committee, Governor Altgeld'is ex officio one of the Trustees of the University. He has manifested a decided interest in regard to the character of this building, viz., that it shall be fire-proof, thoroughly well adapted to the purposes for which the appropriation was made, and also he has a preference in regard to the exterior lines of the building.

Ever since the incumbency of Governor Altgeld he has been a warm friend of the University of Illinois, and has in every way practicable exercised his influence and authority to promote its welfare. For these reasons, briefly stated, I feel safe in saying that the Board of Trustees would be pleased to have you consult with him as soon as you may have made preliminary examination of the grounds of the University and made one or more sketches of the building.

If, when you are ready to see the Governor, as suggested, you will kindly give me two or three days' notice, I will call a meeting of this Committee at Chicago or Springfield, as you may elect, to meet with the Governor and yourself.

In making acknowledgement of this letter please state when you expect to be at the University, as I desire, if I can do so, to meet with you there.

## Yours very truly,

### RICHARD P. MORGAN,

Chairman Buildings and Grounds Committee, University of Illinois.

On the 4th of October the Committee received the following telegram from Mr. Burnham:

"Governor Altgeld sent for me yesterday. He urges quick action. Can you send to-day general instructions to enable me to commence preliminary study. Have wired President Draper also."

In reply to this telegram the Committee responded as indicated in the following letter:

OCTOBER 4, 1895.

## D. H. Burnham & Co., The Rookery Building, Chicago, Ill.,

Gentlemen: Just as I finished a letter to you to-day I received your telegram, and immediately telegraphed to you as follows:

"For reply to your telegram, please see letters by first mail."

You asked in your telegram for "general instructions to enable you to commence preliminary study."

I enclose herewith a copy of the invitation which was sent out to the architects who were invited to present designs for the library building in competition, which will give you a general idea of the character of the building contemplated. This, with what I have stated in my first letter to-day, embraces, together with the map of the University grounds giving the contour lines, which I have directed to be sent to you, all of the data I feel prepared to present at this time for your consideration, and I trust they will be sufficient for your purposes until you have made examination of the site adopted by the Board for the building, and also the site to which preference was given by some members of the Board, as it is possible you may prefer a different location to that selected, and should you do so, I believe the Board of Trustees would concur with you, and especially so, as any location you might select would have reference of course to the plan for landscaping the University grounds, which you have kindly proffered to make.

It seems essential that a conference in person should be had as soon as possible between Dr. Draper, yourself, and the sub-committee of the Buildings and Grounds Committee, and it seems to me that the best place for the conference would be at the University.

Should this suggestion meet with your approval, I will arrange for any date agreeable to you.

## Yours very truly,

## RICHARD P. MORGAN,

Chairman Buildings and Grounds Committee, University of Illinois.

On the 12th of October the Buildings and Grounds Committee met with Mr. Burnham and President Draper at the University and took into consideration the preliminary sketches which Mr. Burnham had to present, after which for some days the Committee waited the further action of Mr. Burnham in the preparation of a design.

Being unofficially informed that the appropriation for the library building would not be available until spring, our Committee addressed a letter of inquiry to the State Treasurer, and received the following reply from the Auditor:

OCTOBER 19, 1895.

Richard P. Morgan, Esq., Dwight, Ill.,

DEAR SIR: Your favor of 17th instant addressed to the State Treasurer has been referred to this office. In reply to same will say:

I am of opinion that no funds for the payment of appropriation for library building of the state University will be available until about the 1st of May next.

DAVID GORE,

Auditor Public Accounts.

After receiving this letter the Committee wrote to Mr. Burnham, as follows, on the 23d of October:

"Hitherto we have endeavored to press forward rapidly in the selection of a design for the library building, but while that is desirable, it should not be done at the expense of thorough consideration, and we think such an error would be inexcusable now that we know that our funds will not be available until about the 1st of May next."

Upon notice from Mr. Burnham, on the 25th of October, that he had the plans ready for the Committee to examine, the sub-committee went to Chicago on the 28th of October to examine the same, from which place the sub-committee repaired to Springfield, and on the 30th instant again consulted Governor Altgeld as stated in the following letter:

OCTOBER 31, 1895.

Hon. Alexander McLean, Macomb, Ill.,

Dear Sir: I have just returned from Springfield, where I met Mr. Morrison, and last evening we had a conference with the Governor with reference to the sketches that Mr. Burnham has furnished for the ground plan of the library building. Our consideration of the matter was protracted to a late hour, and the principal result that I am now able to report to you, is that it was substantially concluded that instead of having a full basement story to the building, and a main and a second floor, as hitherto contemplated, it would be better, if feasible, to have no more than a sub-basement to the building sufficient for the steam pipes, etc., and establish the elevation of the first floor at about five feet above the natural surface of the ground. The first floor to have sufficient area to contain the reading room, the stack room, and executive offices with details. The ceilings to be about seventeen feet high. The second or upper floor, to be used for the museum, art gallery, etc. The considerations were, that in this way the cubic capacity of the building, which measures its cost, could be reduced, and the facility with which the students could reach the library, and also the executive officers and their offices, would be greatly enhanced over any other plan yet considered.

Unfortunately for us, Mr. Burnham was called to Philadelphia and could not meet with us, but I telegraphed last night to the firm to send some qualified person to Springfield to-day to see the Governor and review with him our work of last night as to feasibility, etc.

Knowing you would be interested to know briefly what is taking place, I take pleasure in sending you this account of it.

Yours truly,

RICHARD P. MORGAN.

Chairman Building and Grounds Committee, University of Illinois.

In compliance with this letter, Mr. Weber, of Burnham & Co., went to Springfield and had further conference with Governor Altgeld, after which the work of preparing designs continued.

On the 18th of November the following letter was addressed by the Committee to Messrs. Burnham & Co., it being advised that two designs were being prepared:

NOVEMBER 18, 1895.

Mr. D. H. Burnham, Rookery Building, Chicago.

My Dear Sir: There will be a meeting of the Trustees at the University about the 10th or 12th of December, of which you will be given due notice.

In conformity with your agreement to design and supervise the construction of the library building for the University, the Board will doubtless expect you to be present at that meeting, having with you perfected plans, together with specifications and estimates of cost—briefly I may say, all of the data necessary to enable an immediate call for proposals for the construction of the building, should the Trustees be satisfied to do so.

Whatever may have been said to you by this Committee in regard to any plan for the library building since your services were engaged, you will kindly accept as suggestive only, because the design is to be yours, and as stated in your letter of October 1st, "satisfactory to the Trustees." While this is true, and perhaps you may not be able to concur with the suggestions which have been made as the result of a recent conference between Governor Altgeld and the sub-committee, still it is expected that the design last suggested to you by the Governor will be as completely and carefully perfected in every respect for presentation to the Trustees as your own design, should you present an alternative.

Whenever you are prepared, and if convenient to you to do so, this committee would be pleased to have you afford opportunity to the Trustees who live in Chicago to see the plans, viz.: Governor Altgeld, Dr. Julia Holmes Smith, 499 Dearborn avenue; Mrs. Lucy L. Flower, 361 Superior street, Hon. J. E. Armstrong, Englewood.

The Committee would also like to have you consult freely with President Andrew S. Draper in regard to the sub-divisions of the building, because the Trustees would without doubt readily confirm any disposition of the space that you and President Draper might agree upon.

This Committee and also the Trustees as a Board are extremely desirous that at the December meeting a design shall be decided upon and a call made for proposals to construct the building.

Yours truly,

RICHARD P. MORGAN,

Chairman of Committee on Buildings and Grounds.

Your Committee is informed that Mr. Burnham will be at the University on Wednesday morning, the 11th inst., with perfect designs.

Respectfully submitted,

RICHARD P. MORGAN, N. B. MORRISON, ALEXANDER MCLEAN, ISAAC S. RAYMOND,

Committee on Buildings and Grounds.

The action of the Committee as set forth in this report was approved.

President Draper made a statement with regard to the purchase of a storage battery from The Ford-Washburn Co., of Cleveland, Ohio, and was authorized to receive the goods purchased from aforesaid firm upon its giving an indemnifying bond in terms and amount sufficient to protect the interests of the University and satisfactory to him.

A committee from the Chicago College of Pharmacy presented the following communication:

THE CHICAGO COLLEGE OF PHARMACY, CHICAGO, December, 10, 1895.

At an adjourned semi-annual meeting of the members of the Chicago College of Pharmacy on Tuesday, November 12, 1895, a majority of the members of the College being represented, the following motion was offered and carried unanimously. That a committee of five, consisting of the President, Secretary, Actuary, Chairman of the Business Committee, and Senator Thiele be appointed and instructed to wait upon the Trustees of the University of Illinois and tender to them the title and property of the Chicago College of Pharmacy upon such conditions as may be approved at the adjourned meeting of the College to be held January 14, 1896.

W. B. DAY.

Actuary.

After a somewhat lengthy interview with this committee and discussion the President was directed to appoint a Committee to investigate the proposition, and report to the Board at its next meeting. Messrs. Draper and Armstrong, and Dr. Smith were appointed such committee.

It was voted to request Governor Altgeld to issue to Charles Wesley Groves, a graduate from the University in the class of 1880, a commission as brevet captain in the Illinois National Guard.

It was voted that proposed changes in the catalogue should be referred to the Committee on Instruction, with power to act.

A communication from Professor Breckenridge, asking that he be relieved from his duty as Superintendent of Heating, but without reduction of salary, was referred to the Committee on Buildings and Grounds, with power to act.

The claim of the Garvin Machine Company for damages to a milling machine loaned the University was referred to the Finance Committee for investigation.

A communication was received from Professor Breckenridge, asking that the Board authorize the purchase of twelve car loads of coal from such mines of the state as might be determined by the Business Agent and the professor of mechanical engineering, and the purchase of the coal was authorized.

A communication was received from Professor Breckenridge concerning the manufacture of the "Technical School Wood Lathe," a machine which had been designed and perfected in the University machine shops. This communication was referred to the Committee on Instruction. Subsequently this committee reported recommending that the designer of the lathe be permitted to make such disposition of the design (by patenting it or otherwise) and for its manufacture as he should deem desirable, but that the University should have no concern or interest therein; and the recommendation of the Committee was approved.

President Draper presented the following report from the Agricultural Experiment Station:

University of Illinois, December 10, 1895.

Dr. A. S. Draper, President of the University of Illinois.

SIR: I beg leave to submit from the Board of Direction of the Agricultural Experiment Station the following:

 $Paper\ A$  is a statement of expenditures for the quarter ending September 30, 1895.

 $\operatorname{\it Paper} B$  is a statement of expenditures for the current quarter, ending December 31, 1895.

Paper C is a list of warrants drawn, Nos. 1 to 83, inclusive, for the quarter ending September 30, 1895, and is accompanied with vouchers for the same for audit.

 $Paper\ D$  is a statement of appropriations asked for the current and next quarters.

PAPER A-STATEMENT OF EXPENDITURES, QUARTER ENDING SEPTEMBER 30, 1895.

	 \$12 0
Books and publications	 49 9
Botanical apparatus	 44 3
Buildings and repairs	 15 4
Bulletins and reports	40 0
Bulletins and reports	253 8
uel and lights	11.8
ncidentals	 77.5
rinting, stationery, and postage	25 9
Salaries	 1,660 0
Seeds and trees	14 2
Cools and supplies	 166 8
Fools and supplies	 1,247
Total	00 010 (

Paper B—Statement of Appropriations, Expenditures, and Balances for the Quarter ending December 30, 1895.

	Appro- priated.	Expended.	Balances.
Board expense Books and publications. Botanical apparatus. Buildings and repairs. Builetins. Chemical apparatus Fuel and lights Incidentals. Meteorological apparatus Printing, stationery, and postage Salaries Seeds and trees. Tools and supplies Wages. Wood durability experiment.	225 00 25 00 25 00 300 00 50 00 100 00 25 00 1,660 00 25 00 200 00	3 85 9 35 1 60 1,106 65	50 00 100 00 21 15 23 40 553 35 25 00
Total:	\$3,750 00	\$1,999 92	\$1,759 43

#### PAPER D-ESTIMATES.

From general fund—	Quarter ending December 31, 1895.	
Meteorological app	aratus	\$10 00 50 00
Total		\$60 00
	Quarter ending March 31, 1896.	
From general fund—		
Board expense		\$40 00
Books and publicat	tions	50 00
Botanical apparatu	18	50 00
Buildings and repa	airs	25 00
Bulletins	s and supplies	800 00
Chemical apparatu	s and supplies	40 00
Fuel and lights	***************************************	100 00
Incidentals		25 00
Printing, stationer	y, and postage	25 00
Salaries	,,aza postago	1,910 00
	······	50 00
Tools and supplies	······	
Wages	······	800 00
Couthorn Illinois	xperiments	
Southern Illinois e	xperiments	100 00
Total		\$4,115 00
F		
From farm fund—	•	
Buildings and repa	airs	\$300 00
Dairy stock and fit	tings	275 00
Tools and supplies	•••••	250 00
Wages		250 00
Total		\$1,075 00
10ta1		91,010 00
		I

The Board of Direction asks that the Trustees appropriate Experiment Station funds to meet these estimates. The Trustees are also requested to authorize the Board of Direction of the Experiment Station to order upon satisfactory bids, chemical apparatus and supplies to be imported, not exceeding in amount \$300.00, and botanical apparatus and supplies not exceeding in amount \$75.00.

The Board of Direction has been considering the advisability of conducting some field experiments in southern Illinois with a view to determining in what way the peculiar clay soil of a considerable portion of that country may be cultivated to best advantage. In October last a committee, consisting of Professors Burrill and Davenport, and Mr. Hopkins, chemist of the Station, was sent on a tour of inspection to select a tract of land where such work might best be undertaken. This committee reported in favor of selecting two tracts of land, each of about three acres in extent, one at Edgewood, and the other at Odin, and beginning the experiments in the coming spring.

The Board is asked to authorize this new line of work.

Respectfully submitted, T. J. Burrill, President Board of Direction.

The report was received and recorded. The vouchers were referred to the Finance Committee for auditing, and the requests of the Board of Direction of the Experiment Station for appropriations of Station funds, and for authority to undertake new experiments were granted.

President Draper stated that the parents of Mr. Edwin Warren Stocker, a graduate from the University in the class of 1894, who had since died, were desirous of receiving from the University their son's graduation thesis.

On motion of Mr. Morgan, it was voted that a copy be made of Mr. Stocker's thesis, in order that the file of theses might be kept

complete, and that the original be sent to his parents, together with a letter from the Faculty expressive of the regard in which Mr. Stocker had been held as a student of the University.

On motion of Mr. Raymond, President Draper was made a member of the Board of Direction of the Agricultural Experiment Station.

The Board then adjourned to meet at 8 o'clock Wednesday morning.

### Session of Wednesday.

The Board met pursuant to adjournment, the same members being present as on Tuesday.

President Draper stated that some difficulty had arisen with the water analysis work which the University had undertaken, chiefly because private parties, without first disclosing their purpose, endeavored to use the University to subserve personal interests. On motion of Mr. Morgan, he was requested to prepare rules for the control of this work.

President Draper's bill of \$116.60 for traveling expenses during the preceding six months was referred to the Committee on Finance, and, subsequently, upon the approval of this Committee, was ordered paid.

Appropriations for the State Laboratory of Natural History were made as follows:

From the state appropriation for that department— For field work, office, and incidental expenses. For library. For salaries and assistants. For bulletins For illustration of State Entomologist's report. For investigation of contagious diseases of insects. For expenses of Biological Station	500 00 1,825 00 125 00 125 00 750 00
And from a state appropriation to the University— For expenses of the Biological Station	750 00

Mr. Raymond presented a request from the tenant on the south farm that his payment of rent be deferred from January 1st next to April 1. This request was referred to the Finance Committee, and later, upon recommendation of that committee, an extension of time was allowed on consideration that interest at the rate of 6 per cent. per annum be paid upon the deferred payment.

The following letter and telegram received from Governor Altgeld were presented to the Board, and it was ordered that they be entered upon the records:

STATE OF ILLINOIS, EXECUTIVE OFFICE, SPRINGFIELD, December 9, 1895.

Dr. A. S. Draper, President University of Illinois, Champaign, Ill.

DEAR DOCTOR: It now looks as if it would not be possible for me to meet you to-morrow. Should I not come, then I beg to suggest the following to the Board:

Mr. Burnham will present plan for library in Tudor-Gothic style with towers, etc., and the exterior to be made of terra cotta; also the same plan with the exterior to be made of stone. I think the right thing to do will be for the Board to just take bids on both styles of construction, and when it gets the bids it can then decide whether it will adopt stone or terra cotta.

Mr. Burnham will present another plan of a low building, with no towers, for a library. While I do not wish to influence the Board on this question, I do feel very strongly that this is not the style of building we want and need at the University at present.

Should the question of location again come up, then you may say that, in my judgment, it would be a serious mistake to locate this new building south of, and in the rear of the present administration building. I think it should be west of, and just a trifle north of that building.

I have been told that questions of business management will come up and an effort will be made to introduce some reforms. I think that no matter how honest or how capable the men may be who look after the affairs of the institution, there should be a first-class business method adopted which would provide thorough checks on everybody.

Very truly yours,

JOHN P. ALTGELD.

STATE HOUSE, SPRINGFIELD, December 10, 1895.

President A. S. Draper.

Impossible for me to come there to-day. Did you get my letter of yester-J. P. ALTGELD. day? Please answer.

Mr. D. H. Burnham then presented the plans which he had prepared for the new library building. After a careful explanation of these plans by Mr. Burnham, on motion of Mr. Morgan, the Board went into committee of the whole and discussed the plans, Mr. Morrison being in the chair.

When the Board had resumed its session, on motion of Mr. Armstrong, it was voted to adopt as the design for the library the classic design presented by Mr. Burnham.

The Board then adjourned to meet at 2 o'clock p. m.

## Session of Wednesday Afternoon.

Upon the Board's convening pursuant to adjournment, the Finance Committee made the following report:

Urbana, Illinois, December 11, 1895.

To the Board of Trustees of the University of Illinois.

GENTLEMEN:—Your Finance Committee begs leave to recommend the adoption of the following resolution:

Resolved, That Charles W. Spalding, Treasurer, be, and hereby is directed to transfer ten thousand dollars from the state fund for salaries, etc., to the general fund.

Respectfully submitted,

N. B. Morrison, S. A. Bullard, J. E. Armstrong,

Committee on Finance.

The resolution offered by the Committee was adopted on motion of Mr. Morgan.

The following resolution was adopted:

Resolved, That the following be adopted as the expression of the sentiments of the Board to Governor Altgeld, touching the selection of designs for the new library building.

The Board at first invited a competition among architects and thereby received thirty-eight designs. Having selected the one which seemed most meritorious, and finding it not pleasing to the Governor, and that the author lacked the experience necessary for its execution, it was very willingly determined to abandon the same and, with the approval of the Governor, give the commission for the building to an architect of much experience and wide reputation in the person of Mr. D. H. Burnham, of Chicago. Having entered into a contract of the usual character with Mr. Burnham, he was instructed to prepare designs, with the special injunction that one should be in the Tudor-Gothic style of architecture, to which the Governor was favorable. Mr. Burnham was also told that if he himself should think some other style better adapted to the circumstances of the case he should prepare a design in that style, but that he should exert every effort to bring out the Tudor-Gothic style successfully. He was advised as to the rooms and space for which provision must be made, and that the building must be completed for a sum not greater than the appropriation, \$150,000.00.

Under these circumstances the architect has presented to the Board two designs, one in the Tudor-Gothic style and the other in the Classic Grecian style. They are alike in the interior except that it seems easier to include a basement in the Grecian style than in the Gothic style, and accordingly one has been included in the Grecian design. The Gothic building, if constructed of stone, is estimated by the architect to cost \$220,000.00, and it seems impossible, as stated by the architect, to reduce the cost below \$190,000 by any changes in material or any permissible modifications of the design. The appropriate treatment of the Gothic building apparently requires that it be constructed of stone. The Grecian building, we are advised, may be appropriately constructed entirely of terra cotta, or of terra cotta and brick, even more appropriately than of stone, and we are assured that it can be erected within the limits of the legislative appropriation for the construction of the building.

After the fullest consideration and discussion of the whole matter, eight members of the Board (ten being present) expressed a preference for the Grecian design, on the ground that it was more attractive and appropriate to modern educational uses, and particularly to library purposes, than the Tudor design, and by a vote of eight to two it was selected and approved as the design for the new building.

All of the members were strong in the conviction that it was imperative to adopt a design which could be executed within the appropriation, to the end that faith might be kept with the members of the legislature and the people.

It was also the judgment of the members of the Board that it was highly desirable to include a basement story in the building, as it is provided in the Grecian design.

It is with regret that the Board finds itself unable to approve the design in the style of architecture most admired by Governor Altgeld, who has shown so much interest in and given so much aid to the development of the University, and it is also very much regretted that the Governor was unable to be present personally at this meeting of the Board, for it is believed that in that event he would have seen the advisibility, if not the necessity, of the course which has been pursued.

On motion of Mr. Raymond it was voted that the President of the Board communicate the foregoing resolution to Governor Altgeld.

Mrs. Flower moved that the Business Agent be authorized to expend, not to exceed \$250, in putting into better condition the toilet rooms in University Hall and Machinery Hall. This motion was re-

ferred to the Committee on Buildings and Grounds, and subsequently upon the approval of that Committee was passed by the Board.

The Business Agent, Professor S. W. Shattuck, presented his report.

## THE BUSINESS AGENT'S REPORT.

University of Illinois, December 10, 1895.

Nelson W. Graham, President of the Board of Trustees, University of Illinois, SIR: I have the honor to hand you herewith the following financial statement and reports:

Payer A, a statement of the current appropriations for the three months ending November 30, 1895.

Paper B gives a showing of the state appropriations November 30, 1895.

Paper C gives a similar one of the United States fund.

PAPER B-STATE APPROPRIATIONS.

	Received.	Expended.	Balance.	Assigned.
	<u> </u>	l	<u> </u>	1
For the Years 1893-95.				-
Closed out	\$121,646 14	\$121,646 14		
Cabinets Furnishing and heating Natural History Hall	1,000 00 6,000 00 160,000 00	5,936 16		
Engineering building. Applied mechanics. Civil engineering	472 00 233 00	345 36	126 64	126 6
Botany	450 00	384 99	65 01	65 0
Zoölogy Geolegy	1,200 00 500 00	500 00	21 11	21 1
Mechanical engineering	4,000 00 300 00	300 00		l
PedagogyGreek	150 00 150 00		22 84 41 02	22 8 41 0
Woman's gymnasium	300 00	151 61	148 39	148 3
	\$296, 401 14	\$295,753 34	\$647 80	\$647 8
For the Years 1895-97,				
Operating Biological Experiment Station— Expenses Unassigned	\$750 00 750 00		\$750 00	
	\$1,500 00	\$765 87	\$750 00	
Finishing and Furnishing Engineering Hall— Electric wiring. Furniture. Unassigned	\$1,194 03 2,288 64 1,517 33	1,166 84	\$2 26 1,121 80 1,517 33	\$2 20 1,121 80
	\$5,000 00	\$2,358 61	\$2,641 39	\$1,124 0
College of Engineering— Machine shops. Equipment.	\$15,000 00 10,000 00		\$5,459 64 7,159 10	\$5,456 6 7,159 10
	\$25,000 00	\$12,381 26	\$12,618 74	\$12,618 7
Astronomical observatory	\$5,000 00	\$26 00	\$4,974 00	\$4,974 00
Paving streets, etc	\$9,300 00	\$8,266 71	\$1,033 29	\$1,033 29
Fire protection	\$2,000 00	\$296 49	\$1,703 51	\$1,703 5
Taxes on Minnesota lands	\$1,600 00	\$1,600 00		

## PAPER B-STATE APPROPRIATIONS-Continued.

\$5,075 00 4,825 00 \$9,900 00		Balance. \$382 67 4,825 00	Assigned.
4,825 00			
\$9,900 00		4,020 00	\$382 67
	\$4,692 33	\$5,207 67	\$382 67
500 00 500 00 400 00 500 00 300 00	107 81	\$224 55 500 00 59 57 339 06 188 03 476 13 192 19	\$224 55 500 00 59 57 339 06 188 03 476 13 192 19
\$3,000 00	\$1,020 47	<b>\$1,979</b> 53	\$1,979 53
\$400 00 600 00	\$102 62	\$297 38 600 00	\$297 38
\$1,000 00	\$102 62	\$897 38	\$297 38
\$3,000 00	\$906 27	\$2,093 73	\$2,093 73
\$750 00 750 00	\$473 61	\$276 39 750 00	\$276 39
\$1,500 00	\$473 61	\$1,026 39	\$276 39
\$3,750 00 1,250 00	\$2,136 29	\$1,613 71 1,250 00	\$1,613 71
\$5,000 00	\$2,136 29	\$2,863 71	\$1,613 71
\$2,000 00	\$396 98	\$1,603 02	\$1,603 02
\$2,500 00	\$772 23	\$1,727 77	\$1,727 77
\$12,303 03 3,111 22 500 00 400 00 1,374 94 250 00 600 00 1,050 00 1,050 00 2,000 00 2,000 00 1,900 00 1,900 00 500 00 100 00 60,670 81	\$12, 303 03 3, 111 22 378 34 210 48 1, 258 81 177 08 320 71 864 29 285 10 293 68 153 13 1, 240 00 14 30 146 27 	\$121 66 189 52 116 13 72 92 279 29 185 71 714 90 2, 796 32 21 87 760 00 75 70 1, 753 73 800 00 250 00 100 00 24 25 55 00 60, 670 81	\$121 66 189 52 116 13 72 92 279 29 185 71 714 90 2, 796 32 21 87 760 00 75 70 1, 753 70 1, 753 800 00 250 00 24 25 55 50
	\$500 00 500 00 500 00 500 00 500 00 500 00 500 00 500 00 \$3,000 00 \$3,000 00 \$1,000 00 \$3,750 00 \$1,500 00 \$2,000 00 \$2,500 00 \$2,500 00 \$1,374 94 250 00 \$1,374 94 250 00 \$1,00	500 00	500 00

#### PAPER C-UNITED STATES FUND.

	Received.	Expended.	Balance.	Assigned.
Year ending June 30, 1894.				
Before reported onArchitecture	\$18,500 00 500 00		\$22 07	\$22 07
Total,	\$19,000 00	\$18,977 93	\$22 07	\$22 07
Year ending June 30, 1895.				
Before reported on	\$20,000 00	\$20,000 00		
Year ending June 30, 1896.				:
Salaries for instructionUnassigned	\$17,476 36 3,523 64	\$17,476 36	\$3,523 64	
Total	\$21,000 00	\$17,476 36	\$3,523 64	

Paper D is a list of vouchers presented for audit, being 1,651 to 2,150.

Paper E is an estimate of receipts and expenses for the nine months ending September 1, 1896.

 $Paper\ F$  is a list of appropriations the Board is requested to make for the three months ending February 29, 1896.

I have asked that \$8,000.00 be appropriated on account of President's House.

The architect's estimates in favor of the contractors to this time amount to \$6,800.00; \$1,800.00 of this has been met out of the \$2,000.00 received as part payment on the Griggs farm, leaving \$5,000.00 to be met out of the \$8,000.00. Other accounts are also to be met out of it, and it may be best to increase the amount.

Under the orders of the Board I have purchased—

Nine Babcock fire extinguishers at an expense of. \$202 One Miller extinguisher for. 7 Five long ladders for. 50 Four dozen fire buckets. 24	50∙ 40∙
--	------------

I have also contracted for a fire-escape ladder and stand-pipe to extend to the top of University Hall at an expense of \$275.00.

Additional hose will be purchased, and it seems desirable that several more of the Miller extinguishers should be had.

I inclose a communication in regard to the Kirker-Bendir fire-escape for the consideration of the Board—Paper G.

Respectfully submitted,

S. W. SHATTUCK,

Business Agent.

The following assignments for the three months ending February 29, 1896, were made, as asked for by the Business Agent:

#### APPROPRIATIONS.

Soard expenses	\$500
alaries for instruction and President	25,730
alaries for services	3,590
Buildings and grounds	500
uel and lights	3,000
tationery, printing, and postage	500
fechanical, agricultural, architectural, and horticultural departments	600
filitary department.	50
aboratories	1.000
ibrary and apparatus	50
neidentals	400
icidentals	500
eating apparatus	900
urniture and fixtures	300
Vater supply	125
ymnasium	50
epair shop	300
enator Morrill's bust, balance	30
resident's House	8,000
ewer in the Arboretum	400
Total	845 595
Total	\$45,535

The report of the Business Agent was referred to the Finance Committee.

The Finance Committee made the following report:

URBANA, ILL., December 11, 1895.

To the Board of Trustees of the University of Illinois:

GENTLEMEN:—Your Committee on Finance begs leave to report that it has examined the vouchers submitted by the Board of Direction of the Agricultural Experiment Station, covering the expenditures of the Station for the quarter ending September 30, 1895, being Nos. 1 to 83 inclusive, and has found them correct and duly receipted.

Respectfully submitted,

N. B. Morrison, J. E. Armstrong, S. A. Bullard,

Finance Committee.

Mr. Armstrong, who had been directed (see page 184 of the proceedings of the Board in September, 1895,) to investigate the method of heating and lighting adopted by the United States Heating and Lighting Co., of Chicago, and to invite a proposition for heating and lighting the University, presented the following report:

URBANA, December 11, 1895.

To the Honorable President of the Board of Trustees, University of Illinois.

SIR:—Your special committee on gas plant would respectfully report that I have given some time to the investigation of individual gas plants, with respect to cost of construction, maintaining, and usefulness of the same. It is my belief that the gas made from low grade gasoline by the process used by the United States Heat and Light Co., of Chicago, can be manufactured for 25 cents per thousand cubic feet, as claimed by them, and that for fuel purposes it is superior to other gas. The machinery occupies but little space and can be operated without extra expense to us by locatnig it in our boiler house or machine shop, under the charge of engineers and firemen already employed. The gas is, in my opinion, less desirable for illuminating purposes, from the fact that it requires a special burner, which is somewhat expensive, but even then, this expense is compensated for in the small amount of gas consumed by these burners, as well as the exceedingly strong and steady light produced.

We consumed gas amounting to over \$1,600 last year, and two-thirds of this was for chemical purposes. The pressure of gas is so poor at the present time that frequently some of the burners have to be shut down in order to get sufficient gas to run a part of the laboratory. The muffles are frequently abandoned for the want of sufficient gas, and the assay furnaces must be heated by some other way than by that recognized generally as the best. Besides, this gas should be supplied to the new shops for one or more forges. This will be out of the question at the present rates of \$1.75 per M. In view of these facts, I would recommend that we contract with the United States Heat and Light Co, for a plant large enough for the use of the entire Chemical Laboratory, and that provisions be made for further extension of the service to the new shops as soon as needed there.

I submit herewith a proposition from the above named company for installing a complete plant as above named.

Respectfully submitted,

J. E. Armstrong,

Special Committee on Gas Plant.

This report was referred to the Committee on Buildings and Grounds.

The Finance Committee also presented bills for legal services from J. O. Cunningham and from Cunningham & Boggs, aggregating \$55, and recommended that they be paid. The recommendation was adopted.

On motion of Mr. Raymond, \$60 was appropriated for repairing the floor of the barn at the south farm, and for making a pantry in the house on that farm, the expenditures to be under the direction of the Business Agent.

Mr. Morrison presented a letter from the Treasurer, asking that two of his bondsmen be released. Mr. Morrison was instructed to answer the letter, saying that the Board declined to comply with the request, since it could not be done without running the risk of impairing the validity of the bond.

The committee appointed at the last meeting of the board (see proceedings of Sept. 19, 1895, page 183,) to consider the business methods followed at the University, and to report what changes, if any, were desirable, presented the following communication as a report of progress.

#### PROPOSED FINANCIAL SYSTEM.

The financial system now followed by the University is good. It has been thoroughly tested and by it all the funds of the University have been satisfactorily accounted for during all the years of its history. This, however, we believe has been due not so much to the system as to the integrity and painstaking faithfulness of the officers of the Board charged with the accounting for the finances of the University.

Any system adopted by a corporation for the management of its finances must of necessity rest largely in the trust reposed in the officers who conduct it.

Both for the safety of the corporation and the honor of its servants there should be in the financial system methods of checking accounts, so that the facts shown by the books of one officer may be confirmed by the books of one or more other officers. In this way only can the honorable conduct of any officer be demonstrated and the funds of the institution be perfectly guarded.

We believe that some additional means of checking accounts incorporated into the system now in vogue in the University are all that is necessary to make our system entirely satisfactory and equal to or better than that used in any other public or private corporation in this state.

To arrive more easily and accurately at the changes necessary and desirable we divided the subject into the following captions:

- (a) Receipts—
  - (1) Receiving funds. (2) Holding funds. (3) Investing funds.
- (b) Expenditures—
  - (1) Authorization.(2) By whom and in what manner expended.(3) How paid.

As the duties of each officer of the Board are affected by several of these subdivisions, rather than submit to you for adoption an entire revision of the by-laws of the Board, changing the duties there given for each officer, we have thought it better to submit a list of requirements governing the financial business of the University for your consideration, deferring the revision of the by-laws till your action be taken on these requirements.

Your committee therefore recommends that the following requirements be adopted for the conduct of the financial business of the University and that your committee be instructed to report a revision of the by-laws embodying these requirements at the next meeting of the Board:

## RECEIPTS, INVESTMENTS, AND ACCOUNTING.

- 1. The Treasurer shall be the custodian of the funds and securities belonging to the University.
- 2. The Treasurer shall collect as it becomes due the interest accruing on the money and securities of the University and shall collect the principal of said securities as it becomes due. He shall collect all general and special appropriations made to the University by the state and the United States.
- The Treasurer shall keep the accounts of the money in his custody in such separate funds as are desirable and necessary for the proper and systematic accounting for the moneys coming into the treasury.
- 4. At each regular meeting of the Board, the Treasurer shall report in detail the transactions of his office for the quarter preceding the meeting and shall report the condition of the treasury at any time the Board may require.
- The Treasurer shall report to the Secretary for record a complete description of each of the securities the Finance Committee may place in his custody within ten days after said action of the Finance Committee.
- The Treasurer shall pay out money on warrants signed by the Secretary and the President of the Board and shall not otherwise do so; and he shall submit his receipted warrants to the Board for audit by the Finance Committee.
- The investment of the endowment fund shall be made by the Finance Committee of the Board which shall place the securities thus obtained in the custody of the Treasurer, taking his receipts therefor, and shall at once file the said receipts with the Secretary. The Committee shall report its actions concerning investment of funds at each regular meeting of the Board.
- The Secretary shall keep an accurate account of each of the securities reported by the Treasurer in a bond register and shall report maturing securities to the Board at least one quarter before maturity. He shall report the amount of interest accrued on the securities of the University during the previous quarter.
- 9. The Assistant Treasurer shall be the general Business Agent and financial accountant of the University. He shall collect and account for all money from dues, fees, tuitions, and all other sources not required to be collected by the Treasurer.

- 10. The Assistant Treasurer shall report monthly to the Treasurer the moneys received by him turning over to him all money except such as he and the Treasurer may agree to be necessary for the proper conduct of his office.
- 11. It shall be the duty of the Assistant Treasurer to pay all warrants for small sums drawn against the Treasurer, provided there is sufficient money in his hands to do so. He shall report the receipted warrants to the Treasurer monthly as cash and the Treasurer shall account for them as such.
- 12. The Assistant Treasurer shall report to the Board at its regular meetings the financial condition of the University with such recommendations for appropriations as may be necessary, and the transactions of his office for the quarter preceding and oftener if required by the Board. His report shall include a detailed statement of all moneys received, and from what sources, and the amounts paid to the Treasurer.
- 13. The Registrar shall report in detail to the Board at each regular meetlng the number of students who, during the quarter preceding, were indebted to the University for term incidental fees, matriculation, and graduation fees, tuition, deposits in the chemical and physical laboratories, and all other obligations imposed by their attendance upon the University.
- 14. The reports of the Treasurer, Assistant Treasurer, Secretary, and Registrar shall be audited by the Finance Committee of the Board, the Committee to report its findings and recommendations to the Board for approval.

#### EXPENDITURES, CONTRACTS, AND OBLIGATIONS.

- 1. No expenditures shall be made except on a formal order of the Board and an appropriation of the money therefor.
- 2. All appropriations shall lapse at the end of the fiscal year. By a vote of the Board an appropriation may be made to lapse at any time.
- 3. Articles or materials for the University shall be purchased only by persons or committees designated by order of the Board. When none are designated the Assistant Treasurer shall act as purchasing agent.
- 4. The Assistant Treasurer shall issue an order of purchase to all persons authorized by the Board to make purchases, but shall not do so unless he has the certificate of the Secretary that the purchase has been ordered by the Board and the money for payment therefor has been appropriated. The order shall clearly set forth the articles or materials ordered and shall state the fund from which the cost is to be paid. The order of the Assistant Treasurer shall accompany all bills of account for purchases on presentation for audit and payment.
- 5. The persons composing the force of instruction, the administration officers, and the clerks of the department offices shall be employed and salaries fixed by the Board. The monthly payroll of such persons shall be approved by the President of the University, but he shall not approve the name of any person who has not rendered prescribed service during the month unless such service shall have been previously formally excused by the Board or by the President of the University. The secretary shall prepare the payroll for the approval of the President on the first day of each month, setting forth for each person the amount of salary for the month as fixed by the Board.
- 6. All men and help employed exclusive of members of instructional force, administration officers, and clerks of department offices, shall be engaged by the Superintendent of Buildings and Grounds, provided that before doing so he shall secure the certificate of the Secretary that the employment has been authorized and the money therefor appropriated by the Board. At the time of the employment of each person by him he shall determine the price to be paid, except in cases where the Board has determined that, and he shall keep the time of the service in a proper book and report the payroll to the Secretary on the first day of each month or at the termination of the employment, certifying to the rate of pay, time of service, kind of service, and amount due.

- 7. The payroll of the employés in the State Laboratory of Natural History shall be made out and certified to by the Director and it shall be filed by him with the Secretary on the first day of each month.
- 8. Purchases to an amount exceeding one hundred dollars shall be let by contract in open competion unless the character of the materials or articles, technical or otherwise, render a competition impossible. Contracts shall be let by the Board or a committee designated by the Board and shall be signed for the University by the President and Secretary of the Board unless other persons or committees are authorized by the Board to perform that service.
- 9. Contracts shall be filed with the Secretary by the officers of the Board authorized to enter into the contract and payment in full or in part shall be made on contracts only, on the certificate of some person authorized by the Board that the contract or a part thereof has been acceptably fulfilled and that under the terms of the contract a certain stated amount is due and payable.
- 10. The Secretary shall act as Auditor of the Board and shall audit all accounts against the University. All bills of accounts shall be rendered to the Secretary for audit. The Secretary shall have regular business hours each day in which to audit and discharge bills of accounts against the University and shall have such hours bulletined for the information of the public.
- 11. Bills for purchases when rendered to the Secretary must be accompanied by the order of the Assistant Treasurer, and, if for materials or articles delivered, the receipt of the officer, member of Faculty, or employé who received them that the same was received by him in good condition, and that they were of the quality and kind prescribed.
- 12. When an account against the University is just and due, the obligation having been created by the authority of the Board, and appropriation has been made for the payment of the same, and if is presented in conformity to the requirements of the Board, the Secretary shall stamp on the face thereof "Approved for payment, A. B., Secretary," and shall enter the bill, fully described, in a book of audit, and shall issue a warrant against the Treasurer for the amount of the account. Said warrant he shall lay before the President of the Board for signature. The President shall sign it if he be satisfied that it is correct and return it to the Secretary. The Secretary shall then deliver the said warrant, taking acknowledgment therefor, in the audit book, in exchange for the audited bill, properly receipted, provided that in cases where the money is paid from special state and United States funds he shall require duplicate receipted bills. Each payroll shall be stamped but once, but each item shall be entered separately in the audit book and a warrant issued for each separate amount, and both the payroll and the audit book shall be receipted.
- 13. The Secretary shall report to the Board, at its regular meetings, the financial transactions of his office during the previous quarter, with a detailed lists of warrants issued, the receipted bills taken therefor, and the audit book receipted for warrants, which report shall be audited by the Finance Committee.

The following resolution, offered by Mr. McLean, was adopted:

Resolved, That the Committee on Buildings and Grounds be, and hereby is, authorized and instructed to have the necessary working plans and specifications for the library building made by D. H. Burnham & Co., and when such specifications and plans have been prepared to publish a call, in its discretion, for the erection and completion of said building by March 1, 1897, and to make report from time to time of its acts.

Resolved, That said Committee be further instructed to inform said D. H. Burnham & Co. that the entire cost of said building must not exceed the sum of money appropriated therefor by the General Assembly of the State of Illinois.

The Board then adjourned to meet at 9 o'clock Thursday morning.

# SESSION OF THURSDAY MORNING.

The Board convened pursuant to adjournment.

With regard to the proposition made by President Draper, that the avenue running south from Military Hall through our grounds be named Burrill avenue, Mr. Morgan, from the Committee on Buildings and Grounds, presented the following resolution and moved its adoption:

Whereas, Dr. Thomas. J. Burrill has been continuously Professor of Botany and Horticulture in the University of Illinois since it was inaugurated in 1868, and latterly for several years Regent pro tem., steadily declining permanent appointment to that high office, and also now is Dean of the General Faculty.

WHEREAS, While successfully discharging his formal duties he has, throughout the entire period of his association with the University, supervised and constantly directed the tree culture and work of beautifying the grounds of the University with a zeal and good taste which have resulted in the charming conditions now existing. Therefore, in consideration of these facts, and of the official merit and personal worth of Dr. Burrill, be it

Resolved; That the carriage drive extending from Military Hall south through the University grounds be named in his honor Burrill Avenue.

President Draper presented a request from Professor Palmer that authority be given to order, upon satisfactory bids, apparatus and material for the chemical laboratory to the amount of \$1,500.00.

It was ordered that premiums awarded for designs for the library building be paid from the state fund for salaries and expenses, and an appropriation of \$1,100.00 was made therefor.

It was ordered that the assessment for the Green Street sewer be paid from the fund for street paving, etc.

The Buildings and Grounds Committee was instructed to make repairs and improvements in the toilet room of the gymnasium, at an expense not exceeding \$125.00.

The Committee on Buildings and Grounds reported that it had obtained plans for the Observatory, and had also received bids for its construction, but was not prepared to report action at this time.

On motion of Mr. Morrison, it was voted that the Committee on Buildings and Grounds make a contract, on the best terms obtainable, with the Urbana and Champaign Electric Street Railway Co., for electric light and power, and with the Champaign and Urbana Gas Light and Fuel Co., for gas for the current year, bills to be payable monthly.

The following resolution offered by Mr. McLean, was adopted:

WHEREAS, It is the true policy of this University to own and control its heating, and lighting, and power plant, therefore be it

Resolved, That the matter be referred to the legislative committee next hereafter appointed, and that it be directed, in its discretion, to present to the legislature, along with the usual askings, a request for an appropriation sufficient to install such a plant.

The Finance Committee presented the report of the Treasurer, Mr. Charles W. Spalding, with the recommendation that it be filed for record. Approved.

—14 U. I.

### TREASURER'S REPORT.

Charles W. Spalding, Treasurer, in Account with the University of Illinois, November 30, 1895.

1895.		Dr.		
August Septemb'ı	31 r 13	To balance		\$188, 137 02
4.6	26	of Natural History From S, W, Shattuck on account general fund, check From State Treasurer for Jasper Co. coupons, due Oct.	\$9,900 00 2,000 00	•
October		1, 1895	750 00	
•••	7	From S, W, Shattuck paid warrants on account general fund	3,678 04	
**	9	From U. S. Treasurer, Experiment Station warrant, due	3,750 00	
" November	15 r 8	From W. L. Pillsbury on farm account	887 17	
.4.4		1, 1895. From S. W. Shattuck, paid warrants on account of gen-	325 00	
.4 4		eral fund. From State Treasurer for Douglas Co. bonds, due Nov.	3,213 18	
4.6		10, 1895. From State Treasurer for Douglas Co. coupons, due	5,000 00	
••	27	Nov. 10, 1895.  From Eilert W. Harris, assignee, on account of interest	300 00	
		on land contract No. 62	200 00	
		From S. W. Shattuck, paid warrants on account of general fund	1,593 31	
4.4	30	Interest for September, October, and November on endowment fund, at 4 per cent	214 76	
	30	other funds, at 2 <sup>1</sup> 2 per cent	899 71	990 040 40
				220,848 19
		Cr.		
		By amount paid out of general fund as per list of war- rants attached thereto	<b>\$13,873</b> 59	
**	30	rants attached thereto  By amount paid out of U. S. Experiment Station fund, as per list of warrants attached hereto  By amount paid out of Experiment Station farm account,	3,337 27	
**			771 61	
• •	30	By amount paid out of state appropriation for salaries, as per list of warrants attached hereto. By amount paid out of state appropriations for Engineering Hall, as per list of warrants attached hereto.	13, 305 91	
44	30	By amount paid out of state appropriations for Engi-	420 12	
44	30	By amount paid out of state appropriation for furnishing and heating Natural History Hall, as per list of		
44	30	warrants attached hereto	100 06	
4.4	90	By amount paid out of state appropriation for library, as per list of warrants attached hereto	752 38	
	90	tory of Natural History, as per list of warrants attach-	0.400.00	
4.6	30	ed heretoBy amount paid out U. S. fund, as per list of warrants	2,483 30	
44	30	attached hereto	10,835 22	
••		ing College, as per list of warrants attached hereto By amount paid out of state appropriation for fitting and	8,542 29	
	20	furnishing Engineering Hall, as per list of warrants attached hereto	2,281 42	
	90	By amount paid out of state appropriation for building and equipping Biological Experiment Station, as per	407 00	
4.6	30	list of warrants attached hereto	137 23	
		Experiment Station, as per list of warrants attached hereto	648 33	
44	30	By amount paid out of state appropriation for apparatus and material, as per list of warrants attached hereto	573 01	
• •	30	By amount paid out of state appropriation for shop practice, as per list of warrants attached hereto	254 05	
••	30	By amount paid out of state appropriation for chemical laboratories, as per list of warrants attached hereto	1,404 91	
4.6	30	By amount paid out of state appropriation for laboratory of vegetable physiology, as per list of warrants attach-	_, 101 01	
**	90	ed hereto	232 70	
44	ئ م	By amount paid out of state appropriation for fire protection, as per list of warrants attached hereto	202 19	
	30	By amount paid out of state appropriation for paving streets and walks, as per list of warrants attached	0.004.55	
		hereto	8, 221 99	\$68, 377 58

# Treasurer's Report—Concluded.

Balances— Endowment fund. U. S. Experiment Station fund. U. S. Experiment Station fund. U. S. Experiment Station farm fund. U. S. fund.  State appropriations— For salaries, etc. Furnishing and heating Natural History Hall. Library Laboratory of Natural History. Cabinets. Engineering College. Astronomical Observatory. Fitting and furnishing Engineering Hall. Building and equipping Biological Experiment Station Biological Experiment Station. Apparatus and material. Shop practice. Chemical laboratory. Laboratory of Vegetable physiology.	7, 539 83 76, 672 03 315 33 2, 247 62 6, 024 16 1, 002 74 14, 027 12 5, 000 00 2, 693 93 1, 727 77 734 13 2, 424 14 1, 245 95 3, 553 98 1, 767 30	
Fire protection Paving streets and walks.	1,797 81 1,078 01	
Less general fund overdraft	\$159, 402 75 6, 932 14	152,470 61
		\$220,848 19

The Finance Committee also recommended payment of the Treasurer's bill of \$235.11, and the recommendation was adopted.

On motion of Mr. McLean, the sum of \$5,000 was appropriated for the erection of the President's House.

The Board adjourned.

W. L. PILLSBURY,

Secretary.

N. W. Graham,

President.

# MEETING OF DECEMBER 27, 1895.

The Board of Trustees of the University of Illinois met in special session in the University Parlor in Urbana, Ill., at 3 o'clock p. m. Friday, December 27, 1895, pursuant to the following call issued by the secretary, December 19, 1895:

By order of the President, Mr. N. W. Graham, the Board of Trustees of the University of Illinois is hereby called to meet in special session in the University Parlor in Urbana, Illinois, at 3 o'clock p. m. Friday, December, 27, 1895.

The meeting is called "at the request of Governor Altgeld, who will submit important business."

There were present Governor Altgeld and Messrs. Armstrong, Bullard, Graham, Judy, Morgan, Morrison, and Raymond and Dr. Smith and Mrs. Flower; absent, Messrs. Inglis and McLean.

Mr. Morrison moved to reconsider the action of the Board taken on motion of Mr. Armstrong at its last meeting by which a design for the new library building was adopted. (See minutes of meeting of December 10, 1895, page 199.)

While this motion was under consideration, Mr. D. H. Burnham resigned as architect of the library building.

On the motion to reconsider the yeas were Altgeld, Judy, Morgan, Smith, Graham, Morrison, Raymond; the nays were Flower, Bullard, Armstrong.

The original motion was then defeated by the following vote: Yeas, Flower, Bullard, Armstrong, Raymond; nays, Altgeld, Judy, Morgan, Smith, Graham, Morrison.

On motion of Mr. Judy, Mr. Burnham's resignation was accepted. On motion of Governor Altgeld, it was

Resolved, That the Committee on Buildings and Grounds do ascertain at once whether or not it is practicable and desirable to have the architectural department of the University do the architectural work of the proposed library; and if they find that it is practicable and desirable, that then the said department be instructed to proceed at once with the preparation of sketches and designs to be presented to this Board at its next session. And that in case said Committee finds that it is not practicable, or not desirable, to have the work thus done, that then said Committee do employ the services of a competent architect to draw satisfactory plans and designs and present the same at the next meeting of this Board.

On motion of Mr. Judy, the Committee on Buildings and Grounds was instructed to obtain terms of settlement from D. H. Burnham & Co. and report same to the Board at its next meeting.

An appropriation of two hundred dollars was made for Board expense.

Upon recommendation of the Faculty, the degree of B. S., in the course of architecture was conferred upon Emery Stanford Hall.

The Board adjourned.

N. W. GRAHAM,

W. L. PILLSBURY,

President.

Secretary.

# MEETING MARCH 10, 1896.

The Board of Trustees of the University of Illinois met in the University Parlor, Urbana, at 3 o'clock p. m., Tuesday, March 10, 1896. The members present were Messrs. Armstrong, Bullard, Graham, Inglis, McLean, Morgan, Morrison, Raymond, Dr. Julia Holmes Smith, and Mrs. Flower; absent, Governor Altgeld and Mr. Judy.

The minutes of the meeting of December 10, and of the meeting of December 27, 1895, were approved as presented by the Secretary.

The President then announced the election of officers. Messrs. Morgan and Armstrong were put in nomination for President, and on the fourth ballot Mr. Armstrong was elected by vote of five to four.

W. L. Pillsbury was elected Recording Secretary, Corresponding Secretary, and Registrar, at a salary of \$1,400 a year.

Messrs. Bullard and Raymond were elected members of the Executive Committee.

President Draper presented reports and communications which were disposed of as follows:

#### PAPERS PRESENTED BY PRESIDENT DRAPER.

A report from the Superintendent of Buildings and Grounds was referred to the Committee on Buildings and Grounds.

The following schedule of charges for services in the Chemical Laboratory was recommended by the President and was adopted:

#### SCHEDULE OF CHARGES FOR CHEMICAL ANALYSES.

Sanitary chemical analysis of potable waters—for residents of Illinois  For non-residents	\$10 00
of each and every constituent present	\$20 00 to 50 00 10 00 to 20 00
Analysis of vinegar, wine, beer, and liquors—determination of extract, detection of fusel oil, detection of mineral acid, each determination  Determination of alcohol.	2 00 2 00
Analysis of grains and food stuffs—according to the number of determinations to be made	10 00 to 25 00

# Schedule of Charges for Chemical Analysis—Concluded.

nalysis of foods, coffee, tea, sugar, bread, butter, etc.—		
Determination of moisture in bread		\$1
Determination of mineral ingredients in bread—(alum, copper, baryta).		2
Determination of fat in butter		2
Determination of water in butter		1
Determination of salt in butter		1
Determination of sugar		2
Detection of artificial coloring matter in coffee, tea, etc		2
Determination of ash in coffee or tea.		ī
Determination of caffeine and theine.		5
better and the first and the f	10 00 to	
ertilizers—quantitative examinationnalysis of coal and coke—determination of moisture, volatile combustible	10 00 10 .	40
nalysis of coal and coke—determination of moisture, volatile combustible		-
matter, fixed carbon, ash, sulphur		5
nalysis of iron and manganese ores, minerals, slags, ashes, clays, building		
stone, etc.—per cent. of iron, phosphorus, sulphur, silica, aluminium,		
manganese, each		3
manganese, eacher cent. of iron together with phosphorus, sulphur, silica, aluminium or		
manganese		5
omplete analysis excepting alkalies		20
omplete analysis with alkalies		$\tilde{25}$
old and silver ores—assays for gold and silver in ores	•	3
		o
ther ores, minerals, metals, alloys, etc.—Per cent. of any of the following		
metals, antimony, arsenic, bismuth, tin, cobalt, molybdenum, nickel, zinc,		
cadmium, copper, silver, chromium, lead, mercury, platinum, each		3

Charges for analysis of other articles, such as oils, varnishes, paints, pigments, baking powder, air, soap, drugs, chemicals, medicine, etc., and for the toxicological examination of human organs, etc., would have to be arranged to conform to the amount of time and work involved. They might vary, according to the case, from \$5 to \$50. In cases where the amount of the charge is not definitely fixed it shall be determined by the Professor of Chemistry with the approval of the President.

A request from the business manager of the *Illini* for permission to sell the old printing outfit for the benefit of the *Illini* Association was granted.

A request from Professor Forbes for an appropriation of \$1,000 to be used in publishing the report of the Biological Experiment Station was referred to the Executive Committee with instructions to investigate and report at the next meeting of the Board.

A communication from the Advisory Board of Athletic Managers of the University was referred to the Finance Committee, and upon the recommendation of the committee the matter was laid over to the June meeting.

The construction and maintenance of tennis courts at an expense not to exceed \$250 was authorized, the work to be in charge of a special committee consisting of the Superintendent of Buildings and Grounds, Dr. Smith and Mrs. Flower.

A request from the Glee Club for an appropriation with which to meet the deficiency in their accounts was referred to the Finance Committee. Later in the session the committee reported recommending an appropriation of \$75.00 for the Glee Club, and the recommendation was adopted.

A request by Professor Talbot for \$150.00 for use in the Laboratory of Applied Mechanics was referred to the Finance Committee, and upon recommendation of the Committee the appropriation was made.

- Mr. C. A. Gunn's letter resigning his position as instructor in architecture was referred to the Committee on Instruction and the resignation was accepted, to take effect the first day of July next, upon recommendation of the Committee.
- Mr. H. S Piatt, Assistant Professor of Romance Languages, was granted leave of absence, for the purpose of study abroad, during the University year beginning September 1, 1896, with permission to go away June 10th.

By request of Professor Breckenridge \$250.00 was assigned from the state appropriation for materials for shop practice, for use in the shops.

Certain other requests made by Professor Breckenridge, for appropriations for the Mechanical Engineering Department were referred to the Finance Committee, and upon recommended of the Committee further consideration was postponed to the June meeting.

On request of Professor Baker \$15.00 was appropriated for the removal of certain brick piers received from the United States Laboratory, at Watertown, Mass., to Engineering Hall, and for the return of the metal clamps on these piers.

A request for an appropriation of \$50.00 for expenses of the committee on accredited schools was referred to the Finance Committee, and on recommendation of the Committee this appropriation was made.

A request from the *Technograph* for an appropriation of \$50.00 to meet a deficit in the accounts for publishing of the last number was referred to the Finance Committee, and on recommendation of the Committee, it was voted not to grant the request.

The report of the Agricultural Experiment Station was received.

#### AGRICULTURAL EXPERIMENT STATION.

URBANA, ILLINOIS, March 10, 1896.

Dr. A. S. Draper, President of the University of Illinois,

SIR: I beg leave to submit from the Board of Direction of the Agricultural Experiment Station the following:

Paper A is a list of warrants drawn, Nos. 84 to 168, inclusive, for the quarter ending December 31, 1895, and is accompanied with vouchers for the same for audit.

Paper B is a statement of expenditures for the quarter ending December 31, 1895.

Paper C is a statement of appropriations, expenditures, and balances for the quarter ending March 31, 1896.

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

## Paper B-Statement of Expenditures, Quarter ending December 31, 1895.

Board expense Books and publications. Bouldings and repairs Chemical apparatus and supplies Cuel and lights neidentals Meteorological apparatus Printing, stationery, and postage Salaries, Seeds and trees Cools and supplies Wages Wages	\$34	86
Books and publications	160	50
Buildings and repairs	12	15
Themical apparatus and supplies	16	2
Guel and lights	78	8
ncidentals	9	80
Meteorological apparatus		9
Frinting, stationery, and postage	24	15
alaries	1.660	Ō
seeds and trees	2,000	16
Tools and supplies	106	30
Nomes	965	65
Wood durability experiment.	32	48
Total	\$3, 113	18

# PAPER C-EXPENDITURES, QUARTER ENDING MARCH 31, 1896.

	Appro- priated.	Expended.	Balances.
Board expense. Books and publications. Botanical apparatus and supplies. Buildings and repairs Builletins Chemical apparatus and supplies. Fuel and lights. Incidentals. Printing, stationery, and postage Salaries. Seeds and trees. Tools and supplies Wages Southern Illinois experiments.	50 00 50 00 25 00 800 00 40 00 100 00 25 00 25 00 1,910 00	35 95 6 50 13 50 1,114 99	800 00 40 00 100 00 11 50 25 00 795 01 50 00 100 00
Total	\$4,115 00	\$1,817 71	\$2,297 29

## PAPER D-ESTIMATES.

Quarter ending March 31, 1896,	
Wages	\$150 00
Quarter ending June 30, 1896.	
Board expense. Books and publications. Botanical apparatus and supplies. Bulletins. Chemical apparatus and supplies. Fuel and lights. Incidentals. Printing, stationery, and postage Salaries. Seeds and trees Tools and supplies. Wages Southern Illinois experiments	\$40 00 25 00 10 00 500 00 40 00 25 00 25 00 25 00 1,875 00 75 00 300 00 1,250 00
Total	\$4,395 00
From farm fund— Buildings and repairs. Tools and supplies Wages	\$375 00 200 00 260 00
Total	\$835 00

The Board of Direction, in order to carry on experiments in southern Illinois, which it has undertaken by your authority, desires you to lease for its use two tracts of land; one of Mr. H. N. Woodward, of Odin, Ill., containing about fifteen acres, for one year, with the privilege of renewal each subsequent year for nine years, at a rental of \$25.00 a year; the other of Mr. Samuel Bartley, of Edgewood, Ill., containing three to five acres, for one year, with the privilege of renewal year by year for nine years thereafter, at an annual rental of \$2.50 an acre.

The Board of Direction also asks you to authorize undertaking the following experiments:

- 1. Experiments with Kaffir corn.
- 2. Investigations of pear blight.

The Board of Direction has appointed the members of its staff as follows:

Thomas J. Burrill, Horticulturist and Botanist, salary \$300.00.

Eugene Davenport, Agriculturist and Botanist, salary \$300.00. Eugene Davenport, Agriculturist, salary \$1,050.00. Stephen A. Forbes, Consulting Entomologist, without salary. Donald McIntosh, Veterinarian, without salary. Cyril G. Hopkins, Chemist, salary \$1,500.00. George P. Clinton, Assistant Botanist, salary \$1,000.00. William A. Powers, Assistant Chemist, salary \$720.00. Wilbur J. Fraser, Assistant Agriculturist, salary \$800.00.

These appointments are all for the year beginning April 1, 1896.

George W. McCluer for six months, beginning April 1, 1896, salary \$110.00 a month.

The Board of Direction asks your concurrence in the appointment of W. L. Pillsbury as Secretary of the Station at a salary of \$800.00 a year.

The Station also reports that it has purchased a Jersey cow and calf of excellent pedigree, which will prove, it is confident, a valuable addition to the registered stock already owned by the University.

Respectfully submitted.

T. J. Burrill,

President Board of Direction.

Appropriations of Experiment Station funds were made as asked for in this report, and the Board of Direction was authorized to undertake the new experiments proposed.

The appointment of members of the Station staff as reported was approved, and the Board concurred in the election of W. L. Pillsbury as Secretary.

The President and Secretary of the Board of Trustees were authorized to sign leases for land in southern Illinois as proposed when presented by the Board of Direction of the Experiment Station.

Messrs. E. E. Chester, of Champaign; H. B. Gurler, of DeKalb, and E. A. Riehl, of Alton, were appointed upon the Board of Direction of the Agricultural Experiment Station, as representatives of the State Board of Agriculture, State Dairymen's Association and the State Horticultural Society respectively.

Messrs. Morrison and Raymond, President Draper and Professors. Burrill, Forbes, and Davenport were also appointed members of the Board of Direction of the Agricultural Experiment Station. Dr. Burrill was made President and President Draper and Mr. Raymond were appointed members of the Executive Committee.

A request from Dr. Burrill, for leave to import apparatus and material for the Botanical Department of the University to the amount of \$100.00, was referred to the Committee on Finance and upon the recommendation of the committee the request was granted.

Another communication from Dr. Burrill in relation the employment of Mr. G. P. Clinton as Instructor in Botany, by the University, and the discontinuance of Mr. John Mayer as an employé of the Experiment Station, was referred to the Committee on Finance.

Upon motion of Mr. McLean, authority was given in the discretion of the President to pay to special students who may be appointed members of the band by the professor of military science, the same amount (\$22.50) a year for such service as is now paid matriculated students who continue as members of the band after they have completed their military service.

President Draper was authorized to make arrangements for lectures during the next University year, and \$1,000.00 was appropriated for this purpose.

The Committee on Buildings and Grounds made the following report:

#### REPORT ON LIBRARY.

URBANA, ILL., March 10, 1896.

To the Board of Trustees of the University of Illinois.

GENTLEMEN: The Buildings and Grounds Committee presents the following report of its doings:

In conformity with the resolution of instructions of the Board, December 27, 1895, the following letter was addressed to President Draper:

University of Illinois, Urbana, Ill., Dec. 28, 1895.

Dr. Andrew S. Draper, President,

DEAR SIR: This Committee respectfully requests that you take into consideration the practicability of utilizing the architectural department of the University in the preparation of plans, specifications, and estimates of cost for the proposed library building of the University, in accordance with the resolution of the Board of Trustees adopted December 27th.

The Committee not being sufficiently informed as to the feasibility of such a collateral engagement of the professors, desires to obtain a complete statement from yourself, and also your opinion, for its guidance.

R. P. Morgan, N. B. Morrison, I. S. Raymond,

Committee on Buildings and Grounds.

### REPLY.

Urbana, January 2, 1896.

Richard P. Morgan, N. B. Morrison, Isaac S. Raymond, Alexander McLean, Committee on Buildings and Grounds,

GENTLEMEN: Replying to your favor of the 28th ult., requesting me to take into consideration the practicability of utilizing the architectural department of the University in the preparation of plans, specifications and estimates of cost, for the proposed library building of the University, in accordance with

the resolution of the Board of Trustees adopted December 28th, I advise you that I have held several extended interviews with the professor and the assistant professor of architecture touching the matter. These gentlemen have expressed serious apprehensions as to their ability to find the time to carry out this important undertaking while carrying their regular University work. I have answered them that I understand the Board is very willing to make provision for any expense which may be incurred either in employing draughtsmen to assist them upon the plans or in employing instructors to assist in the work of instruction. It has therefore been concluded to advise your committee that upon this understanding Professor Ricker and Professor White will undertake to present to the committee, in less than thirty days, several sketches and estimates of cost for the proposed building, and they have already entered enthusiastically upon the work of preparation. I am,

Very truly yours,

A. S. Draper,

President.

Under this arrangement four designs were prepared and submitted to this Committee, at the University, on the 28th of January, 1896. After careful consideration of the designs the following motion was adopted:

#### MEETING OF BUILDINGS AND GROUNDS COMMITTEE.

President's Office, University of Illinois. January 28, 1896.

On motion of Mr. Raymond, Mr. Morrison was instructed to proceed to Springfield at the earliest possible day, accompanied by Professor Ricker or Professor White, for the purpose of submitting the designs for the library building, prepared by the architectural department, to Governor Altgeld, for consultation with him, and to report promptly and fully to the Chairman of this Committee the result of the interview.

RICHARD P. MORGAN,

Chairman.

Mr. Morrison being, in consequence of sickness, unable to attend to the matter, a meeting was arranged with Governor Altgeld at his office in Chicago, on Tuesday, February 4th, at which there were present, Governor Altgeld, Professor Ricker, Professor White, and Mr. Morgan. The plans were fully explained by Professor Ricker and Professor White, and after full consideration the purely Romanesque design was considered satisfactory to all.

On the evening of the same day your Committee invited a conference, at the Palmer House, of the Trustees residing in Chicago, at which were present, Mrs. Flower, Mrs. Dr. Smith, Mr. Armstrong, and Mr. Morgan. At this meeting there was a very thorough discussion of the merits of the several designs, which resulted in a unanimous agreement upon the Romanesque design. The question of the employment of Professors Ricker and White to supervise the construction of the building, and also their compensation, were fully considered and this Committee was informally instructed to arrange with those gentlemen in its discretion.

That the entire responsibility of thus employing Professor Ricker and Professor White, in a degree out of the educational corps of the University, should not rest upon President Draper, and also for the general information of the Trustees upon the subject, your Committee addressed a letter of inquiry to President Angell, of the University of Michigan, and to Professor Adams, of the University of Wisconsin, and received the replies now read.

After this preparatory work and having received the unanimous approval of the Trustees of the Romanesque design, your Committee entered into the the following agreement with Professors Ricker and White.

#### COPV.

Memorandum of an agreement entered into this eighth day of February, 1896, by and between the University of Illinois, through its Committee on Buildings and Grounds, of the first part, and N. Clifford Ricker and James M. White of the second part.

The party of the first part accepts and approves the Romanesque design (No. 4) for a library building to be erected for the University.

The parties of the second part agree to work out sufficiently the details of said design for examination by the Board at a meeting to be held on March 10, 1896, and fully to complete same for bidders not later than April 15, 1896, and as much earlier as possible.

It is agreed by the party of the first part to pay to the party of the second part the usual commission of five per cent. on the total cost of said library building.

It is agreed by the parties of the second part that the present efficiency of the architectural department shall be maintained and that all additional instructors required to secure this end shall be employed and that any additional instructors so required shall be paid by the parties of the second part out of their commissions. The amount of this assistance, the particular persons employed, and the salaries paid shall be entirely subject to the acceptance and approval of the President of the University.

It is agreed by the parties of the first part that funds shall be advanced on account of the commission of the parties of the second part as may be required to pay salaries, and for material and other necessary expenses. These payments shall be made on the certificates of the parties of the second part, after having the approval of the President of the University. One-half of the commissions to the parties of the second part shall become due and payable at the time contracts are signed for the erection of the building and shall be then paid to the parties of the second part after deducting such advances as may have been made. The remainder of said commission shall be paid in installments as the work progresses.

It is agreed by the parties of the second part to devote as much time as necessary and give personal supervision to the construction of the building, and it is also agreed that one of the said parties of the second part shall be present at the University at all times.

It is agreed that suitable rooms shall be provided by the party of the first part, as may be approved by the President, for carrying on the work herein referred to, and it is also agreed that the architectural work herein referred to shall be advanced with all possible speed.

University of Illinois, by Richard P. Morgan,

Chairman Committee on Buildings and Grounds, Parties of the first part.

N. CLIFFORD RICKER, JAMES M. WHITE, Parties of the second part.

The foregoing agreement, so far as the instruction work is concerned, meets with my approval.

A. S. Draper,

President of the University of Illinois.

Respectfully submitted,
RICHARD P. MORGAN,
ISAAC S. RAYMOND,
N. B. MORRISON,
ALEX. McLEAN.

Committee on Buildings and Grounds.

Mr. Bullard moved that the report of the committee be adopted. While this motion was pending, the Board adjourned to meet at 8:30 o'clock Wednesday morning.

## Session of Wednesday Morning.

When the Board convened pursuant to adjournment the same members were present as on Tuesday.

After further consideration of the report on the library building Mr. Bullard's motion was passed.

President Armstrong announced the standing committees of the Board as follows:

#### STANDING COMMITTEES.

Farm—I. S. Raymond, chairman; N. B. Morrison, Alex. McLean, J. W. Judy.

Buildings and Grounds—S. A. Bullard, chairman; R. P. Morgan, I. S. Raymond, Mrs. Flower.

Finance—N. B. Morrison, chairman; N. W. Graham, S. A. Bullard.

Instruction—Mrs. Flower, chairman; S. M. Inglis, Dr. Smith, N. W. Graham.

Publication—Mr. Morgan, chairman; President Draper, W. L. Pillsbury.

Library—President Draper, chairman; S. M. Inglis, Alex. McLean, Professor S. W. Shattuck, Percy F. Bicknell.

Students' Welfare—Julia Holmes Smith, chairman; R. P. Morgan, N. W. Graham.

Mr. Morrison from the Finance Committee, reported back the claim of the Garvin Machine Co. (see page 195) without recommendation and, on motion of Mr. Bullard, the Secretary was instructed to write the Garvin Machine Co. that this Board does not consider the papers presented by the company sufficient to establish a claim against the University.

On motion of Mr Morgan the following resolutions were adopted:

Resolved, That the architects of the library building are hereby instructed to construct the tower of the building in a manner to enable the hanging of a suitable chime of bells in the tower of the same. And be it further

Resolved, That the Trustees of the University shall establish in the tower a chime of bells in the name of the first reputable citizen of the State of Illinois who shall deposit with them, as a donation, a sum of money sufficient to purchase a chime of bells satisfactory to the Trustees.

President Draper, from the committee appointed for the purpose, reported rules concerning the conduct of business in the University, as follows:

Rules Governing the Transaction of Business, the Keeping of Accounts and the Custody of Funds of the University of Illinois.

The following rules are adopted for the observance of officers charged with the management of the business, the keeping of the accounts, and the custody of the moneys of the University, and shall apply to the affairs of the Agricultural Experiment Station and of the State Laboratory of Natural History, as well as the affairs of the University, except that the accounts of the Experiment Station and of the State Laboratory shall be kept in separate books, and that in the transaction of the business of the Experiment Station the action of the Board of Direction of the Station shall be accepted for that of the Board of Trustees of the University when within the scope of the delegated powers conferred upon the Board of Direction and pursuant to appropriations made by the Board of Trustees.

### RECEIPTS, INVESTMENTS, AND ACCOUNTING.

- 1. The Treasurer shall be the custodian of the funds and securities belonging to the University.
- 2. The Treasurer shall collect, as it becomes due, the interest accruing on the money and securities (including land contracts) of the University, and shall collect the principal of said securities when it becomes due. He shall collect all general and special appropriations made to the University by the state and the United States.
- 3. The Treasurer shall keep the accounts of the moneys in his custody in such separate funds as shall be indicated by the Board of Trustees, or as are desirable and necessary for the proper and systematic accounting for the moneys coming into the treasury.
- 4. At each regular meeting of the Board, the Treasurer shall report in detail the transactions of his office for the quarter preceding the meeting, and shall report the condition of the treasury at such time, and also at any other time the Board may request.
- 5. The Treasurer shall report to the Secretary, for record, a complete description of each of the securities the Finance Committee may place in his custody, within ten days after such action of the Finance Committee.
- 6. The Treasurer shall pay out money on warrants signed by the Chairman of the Board of Trustees and the Secretary, and shall not do so otherwise; and he shall submit his paid warrants to the Board for audit by the Finance Committee.
- 7. The endowment fund shall be kept constantly invested by the Treasurer and the Finance Committee of the Board. The Treasurer shall forthwith report all changes in investments to the Secretary, who shall enter the same in his records. The Committee shall report its action concerning the investment of funds at each regular meeting of the Board, for approval.
- 8. The Secretary shall keep an accurate account of each of the securities reported by the Treasurer, in a register, and shall report maturing securities to the Board at least one quarter before maturity. He shall report the amount of interest accrued on the securities of the University during the previous quarter.
- 9. The Business Manager shall be the general business agent and financial accountant of the University. He shall collect and account for all money from dues, fees, tuition, and all other sources not required to be collected by the Treasurer.
- 10. The Business Manager shall report monthly to the Treasurer the moneys received by him, turning over to him all money, except such as he and the Treasurer may agree to be necessary for the proper conduct of the petty business of his office. Single transactions involving less than \$50 in money may be classified as "petty business."
- 11. The Business Manager shall report to the Board at its regular meetings the financial condition of the University, with such recommendations for appropriations as may be necessary; and also the transactions of his office for the quarter preceding, and oftener, if requested by the Board. His report shall include a detailed statement of all moneys received and from what sources, shall show the amounts paid to the Treasurer, and all accounts audited, warrants drawn, and balances standing to the credit of the different funds.
- 12. The Registrar shall report in detail to the Board, at each regular meeting, the number of students, who, during the quarter preceding, were indebted to the University for term fees, tuition, deposits, and all other financial obligations imposed by their attendance upon the University.
- 13. No department of the University shall receive any funds unless specially authorized by the Business Manager, in writing, to do so. In all such cases he shall furnish the department so authorized a book in which the proper person shall enter a record of all transactions, specifying the date, the person from whom the money was received and the purpose or consideration for which it was received, and at the end of each month, or oftener, if

the Business Manager shall request, the department receiving such money shall report to the Business Manager, upon a proper blank to be prepared for the purpose, a transcript of his memorandum book, and account and pay over the moneys so received, and the Business Manager shall keep said reports on file in his office and enter the funds so received in his books.

### EXPENDITURES, CONTRACTS, OBLIGATIONS, AND PAYMENTS.

- 1. No expenditures shall be made except on the authority of the Board, and after an appropriation of money therefor, as evidenced by its records. In an emergency requiring immediate action the President and Business Manager may, by concurrent action, incur an expense not greater than \$250, and the Executive Committee of the Board of Trustees may, of course, act in any matter at any time.
- 2. All appropriations shall lapse at the end of the fiscal year unless otherwise specially ordered. By a vote of the Board an appropriation may be made to lapse at any time.
- 3. Articles or materials for the University shall be purchased by persons or committees designated by order of the Board. When none are designated the Business Manager shall act as purchasing agent.
- 4. The Business Manager shall issue an order for purchase to persons authorized by the Board to make purchases, but shall not do so unless the records of the Board show that the purchase has been authorized and that the money for payment therefor has been appropriated. The order shall clearly set forth the articles or materials ordered, and shall state the fund from which the account is to be paid. The order of the Business Manager shall accompany all bills of account for purchases, (or said bills shall refer to said orders,) on presentation of such bills for audit and payment. But no order for the purchase of furniture, apparatus, or equipment, unless specifically ordered by the Board of Trustees, shall be made unless the advisability of such purchase is approved by the President of the University, nor unless the price which it is proposed to pay is approved by the Business Manager.
- 5. The persons composing the force of administrative officers, and the clerks or other employés of the departments, and the Corps of Instruction, shall be employed and salaries fixed by the Board. The monthly payroll of such persons shall be approved by the President of the University, but he shall not approve the pay of any person who has not rendered prescribed service during the month, unless such service has been previously formally excused by the Board or by the President of the University, under the rules for the government of the instructional force. The Business Manager shall prepare the payroll for the approval of the President each month, setting forth for each person the amount of salary for the month, as fixed by the Board.
- 6. All help employed, exclusive of the persons referred to in the preceding rule, shall be employed by the Superintendent of Buildings and Grounds, with the approval of the President of the University, provided that before doing so the Superintendent shall secure the certificate of the Business Manager that the employment has been authorized and the money therefor appropriated by the Board. At the time of the employment of each person by him he shall determine the price to be paid, except in cases where the same has been determined by the Board, and he shall keep a record in a suitable book, to be provided for the purpose, of the name of the person so employed, the time when employed, the length of service, and the amount to be paid, and he shall report the same to the Business Manager whenever requested; and he shall prepare and deliver to the Business Manager the payrolls covering such help at the termination of the employment or at such other time as he may be requested so to do.
- 7. The employés of the Agricultural Experiment Station shall be appointed by the Board of Direction of the Station, or by the Director of said Station when authorized by said Board, but no appointment shall be made unless the same shall have been authorized by the Board of Trustees. The Business Manager and the Secretary of the Board of Trustees shall, upon application,

afford information to the Board of Direction of the Experiment Station touching the action of the Board of Trustees and the condition of the funds in which the Board of Direction and the Station may be interested. The payroll of said employés shall be made and certified by the Director of the Station to the Business Manager at such times as that officer may request.

- 8. The employés of the State Laboratory of Natural History shall be appointed by the Director of the Laboratory, but not until such appointments shall have been authorized by the Board of Trustees, and the payroll of said employés shall be made out and certified by the Director and delivered by him to the Business Manager at such times as that officer may request.
- 9. Purchases to an amount exceeding \$100.00 shall be let by contract, after competition, unless the character of the material or articles renders competition unpracticable. Contracts shall be let by the Board or a committee appointed by the Board, and shall be signed for the University by the Chairman and Secretary of the Board of Trustees, unless other persons or committees are authorized by the Board to perform that service.
- 10. Contracts shall be filed with the Business Manager by the officers of the Board authorized to enter into the contracts, and payment in full or in part shall be made on contracts only on the certificate of some person authorized by the Board to make a certificate that the contract or a part thereof has been acceptably fulfilled, and that under the terms of the contract a certain stated amount is due and payable.
- 11. The Business Manager shall act as the auditor of the Board, and all bills shall be presented to him for audit, but no bills relating to labor upon buildings and grounds shall be audited and paid unless approved by the Superintendent of Buildings and Grounds, and all other bills must have the approval of the President of the University unless they are for continuing salaries, contracts, or other running accounts specially authorized by the Board; and in all cases payment of any bill or account shall be suspended on the request of the President of the University pending the action of the Board of Trustees.
- 12. Bills for purchases, when rendered, must be accompanied by the order hereinbefore provided for, and if for materials or articles delivered then also by the receipt of the officer, member of the instructional force, or employé who received them, that the same were received by him in good condition, and that they were of the quality, kind, and price prescribed.
- 13. When any account against the University is found to be just and due, created by the authority of the Board, and one that an appropriation has been made to pay, and is presented in accordance with the requirements of the Board, and has been approved by the proper officer, the Business Manager shall approve and audit the same, stamp his approval upon the face of the bill, issue a warrant against the Treasurer for the amount thereof, and send said warrant to the Chairman of the Board of Trustees for signature. The Chairman shall sign the same, if he thinks proper, and in that event he shall forthwith forward it to the Secretary. In case he declines to sign the same he shall return it to the Business Manager with his reasons for such declination. The Secretary shall, as soon as he receives a warrant, make a proper record thereof in his books, sign the same, and deliver it to the Business Manager, who shall enter the same in his warrant book, giving its number, for what issued, to whom payable, and the appropriation from which it is to be paid.

Separate warrant books shall be kept for the University, the Agricultural Experiment Station, and the State Laboratory of Natural History.

The Business Manager shall deliver the signed warrants which he receives to the payee therein named in exchange for such receipts or evidences of discharge as may be required to meet the needs of the University accounts.

When a bill or claim is for less than \$50.00 the Business Manager may, at his discretion, pay the same in cash, if, in his opinion, the business of the University will be better expedited thereby. Before such payment the Secre-

tary shall, however, make a record of said bill, and soon after payment, certainly as often as once in each month, and as much oftener as he prefers, the Business Manager shall make a statement of all such payments, accompanied by the vouchers therefor, and draw a warrant to his own order for the sum thereof, and forward both to the Chairman of the Board of Trustees for approval and signature. If the payments are approved the Chairman shall endorse his approval upon said statement, and shall sign the accompanying warrant and forward both to the Secretary, who shall also sign both and note the fact against the previous record, and deliver said statement and warrant to the Business Manager, who shall make proper entries of their receipt in his books, shall file the statement in his office, endorse the warrant and deliver the same to the Treasurer, who shall receive the same as cash and credit the Business Manager with the amount thereof.

- 14. The Business Manager, Treasurer, and Secretary shall report fully to each regular meeting of the Board, and their reports shall be examined by the Finance Committee of the Board, and said committee shall forthwith report its findings and recommendations to the Board for approval.
- 15. The fiscal year of the University shall begin on the first day of July in each year and end upon the 30th day of June next succeeding, but all reports shall be made as required by law.
- 16. The officers of the Board shall cause new account books to be prepared, and shall open the same and transfer all balances to them at the beginning of the next fiscal year, and shall prepare all blank forms necessary for carrying the foregoing rules into effect.
- 17. The foregoing rules shall be observed from the time of their adoption so far as practicable, and shall be fully in effect from and after the first day of July, 1896.

The report of the committee was adopted.

The Committee on Finance offered the following report, which was approved:

URBANA, March 11, 1896.

To the Board of Irustees of the University of Illinois.

GENTLEMEN: Your Committee on Finance has examined the vouchers submitted by the Agricultural Experiment Station Nos. 84 to 168, inclusive, and rect and duly receipton.
Respectfully submitted,
N. B. Morrison,
S. A. Bullard,
N. W. Graham,
Financ has found the same correct and duly receipted.

Finance Committee.

The Treasurer's report was received and referred to the Finance Committee.

#### TREASURER'S REPORT.

CHARLES W. SPALDING, TREASURER, IN ACCOUNT WITH THE UNIVERSITY OF ILLINOIS, FEBRUARY 29, 1896.

	7		
	Dr.		
1895.			
	r 30 Balance		\$152,470 61
	16 From F. Topka, interest on land contract No. 18	<b>\$52</b> 50	420-y 210 02
December			
	Wenzl Kopacek, principal on land contract No. 65	500 00	
	wenzi Kopacek, interest on land contract No. 55	65 00	
66	24 "S. W. Shattuck, paid warrants, general fund	1,915 97	
4.4	30 '' Jos. Novotny, interest on contract No. 53	40 00	
	31 '' Jos. Dezort, interest on contract No. 40	96 00	
	50s. Dezort, interest on contract No. 40	. 20 00	
1896.			
January	2 From L. S. Botten, principal on contract No. 83	200 00	
	2 ' L. S. Botten, interest on contract No. 83	39 20	
4.6	2 '' Wm. Buethe, principal on contract No. 80	120 00	
4.6			
4.4	2 "Wm. Buethe, interest on contract No. 80	58 80	
	2 Rier O. Braaten, interest on contract No. 65	4 39	
. 4.4	3 '' Erick Lindquist, interest on contract No. 64	77.00	
4.4	3 Village of Austin coupons due January 1, 1896		
	of the second continues and state of the second sec	313 00	

# Treasurer's Report—Continued.

		Dr,		
1895. January	. 9	•	\$120 00	
••	3	From Dale & Roise, principal on contract No. 72	58 80	
• •	3	Olof Mattson, interest on land contract No. 73	200 00	
4.4	3	Olof Mattson, interest on land contract No. 73 Jos. Cuta, principal on contract No. 65 Jos. Cuta, interest on contract No. 65 Crawford county coupons due Jan. 1, 1896 Gallatin county coupons due Jan. 1, 1896	84 00 100 00	
* *	3	'' Jos. Cuta, interest on contract No. 65.	35 00	
44	4	Crawford county coupons due Jan. 1, 1896	600 00	
• •	4	From Borthal Poderson, principal on contract No. 69	630 00 50 00	
4.4	6	From Berthal Pederson, principal on contract No. 69 Berthal Pederson, interest on contract No. 69	14 70	
44	- 6	"Berthal Pederson, principal on contract No. 74	14 70 105 00	
•••	6	"U. S. Treasury, Experiment Station warrant, due	14 70	
4.	8	Jan. 1, 1896 '' Peter Larson principal on contract No. 66	3,750 00 133 33	
4.6	8	Peter Larson, principal on contract No. 66. Peter Larson, interest on contract No. 66. S. J. Hallquist, principal on contract No. 75. S. J. Hallquist, interest on contract No. 75.	84 00	
44	9	S. J. Hallquist, principal on contract No. 75	150 00	
4.6	9	S. J. Hallquist, interest on contract No. 75	63 00 13 50	
4.6	9	S. J. Hallquist, principal on contract No. 76. S. J. Hallquist, interest on contract No. 76. J. E. Blickenstaff, interest on contract No. 39.	73 50	
4.6	11	J. E. Blickenstaff, interest on contract No. 39	24 00	
••	13 13	Nels Olson, on contract No. 99	25 00	
4.4	16 16	Nels Ölson, interest on contract No. 99 Ole Lundquist, interest on contract No. 112	35 00 25 25	
4.6	16	"W. L. Pillsbury, on account farm fund, credit	1,015 01	
44	18	W. L. Pillsbury, on account farm fund, credit Hans Vesterud, interest on land contract No. 84 Hans Vesterud, interest on land contract No. 85	23 54	
**	18 18	Hans Vesterud, interest on land contract No. 85	23 54 9 15	
44	27	"" Burnham Trevett & Mattis, Beatrice, Neb., re-	9 10	
		demption and interest tax certificates Nos. 5649		
44	-00	"Hans Vesterud, taxes on contracts Nos. 84 and 85 Burnham, Trevett & Mattis, Beatrice, Neb., redemption and interest tax certificates Nos. 5649 and 5650 on contract Middleton	38 00	
••	28	5. W. Shattuck, paid warrants on account general	4 520 76	
Pebruary	3	fund	4,530 76 984 20	
• • •	3	Ole Sorenson, principal on contract No. 79	158 35	
	3	Union School District No. 6, Champaign county, coupons		
4.6		due Feb. 1, 1896.	270 00	
4.4	4	Mattoon, Coles county, Ill., coupons	2 89 150 00	
44	$2\overline{4}$	From Ole Sorenson, interest on contract No. 79	3,948 00	
**	29	From S. W. Shattuck, paid warrants on account, generall	1,229 07	
**	29	fund Interest Dec., Jan., and Feb. on endowment fund at 4 per cent Interest Dec., Jan., and Feb. on all other funds at 2 <sup>1</sup> 2 per	280 00	
••	29	Interest Dec., Jan., and Feb. on all other funds at 2 <sup>1</sup> 2 per cent	577 30	
				\$23,372 45
				\$175,843 06
1896.		Cr.	i i	
	00		i	
	29	By amount paid out of general fund, as per list of war-		
		By amount paid out of general fund, as per list of war- rants attached hereto	\$10,735 80	
••		rants attached hereto		
••	29	rants attached hereto.  By amount paid out of state appropriation for salaries, etc. as per list of warrants attached hereto	\$10,735 80 36,250 05	
	29	rants attached hereto By amount paid out of state appropriation for salaries, etc., as per list of warrants attached hereto By amount paid out of state appropriation for furnishing and heating Natural History Hall, as per list of war-	36, 250 05	
	29 29	rants attached hereto  By amount paid out of state appropriation for salaries, etc., as per list of warrants attached hereto  By amount paid out of state appropriation for furnishing and heating Natural History Hall, as per list of warrants attached hereto.		
	29 29	rants attached hereto  By amount paid out of state appropriation for salaries, etc., as per list of warrants attached hereto  By amount paid out of state appropriation for furnishing and heating Natural History Hall, as per list of war- rants attached hereto  By amount paid out of state appropriation for Library, as	36, 250 05 315 33	
	29 29	rants attached hereto  By amount paid out of state appropriation for salaries, etc., as per list of warrants attached hereto  By amount paid out of state appropriation for furnishing and heating Natural History Hall, as per list of war- rants attached hereto  By amount paid out of state appropriation for Library, as	36, 250 05	
	29 29 29 29	rants attached hereto  By amount paid out of state appropriation for salaries, etc., as per list of warrants attached hereto  By amount paid out of state appropriation for furnishing and heating Natural History Hall, as per list of warrants attached hereto  By amount paid out of state appropriation for Library, as per list of warrants attached hereto  By amount paid out of state appropriation for Laboratory of Natural History, as per list of warrants attacked herets attacked hereto	36, 250 05 315 33	
	29 29 29 29	rants attached hereto  By amount paid out of state appropriation for salaries, etc., as per list of warrants attached hereto  By amount paid out of state appropriation for furnishing and heating Natural History Hall, as per list of warrants attached hereto  By amount paid out of state appropriation for Library, as per list of warrants attached hereto  By amount paid out of state appropriation for Laboratory of Natural History, as per list of warrants attacked herets attacked hereto	36, 250 05 315 33 1, 048 25 2, 321 93	
**	29 29 29 29	rants attached hereto  By amount paid out of state appropriation for salaries, etc., as per list of warrants attached hereto  By amount paid out of state appropriation for furnishing and heating Natural History Hall, as per list of war- rants attached hereto.  By amount paid out of state appropriation for Library, as per list of warrants attached hereto.  By amount paid out of state appropriation for Labora- tory of Natural History, as per list of warrants at- tacked hereto.  By amount paid out of state appropriation for cabinets, as per list of warrants attached hereto.	36, 250 05 315 33 1, 048 25	
**	29 29 29 29	rants attached hereto By amount paid out of state appropriation for salaries, etc., as per list of warrants attached hereto.  By amount paid out of state appropriation for furnishing and heating Natural History Hall, as per list of war- rants attached hereto.  By amount paid out of state appropriation for Library, as per list of warrants attached hereto.  By amount paid out of state appropriation for Labora- tory of Natural History, as per list of warrants at- tacked hereto.  By amount paid out of state appropriation for cabinets, as per list of warrants attached hereto.  By amount paid out of state appropriation for Engineer-	36,250 05 315 33 1,048 25 2,321 93 234 23	
••	29 29 29 29 29	rants attached hereto  By amount paid out of state appropriation for salaries, etc., as per list of warrants attached hereto  By amount paid out of state appropriation for furnishing and heating Natural History Hall, as per list of war- rants attached hereto  By amount paid out of state appropriation for Library, as per list of warrants attached hereto  By amount paid out of state appropriation for Labora- tory of Natural History, as per list of warrants at- tacked hereto  By amount paid out of state appropriation for cabinets, as per list of warrants attached hereto  By amount paid out of state appropriation for Engineer- ering College, as per list of warrants attached hereto	36, 250 05 315 33 1, 048 25 2, 321 93	
	29 29 29 29 29 29	rants attached hereto  By amount paid out of state appropriation for salaries, etc., as per list of warrants attached hereto  By amount paid out of state appropriation for furnishing and heating Natural History Hall, as per list of war- rants attached hereto  By amount paid out of state appropriation for Library, as per list of warrants attached hereto  By amount paid out of state appropriation for Labora- tory of Natural History, as per list of warrants at- tacked hereto  By amount paid out of state appropriation for cabinets, as per list of warrants attached hereto  By amount paid out of state appropriation for Cabinets, as per list of warrants attached hereto  By amount paid out of state appropriation for Astro- nomical Observatory, as per list of warrants attached hereto.	36,250 05 315 33 1,048 25 2,321 93 234 23	
	29 29 29 29 29 29	rants attached hereto  By amount paid out of state appropriation for salaries, etc., as per list of warrants attached hereto  By amount paid out of state appropriation for furnishing and heating Natural History Hall, as per list of war- rants attached hereto  By amount paid out of state appropriation for Library, as per list of warrants attached hereto  By amount paid out of state appropriation for Labora- tory of Natural History, as per list of warrants at- tacked hereto.  By amount paid out of state appropriation for cabinets, as per list of warrants attached hereto.  By amount paid out of state appropriation for Engineer- ing College, as per list of warrants attached hereto.  By amount paid out of state appropriation for Astro- nomical Observatory, as per list of warrants attached hereto  By amount paid out of state appropriation for Astro- hereto  By amount paid out of state appropriation for fitting and	36, 250 05 315 33 1, 048 25 2, 321 93 234 23 8, 893 78	
	29 29 29 29 29 29	rants attached hereto  By amount paid out of state appropriation for salaries, etc., as per list of warrants attached hereto  By amount paid out of state appropriation for furnishing and heating Natural History Hall, as per list of war- rants attached hereto.  By amount paid out of state appropriation for Library, as per list of warrants attached hereto  By amount paid out of state appropriation for Labora- tory of Natural History, as per list of warrants at- tacked hereto.  By amount paid out of state appropriation for cabinets, as per list of warrants attached hereto  By amount paid out of state appropriation for Engineer- ing College, as per list of warrants attached hereto  By amount paid out of state appropriation for Astro- nomical Observatory, as per list of warrants attached hereto  By amount paid out of state appropriation for fitting and hereto  By amount paid out of state appropriation for fitting and furnishing Engineering Hall, as per list of warrants	36, 250 05 315 33 1, 048 25 2, 321 93 234 23 8, 893 78 26 00	
	29 29 29 29 29 29 29	rants attached hereto  By amount paid out of state appropriation for salaries, etc., as per list of warrants attached hereto  By amount paid out of state appropriation for furnishing and heating Natural History Hall, as per list of war- rants attached hereto.  By amount paid out of state appropriation for Library, as per list of warrants attached hereto.  By amount paid out of state appropriation for Labora- tory of Natural History, as per list of warrants at- tacked hereto.  By amount paid out of state appropriation for cabinets, as per list of warrants attached hereto.  By amount paid out of state appropriation for Engineer- ing College, as per list of warrants attached hereto.  By amount paid out of state appropriation for Astro- nomical Observatory, as per list of warrants attached hereto  By amount paid out of state appropriation for Astro- hereto  By amount paid out of state appropriation for fitting and furnishing Engineering Hall, as per list of warrants	36, 250 05 315 33 1, 048 25 2, 321 93 234 23 8, 893 78	
	29 29 29 29 29 29 29	rants attached hereto  By amount paid out of state appropriation for salaries, etc., as per list of warrants attached hereto  By amount paid out of state appropriation for furnishing and heating Natural History Hall, as per list of war- rants attached hereto.  By amount paid out of state appropriation for Library, as per list of warrants attached hereto.  By amount paid out of state appropriation for Labora- tory of Natural History, as per list of warrants at- tacked hereto.  By amount paid out of state appropriation for cabinets, as per list of warrants attached hereto.  By amount paid out of state appropriation for Engineer- ing College, as per list of warrants attached hereto.  By amount paid out of state appropriation for Astro- nomical Observatory, as per list of warrants attached hereto  By amount paid out of state appropriation for Astro- hereto  By amount paid out of state appropriation for fitting and furnishing Engineering Hall, as per list of warrants	36, 250 05 315 33 1, 048 25 2, 321 93 234 23 8, 893 78 26 00	
	29 29 29 29 29 29 29	rants attached hereto By amount paid out of state appropriation for salaries, etc., as per list of warrants attached hereto By amount paid out of state appropriation for furnishing and heating Natural History Hall, as per list of war- rants attached hereto. By amount paid out of state appropriation for Library, as per list of warrants attached hereto. By amount paid out of state appropriation for Labora- tory of Natural History, as per list of warrants at- tacked hereto. By amount paid out of state appropriation for cabinets, as per list of warrants attached hereto By amount paid out of state appropriation for Engineer- ing College, as per list of warrants attached hereto. By amount paid out of state appropriation for Astro- nomical Observatory, as per list of warrants attached hereto By amount paid out of state appropriation for fitting and furnishing Engineering Hall, as per list of warrants attached hereto By amount paid out of state appropriation for building and equipment of Biological Experiment Station, as per list of warrants attached hereto.	36, 250 05 315 33 1, 048 25 2, 321 93 234 23 8, 893 78 26 00	
	29 29 29 29 29 29 29	rants attached hereto  By amount paid out of state appropriation for salaries, etc., as per list of warrants attached hereto  By amount paid out of state appropriation for furnishing and heating Natural History Hall, as per list of war- rants attached hereto  By amount paid out of state appropriation for Library, as per list of warrants attached hereto  By amount paid out of state appropriation for Labora- tory of Natural History, as per list of warrants at- tacked hereto  By amount paid out of state appropriation for cabinets, as per list of warrants attached hereto  By amount paid out of state appropriation for Engineer- ing College, as per list of warrants attached hereto  By amount paid out of state appropriation for Astro- nomical Observatory, as per list of warrants attached hereto  By amount paid out of state appropriation for fitting and furnishing Engineering Hall, as per list of warrants attached hereto  By amount paid out of state appropriation for building and equipment of Biological Experiment Station, as	36, 250 05 315 33 1, 048 25 2, 321 93 234 23 8, 893 78 26 00 254 54	

## Treasurer's Report—Continued.

February	29	By amount paid out of state appropriation for apparatu		
	29	and material, as per list of warrants attached hereto By amount paid out of state appropriation for shop prac-		
4.6		tice, as per list of warrants attached hereto	. 798 46	
		Laboratory, as per list of warrants attached hereto	. 1.302 67	
	29	By amount paid out of state appropriation for Labora tory of Vegetable Physiology, as per list of warrant	s	
	29	attached hereto	. 1,457 93	
		streets and walks, as per list of warrants attache hereto	d . 183 56	
	29	By amount paid out of state appropriation for fire protection, as per list of warrants attached hereto		
**	29	By amount paid out of U.S. fund as per list of warrant attached hereto	s 7.490 74	
	29	By amount paid out of U.S. fund for the Experimen	t	
	29	Station, as per list of warrants attached hereto By amount paid out of U. S. Experiment Station farm a	)-	
		count, as per list of warrants attached hereto	621 95	\$76,876
		Balances— General fund	. \$8,238 47	
		Endowment fund. U. S. Experiment Station fund.	. 28,945 93	
		Experiment Station farm fund	. 597 72	
		U. S. fund State appropriations—	1	
		For salaries For library For Laboratory of Natural History	. 30,421 98 1,199 37	
		For cabinets	.1 768 51	
		For Engineering College. For Astronomical Observatory	. 5, 133 34	
		For fitting and furnishing Engineering Hall For building and equipment of Biological Exper	2,439 39	
		ment Station	. 1,682 29	
		For Biological Experiment Station <u>F</u> or apparatus and material	. 1,188 98	
		For shop practice	. 2,251 31	
		For Laboratory of Vegetable Physiology For fire protection	. 309 37 1,702 21	*
		For paving street and walks	894 45	98,966
				\$175,843
			1	Q110,030 V

A letter from Mr. F. E. Bonham, a student of the University, was, on motion of Mr. Inglis, referred to the President of the University.

It was now 11 o'clock and the Board adjourned until 2 o'clock in order that the rest of the forenoon might be spent in the architects' rooms in examining the plans for the library building.

## WEDNESDAY AFTERNOON SESSION.

Upon convening in the afternoon, the Board, by the following vote, authorized the carrying out of the idea of the architects in using stone of two colors in the exterior walls of the building: Yeas—Flower, Bullard, Smith, Graham, Armstrong, Raymond; nays—Inglis, McLean, Morgan, Morrison.

## Mr. McLean offered the following resolution:

Resolved, That the new library building be erected on the northwest corner of the present quadrangle, and in front of the President's House, where stakes are now set, in lieu of the site heretofore selected south of the greenhouse.

This resolution was lost by the following vote: Yeas—Inglis, McLean, Morgan, Smith, Graham; nays—Flower, Bullard, Morrison, Armstrong, Raymond.

The proceedings of the Board were interrupted for a few moments, during which Professor Breckenridge, in behalf of the mechanical engineering department, presented to Mr. Graham a beautiful chess table which had been made of India teak in the shops. On motion of Mr. Morgan, the thanks of the Board were returned to the gentlemen who had made and presented the table.

On motion of Mr. McLean, it was voted that the Board, when it adjourned, should adjourn to meet at the call of the President, and that the Board should be called to meet as soon as the architects could have working plans and specifications ready to submit.

Mr. Morgan, from the Committee on Buildings and Grounds, presented the bill of D. H. Burnham & Co. for \$1,000 for professional services and traveling expenses, and recommended the payment of the bill. The bill was ordered paid.

Mr. Morgan moved the payment of \$300 to Professor Ricker for furnishing plans and supervising the construction of machinery hall; of \$300 to Professor Talbot for services in supervising the laying of pavements and walks; of \$125 to Professor Breckenridge for services in connection with the equipment of machinery hall, and the heating of the President's House; \$300 to Professor White for supervising the construction of the President's House; and of \$100 to Mr. C. A. Gunn for furnishing plans for the Observatory, and the motion prevailed.

The President of the Board was authorized to endorse, in the name of the Board of Trustees, a note which had been received for the deferred payment for the Griggs farm, in order to effect a sale of said note.

Sundry bills for material and work done on the ladies' parlor and the rooms of the music department, amounting in all to \$108.37, were ordered paid.

The Board refused to grant a petition recived from Mr, O. K. Doney, who had been a student of the University, asking for the return of a part of his fees on account of his withdrawal from the University during the term.

An informal report with regard to the proposition made to the Board at its meeting of December 10th by the Chicago College of Pharmacy was made by the committee appointed to investigate the matter.

Mr. W. B. Day, Actuary of the College, was also heard.

On motion of Mr. McLean, Mrs. Flower and Mr. Morgan were added to the committee, and the committee was instructed to investigate further and report at the next meeting of the Board.

Mr. Morgan, from the Committee on Buildings and Grounds, presented the bill of the Maltby & Wallace Co for heating plant in machinery hall, and recommended that the bill be paid and that the amount thereof, \$1,118.05, be appropriated. The bill was approved and ordered paid as recommended.

The Business Manager, Professor S. W. Shattuck, presented his report, which was referred to the Finance Committee:

### BUSINESS MANAGER'S REPORT.

University of Illinois, March 10, 1896.

N. W. Graham, President of the Board of Trustees, University of Illinois,
SIR:—I have the honor to hand you herewith the following financial statements:

Paper A, a statement of current appropriations for the three months ending February 29, 1896.

Paper B, a statement of the state appropriations, February 29, 1896. Paper C, a statement of the U. S. fund, same date.

PAPER A-CURRENT APPROPRIATIONS.

December 10, 1895.	Appropriated.	Expended.	Balance.			
Board expenses.  Salaries for instruction and for President \{ \begin{array}{c} U. S. Fund \\ State. \end{array} \} \} \]  Salaries for services \{ \begin{array}{c} Current. \\ State. \end{array} \} \} \]  Buildings and grounds  Fuel and lights.  Stationery and printing.  Preparatory School, salaries  Repair shop.  Mechanical department.  Departments  Laboratories  Library and apparatus  Incidentals.	\$500 00 24,415 00 3,500 00 139 87 3,000 00 500 00 1,365 00 497 94 152 06 1,000 00 50 00	\[ \begin{array}{c} 10 50 \\ 3,496 62 \\ 20,902 63 \\ \ 196 35 \\ 3,280 72 \\ 339 36 \\ 1,365 60 \\ 196 34 \\ 474 99 \\ 125 31 \\ 342 31 \end{array}	\$15 62 5 25 } 22 90 5 76 563 28 160 64 103 66 22 95 27 05 657 657 657 657 623 89 97 51			
Sundries.	e d	5 · •>				
President's House. Water supply. Heating apparatus. Furniture and fixtures. Treasurer's expenses and interest. Gymnasium South farm. Attorney's fees. President Draper's expenses. Senator Morrill's bust.	5,000 00 125 00 500 00 300 00 235 11 50 00 60 00 55 00 116 60 30 00	125 00 100 09 172 06 235 11 14 62 54 83	2, 140 56 399 91 127 94 35 38 5 17 30 00			
Total	<b>\$42,291</b> 58	\$37,846 42	\$4,445 16			

# Paper B-State Appropriations.

December 10, 1895.	Received.	Expended.	Balance.	Assigned
For the years 1893-1895,				
Closed out Cabinets Cabinets Applied mechanics Botany Zoölogy Mechanical engineering Pedagogy Greek Woman's gymnasium	\$282, 679 14 1,000 00 6,000 00 472 00 1,200 00 4,000 00 150 00 300 00	\$282, 679 14 1,000 00 6,000 00 469 66 405 65 1,200 00 4,000 00 127 16 111 68 246 02	\$2 34 44 35 22 84 38 32 53 98	\$2 3 44 3 22 8 38 3 53 9
	\$296,401 14	\$296, 239 31	\$161 83	\$161 8
For the years 1895-1897.  Apparatus and materials— Psychology Zóölogy Chemistry Applied chemistry Geology Physiology Botany and horticulture	300 00	\$103 57 169 79 499 70 500 00 400 00 266 87 262 25	\$196 43 330 21 30 233 13 37 75	233 1 37-7
	\$3,000 00	\$2,202 18	\$797 82	<u>\$797_8</u>
Operating Biological Experiment Station	\$1,500 00	\$1,322 20	\$177 80	\$177 8
Bialogical Experiment Station Equipment	\$2,500 00	\$833 27	\$1,666 73	\$1,666 7
Paving streets, etc	\$9,300 00	\$8,468 05	\$831 95	\$831 9
Astronomical Observacory	\$5,000 00	\$26 00	\$4,974 00	\$4,974 0
Illinois State Laboratory of Natural History	\$9,900 00	\$7,079 57	\$2,820 43	\$2,820 4
Laboratoay of Vegetable Physiology	\$2,000 00	\$1,813 29	\$186 71	\$186 7
Salaries, etc.— Salaries for instruction. Salaries for services. Heating apparatus. Library catalogue. Buildings and grounds Library building designs. Toilet rooms. Arboretum sewer. President's House Art and design. Physical culture. School of Music. Lectures. Agriculture. Farm house. Fuel and lights. Preparatory School. Advertising and catalogue. University magazine. Illini Oratorical contest. Gas fixtures. Accredited schools. Illio Technograph U. S. flag. Applied chemistry. Entomological room. College of Literature and Arts, books.	\$33, 205 66 \$, 391 97 500 00 400 00 1, 735 07 1, 100 00 375 00 250 00 1, 050 00 250 00 1, 050 00 250 00 1, 000 00 90 00 1, 000	\$33, 205 66 6, 391 97 4555 45 255 36 1, 735 07 1, 100 00 231 81 8, 000 00 185 38 187 27 962 09 7577 91 2, 796 09 153 19 2, 796 09 250 00 250 00 250 00 00 00 00 00 00 00 00 00 00 00 120 33 163 15	\$44 55 144 64 218 00 118 19 64 67 2 73 87 91 242 99 203 91 21 87 30 66 1,611 94 800 00 250 00 250 00 11 77 92 94	\$44 5 144 6  218 0  118 1  64 6  2 7  87 9  242 0  203 9  21 8  30 6  1, 611 9  800 0  250 0  117 7  92 9

#### PAPER B-STATE APPROPRIATIONS-Continued.

	Received.	Expended.	Balance.	Assigned.
Fire protection	\$2,000 00	\$297 79	\$1,702 21	\$1,702 21
Library	\$3,000 00	\$2,093 21	\$906 79	\$906 79
Cabinets— Geology. Unassigned	\$400 00 600 00		\$114 89 600 00	\$114 89
	\$1,000 00	\$285 11	\$714 89	\$114 89
Taxes and lands	\$1,600 00	\$1,600 00		
College of Engineering— Machine shop. Equipment		6,417 82	\$191 39 3,582 18	\$191 39 3,582 18
	\$25,000 00	\$21,226 43	\$3,773 57	\$3,773 57
Furniture and fixtures, Engineering Hall— Electric wiring. Furniture. Unassigned.	\$1,191 77 2,302 90 1,505 33	1,632 58	\$670 32 1,505 33	
	\$5,000 .00	\$2,824 35	\$2,175 65	\$670 32
Shop practice— Mechanical DepartmentUnassigned	\$1,250 00 250 00		\$133 94 250 00	<b>\$133</b> 94
	\$1,500 00	\$1,116 06	\$383 94	\$133 94
Chemical Laboratory	\$3,750 00 1,250 00		\$823 45 1,250 00	\$823 45
	\$5,000 00	\$2,926 55	\$2,073 45	\$823 45

#### PAPER C-UNITED STATES FUND.

	Received.	Expended.	Balance.	Assigned.
Year ending June 30, 1894.				
Before reported on	\$18,500 00 500 00		\$22 97	\$22 07
Total	\$19,000 00	\$18,977 93	\$22 07	\$22 07
Year ending June 30, 1895.				
Before reported on	\$20,000 00	\$20,000 00	<u></u>	<u></u>
Year ending June 30, 1896.				
Salaries for instruction. Unassigned	\$20,972 98 27 02	\$20,972 98	\$27 02	
Total	\$21,000 00	20,972 98	\$27 02	

Paper D, a list of vouchers presented for audit, being 1 to 675, inclusive. Paper E, estimated receipts and expenses for the six months ending September 1st, not including the state and United States funds, due in July.

 $Paper\ F$ , a list of appropriations the Board is requested to make at this time.

Paper G, a statement of the collections made by the Business Manager in the three months ending February 29, 1896.

The attention of the Board is drawn to the fact that expenditures are made under the state appropriation for a library building, and from the balance \$5,000 for the Engineering College which have not been received from the state. This condition will complicate our accounts badly, within a short time.

The Board is requested to authorize the employment, in the business office of a clerk, to give his full time, at a salary of \$45 per month.

Respectfully submitted,

S. W. SHATTUCK,

Business Manager.

Mr. Morrison, from the Finance Committee, recommended appropriations as follows, in accordance with the request of the Business Manager:

Board expenses	\$500
Salaries for instruction and President	25.800
deleries for corvides	3 400
Buildings and grounds	750
fuel and lights and electric power	1.500
Stationery, printing, and postage.	600
Stationery, printing, and postage	600
Departments	100
_aboratories	500
ibrary and apparatus	50
ncidentals	
Heating apparatus	200
Furniture and fixtures	
Nater supply	125
ymnasium.	50
Repair shops	
Commencement	300
Constant Mounill's hust belongs	30
enator Morrill's bust, balance President's House	2.140
resident s nouse	2, 140
	\$37,545
	φοι, υπο

He also recommended a further appropriation of \$2,000 for the President's House, and also an appropriation of \$45 a month for pay of a clerk in the Business Manager's office. These recommendations were adopted.

Dr. Smith, from the Committee on Student's Welfare, made a report, which was referred to the Committee on Instruction and President Draper.

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

## THURSDAY MORNING SESSION.

The Board met pursuant to adjournment, the same members being present as on Wednesday, except Dr. Smith and Mr. Morrison.

- Mr. Bullard, from the Committee on Buildings and Grounds, presented recommendations from the architects with regard to the construction of the library building, as follows:
- 1. Footings of exterior walls to be of dimension stone, laid in cement; footings of interior walls and of columns to be of fine hard brick, laid in cement.

- 2. Fire proof construction—Floors of steel framing and tile arches; ceilings and roofs of steel framing and book tile; steel trusses; ground floors of concrete; hollow tile partitions; floors over large reading room and ceiling of second story suspended from steel trusses, skylight of stained glass over rotunda, roof skylight over this.
- 3. Ceilings and stairways—Marble stairs, wainscot, and railings in vestibule; mosaic floors in vestibule and staircase hall; other stairs to have marble steps with ornamental iron railings.
- 4. Book stacks and shelves—The proposition of the Library Bureau, of Chicago, for three stories of seven feet each, and each with seven shelves, two lower division floors of Georgia marble slabs, polished on under surface, steel construction of third division floor complete, iron to have painted finish, poplar shelves with oak facing, the whole complete in place for \$8,500.00, accepted, provided the Library Bureau will put in shelving and fixtures any time within three years.
- 5. Roof-Vitrified Spanish tiles, laid in cement on book tiles, supported by steel framing.
- 6. Heating and ventilation—Hot air blast system with automatic regulation of temperature in all the rooms; air to be changed once an hour in vestibule, halls, corridors, and stack room, and five and one-half times an hour in all other rooms.

These recommendations were adopted.

Mr. Graham asked to be excused from serving as a member of the Committee on Instruction, and his request was granted. The President appointed Mr. Raymond in his place.

On recommendation of the Buildings and Grounds Committee, \$1,800.00 was appropriated for payment of architects' services.

The Committee on Instruction made the following report, which was adopted:

URBANA, ILL., March 12, 1896.

To the Board of Trustees, University of Illinois.

GENTLEMEN: The Committee on Instruction recommends the acceptance of Mr. Gunn's resignation.

It also recommends that the suggestions with regard to changes in the catalogue, made by the Faculty, be approved, and that Assistant Professor Tooke's title be Assistant Professor of Public Law and Administration, and that the word "Industrial" be dropped from the name of the department of "Industrial Art and Design," and from the title of Professor Frederick.

Also, that the request for a medal for the high school whose team shall win the inter-scholastic debate be approved, value not to exceed \$20.00.

Respectfully submitted,

LUCY L. FLOWER, JULIA HOLMES SMITH, I. S. RAYMOND,

Committee on Instruction.

For improving the water supply in the machine shops and Military Hall, \$225.00 was appropriated, and the Committee on Buildings and Grounds was instructed to give the matter immediate attention.

Thirty dollars was appropriated for a drinking fountain in University Hall.

For the purchase of Welshbach gas burners \$200.00 was appropriated.

Upon the recommendation of President Draper, and, on motion of Mr. McLean, the following resolution was passed:

Resolved, That the name of the Athletic Park be changed to that of "Illinois Field," and that the care of the same be given to the Superintendent of Buildings and Grounds, and that the sum of \$250.00 be appropriated for improvements thereat.

The Board adjourned to meet at the call of the President.

J. E. Armstrong,

W. L. PILLSBURY,

President.

Secretary.

## MEETING OF APRIL 22, 1896

The Board of Trustees of the University of Illinois met in special session in the University parlor, Urbana, Illinois, at 2 o'clock p. m., Wednesday, April 22, 1896, pursuant to the following call issued by the Secretary, April 15, 1896:

"By order of the President, Mr. James E. Armstrong, the Board of Trustees of the University of Illinois is called to meet in special session in the University parlor, Urbana, Illinois, at 2 o'clock p. m., Wednesday, April 22, 1896, to consider plans and specifications for the library building, and to transact such other business as may come before the Board."

There were present Governor Altgeld and Messrs. Armstrong, Bullard, Graham, Inglis, McLean, Morrison, and Raymond, and Dr. Smith and Mrs Flower; absent, Messrs. Judy and Morgan.

The Committee on Buildings and Grounds asked for instructions as to the location of the Observatory.

It was ordered that the building should be erected east of the Experiment Station warehouse on the highest ground between Burrill avenue and Matthews avenue.

On motion of Mr. Bullard, \$700.00 was appropriated for the payment of the architects of the library building.

On motion of Mr. McLean, it was voted to erect the library building a little ways northwest of University Hall, the building to front northeast, as indicated by stakes recently set.

On motion of Mr. Morrison, it was voted that one-half of Mr. Clinton's salary for the year beginning September 1, 1895, be paid from University funds.

After looking over the plans, etc., for the library building, on motion of Mr. Morrison, it was voted to adopt plans as presented.

On motion of Mr. Morrison, the following resolution was adopted:

Resolved, That advertisements be published forthwith for bids for the erection of the new library building; that bids be taken for the erection of the entire building; that bids be received up to 12 o'clock noon of May 25th by the Secretary of the Board; and that the Board meet at 2 o'clock p. m. of that day and open said bids.

President Draper read a letter from Colonel Morgan expressing his regret at his not being able to be present at this meeting of the Board on account of the date being later than had been first proposed.

President Draper, on behalf of the Executive Committee of the Board of Direction of the Experiment Station, asked for an appropriation of \$143.00 from Experiment Station funds to be used in paying the balance required for repairs on the north barn. This appropriation was made on motion of Mr. Raymond.

On motion of Mr. McLean, an appropriation of \$30.00 was made to pay Mr. C. D. McLane for plans for a new barn.

The request of the Colonel Nodine Post of the G. A. R., for the use of the Chapel Decoration Day, was granted.

President Draper presented communications from Mr. A. C. Burnham, instructor in mathematics, and Mr. Alfred H. White, assistant in chemistry, asking leave of absence, in order that they might spend next year in study in Europe.

On motion of Mr. Inglis, the following resolution was adopted:

Resolved, That the Board has received with pleasure the applications of Messrs. A. C. Burnham and Alfred H. White, instructors in the University, for a year's absence for study in Europe; that while the employment of instructors is not continuous, and, therefore, they do not require a leave of absence, yet it is the purpose of the University to encourage study by its teachers in the leading institutions of the world, and in recognition of the worth of these young men the Board approves of the course which they propose to pursue and will undertake to provide positions for them upon the instructional force when they return.

On motion of Mr. Inglis, the following resolution was adopted:

WHEREAS, Complaint has been made that persons connected with the University have been unduly active in local political contests, and

WHEREAS, The Board thinks proper to declare its views touching such matters, although no specific facts have been alleged and there is no thought of reflecting upon any one, therefore

Resolved, First, that the Board recognizes the right of any person being a citizen and having a residence in either of the adjacent cities to exercise any of the rights adhering in such citizenship and residence.

Second, that in most cases there can be no question about teachers in the University acquiring the rights of citizenship here while the status of students in that regard is very uncertain. The question, however, is one which must turn upon the facts of each case and be decided by the local tribunals having jurisdiction thereof. No one should attempt to exercise the suffrage, however, whose right to do so is not clear.

Third, that the University should never be involved in any political or partisan issue. In no case should it be made the basis of operations or its organization used to promote any political end, and to avoid this, or the appearance of it, it is important that all persons connected with it should refrain from political activity.

Fourth, that upon recurring political contests the political committees be requested to refrain from sending carriages to the University to secure votes, and that the Superintendent of Buildings and Grounds be directed to deny such carriages the privileges of the grounds. In the opinion of the Board it is not consistent with the dignity of young manhood in the student body that members thereof should respond to solicitation to vote for one candidate or another made at the doors of the University. Students who have a right to vote should exercise it upon their own motion and pursuant to their own judgment.

Governor Alltgeld offered the following resolution:

Whereas, A proposition has been made by the Chicago College of Pharmacy to turn over to, and donate to, this University the said College of Pharmacy with all property it now has, a list of which has been furnished, on the condition that this University do take and maintain and run said College of Pharmacy as a branch or a part of this University, to be in all respects under the absolute control of the Board; it being further represented in said proposition that the debts of said College of Pharmacy do not exceed \$1,500.00, including the debt on the real estate included in said inventory, which debt of \$1,500.00 this University is to assume; and

WHEREAS, This Board is of the opinion that it will be to the interest of this University to accept this proposition; therefore

[Resolved, That said proposition by said College of Pharmacy be and the same is hereby accepted, and that the President of this Board and the President of the University see to carrying out and closing this matter, and that the property is turned over.

While the discussion of this resolution was pending the Board took a recess to witness the Battalion drill and inspection. When the Board had reassembled the resolution was adopted.

Mrs. Flower, from the Committee on Instruction, made a report recommending the appointment of Albert P. Carman, Ph. D., of Cedarville, N. J., Professor of Physics in the University at a salary of \$2,250.00 a year from September 1, 1896. On motion of Mr. McLean the report of the Committee was adopted.

The Committee on Instruction reported progress and asked for further time for consideration of the report of the Committee on Students' Welfare referred to it at the last meeting of the Board. The request of the Committee was granted.

The following report from the Committee on Finance was adopted:

URBANA, ILL., April 22, 1896.

To the Board of Trustees of the University of Illinois.

GENTLEMEN: Your Finance Committee begs leave to recommend the adoption of the following resolution:

Resolved, That Charles W. Spalding, Treasurer, be, and hereby is directed to transfer ten thousand dollars, from the general fund, to the state fund for salaries, etc.

Respectfully submitted,

N. B. Morrison.

Chairman of Committee on Finance.

## Appropriations were made as follows:

A communication from the Union Manufacturing Company with regard to the contract for water was referred to Mr. Graham to investigate and report at the next meeting of the Board.

Twenty dollors was appropriated for the medal for the interscholastic debate (p. 234.)

The Board adjourned to meet May 25, 1896, at 2 o'clock p. m.

W. L. PILLSBURY,

Secretary.

JAMES E. ARMSTRONG,

President.

## ADJOURNED SESSION, MAY 25, 1896.

The Board of Trustees of the University of Illinois met, pursuant to adjournment, at 2 o'clock p. m., May 25, 1896, in the University parlor, Urbana. The members present were Messrs. Armstrong, Bullard, Graham, Morrison, and Raymond; absent, Governor Altgeld and Messrs. Inglis, McLean, Judy, and Morgan, and Dr. Smith and Mrs. Flower. A little later Mr. Morgan came in.

The President announced as the first business of the meeting the opening of the bids which had been received by the Secretary for the construction of the Library building.

The bids were opened in the presence of the bidders and were as follows, for construction of the building according to plans and specifications, using stone as named:

### BIDS FOR THE CONSTRUCTION OF THE LIBRARY BUILDING.

Chas. A. Moses, 159 LaSalle St., Chicago—  1. Buff Bedford for trimmings and wall. 2. Portage trimmings, Kettle River wall. 3. Portage trimmings, cream buff sandstone wall. 4. Cream buff trimmings, buff Bedford wall. 5. Portage trimmings and wall. 6. Portage for basement to and including main water table, front entrance, mosaic frieze, steps and buttress; Bedford trimmings for tower; Kettle River for rest of building. 7. Kettle River basement and arches to water table and steps, buff Bedford. 8. Kettle River trimmings and wall. 1If Golding system of fire-proofing is used throughout entire building, deduct from each proposal the sum of \$5,300.00.	\$142,000 00 155,630 00 154,333 00 149,764 00 154,764 00 149,564 00 148,964 00 143,564 00
Scoullar & Bierwirth, 107 Washington Street, Chicago—  1. Portage red stone with Ohio speckled buff, or Ohio cream buff, or Kasota stone for the random ashler work.  2. Portage and Bedford stone.  3. All Bedford stone.  4. All work except cut stone work.	162,000 00 158,000 00 148,000 00 115,000 00
John W. Evans Sons Co., Bloomington, Ill.—  1. Cream buff Amherst trimmings, Bedford buff for ashler  2. Portage for trimmings, cream buff Amherst for ashler work.  3. All No. 1 Portage Entry sandstone  4. All Bedford buff  5. Portage trimmings, Joliet ashler  6. Bedford trimmings, Joliet ashler  7. Kettle River trimmings, buff Bedford ashler  8. Portage entry trimmings to main water table, Kettle River for rest of wall  If Golding system No. 1 is substituted and metal lath partitions and iron studding and beams, etc., are reduced, deduct from entire bid,\$3,865.	154, 727 00 159, 500 00 160, 000 00 146, 900 00 150, 000 00 144, 900 00 156, 900 00
Everett Clark, 100 Washington Street, Chicago—  1. Kettle River sandstone for trimmings, No. 1 Bedford stone for the ashler above first story sill course	142, 327 00 159, 639 00 163, 805 00 174, 212 00 141, 479 00 151, 686 00
Guaranty Construction Co., Chicago—  1. Blue and buff Bedford stone  2. Buff Bedford and Kettle River stone  3. East Tennessee marble, dark and light pink, as per sample  4. Buff Bedford and Joliet limestone  5. Portage and Joliet limestone  6. Portage and buff Amherst	149, 721 00 152, 000 00 165 000 00 145, 600 00 148, 000 00 142, 600 00

## Bids for Construction—Continued.

Jonathan Clark & Sons Co., 2 and 4 Sherman Street, Chicago— 1. No. 1 Portage red sandstone for trimmings, cream buff Amherst for	
ashler	\$165,730 00
<ol> <li>Cream buff Amherst for trimmings, No. 1 buff Bedford for ashler</li> <li>Portage red sandstone for trimmings, Conestoga pink sandstone for</li> </ol>	157, 316 00
ashler	169,074 00
1 Detection and conditions	181, 143 00
4. Potsdam red sandstone	
5. Kettle River sandstone for trimmings, buff Bedford for ashler	138,814 00
F. W. Menke, Quincy, Ill.—	
Buff Bedford stone     Portage trimmings, buff Bedford wall	146,000 00
2 Portage trimmings buff Redford wall	147,500 00
3. Portage trimmings, and buff Cleveland stone	148, 900 00
5. Fortage trimmings, and but Oleveland Stone	140, 900 00
Richard Shinnick, 304 North 8th St., St. Louis—	
1. Portage basement. including entrance, Kettle River above	158, 270 00
2. Portage trimmings, Kettle River wall	164,384 00
3. Portage trimmings, Cream buff Amherst wall	163,000 00
4. Kettle River basement, buff Bedford above	157,000 00
5. Cream buff Amherst trimmings, Portage wall	164,000 00
6. Buff Bedford	151,000 00
Valentine Jobst, 517 North Adams St., Peoria, Ill.—	
Kettle River sandstone.     Portage Entry trimmings, Kettle River ashler	138,950 00
2. Portage Entry trimmings, Kettle River ashler	145,500 00
3. Arcadian trimmings, Kettle River ashler	143,400 00
4. Rockville granite to first story sill course, Kettle River above	147, 450 00
4. Rockville granite to first story sill course, Kettle River above	
5. Buff Bedford stone 6. Portage trimmings and buff Bedford Ashler	136,000 00
6. Portage trimmings and buff Bedford Ashler	137,500 00
7. Portage trimmings and buff Amherst and Cleveland	139,000 00
8. Portage	152,000 00
9. Buff Bedford trimmings, Joliet ashler	137, 500 00
10. Portage trimmings and Joliet ashler	143,000 00
10. Portage trimmings and Joliet ashler	149, 900 00
11. Retide to ver triminings and buil Dedicit Ashiel	163, 300 00
12. Potsdam red sandstone	105, 500 00
If expanded metal system of fire-proofing instead of tile system as	
specified, deduct \$2,000.00. Time to complete 310 working days, weather permitting.	
H. M. R. Construction Co., 79 Dearborn St., Chicago—	
1. Buff Bedford stone	137,000 00
2. Kettle River sandstone	135,000 0
3. Ashler work buff Bedford trimmings, Kettle River sandstone	135,700 00
4. Basement from grade to first story sill course, including front entrance	100,100 0
arch, Kettle River sandstone: entire portion above buff Bedford	143,000 0
arch, Rettie tiver sandstone. entire portion above bun Bedford	140,000 00
5. Basement from grade to first story sill course, including front entrance	440 000 0
arch, Portage sandstone, all above, Kettle River sandstone	143,000 0
6. Ashler work Kettle river sandstone, trimmings Portage sandstone	150,000 0
7. Ashler work cream buff Amherst, trimmings Portage	149,000 00
7. Ashler work cream buff Amherst, trimmings Portage	144,000 0
9. Portage stone.	150,000 0
10 Crasm buff Amherst	144,000 0
IV. OLUMII DUR TIMMOISO	122,000 0
Dodget \$4,000,00 in case expanded metal system of fire-proofing is used in	
10. Cream buff Amherst. Deduct \$4,000.00 in case expanded metal system of fire-proofing is used instead of tile fire-proofing.	

After the bidders had retired the proposals were discussed at considerable length, and it appearing that to use stone in two colors which would be satisfactory, as had been proposed, would bring the cost of the building above the money available, it was voted to refer the proposals to the architects with instructions that they should advise the Board, as soon as possible, as to the best course to pursue under existing conditions.

## CHICAGO COLLEGE OF PHARMACY.

President Draper reported for the committee appointed to attend to the transfer of the Chicago College of Pharmacy to the University, that the committee, accompanied by the Business Manager had met the Board of Trustees of the Chicago College of Pharmacy on the afternoon of Saturday, May 2, 1896.

In the investigation of the finances of the institution it was developed that certain expenses, including the rent of the buildings, the salaries of the Actuary and janitor for the month of April, as well as some other small items, aggregating some \$800.00, were yet unpaid. The Trustees of the College explained that it was customary to borrow money during the vacation to meet running expenses, which was repaid from tuition fees in the fall. The committee, however, declined to accept the indebtedness, but promised to submit the matter to the Board of Trustees of the University. The Trustees of the College of Pharmacy agreed to pay the same if the Board of Trustees of the University declined to do so.

Thereupon, deeds of the real estate belonging to the College of Pharmacy and transfer of all personal property of the institution, were passed to the committee and accepted by them in behalf of the University. The committee recommended that the Board of Trustees of the University assume the indebtedness referred to and that their acts in accepting the property should be confirmed.

The following resolutions were adopted:

Resolved, That the action of the special committee appointed by this Board at the last meeting to attend to the details touching the transfer of the Chicago College of Pharmacy to the University, is hereby approved, and such transfer is hereby ratified and confirmed.

Resolved. That the Business Manager of the University be, and he is hereby instructed to settle all claims accruing in the month of April for expenses of such College of Pharmacy, and that he shall make provisions in his University estimates for other running expenses, and that he take general charge of the business affairs of the institution.

Resolved, That the Chicago College of Pharmacy be hereafter styled The School of Pharmacy of the University of Illinois, but that the original name be continued for some time upon the signs, stationery, and publications thereof.

Resolved, That Mr. W. B. Day be continued for the time being as Actuary, at a salary of \$75 per month, and that Mr. H. Eulert be continued as janitor of the building at \$50 per month.

Resolved, That Mr. Frederick M. Goodman be appointed as Professor of Materia Medica and Botany and Director of the Microscopic Laboratory; that S. N. Hallberg be appointed Professor of Pharmacy and Director of the Dispensing Laboratory; that William A. Puckner be appointed Professor of Physics and Chemistry and Director of the Chemical Laboratory; and that Frank S. Hereth be appointed Director of the Pharmaceutical Laboratory; that the said professors be paid the sum of \$4,500 jointly for their services during the next year; and should the receipts of the said school from tultion fees exceeds \$12,000 in the course of the year they shall be paid jointly one-half of the excess over \$12,000, provided that they shall employ and pay such assistants as in the judgment of the President of the University shall be necessary to carry on properly the work of the school; but the tuition fees of one student may be remitted for services rendered to the faculty. No part of the pay of said professors shall be due and payable, however, except out of the tuition fees and after the same have been received by said school.

Resolved, That the Chairman and Secretary of the Board of Trustees be and they are hereby authorized to execute a lease with the owners of the building in which the School of Pharmacy is maintained at 465-67 State street, Chicago, for the term of one year, from the first of May last, at a monthly rental of \$300.

Resolved, That all the administrative officers of the University be and they are hereby charged with the administration of the affairs of the School of Pharmacy the same as of all other departments of the University, and that they make such local arrangements at the School as may seem necessary for the proper conduct of its affairs.

President Draper presented Professor Snyder's resignation of the chair of the German language and literature. This resignation was accepted by the adoption of the following resolutions:

WHEREAS, Professor Edward Snyder, of the German department, who has been connected with the University from the beginning, has felt impelled to tender his resignation because of ill health and the necessity of residence in a milder or more uniform climate:

Resolved, That the sound scholarship and amiable qualities of Professor Snyder manifested here during the long period of twenty-eight years, have gained him the entire respect and affectionate regard of all connected with the University; that this Board of Trustees deeply regrets the necessity of his resignation and accepts the same only because it seems imperatively to his advantage to do so; that it cannot do so except with an expression of its appreciation of the great services he has rendered the University and the sincere hope that rest in a more favorable climate will bring him renewed health and that his life may yet be prolonged through many happy years.

Resolved, That the resignation be accepted to take effect January 1, 1897; that Professor Snyder be given leave of absence from the close of the current term, and that he be continued upon the corps of instruction as Professor of the German Language and Literature, emeritus.

Upon recommendation of President Draper, Lewis Addison Rhoades, Ph.D., was appointed Assistant Professor of the German Language and Literature, at a salary of \$1,500 a year, the appointment to take effect September 9, 1896.

On motion of Mr. Graham, it was voted that when the Board adjourned at the close of the afternoon session, it should adjourn to meet at the Beardsley, in Champaign, at 8 o'clock p. m.

### LIBRARY BUILDING.

Professor Ricker stated that in the opinion of the architects of the library building the best course for the Board to take, in view of the results of the bidding, was to use but one stone for the exterior, in the construction of the building. The recommendation was adopted.

On motion of Mr. Bullard, it was voted to accept the second proposition of the H. M. R. Construction Co., of Chicago, to-wit:

"To erect the proposed library building for the University of Illinois, the building to be completed in accordance with plans and specifications, as presented by Messrs. Ricker & White, architects, and entire exterior of the building to be finished in Kettle River sandstone for the sum of one hundred and thirty-five thousand dollars."

It was also voted to accept the proposition of the said H. M. R. Construction Co., to reduce the amount above named by four thou-

sand dollars for permission to use the expanded metal system of fire-proofing instead of tile fire-proofing, as described in the plans and specifications.

The bill of S. S. Beman, architect of the President's House, was referred to Mr. Morgan, for report at the next meeting of the Board.

Mr. Graham, to whom was referred a communication from the Union Manufacturing Co., with regard to the contract for water, reported that he had had a conference with the officers of the company and that they had agreed to allow matters to run as at present until the expiration of the existing contract.

On motion of Mr. Bullard, the Secretary was instructed to return all checks deposited with the proposals for the erection of the library building, except those deposited by Mr. Jobst and the H. M. R. Construction Co.

The following communication was received from Messrs. Ricker & White:

URBANA, ILL., May 25, 1896.

To the President and the Board of Trustees, University of Illinois.

Gentlemen:—In accordance with instructions received from your Building Committee, we have accepted the bid of the B. F. Sturtevant Company for the heating apparatus for the new University Library at \$4,952, complete. This proposal was, in our opinion, the lowest and best of those received from the five competitors from whom bids were asked and who are the leading competitors for this kind of work.

The system proposed by this company has been carried out in the building and the necessary ducts and spaces provided which are required therefor.

In accordance with instructions received from the Building Committee we have accepted the bid of George B. Meleney, Chicago Manager of the Library Bureau, for the book stacks, glass floors, wood shelves, etc., at \$8,500, complete for three tiers of the book stack room of the new University library. This bid was the lowest one received from three competitors, leading manufacturers of these fixtures, and we believe that the work will be done to your entire satisfaction.

Very respectfully submitted,

RICKER & WHITE,
Architects of Library Building.

The action of the architects in accepting these bids for book stacks, etc, and for heating apparatus, was confirmed.

Upon recommendation of the Business Manager, appropriations were made as follows:

Board expense	\$100 00
Balance on contract	30
Extras. 401	. 05
Grading. 52 Brick, cement, etc. 15	55
	680 63
Salary of G. P. Clinton, March, April, and May, 1896. \$250 Salary of the gardener, April and May. 100	00
	<b>——</b> ] 350 00

Chicago College of Pharmacy— Bills due May 1, 1896, as per list.  May salary of Actuary.  May salary of janitor.  May rent of building.  Repairs of building etc.  Advertising and catalogue.  Miscellaneous.	50 00 300 00 208 50 1,000 00	\$2,258 17 \$3,388 80
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The Board adjourned to meet at the Beardsley at 8 o'clock p. m.

## EVENING SESSION.

The Board met pursuant to adjournment, the same members being present as in the afternoon.

President Draper submitted the following:

#### SALARIES AND APPOINTMENTS.

To the Board of Trustees.

I respectfully recommend the following, touching the corps of instruction of the University:

- 1. That the Salary of Associate Professor E. B. Greene be \$1,700.
- 2. That the salary of Assistant Professor T. A. Clark be \$1,500.
- 3. That the salary of Assistant Professor Bernard Victor Swenson be \$1,200.
- 4. That the salary of Assistant Professor William Esty be \$1,200.
- 5. That the salary of Assistant Professor George D. Fairfield be \$1,300, and that he have charge of the department of Romance Languages during the ensuing year.
  - 6. That the salary of Assistant Professor Charles W. Tooke be \$1,200.
- 7. That the salary of Assistant Professor Walter Howe Jones be \$900, and one-half of any excess over that amount which may be paid for lessons upon the piano.
- 8. That the salary of Miss Adeline Whitney Rowley, Instructor in Vocal Music, be \$700, and one-half of any excess over that amount which may be paid for instruction which she may give in vocal music.
  - 9. That the salary of Assistant Professor Wm. D. Pence be \$1,500.
  - 10. That the salary of Assistant Professor George D. Hammond be \$1,200.
- 11. That Mr. Frank Smith, Instructor in Zoölogy, be appointed Assistant Professor of Zoölogy at the same salary he has heretofore received, viz., \$1,200.
- 12. That the salary of Miss Ella H. Morrison, Director of Physical Culture for Women, be \$1,000.
- 13. That the following instructors and assistants be appointed for ten months from September 1, 1896, at the monthly salary set opposite their names, viz.:

C. D. McLane	\$110	00
J. D. Phillips	85	00
R. P. Smith	120	õõ
Helen E. Butterfield	75	00
R. A. Wood	80	00
Oscar Quick	75	
G. A. Goodenough.	75	
E. J. Lake	60	
Chas. F. Hottes.	60	
Geog A. Huff	100	
M. S. Ketchum	70	
J. G. Mosier.		
R. C. Vial	70	
Paul Chipman	70	00

- 14. That C. B. Clark, foreman in the machine shop, be reappointed for ten months from the first of September, 1896, at \$85 per month; that A. R. Curtiss, foreman in the wood shop, be reappointed for ten months from September 1, 1896, at \$85 per month; that Henry Jones be reappointed foreman in the smith shop for ten months from September 1, 1896, at \$60 per month; and that J. H. Wilson, foreman in the moulding shop, be reappointed for ten months from September 1, 1896, at a salary of \$50 per month.
- 15. That the teachers in the Preparatory School be reappointed upon the same terms as last year.
- 16. That William L. Steele be appointed to a special scholarship in music for the ensuing year, and that he be paid the sum of \$300.
- 17. That Geo. F. Anderson be appointed special instructor in Military Science for ten months from September 1, 1896, at \$10 per month.
- 18. That Lewis A. Rhoades be appointed Assistant Professor of German at a salary of \$1,500, and that he have charge of the German department.
- 19. That Geo. W. Myers, Associate Professor of Mathematics, who has been absent in Europe the last two years on leave, be given the title of Associate Professor of Astronomy and Mathematics and that his salary be \$1,750.

Respectfully submitted.

A. S. Draper,

President of the University of Illinois.

The foregoing recommendations were adopted as presented.

Mr. B. M. Duggar's resignation of the position of botanical assistant in the Laboratory of Natural History was presented and accepted to take effect June 1, 1896.

The Board adjourned.

James E. Armstrong.

W. L. Pillsbury, Secretary. President.

## MEETING OF JUNE 9, 1896.

The Board of Trustees of the University of Illinois met in the University Parlor, Urbana, Illinois, at 3 o'clock p. m., Tuesday, June 9, 1896.

The members present were Messrs. Armstrong, Bullard, Graham, McLean, Morgan, Morrison, and Raymond, and Dr. Smith; those absent were Governor Altgeld, Messrs. Inglis and Judy, and Mrs. Flower.

It was suggested by President Armstrong that at the adjourned meeting of the Board held May 25th there had been but six members of the Board present, and that it would be necessary to take some action with reference to the transactions of that meeting before they would be strictly legal and binding. It was thereupon voted that the several acts of the meeting of May 25th stand confirmed by the Board.

The minutes of the meetings of March 10, 1896, April 22, 1896, and May 25, 1896, as presented by the Secretary, were approved.

President Draper stated that the Faculty of the University recommended that authority be given to confer, on commencement day, degrees as follows, and the authority was granted.

#### DEGREES.

College of Literature and Arts.

Degree of Bachelor of Arts.

Amelia Darling Alpiner.
Nellie Besore,
James Woodbury Blakeslee,
Cora Mae Cairns,
David Hobart Carnahan,
Mary Maude Cole,
Charles Hunter Garnett,
John J Hindman,
Lewis William Johnson,
Louis Maxwell Kent,
Aureka Belle Kiler,
Sophia Nott Leal,
John Madison Martin,

Althea S. Mather.
Minnie Rose Moore,
James William Myers,
Isabelle Noble,
Mary Elizabeth Noble,
William Noble,
Francis Marion Phillippi,
Robert Knight Porter,
George Harvey Scott,
Charles Roy Vickery,
Rebecca Gaskin Wharton,
Robert Williams,
Wilber Hoyt Wright.

COLLEGE OF ENGINEERING.

Degree of Bachelor of Science.

Course in Architecture.

Melville Clark Chatten, Herbert John Green, Henry Gustav Hottes,! George Charles Liese, George Washington Ludwick, Robert Payton Manard, Sherman Smith, William LaBarthe Steele.

Course in Architectural Engineering.

James George Beach,

John C Sample.

Course in Civil Engineering.

Henry Jackson Burt, Henry Clarence Estee, Frederick William Honens, Richard Bird Ketchum, Samuel Theodore Morse, Oscar Emil Strehlow, Fred Lawrence Thompson, Charles Edwin VanOrstand.

Course in Electrical Engineering.

Edward Langford Adams, Walter Gilbert Campbell, Paul Henry Cooper, Warren Edward Durstine, Frank Milton Everett, Howard Hall Haskell, Henry Curtis Marble, Jediddiah D Morse, John Edward Pfeffer, John Clark Shea, Alexander Martin Simons, Percy Allyn Stone.

Course in Mechanical Engineering.

Joshua Franklin Begole, Frank Hopkins Green, Homer Roberts Linn, James Harvey McKee,

John Alexander McRea, George Edward Row, Don Sweney, Theodore Weinshank, Myron Edwin Whithman.

COLLEGE OF SCIENCE.

Degree of Bachelor of Science.

Course in Chemistry.

Georgia E Bennett, William Charles Brenke, Florence Besançon Clark, Frank Henry Serafino Gazzolo, Harry Keeler, Charles Jacob Maxwell, Harry J Sauders.

Course in Mathematics.

Edward Lawrence Milne.

Course in Natural Science.

Rachel Ellen Folger, Bertha VanHoesen Forbes, George David Hubbard, Fred Thales Huston, Matthew Aaron Reasoner, Solon Marks White.

Masters' Degrees, as follows:

John Henry Meneely, A.B., Austin College, the degree of A.M. Francis Edward King, B.L., Univ. of Ill., the degree of M.L. Marion Thompson, B.L., Univ. of Ill., the degree of M.L. Earl Vanhise Capps, B.S., Univ. of Ill., the degree of Electrical Engineer.

President Draper presented a request from Mr. L. A. McLean, of Urbana, asking that permission be given for the Masonic order to march on foot through the University grounds to the cemetery on the afternoon of June 10th. The request was granted.

Permission was also given the Knights of Pythias to use Military Hall for their exercises on Sunday, June 14th.

The recommendations of President Draper, contained in the following paper, were adopted:

#### SALARIES AND APPOINTMENTS.

To the Board of Trustees.

I make the following recommendations touching the instructional force:

- 1. That James McLaren White be promoted from the position of assistant professor of architecture to that of associate professor of architecture, without change in salary.
- 2. That the salary of Harry S. Grindley, assistant professor of chemistry, be \$1,200.

That the salary of James D. Phillips, instructor in general engineering drawing, be \$900.

- 4. That the salary of George A. Goodenough, instructor in mechanical engineering, be \$800.
- 5. That Arthur S. Patterson be appointed assistant in French for ten months, from the first of September next, at \$50 per month. This appointment, and the one following, are to make provision for the work of Professor Piatt during his absence next year.
- 6. That D. Hobart Carnahan be appointed assistant in French for ten months, from September first next, at a salary of \$40 per month.
- 7. That Ernest C. Klipstein be appointed instructor in architecture for ten months, from September first next, at a salary of \$80 per month.
- 8. That authority be given the President to appoint an instructor in chemistry, at a salary of \$70 per month, from September first next, to take the place of Mr. Alfred H. White, who is to be absent in Europe during the next year. And, also, if exigencies require it, that another instructor in chemistry may be appointed for a part or the whole of next year, at a compensation not to exceed \$60 per month.
- 9. That authority be given the President to appoint an instructor in mathematics, at the opening of the fall term, to take the place of Mr. Alton C. Burnham, who is to be absent in Europe during next year, at a salary not to exceed \$70 per month for ten months, from the first of September next.
- 10. That Cyrus D. McLane be promoted to the position of assistant professor of architectural construction, without change of salary.
- 11. That the title of Edward J. Lake be instructor in free hand drawing, instead of assistant in art and design, without change of salary.
- 12. That the title of Miss Ella H. Morrison be Director of Physical Training for women instead of Director of Physical Culture for Women.
- 13. That the deans of the colleges be re-elected, as follows: Thomas J. Burrill, Dean of the General Faculty and of the Graduate School; N. Clifford Ricker, Dean of the College of Engineering; Stephen A. Forbes, Dean of the College of Science; David Kinley, Dean of the College of Literature and Arts: Eugene Davenport, Dean of the College of Agriculture.

Very truly yours,

Upon recommendation of the Council of Administration, presented by President Draper, the following appointments to fellowships were made:

In the College of Literature and Arts-

Mary Maude Cole,

Charles Hunter Garnett,

In the College of Engineering—

James Harry McKee,

Walter Gilbert Campbell.

In the College of Science—

George David Hubbard,

Edward Lawrence Milne.

The following communication from President Draper, with regard to the agricultural departments of the University, was referred to the Farm Committee. Later in the session the paper was returned by the Committee, and, after discussion, was adopted.

### AGRICULTURAL DEPARTMENT AND EXPERIMENT STATION.

To the Board of Trustees.

During the past year I have given such attention and thought as I have been able to the agricultural interests which we are endeavoring to promote in the University. The situation at the farm has been somewhat improved, and yet it is far from satisfactory. I think a good beginning has been made, but little more than that can be said. There is serious need of a more perfect system of management. I am not certain but that this is contingent upon a somewhat radical modification of the plan of organization. When I have advised with the Dean of the College of Agriculture about matters which I supposed were wholly subject to his direction, he has claimed that these matters were in charge of the Agricultural Experiment Station, and therefore under the direction of the Board of Direction of the Experiment Station, and that he had no more to do with them than have professors in other departments of the University who have no relation whatever to the work of the Station. Technically the plan of organization for the management of the Experiment Station, adopted by the Board of Trustees on the 21st of March, 1888, affords ground for this claim. It seems to me that it should be removed. Our plan of managing the affairs of the Experiment Station, through the Board of Direction, is at variance with that of practically all the leading Experiment Stations of the country. I think, also, that it is at variance with sound principles, because it devolves executive duties upon the Board of Direction which can only be properly discharged by a single individual who has full authority and is charged with entire responsibility.

'I am exceedingly anxious that not only should there be no hindrance in the way of the fullest and most rapid development of this work, but that everything which we can do to aid such development shall be done, and I recommend:

1. That the position of Director of the Experiment Station be created and that the Dean of the College of Agriculture shall fill such position ex officio; that such Director shall have immediate charge of all property belonging to the Agricultural Experiment Station; that he shall be the executive officer of such Station, vested with full authority and charged with entire responsibility for attaining the purposes of the law and for carrying out the directions of the Board of Trustees or of the Advisory Board concerning said Station; that he shall have general supervision of the work of all its departments, shall employ such assistance and laborers as he may be authorized to do by action of the Board of Trustees; that he shall keep the President of the University generally advised of all matters appertaining to the work of the Station, and shall make formal written reports at the first of each month covering the work of the Station, and that he shall act under the direction of the President in the absence of special directions from the Board of Trustees or the Advisory Board.

- 2. That the present Board of Direction be continued and its name changed to that of the Experiment Station Advisory Board, and that it be directed to recognize the Director above provided for as the executive officer of all Station affairs, charged with the duties above set forth.
- 3. That the position of Assistant Professor of Agricultural Physics be created, at a salary of \$1,200.00 per year; that the position of Instructor in Dairying be created at a salary of \$800.00 per year; that the Executive Committee be authorized to fill these positions, if practicable to do so, before the opening of the fall term.
- 4. That the salary of the Professor of Animal Husbandry, that of the Assistant Professor of Soils and Crops, and those of the Assistant Horticulturist (the salary hereafter to be \$1,000.00 per year) and the Instructor in Dairying be equally divided between the University and the Agricultural Experiment Station, and that the salary of the Professor of Veterinary Science be equally divided between the University, the Agricultural Experiment Station, and the Vaccine Laboratory account.
- 5. That the Agricultural Experiment Station staff shall be comprised of the following officials, who shall be appointed by the Board of Trustees only:

Director, Agriculturist, Assistant Agriculturist, Botanist, Assistant Botanist, Chemist, Assistant in charge of Dairy Experiments,
Entomologist,
Horticulturist,
Assistant Horticulturist,
Veterinarian.

It will be remembered that by previous action of the Board the book accounts of the Experiment Station and all of the business transactions thereof have been transferred to the care of the regular administrative officers of the University. If the foregoing plan should be adopted, all of the business of the Experiment Station will really be controlled directly by the Board of Trustees through the regular administrative officers of the University.

Very truly yours,

A. S. Draper, President.

President Draper presented the following paper concerning the music department. This was referred to the Committee on Instruction, and later during the session the Committee reported, recommending the approval of the recommendations, and the report of the Committee was adopted.

#### MUSIC DEPARTMENT.

To the Board of Trustees.

The Music Department established a year ago has been as successful as could have been expected during the first year. The work of Professor Jones, from an artistic point of view, has been highly satisfactory. Miss Elinor Edwina Ellsworth, who was employed as instructor in vocal music at the beginning of the year, was obliged to resign on account of ill-health, at the end of the fall term, and her place was filled by the appointment of Miss Adeline Whitney Rowley. Miss Rowley is a capable vocalist and a conscientious teacher. The work of these persons has stimulated the musical interests of the University to an extent which is unprecedented. The number of pupils these teachers have had has not been large, but their tuition fees would more than half pay the salaries of the instructors.

Mr. W. L. Steele, a student of the senior class, who was given a special scholarship in music last year has trained the military band to a point of proficiency never before reached in the University, which has made it a most important feature in our University life. Unfortunately he has determined to engage in other employment next year and his services are not to be available to us.

The pianos owned by the University, with the exception of the new one purchased last year, are in deplorable condition and nearly or quite beyond repair. We shall doubtless all agree as to the importance of strongly sustaining this new department. The Chickering piano in the chapel is possibly worthy of repair. Such investigations as I have been able to make indicate that by the expenditure of \$100 to \$150 it may be put in condition to be of service to us for several years. There should be a good piano in the room of the instructor in vocal music, and there should be a good, serviceable piano in readiness continuously for student practice.

From the first I have thought it highly important to have a teacher of the violin and other stringed instruments in the department. In view of the fact that Mr. Steele is to retire it has occurred to me that it may be practicable to find a man who would meet this need and at the same time lead the band and assist in the musical work generally, so far as he could do so.

Under all these circumstances, I recommend:

- 1. That the sum of \$1,000 be appropriated for repairing pianos and the purchase of new ones, and that authority be given to make any exchange of instruments upon terms which may seem advantageous.
- 2. That the President be authorized to employ an additional instructor in the Music Department, for the purpose mentioned, at a salary of not to exceed \$800 per year.

Very truly yours,

A. S. Draper, President.

Dr. Smith and the Business Manager were appointed to effect any exchanges or purchases of instruments.

The following recommendation, made by President Draper, was adopted on motion of Mr. Raymond:

#### VISITOR OF HIGH SCHOOLS.

To the Board of Trustees.

The time has come when it seems imperatively necessary that the University should employ a man whose special duty it shall be to visit high schools with a view to placing them, or continuing them, upon the accredited list of the University. The work has heretofore been done by members of the faculty and always with more or less inconvenvience to their regular University work, as well as without the best results upon the field. When the examinations of high schools are made by different members of the Faculty, of course, there is an inevitable variaty of judgment exercised in determining their status. I am confident that it would be very greatly to the advantage of University work, that it would promote the best relations between the University and the high schools, and that it would have a stimulating and helpful effect upon the high school work throughout the state, if we could have the right man, whose time should be exclusively devoted to that important interest. I therefor recommend that authority be given the President to employ such a man for the ensuing year at a salary not to exceed \$1,200.00.

Very truly yours,

A. S. Draper, President.

Appointments of the staff of the State Laboratory of Natural History were made as follows upon recommendation of the Director, Professor S. A. Forbes, the appointment to date from July 1, 1896:

Charles A. Hart, Systematic Entomologist and Curator of Collections, 12 months at Frank Smith, Assistant Zoölogist, 2 months at Mary J. Snyder, Secretary, 12 months at	100 00
H. C. Forbes, Librarian and Business Agent, 12 months at	83 33
Lydia M. Hart, at the following rates per hour of service rendered: Chart Draw-	
ing 25c, Outline Drawing 30c, Shaded Drawing 35c	75 00

C. A. Kofoid, salary \$100 a month, and A, Hempel, salary \$60 a month, were to continue as assistants of the State Laboratory in charge of the Biological Station, so long as funds available for the maintenance of the Station will permit.

Mr. Graham offered the following resolution:

Resolved, That the purchase of coal and contracting for the same for the University and for the School of Pharmacy, at Chicago, be referred to Mr. Morrison with power to act.

On motion of Mr. Bullard the resolution was amended by inserting after the words "Mr. Morrison" the words "and the Business Manager."

The resolution as amended prevailed.

The Board then adjourned to meet at 8 o'clock p. m.

## EVENING SESSION.

The Committee on Buildings and Grounds recommended that the water main crossing the site of the library building be changed so as to pass around the building on the south, and that the work be put in charge of Professor Talbot.

The Committee also recommended that the top soil taken out in excavating for the building be reserved for grading around the building, and that the rest of the dirt be taken from the site as fast as taken out, and used to fill in around the President's House and also to fill in the low ground around Natural History Hall.

The recommendations were adopted.

The Committee recommended that the architects be paid on account of services rendered, \$1,111.30, and the payment was ordered.

The Committee on Buildings and Grounds reported, informally, that the work was going on upon the Observatory, and that the contracts for the building, and for instruments and appliances had been kept well within the appropriation.

Mr. Raymond, from the Farm Committee, said that it was desirable to make arrangements to lease the south farm. He stated that the present tenant, Mr. Hedges, was desirous of re-leasing the farm at a rental of \$2,000 a year for three years.

The Farm Committee was authorized to make the lease.

President Draper presented the following report from the Board of Direction of the Agricultural Experiment Station and the report was adopted, and its recommendations approved. The vouchers were referred to the finance Committee.

### AGRICULTURAL EXPERIMENT STATION REPORT.

Urbana, Ill., June 9, 1896.

Dr. A. S. Draper, President of University of Illinois,

SIR: I beg leave to submit from the Board of Direction of the Agricultural Experiment Station the following:

Paper A is a list of warrants drawn, Nos. 169 to 247 inclusive, for the quarter ending March 31, 1896, and is accompanied with vouchers for the same for audit.

 $Paper\ B$  is a statement of expenditures for the quarter ending March 31, 1896.

 $\it Paper~C$  is a statement of appropriations, expenditures, and balances for the quarter ending June 30, 1896.

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

PAPER B-EXPENDITURES, QUARTER ENDING MARCH 31, 1896.

Board expense. Building and repairs. Books and publications.	\$22 50
Building and repairs	18 85
Books and publications	38 22
Botanical apparatus and supplies	35 95
Bulletins	435 53
Chemical apparatus and supplies.	49 20
Chemical apparatus and supplies. Fuel and lights	59 12
naidontala	99.50
Printing, stationery, and postage. Salaries Seeds and trees Fools and supplies. Wages and teams	24 00
Salaries	1,672 50
Seeds and trees	5 40
Pools and supplies	100 16
Wages and teams	1,008 91
Southern Illinois experiments	71 66
Total	00 FC4 FC
1000	\$3,564 50

# Paper C—Statement of Appropriations, Expenditures, and Balances for Quarter ending June 30, 1896.

	Appropriations.	Expended.	Balance.
Board expense. Books and publications Botanical apparatus and supplies Bulletins Chemical apparatus and supplies Fuel and lights Incidentals. Printing, stationery, and postage Salaries Seeds and trees Tools and supplies Wages Wages Southern Illinois experiments	10 00 500 00 40 00 80 00 25 00 25 00 1,875 00 75 00 300 00 1,250 00	3 60 1,081 64 41 06 172 17 614 49	\$40 00 25 00 10 00 500 00 15 16 80 00 21 40 25 00 793 39 127 85 635 51 75 66
Total.	\$4,395 00	\$2,012 18	\$2,382 82

## PAPER D-ESTIMATES, QUARTER ENDING SEPTEMBER 30, 1896.

General Fund.  Board expense Books and publications. Botanical apparatus and supplies. Buildings and repairs. Bulletins. Chemical apparatus and supplies. Fuel and lights. Incidentals Printing, stationery, and postage. Salaries. Seeds and trees. Tools and supplies. Wages Southern Illinois experiments.	340 00 30 00 25 00 25 00 1,450 00 1,75 00 1,200 00 100 00
Southern Illinois experiments	

#### PAPER D-ESTIMATES-Continued.

Farm Fund.	
Pigs. Sheep Tools and supplies. Wages	100 00 250 00
Total	\$780 00

The Board of Trustees is asked to assign funds of the Experiment Station according to estimates made in *Paper D*, and also to authorize the President and Secretary of the Board of Direction to expend, as the best interests of the Station may require, any unexpended balances of the United States fund.

Respectfully submitted,

T. J. Burrill,

President Board of Direction.

An appropriation of \$45.00 was made for the purchase of the bust of Senator Morrill.

The Board adjourned to meet at 2 o'clock.

## Session of Wednesday Afternoon.

The following resolutions were adopted:

### FLAG LAW INDICTMENTS.

WHEREAS, The Trustees of the University of Illinois have been indicted by the grand jury of Champaign county, for an alleged failure to comply with the letter of the laws touching the display of flags over public buildings, and

WHEREAS, the State's Attorney of this county has caused a verbal message to be presented to the Board through the President of the University, substantially to the effect that said indictments will be quashed, provided the Board will put a flag on one of the University buildings, and

WHEREAS, The Deputy Sheriff of this county has just communicated to the Board a statement that he is instructed by the State's Attorney to serve the process of the court upon the members of the Board unless said proposition is accepted, and

WHEREAS, The Trustees are in favor of the central thought of the flag law and intend to inculcate an observance of all laws, rationally construed, upon all, and particularly upon the students of the University; therefore

Resolved, That in the judgment of this Board the spirit and intent of the legislature, expressed in said flag laws, have not only been fully complied with, and were observed even before the laws were enacted, but have been complied with in the most exact manner practicable, by displaying a flag, on a tall pole in the midst of the University campus, so that it has floated above all the buildings on all school days, by observing great care that it shall never touch the ground or come in contact with any other thing, and by doing all things calculated to inspire respect and love for the flag on the part of all connected with the University.

Resolved, That the display of the flag on one University building is, in our judgment, not so near a literal compliance with the law as the course long pursued by the Board, and that we recognize no right on the part of the State's Attorney or Sheriff to propose terms of settlement of an indictment out of court.

## The Business Manager presented his report:

## THE BUSINESS MANAGER'S REPORT.

University of Illinois, June 9, 1896.

James E. Armstrong, Esq., President Board of Trustees, University of Illinois, Sir: I have the honor to hand you herewith my report as Business Manager for the three months ending May 31, 1896.

Paper A is a statement of the current appropriations for that time.

Pager B gives the condition of the state appropriations May 31, 1896.

Paper C is the same for the United States appropriation.

### PAPER A-CURRENT APPROPRIATIONS.

			I
1895–1897.	Appropriated.	Expended.	Balance
$\begin{array}{c} \textbf{Board expenses.} \\ \textbf{Salaries for instruction} \\ \textbf{and for President} \\ \textbf{State.} \\ \end{array} \\ \begin{array}{c} \textbf{Current.} \\ \textbf{U, S. Fund.} \\ \textbf{State.} \\ \end{array}$	\$500 00 24,685 00	$   \left\{     \begin{array}{c}       41 & 10 \\       27 & 02 \\       24,525 & 14   \end{array}   \right\} $	\$8 3 91 7
Salaries for services { Current.         }           Buildings and grounds         }           Fuel and lights         \$           Stationery and printing.         Preparatory School—Salaries           Repair shop         Mechanical department           Departments         Laboratories           Library and apparatus         Incidentals	3,635 00 250 00 1,500 00 1,365 00 300 00 600 00 151 91 650 00 50 00 400 00	3, 351 12 } 215 77 1, 292 58 389 34 1, 365 00 167 15 591 30 125 35 650 00 25 70	98 98 98 2207 42 210 66 8 77 26 5 5 100 7
Sundries.  Water supply. Heating apparatus. Furniture and fixtures Gymnasium Ladies' parlor. Commencement Debate medal Senator Morrill's bust. President's house. Glee, Mandolin, and Guitar Clubs School of Pharmacy	125 00 200 00 200 00 50 00 108 37 300 00 20 00 30 00 5, 121 19 75 00 2, 258 17	130 76 53 27 3 85 72 31 30 00 20 00 5, 121 19 75 00	69 2 146 7 46 1 36 0 270 0

## PAPER B-STATE APPROPRIATIONS.

	Received.	Expended.	Balance.	Assigned.
For the years 1893-1895.  Closed out	150 00	472 00 405 65 127 16 150 00 300 00	22 84	\$44 35 22 84

# $Paper\ B-State\ Appropriations- {\bf Continued.}$

	Received.	Expended.	Balance.	Assigned.
For the years 1895-1897.				
Apparatus and material— Closed put. Psychology. Zoölogy. Physiology Botany and horticulture Chemistry	\$900 00 300 00 500 00 500 00 500 00	213 09 458 84 287 62 290 25	\$86 91 41 16 212 38 9 75	\$86 91 41 16 212 38 9 75
	\$3,000 00		\$350 20	\$350 20
Operating Biological Experiment Station	\$1,500 00		\$6 97	\$6 97
Biological Experiment Station, equipment	\$1,500 00	\$2,379 80	\$120 20	\$120 20
Taxes on Minnesota lands	\$1,600 00	\$1,600 00		
Paving street, etc	\$9,300 00	\$8,798 05	\$531 95	\$531 95
Astronomical Observatory	\$15,000 00	\$624 23	\$14,375 77	\$14,375 77
Laboratory of Vegetable Physiology	\$2,000 00	\$1,911 98	\$88. 02	\$88 02
Library buildingUnassigned	\$4,679 85 \$145,320 15		\$145,320 15	· · · · · · · · · · · · · · · · · · ·
	\$150,000 00	\$4,679 85	\$145,320 15	
Salaries, etc,— Closed out. Salaries for instruction Salaries for services. Heating apparatus. Library catalogue Buildings and grounds Toilet rooms. Arboretum sewer. Art and design Physical culture. School of Music Lectures. Agriculture Farm house. Preparatory School Advertising and catalogue University magazine. Illini. Oratorical contest. Gas fixtures. Accredited schools. Applied chemistry. Entomological room College of Literature and Arts, books Athletic fund. Military scholarships. Band scholarships. Band scholarships Unassigned.	379 00 00 400 00 520 00 1, 050 00 1, 000 00 3, 000 00 175 00 1, 900 00 500 00 100 00 100 00 200 00 200 00 200 00 135 00 1, 816 04	494 77 314 93 2, 052 36 0 221 81 206 33 817 27 1, 019 83 811 26 6 2, 874 31 1019 83 6 5 35 816 51 500 00 50 00 150 30 73 200 00 159 27 1,816 04 \$5,035 97	200 00 159 27  \$3,219 93	
Fire protection	\$2,000 00	\$1,029 66	\$970 34	\$970 34
Library	. \$3,000 00	\$2,281 09	\$718 91	\$718 91
22001 to 1 g				
Cabinets— Geology Unassigned	\$400 00 600 00		\$75 80 600 00	\$75 80

### Paper B—State Appropriations—Concluded.

	Received.	Expended.	Balance.	Assigned.
College of Engineering— Machine shop Mechanical engineering. Electrical engineering and physics Civil engineering Laboratory of applied mechanics and mu-	1,600 00	2,600 00 2,702 34 321 65	\$497 66 1,278 35	\$497 66 1,278 35
nicipal and sanitary engineering Architecture. College of Engineering. Unassigned.	1,600 00 1,500 00 500 00 1,991 96	686 10 193 58	1,494 53 813 90 306 42 1,991 96	813 90 306 42
	\$30,000 00	\$23,617 18	\$6,382 82	\$4,390 86
Furnishing and fitting Engineering Hall— Electric wiring. Furniture. Unassigned.	\$1,191 77 2,302 90 1,505 33	1,882 53	\$420 37 1,505 33	
	\$5,000 00	\$3,074 30	\$1,925 70	\$420 37
Shop practice— Mechanical department	\$1,500 00	\$1,436 13	\$63 87	\$3 87
Chemical LaboratoryUnassigned	\$3,750 00 1,250 00		\$577 74 1,250 00	\$577 74
	\$5,000 00	\$3,172 26	\$1,827 74	\$577 74
Vaccine Laboratory	\$3,000 00		\$3,000 00	
Illinois State Laboratory of Natural History	\$9,900 00	\$8,888 42	\$1,011 58	\$1,011 58

#### PAPER C.-UNITED STATES FUND.

	Received.	Expended.	Balance.	Assigned
Year ending June 30, 1894,				
Before reported on	\$18,500 00 500 00	\$18,500 00 500 00		
Total	\$19,000 00	\$19,000 00		
Year ending June 30, 1895,				
Before reported on	\$20,000 00	\$20,000 00		
Year ending June 30, 1896.  Salaries for instruction	\$21,000 00	\$21,000 00		

Paper D is a list of vouchers presented for audit, being Nos. 676 to 1.455.

 $Paper\ E$  is an estimate of receipts and expenses for the year ending June 30, 1897. In making this estimate only the funds to be received in that year have been considered.

 ${\it Paper}\ {\it F}$  is a list of the general appropriations asked for the three months ending August 31, 1896.

 $Paper\ G$  is a statement of money received in the three months and the amount turned over to the Treasurer of the University.

In addition to the appropriations asked for in  $Paper\ F$ , the Board is requested to make the following order:

- 1. What may be left in the state appropriations of 1893-5, July 1, 1896, to be assigned to buildings and grounds.
- 2. What may be left of the assigned appropriations of 1895-7, July 1st, to be re-assigned for the same purposes with the following exceptions:

Arboretum sewer, presen Farm house, Lectures, University magazine, Gas fixtures, Entomological room,	4.6 4.6 4.6	\$108 5 188 800 11 30	32 74
		\$1,144	75

- 3. What may be left of these balances to be assigned for instruction.
- 4. That the unassigned balance on the second page of *Paper B* be assigned for salaries for instruction, \$1,816.04.
- 5. That the unassigned balance of cabinets be assigned to be used, as the President may direct, for cabinets, \$600.00.
- 6. That the unassigned balance for College of Engineering equipment be assigned for use as may be agreed upon by the faculty of that College, \$1,991.96.
- 7. That the unassigned balance for the furnishing and fitting of Engineering Hall be assigned under similar conditions, \$1,505.33.
- 8. That the unassigned balance for the Chemical Laboratory (water survey) be assigned for purposes named in Professor Palmer's report, \$1,250.00.
- 9. That the appropriation for a Vaccine Laboratory be assigned for use under the direction of the President of the University and Dr. Burrill, \$3,000.00.
- 10. That the appropriation for the library building be assigned for use under the direction of the Building and Grounds Committee, \$145,320.15.

#### From the State Appropriation due July 1, 1896.

- 11. That the appropriations for the Laboratory of Natural History, \$9,900.00, and for the Biological Experiment Station, \$1,500.00, be assigned for use under the direction of Professor Forbes, \$11,400.00.
- 12. That for the library there be assigned for use under the direction of the Library Committee, \$3,000.00.
  - 13. That for taxes on Minnesota lands there be assigned, \$1,600.00.
- 14. That from the appropriation for shop practice one-half be assigned, \$750.
- 15. That from the appropriation for apparatus and materials, the following assignments be made:

16. That from the appropriation for salaries, etc., the following assignments be made:

Botany (herbarium, etc.)	· · · · · · · · · · · · · · · · · · ·	\$150 00	
Agriculture		500 00	
Agriculture Women's gymnasium Men's gymnasium <i>[llini</i>		100 00	
Men's gymnasium		300 00	
Illini		500 00	
Illio		100 00	
Technograph			
Art department			
Accredited schools		300 00	
Heating apparatus (repairs) Signal bells (additional)		500 00	
Signal halls (additional)		100 00	
Music department		200 00	
Solorios for instruction (in Dance F)		20,000 00	
Salaries for instruction (in $Paper F$ )		2,000 00	
Buildings and Grounds (in $Paper(F)$ )		500 00	
bulldings and Grounds (in Paper 17)		500 00	00F 000 00
			\$25,600 00°

#### Respectfully submitted,

S. W. SHATTUCK,

Business Manager.

The recommendations of the report were adopted, and appropriations were made as asked.

The assignments made as recommended in  $Paper\ F$  were as follows:

#### APPROPRIATIONS.

Board expenses	\$500 00	
Salaries for instruction and President	21, 100 00	
Salaries for services	2,300 00	
Buildings and grounds	1,000 00	
Fuel and lights and electric power	3,000 00	
Fuel and lights and electric power Stationery and printing.	600 00	
Repair shop	300 00	
Mechanical department	500 00	
Architectural, Horticultural, Military, and Civil Engineering depart-	***	
ments	200 00	
Laboratories.	2,000 00	
Library and apparatus	50 00	
Incidentals		
Furniture and fixtures	500 00	
Heating apparatus	500 00	
Water supply	125 00	
Minnesota lands	100 00	
School of Pharmacy		
School of Pharmacy, balance	1, 267 75	
Commencement, balance	270 00	
Commencement, barance	210 00	\$36, 487 75

The Treasurer's report was received and referred to the Finance Committee:

#### TREASURER'S REPORT.

CHARLES W. SPALDING, TREA SURER IN ACCOUNT WITH THE UNIVERSITY OF ILLINOIS, MAY 31, 1896.

		11111 01, 1000		
-		Dr.		
1896.				*** ***
Feb.	29	Balance. Received from S.W. Shattuck on account of general fund	\$10,888 00	\$98,966 50
March	14	From Mary Muhlhausen, interest on contract No. 58	230 87	
	28	From Mary Muhlhausen, interest on contract No. 58 From S. W. Shattuck, paid warrants	2,065 38	
April	1 8	From Anton Bengston, interest on contract No. 101 From U. S. Treasurer on account of U. S. Experiment	20 00	
		Station due April 1, 1896	3,750 00	
4.4	8	From Eric Lindquist, principal on contract No 64 From Eric Lindquist, accrued interest From W. L. Pillsbury, credit to Experiment Station farm	200 00 3 50	
••	- 8	From Eric Lindquist, accrued interest	3 50	
		tind	561 25	
• •	25	From State Treasurer, state appropriation for establish-	001 20	
		From State Treasurer, state appropriation for establishment of Laboratory for propagation of Pure Vaccine	0.000.00	
		Virus. From State Treasurer, state appropriation for erection	3,000 00	
	40	of a library building	150,000 00	
••	29	of a library building.  From State Treasurer, balance of state appropriation for College of Engineering.		
		Contege of Engineering	5,000 00	
	49	From State Treasurer, balance of state appropriation for Astronomical Observatory and equipment	10 000 00	
	30	Astronomical Observatory and equipment	10,000 00 2,370 56	
Мау	4	From S. W. Shattuck, paid warrants. Received Sangamon county bonds, due May 1, 1896 Sangamon county bonds, due May 1, 1897 and bonus	1,000 00	
	4	Sangamon county bonds, due May 1, 1897 and bonus Sangamon county coupons, due May 1, 1896	$\begin{array}{c c} 1,020 & 00 \\ 250 & 00 \end{array}$	
**	5	From M. O. Batterbury, interest on contract No. 97	56 18	
	6	Shelby county bond, due May 5, 1896	500 00	
**	6	Shelby county coupons, due May 5, 1896	270 00 325 00	
	15	Cass county coupons, due May 1,1896	700 00	
	15	Received Bond county coupon due May 1 1896	42.00	
• • • • • • • • • • • • • • • • • • • •	18	From Joseph Hollen, principal on contract No. 116. From S. W. Shattuck, on account of Minnesota grass From S. W. Shattuck, paid warrants. Interest from Treasurer on endowment fund at 4 per	400 00 10 00	1
	29	From S. W. Shattuck, on account of Minnesota grass	4,756 96	
* *	31	Interest from Treasurer on endowment fund at 4 per	1, 100 00	
	04	cent., March, April, and May, 1896	306 64	
	31	cent., March, April, and May, 1896. Interest from Treasurer on all other funds at 2½ per cent., March, April, and May, 1896.	704 02	
		00101, 1101011, 1101111, 11111111111111		198,430 36
				\$297,396 86
1000		Cr.		φ201,000 00
1896. May	31	By amount paid out of general fund, as per list of war		
		rants attached hereto	\$11, 124 65	
4.	31	by amount paid out of state appropriation for salaries,	90 500 55	
4.4	91	etc., as per list of warrants attached hereto By amount paid out of state appropriation for library	30, 783 55	
		building, as per list of warrants attached hereto	3,575 85	
• •	31	By amount paid out of state appropriation for library, as per list of warrants attached hereto		
	91	per list of warrants attached hereto	404 46	
	91	ry of Natural History as per list of warrants attached	2,035 27	
* *	31	By amount paid out of state appropriation for Laboratory of Natural History, as per list of warrants attached. By amount paid out of state appropriation for Engineering College, as per list of warrants of warrants at-	_,	
		ing College, as per list of warrants of warrants at-	0.400.07	
4.4		by amount paid out of state appropriation for Astro-	3, 132 87	
	0.1	nomical Observatory, as per list of warrants attached.	598 23	
**	31	nomical Observatory, as per list of warrants attached. By amount paid out of state appropriation for fitting and		
		1 Turnishing Engineering flam, as per fist of warrants	969 00	
	31	attached hereto	362 09	
	0.	By amount paid out of state appropriation for building and equipment of Biological Experiment Station, as		
44		per list of warrants attached hereto	1,498 62	
• •	31	By amount paid out of state appropriation for Biological		
		Experiment Station expense, as per list of warrants attached hereto	274 18	
4.4	31	By amount paid out of state appropriation for apparatus		
		and material, as per list of warrants attached hereto	674 32	
	31	By amount paid out of state appropriation for shop practice, as per list of warrants attached hereto	268 45	
* *	31	By amount paid out of state appropriation for Chemical	200 40	
4.4		Laboratory, as per list of warrants attached hereto	361 82	
••	31	By amount paid out of state appropriation for Laboratory		
		of Vegetable Physiology, as per list of warrants attached hereto	221 35	

31	By amount paid out of state appropriation for fire pro-			
	tection, as per list of warrants attached hereto	<b>\$669 11</b>		
31	street and walks as per list of warrants attached	362 50		
31	By amount paid out of farm fund, as per list of warrants	904 00		
	attached hereto	961 63		
31	By amount paid out of Experiment Station fund, as per	9 661 75		
31	By amount paid out of U. S. fund, as per list of warrants	9,001 19		
-	attached hereto	<b>49 09</b>		
31	By amount paid out of fund for cabinets, as per list of	. 59 05		
	warrants attached hereto	99 91	\$61,073	66
	Balances, May 31, 1896—		φολήσιο	•••
-	U. S. Experiment Station fund			
	Farm fund	197 34		
	Endowment fund			
	State appropriations—	•		
	For salaries, etc	15,883 45		
	For library building			
	For Engineering College	7.000 47		
	For Laboratory of Natural History			
	For Astronomical Observatory			
	For fitting and furnishing Engineering Hall.	2,077 30		
	For building and equipping Biological Experiment	•		
	Station			
-	For shop practice.	179 04		
į	For Chemical Laboratory			
1	For Laboratory of Vegetable Physiology			
	For paying street and walks	531 95		
	For establishing and equipping Laboratory of Pure			
	Vaccine Virus	3,000 00	004 000	ο.
			230, 323	<b>4</b> 0
1	i i		\$297.396	
	31 31 31 31	31 By amount paid out of state appropriation for paving street and walks, as per list of warrants attached. 31 By amount paid out of farm fund, as per list of warrants attached hereto. 31 By amount paid out of Experiment Station fund, as per list of warrants attached hereto. 31 By amount paid out of U. S. fund, as per list of warrants attached hereto. 32 By amount paid out of fund for cabinets, as per list of warrants attached hereto. 33 By amount paid out of fund for cabinets, as per list of warrants attached hereto.  Balances, May 31, 1896—  U. S. Experiment Station fund. Farm fund. General fund. Endowment fund. State appropriations— For salaries, etc For library building. For library. For Engineering College. For Laboratory of Natural History. For astronomical Observatory For fitting and furnishing Engineering Hall. For building and equipping Biological Experiment Station. For expense of Biological Experiment Station. For spearatus and material. For shop practice. For Chemical Laboratory For Laboratory of Vegetable Physiology. For fire protection. For paying street and walks.	tection, as per list of warrants attached hereto	tection, as per list of warrants attached hereto

The Executive Committee returned, without recommendation, Professor Forbes's request for an appropriation of \$1,000.00 to aid in publishing reports of the Biological Experiment Station. The request was laid on the table.

The Treasurer's bill of \$1,750.59 for taxes paid and \$20.86 for incidental expenses was ordered paid.

The Board adjourned to meet at 7:30 in the evening.

### Evening Session.

"It was voted to accept the bond of the H. M. R. Construction Co., \$25,000 in amount, with the American Security Co., for security, provided the same was found satisfactory to the Chairman of the Committee on Buildings and Grounds.

#### LOCATION OF LIBRARY BUILDING.

The following resolution was adopted:

Resolved, That the new library building be situated on the site selected northwesterly from University Hall, on the cardinal lines; the south side of the building to be not exceeding 30 feet north of the face line University Hall produced west; the west line to be 10 feet east of the east line of Wright street; the building to face north.

A motion was made to reconsider, and the motion to reconsider was laid on the table.

The following resolution was adopted:

Resolved, That Hon. James R. Mann and Hon. J. O. Cunningham be associated to represent the interests of the Board in the indictment found under the flag laws, but that the said attorneys be advised that the members of the Board have no desire to avoid the allegations against them on technical grounds, but that they shall establish the fact in court that the course pursued has been a full compliance with the intent of the law making power.

The resolution was adopted by the following vote:

Yeas: Messrs. Armstrong, Bullard, Graham, Morgan, Raymond and Dr. Smith. Nays: Messrs. McLean and Morrison.

The following summary of students attending the University was presented by the Secretary. (See p. 18.)

The Board adjourned.

JAMES E. ARMSTRONG.

W. L. PILLSBURY,

President.

Secretary.

### MEETING OF JUNE 26, 1896.

The Board of Trustees of the University of Illinois met in special session at Hotel Beardsley, in Champaign, Ill., at 8 o'clock a. m., Friday, June 26, 1896, pursuant to the following call issued by the Secretary, June 20, 1896:

"Upon the call of the President, Mr. James E. Armstrong, there will be a special meeting of the Board of Trustees at Hotel Beardsley, Champaign, Ill., at 8 o'clock a. m., Friday, June 26th, to transact such business as may be properly presented.

The members present were Messrs. Armstrong, Graham, McLean, Morgan, Morrison, and Raymond and Dr. Smith; those absent were Governor Altgeld, and Messrs. Bullard, Inglis, and Judy and Mrs. Flower. Mr. Bullard came in later.

#### FLAG LAW INDICTMENT.

The President, Mr. Armstrong, stated that a conference of a number of the members of the Board was held in Chicago shortly after the last meeting of the Board, and that there the matter of the indictment of the members of the Board for alleged violation of the flag law was discussed; and he also stated what steps had been taken to procure legal counsel for the trial set for 8:30 this morning.

The Board then took a recess to meet, after attending court, in the President's office, University Hall, Urbana, at 11:30 a.m.

When the Board met after the recess, on motion of Mr. McLean, it was voted that it be entered in the journal that Judge Wright, of the Circuit Court in Champaign county, holding that the laws were unconstitutional, had this day quashed the indictment found against the members of the Board of Trustees of the University for alleged failure to display the American flag in the precise manner provided by the statutes enacted at the last session of the General Assembly.

President Draper recommended the employment of Perry G. Holden as Assistant Professor of Agricultural Physics, at a salary of \$1,200.00 a year, one-half to be paid from University funds and the other half from Experimental Station funds. The term of service to begin September 1, 1896.

He also recommended the appointment of Mr. W. J. Fraser as Instructor in Dairying for the year beginning September 1, 1896, at a salary of \$800.00 a year, one-half to be paid from University funds, and one-half from Experiment Station funds.

On motion of Mr. Morrison these appointments were made as recommended.

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

WHEREAS, Matters arise in the transaction of our regular business involving points of law, therefore be it

Resolved, That the Board consider at its next regular meeting the question of appointing an attorney, who shall be the legal adviser of the Board, and attend to such matters of law as may occur in the ordinary business of the Board.

On motion of Mr: Morgan an appropriation of \$163.31 was made for the incidental account, the amount to be used in paying the balance due on account of concerts held at the University during the past year.

It was voted that Mr. O. T. Wills be paid the proportional part of a military scholarship for two terms of this year, during which he served as an officer of the battalion.

It was ordered that the inventories of the several departments of the University should be filed with the Business Manager on or before July 1st of each year.

It was ordered that bills for gas and for electric lighting at the President's House should be charged to the University.

The Board adjourned.

W. L. PILLSBURY,

Secretary.

JAMES E. ARMSTRONG,

President.

### LIST OF WARRANTS FOR THE TEN MONTHS ENDING JUNE 30, 1896.

No.	Date.		To whom.	For what.	Amount
	1895.		•		
1	Sept.	14	N. W. Graham	Expenses to Board meeting	. \$18 5
123 45 67 89	•••		S. A. Bullard	,	
-3	**		N. B. Morrison		. 84 8
-4			R. P. Morgan		. 70 0
-5	6.4		Alex. McLean		
-6	4.4		Tanan C Darmannd	,	. 22 2
7	"		C. W. Spalding	Accrued int., prem's. and expenses Scholarship	. 2,523 2
8	4.4		R. P. Manard	Scholarship	. 22 5
9	4.4		E. B. Forbes	Expenses and services	. 26 8
10	"	-	C. A. Hart	Expenses	. 91
11	"	-	Lvdia M. Hart	Drawings	. 48.9
12	• • •		F. D. Wilson	Work in laboratory	. 27 8
13		-	Wm. Wood & Co	Manual of Bacteriology	. 80
14	• •	- 1	H. W. Rokker	Stationery	. 56 5
15		-	K. F. Koehler's Antiquarium	StationeryBooks.	. 14
16	"		H. C. Forbes	Exponence	76
17	**	-	L. P. Breckenriage		. 67
18	::		W. O. Krohn		
19	1	-		Sewer inlets	
20	**		Bevis & Co	Drawers and repairs	. 91 0
21			J. H Bainum	Repairs, etcGas to July 23, 1895	. 80 2
.22			Champaign and Urbana Gas Co.	Gas to July 23, 1895	. 281 2
23	::		Martin Bibbus	Sand	. 13
24	::	- 1			
25	1 ::		Mrs. J. D. Bruner	Salary, July and August, 1895	. 266 7
20 21 22 23 24 25 26 27 28 29 30			Geo. L. Batchelder	On contract for wiring	. 1,509 5
27			Electric Lighting & Power Co	Power for July, 1895	. 40 0
28			Kenyon N. & P. Subscript'n Co	Subscriptions	. 10 9
29		- 1	Ward Bros	Binding books	. 141 4
30				Printing	
31		-	Chas. A. Hart	Expenses	. 26
$\tilde{32}$		-	The Illini	Copies of commencement number. Printing	. 25 0
. 33	;;	-	Champaign Co. Printing Co	Printing	. 15 2
34	::	1	Keuffel & Esser Co	Apparatus	. 44
35	1	1	Eligene Dietzgen Co	1 77	- 60
36		- 1	J. F. Tenney	Rubber stampTransformer	. 74
37	;;		Ft. Wayne Electric Corporat'n.	Transformer	. 21 1
38		-	west'n Electrical Instrum't Co.	Wattmeter	. 67 5
39			Davidson & Sons	State staps	. 14 0
40			Meacham & Wright	Portland cement	. 14 5
41		- 1		Flint	
42		- 1	Queen & Co	Air meter	. 60 0
43			E. Davenport	Expenses	. 63
44			Western Union Telegraph Co	Telegrams	. 9 1
45			F. J. Foote	Work as electrician	. 45 0
46		1	5. W. Parr	Expenses	. 21 4
47			J. T. Wolcott	Work in registrar's office	. 20 0
48			John Mayer	Salary, August, 1895	. 20 0
49	1			Labor	. 845 6
50		20	Payroll of students, Aug., 1895	G 1	. 112 1
51	Sept.	ฮ∪	A. S. Draper	Salary for September, 1894	. 583 3
52			1. J. Durriii		. 440 0
53 54	1 11		S. W. Shattuck	l II	. 166 6 166 6
			E. Snyder		

# $List\ of\ Warrants - {\bf Continued.}$

0.	Date.		To whom.		For what.		Amou
Ì	1895.		N. C. Ricker I. O. Baker I. O. Baker S. A. Forbes C. W. Rolfe D. McIntosh A. N. Talbot A. W. Palmer F. F. Frederick S. W. Parr H. J. Barton Chas. M. Moss D. K. Dodge L. P. Breckenridge D. W. Shea David Kinley Eugene Davenport Arnold Tompkins E. J Townsend H. E. Summers E. B. Greene Katharine Merrill William O. Krohn J. McLaren White Wm, H. VanDervoort W. D. Pence A. H. Daniels Harry S. Grindley T. A. Clark H. S. Piatt B. V. Swenson Geo. D. Fairfield Chas. W. Tooke Percy F. Bicknell H. E. Verett Walter H. Jones C. D. McLane W. E. Sandford J. D. Phillips Wm. Esty Frank Smith R. P. Smith A. C. Burnham Helen E. Butterfield Frank A. Sager Ella H. Morrison Robert A. Wood Oscar Quick G. A. Goodenough C. A. Goodenough C. A. Gun M. S. Ketchum J. G. Mosier R. G. Mosier R. G. Mosier R. G. Mosier R. G. Mosier R. G. Matfi				
55	Sept.	30	N. C. Ricker	Salary for S	September, 1895	i	\$191
00			I. O. Baker		• • • • • • • • • • • • • • • • • • • •		183
57	••		S. A. Forbes	::	**		. 83
8 59	::		C. W. Rolfe				175 150
9			D. McIntosh	• • •			150
60			A. N. Talbot	**		• • • • • • • • • •	175
31			A. W. Palmer			• • • • • • • • • •	175
3			C W Down	**		• • • • • • • • • • • • • • • • • • • •	158 175
34			U I Rowton	4.4			166
5			Chae M Mose		4.4		175
6			D K Dodge	4.4			166
7			L. P. Breckenridge	• •			166
8			D. W. Shea	4.6			183
9	* *		David Kinley	4.6			187
0	• •		Eugene Davenport	**	• •		83
1	**		Arnold Tompkins	**	• •		150
2			E. J Townsend	• • •	• • •		137
3	• • •		H. E. Summers		• •		137
4	"		E. B. Greene		**		133
5	• • • • • • • • • • • • • • • • • • • •		Katharine Merrill	::	• • •		108 150
6 7	• • •		william O. Krohn	::	4.6		150
7			J. McLaren White			• • • • • • • • • • • • • • • • • • • •	125
8	**		wm, H. VanDervoort		**	• • • • • • • • • • • • • • • • • • • •	137
X	4.6		w. D. Pence	• •	4.6	• • • • • • • • • • • • • • • • • • • •	116 100
0	4.6		Howar S. Chindles			• • • • • • • • • • • •	87
1 2 3 4			Tarry S. Gringley				109
5	4.4		H C Diett	4.4	4.6		89
4			R V Swenson	**	4.6		83 91 83
5	* *		Geo. D. Fairfield				83
6			Chas. W. Tooke	**	4.4		83
67	• •		Percy F. Bicknell	* *			129
8	• •		H. Everett	* *	• •		100
9	**		Walter H. Jones	• •	• •		58
8 9 0	* * * .		C. D. McLane	4.4	4.4		110
1	• •		W. E. Sandford	• •			80
2			J. D. Phillips		••		85 105
3	• • •		Wm. Esty	::			105
4			Frank Smith	**	4.6	• • • • • • • • • • • • • • • • • • • •	120 120
5			R. P. Smith	• •			120
6	6.6		Holom E. Duttonfold			• • • • • • • • • • • • • • • • • • • •	80 75
8			Emark A Sagar	4.6	4.6		85
9			File H Morrison		4.6	• • • • • • • • • • • • • • • • • • • •	70
ő	4.4		Robert A Wood		4.4		80
1	4.4		Osear Quick	4.6	• •		80 75
$\hat{2}$			G. A. Goodenough		4.6		75
3	4.6		C. A. Gunn				85
4	4.4		A. H. White	**			80
5	• •		G. W. McCluer	• •	• •		15
6	"		Edward. J. Lake		**		60
7	**		C. F. Hottes		••		60
8	• • •		M. S. Ketchum		••	• • • • • • • • • • • • • • • • • • • •	70
9	• • •		J. G. Mosier. R. C. Vial. Geo. A. Huff Elinor Ellsworth Paul Chipman	• • • • • • • • • • • • • • • • • • • •		•••••	70
0	• • •		K. C. Vial	• • • • • • • • • • • • • • • • • • • •		•••••	50
1	4.6		Geo. A. Huff			• • • • • • • • • • • • • • • • • • • •	50
2	4.4		Ellinor Ellsworth			• • • • • • • • • • • • • • • • • • • •	70
3	4.4		C P Clork		4 6		80
4	4.6		O. D. Clark		4.6	•••••	80
5 6	4.4		Honey Jones		4.4		60
7			I R Wilson	**	4.6		50
	4.6		Edward G Howe				150
9	4.4		N. A. Weston		4.6		90
ő	4.4		L. A. Clendenin	**	4.4	********	65
1	4 6		Chas. N. Cole	**	• •		75
$\hat{2}$	4 6		R. S. Douglass.	••			75
3	4.4		Wm. L. Steele.	**			30
4	4.6		Marion Thompson	• •	4 6		40
5	• •		G. D. Hammond	**	• •		83
6	4.4		Geo. W. Graham	**	• •		100
7	4.4		M. T. Lindsey	• •	4.6		35
8	• •		I. H. Allen	**	**		3.5
9	• •		Paul Chipman C. B. Clark A. R. Curtiss Henry Jones J. R. Wilson Edward G. Howe N. A. Weston L. A. Clendenin Chas. N. Cole R. S. Douglass Wm. L. Steele Marion Thompson G. D. Hammond Geo. W. Graham M. T. Lindsey I. H. Allen F. J. Foote Lillie Heath H. I. Green		• •		75
ő				6.6			60

# ${\it List~of~Warrants} - {\it Continued}.$

0.	Date.		To whom.	Salary for September, 1895.  Salary for September, 1895.  Kerosene Labels, etc Labels, etc Laboratory supplies Groceries. Pipe fittings and labor. Net Plans for boat. Freight and drayage. Half-tones. Expenses. Aluminum Carriage. Expenses to Board meeting. Brick piers. Lantern slides. On contract machine shop. Laboratory supplies. Sewer pipe. Sewer pipe. Settees, etc Chemical supplies. Printing, etc. Freightage.  Postage. Chemical supplies. Abstract. Mats. etc. Paper Advertising. Gas. Copper wire, etc. Mortar. Rubber tubing. File cabinet. Gear cutter. Papers. Expenses to Board meeting. Expenses, 3 mos. to Aug. 31, 1895. Books. Subscription.  to Journal. Books. Books and binding. Test tubes. Manual of Conchology. Journal of Morphology. Postage. Printing. Expenses. Supplies for cabin boat. Rent, etc. Office rent. Work on well N. Y. Fungi. Chemical supplies. Apparatus. Lamps, etc.	Amou
	1895.				
32	Sept.	30	L. G. Lathrop	Salary for September, 1895	\$30
53		- 1	W. R. Hoffman		35 26 25 30
34			J. J. Johnson		20
35			Philip Schwenm		20
6			J. G. Maynard		96
8			Anahia S. Galdan		35 15 116 13
9			W I. Pillahung		111
ő			A R Roker		1 1
1	4.4	- 1	Susan W Ford		13 55 20 100 65 83 100 62
2			John Maver	**	20
3		ı	W. G. Johnson.	**	10
4		- 1	Mary J. Snyder	**	6
5		- [	B. M. Duggar		8
6		-	H. C. Forbes		8
7	4.4		C. A. Kofoid	** *** ********************************	10
8	* *		C. A. Hart		6
9		- [	Adolph Hempel		6
0	• •		Miles Newberry	''	4
1	"		James Dowhen	Kerosene	2
2		ļ	Cambridge Botanical Sup. Co	Labels, etc	2
3	• • •		Bausch & Lomb Optical Co	Laboratory supplies	
1			J. M. Schilling	Ding Ctting and Johan	2: 14: 2: 1: 3: 1: 2: 4:
5			Am Not and Their Co	Not	1 1
6		ŀ	Am. Net and Twine Co	Net	4
7		- }	Geo Coleman	Freight and drawage	4
9	4 4		Franklin Eng and Electro Co	Half-tones	1
5	4.6		W G. Johnson	Expenses	3
1			Pittsburg Reducing Co	Aluminum	
2	6 6	- 1	E. H. Renner & Bro	Carriage	1 :
3			N. W. Graham.	Expenses to Board meeting	1
í		l	Alex. McLean		2
5		-	J. H. Bainum	Brick piers	-
3		1	W. H. Pierce & Co	Lantern slides	4
7	• •		Bevis & Co	On contract machine shop	56
3	• •	- 1	E. H. Sargent & Co	Laboratory supplies	2
•	"	-	Hubbard & Sons	Sewer pipe	56 20 13 520
1	• • • • • • • • • • • • • • • • • • • •	- 1	A. H. Andrews	Settees, etc	520
Ų	**	- 1	Henry Heil Chemical Co	Chemical supplies	20
			Champaign Co. Heraid	Printing, etc	20
3	4.6	- (	Amoriaan Ernraga Co	rreigniage	1
5	4.6		F I. Rille	Postaga	5
3	4.6		Richards & Co	Chemical supplies	18
7	. 66	- 1	R. A. Webber	Abstract	
3	• •	- 1.	A. H. Abbott & Co	Mats. etc	١ ١
او	• •		Albany Perf. Wrap. Paper Co	Paper	1
)	• •		American Machinist	Advertising	:
l	4.4		Chicago Calcium Light Co	Gas	'
2	* *		Chas. H. Besly & Co	Copper wire, etc	1 4 5 18
3	••		wnitall Tatum & Co	Mortar	ا ا
l	• • • • • • • • • • • • • • • • • • • •		Goodyear Kubber Co	Kubber tubing	2
			Library Bureau	File capinet	2 20 10
	**	-	Namuel Harris Co	Gear cutter	-
	• •		Iomos F Armstram	Funnance to Board mosting	111
3		- 1	S W Shottuck	Expenses to Board meeting	1
	Oat :	15	A C McClure & Co	Pooks	4
	Oct., i	10	Macmillan & Co	Subscription	4.
		ŀ	Houghton & Mifflin Co	ogosofi buon	9
	4 4		Association Eng Societies	" to Journal	"
	" "		G. E. Stechert.	Books	26
	• •	-1	Pantagraph Printing & Sta. Co.	Books and binding	79
		- 13	E. H. Sargent Co	Test tubes	
1	• •	- [	S. R. Roberts	Manual of Conchology	l é
3	• •		Ginn & Co	Journal of Morphology	9
)	4.4		F. L. Bills	Postage	260 79 4 6 6 22 26
)	• •	- 1	H. W. Rokker	Printing	26
L	* *	- [	B. M. Duggar	Expenses	(
2		1	J. M. Schilling	Supplies for cabin boat	4
3	• •	1.	Miles Newberry	Rent, etc	
1	• • •	- 1	B. Zelle	Office rent	22
	••	-  -	Jas. Moore	Work on well	:
3	4.	- 1	U. L. Shear	N. Y. Fungi	22 22 36 642 30
(	**	1:	Kichards & Co	Unemical supplies	642
31		- 1	Himor & Amond	Apparatus	- 30

# $List\ of\ Warrants -- {\bf Continued.}$

	Date.		To whom.	For what.	Amou
Ī	1895.			-	1
	1090.	15	T C Conside	Calipers, etc Cupola. Lantern slides. Apparatus. Gear cutter Glue and band saw Brick and cement. Fittings and supplies. Sewer pipe and shop supplies. Painting, etc Pipe, fittings, and labor. Apparatus.	\$33
יטוי	ct.,,	19	Whiting Foundary Foundary Co.	Campers, etc	125
2	6.6		Whiting Foundry Equipm t. Co	Cupoia	70
3			C. T. Wilder	Lantern slides	1 79
			Rice Machinery Co	Apparatus	
Į.	4.6		Brown & Sharpe Mig. Co	Gear cutter	9
5	4.4		Frank E. Fitts Mfg. Supply Co.		.3
3	4.4		Orr & Lockett Hardware Co	Glue and band saw	18
7			Sheldon Brick Co	Brick and cement	29
3			Maltby & Wallace Co	Fittings and supplies	49
9			Champaign Supply Co	Sewer pipe and shop supplies	66
)	••		William Price	Painting, etc	157 103
L)			Robinson & Burr	Pipe, fittings, and labor	103
2			Emil Greiner	Apparatus	102 102
3 .	4 4		W. R. Howe	Dravage	102
į			A. S. Aloe & Co	Paper	1 7
5			E. F. Frederick	Expenses	14
3	6.6		Leonard & Ellis.	Machine oil.	14
ź	4 4		E Henry	Janitors' supplies etc	48
a f			T. H. Trevett	Hardware	21
ó			J. M. Chase	Painting warehouse	67
ó	4.4		J T Wolcott	Typewriting etc	28
ĺ	4.4		Fuller & Fuller Co	Painting, etc. Pipe, fittings, and labor. Apparatus. Drayage Paper Expenses. Machine oil. Janitors' supplies, etc. Hardware. Painting warehouse Typewriting, etc. Corks. Filters, etc. Cloth. Card holders Picture frames, etc. Piano Encyclopedia. Water, 3 months, to Dec. 31, 1895. Hand taps, etc. Files Tools Drills Emery wheels Drawings. Benairs	22
	• •		Hanny Hail Chamical Co	Filters ata	1 2
			Fighbour & Boon	Cloth	11
	4.4		La Payotta Lumban Mfa Ca	Card holdors	1 1
			Mitter dearf & Tiles	Distance formers	25 800
5	4.4		mittendori & Kner	Picture frames, etc	000
2			Lyon & Potter Co	Flano	oni
ĺ	4.6		T. H. Castor Co	Encyclopedia	40
3			Union Mig. Co	water, 3 months, to Dec. 31, 1895	125
9			Pratt & Whitney Co	Hand taps, etc	25 59
)	4.4		Nicholson File Co	Files	25
L	4.4		Howe-Brown Co	Tools	5
2			Cleveland Twist Drill Co	Drills	
3			Norton Emery Wheel Co	Emery wheels	15
L			C. A. Gunn	Drawings	8
5			National Typewriter Exchange	Repairs	2
3			Montgomery & Co	Punch	
7			A. Smith & Sons	Punch Insect pins Boats	4
3	• •		Geo. E. McHose	Boats	20
)			Geo. Coleman	Drayage	2
)			Geo. E. McHose	Boats	44
il ·			P. E. Taintor	Boats Drayage Boats On contract, cement walks Steel and iron Screens and lockers Repairs	2,000 60
2			Jones & Laughlins	Steel and iron	60
3			Bevis & Co	Screens and lockers	189
1			The Hammond Typewriter Co.	Repairs	1
5			W. O. Krohn	Expenses	17
3			W. O. Krohn R. P. Morgan	Expenses	81
7			Henry Trevett	Fire extinguishers.	386
	4.4		Shipman Mfg Co.	Ink	1
	4.4		The Carette	Printing ate	275
ő			P Howhet	Typowriter ribbon	216
			C V Millon	Calour Contombon 1905	60
2			Notional Municipal Lagran	Expenses Expenses Expenses Fire extinguishers Ink Printing, etc Typewriter ribbon Salary, September, 1895 Book Lectures Telephone services to Dec. 1, 1895 Telegrams Laboratory supplies Cord, etc Plate Paper On contract Multiplier	1
			National Municipal League	DUUK	100
3			Edward W. Bemis	Lectures	100
Į.			Central Union Telephone Co	Telephone services to Dec. 1, 1895	12 13
5			<u>Western Union Telegraph Co</u>	Telegrams	16
3	• • •		H. Swannell	Laboratory supplies	2
71			E. Miller & Son	Cord, etc	2
3	4.4		E. S. Ritchie & Sons	Plate	
)			Post & Jacobi Co	Paper	8
			Bevis & Co	On contract	1,529
			Western Electric Inst. Co	Multiplier	31
2			Petty & Savers	Slate	2
3			DuQuoin Union Coal Co	Coal	1.04
í	4 4		Payroll of men. Sept., 1895	On contract Multiplier Slate Coal Labor Labor Labor Labor Labor Labor	1,044 598
< l			Payroll of students Sept 1895	Labor	5
á	ct.	21	A S Draner	Salary for October, 1895	588
7	٠٠.،	91	T I Rurrill	[Carati, 201 October, 1000	22
3			S W Shattnek		166
9			Edward Spydon		166
7			N O Bishow		19
			Ira O. Baker		183
)				1	1.06
1			S. A. Forbes. C. W. Rolfe		

### 

	Date.	To whom.		For what	t.	Amour
1	1895.					
4	Oct. 3	D. McIntosh A. N. Talbot A. W. Palmer F. F. Frederick S. W. Parr	Salary for	October.	1895	\$150
		A. N. Talbot	. 202	00000,027,		175
36	4.4	A. W. Palmer	• •	* *		175
37	4.4	F. F. Frederick	••			158
8	. 4 4	S. W. Parr	4.4			175
39						166
0		Chas. M. Moss	••			175
1		D. K. Dodge				166
2	**	Chas. M. Moss. D. K. Dodge L. P. Breckenridge. D. W. Shea	••		*******	166
3	**	D. W. Shea	••			183
4		David Kinley Eugene Davenport Arnold Tompkins Edgar J Townsend H. E. Summers E. B. Graepe				187
5		Eugene Davenport	••	* *		83
6		Arnold Tompkins	•••	4.4		150
7	* *	Edgar J Townsend	••			137
8		H. E. Summers	• •			137
9		E. B. Greene	• •	**		133
10	* *	Katharine Merrill	•••			108 150
1	4.4	W. O. Krohn	••			150
2		James M. White	••			125
3		W. H. VanDervoort	**			137
4	• •	H. E. Summers E. B. Greene. Katharine Merrill W. O. Krohn. James M. White. W. H. VanDervoort W. D. Pence. A. H. Daniels. H. S. Grindley T. A. Clark H. S. Piatt B. V. Swenson. Geo. D. Fairfield. Chas. Tooke. Percy F. Bicknell. Henry H. Everett. Walter H. Jones G. D. Hammond.	**			166
5	• •	A. H. Daniels	••			100
6		H. S. Grindley	••		********	87
7	* *	T. A. Clark	• •		********	108
8	4.4	H. S Piatt	• •	6.6		83
9	• •	B. V. Swenson	••			91
0		Geo. D. Fairfield	••			83
1	* *	Chas. Tooke	• • •			83
2	**	Percy F. Bicknell	••			129
3	* *	Henry H. Everett	•••			100
4	4.4	Walter H. Jones G. D. Hammond C. D. McLane. W. E. Sandford J. D. Phillips William Esty Frank Smith R. P. Smith A. C. Burnham Helen E. Butterfield Fred A. Sager Ella H. Morrison Robt. A. Wood Oscar Quick	•			58
5	• •	G. D. Hammond	• • •			83
6	• •	C. D. McLane		• •		110
7		W. E. Sandford	" "	• •		80
8	4.6	J. D. Phillips		• •		85
9		William Esty	• •	* *		105
0		Frank Smith	• •	4.4		120
1		R. P. Smith	. "			120
2		A. C. Burnham	**	* *		80
3	• •	Helen E. Butterfield	**	• •		75
4	**	Fred A. Sager				85
5	**	Ella H. Morrison	::	• •		70 80
6	••	Robt. A. Wood	1 ::	• • • • • • • • • • • • • • • • • • • •		80
7	• • • • • • • • • • • • • • • • • • • •	Oscar Quick		• • •		75
8	• • •	G. A. Goodenough		•••		75
9		Chas. A. Gunn	1 ::			85
0	• • •	Alfred H. White		::		80
1		G. W. McCluer				15
2	44	E. J. Lake	::			60
3		Chas. F. Hottes	1 ::			60
4		Chas. A. Gunn. Alfred H. White G. W. McCluer E. J. Lake Chas. F. Hottes M. S. Ketchum J. J. Mexicor	1 ::		· · · · · · · · · · · · · · · · · · ·	70
5		J. G. Mosier				70
6	::	K. C. Vial.	::	••		70
7	::	Geo. A. Huff	1 ::	• • •		50
8		R. C. Vial. Geo. A. Huff Elinor Ellsworth Paul Chipman C. B. Clark	1	::		50
9	**	Paul Unipman	1 ::		*	70
0		U. B. Clark	1 ::	• • • • • • • • • • • • • • • • • • • •		80
1		A. R. Curtiss Henry Jones J. H. Wilson	::	• • •		80
2		Henry Jones	::	• • • • • • • • • • • • • • • • • • • •		60
3		J. H. Wilson	1 ::	• • • • • • • • • • • • • • • • • • • •		50
4	• • •	J. H. White B. G. Howe N. A. Weston Lillie A. Clendenin Chas. N. Cole R. S. Douglass.	::	• • • • • • • • • • • • • • • • • • • •		150
5	**	N.A. Weston	1 ::	••		90
6	• • •	Lillie A. Clendenin		• • •		65
7	• • •	Unas. N. Cole		• • •		75
8	• • • • • • • • • • • • • • • • • • • •	K. S. Douglass	1 ::	• • •		75
9	• • •	Wm. L. Steele Marion Thompson Geo. W. Graham		• • •		30
9	• • •	Marion Thompson		• • •		40
1	• • • • • • • • • • • • • • • • • • • •	Geo. W. Graham		• • •		100
2						41
3	• • •	A. B. Baker M. T. Lindsey. I. H. Allen F. J. Foote Lillie Heath H. I. Green		• • •		35
4		I. H. Allen	1	• • •		35
5		F. J. Foote				75
6		Lillie Heath				60
7		H. I. Green				50
8		H. I. Green Susan W. Ford W. R. Hoffman J. M. Snyder L. G. Lathrop	**			45
			1 66			35
9		W.K. Hoπman				35

# $List\ of\ Warrants -- {\bf Continued.}$

0.	Date.	To whom.	For what.	Amour
	1895.			
62	Oct. 3	J. J. Johnson	Salary for October, 1895	\$30 30
oo	::	J. G. Maynard		30
64	::	Archie S. Golden		30
65	1	Philip Schwehm		25
66		Philip Schwenm W. L. Pillsbury C. V. Millar John Mayer W. G. Johnson Mary J. Snyder		166
67		C. V. Millar		60
68		John Mayer		20 100
69 70		W. G. Johnson		62
70 71		Mary J. Shyder		62
72		R M Dugger		83
73		H C Forhes		83
74	4.6	C A Kofoid		100
75		Adolph Hemnel		60
76	**	Chas T Wilder	Negatives	8
77	• •	Public School Publishing Co.	Advertising	l ĕ
78	**	Brown & Sharpe Mfg. Co	Castings	18
7 <u>9</u>	**	Howe, Brown & Co	Tools.	18 3
ŏ	**	A. P. Cunningham & Son	Net. balls. etc	9
81		J. W. Seaver	Record book	6
32	• •	William Price	Lettering, etc	7
33	"	T. H. Trevett	Hardware	2
34	**	Champaign Co. Printing Co	Negatives Advertising Castings Tools Net, balls, etc Record book Lettering, etc Hardware Printing Cases, index, etc Wire, etc Anthropometric tables Laboratory supplies Padlocks Zinc Magnets Ether Cement Mail pouch Advertising Books Work Postage Machine shop roof contract	10
35	::	Office Specialty Mfg. Co	Cases, index, etc	191 56
36	::	G. L. Batchelder	Wire, etc	56
37	::	Mary A. Wood	Anthropometric tables	6
8		Eimer & Amend	Laboratory supplies	2
39		Yale & Towne Mfg. Co	Padlocks	16 30
90		Lenigh Zinc and Iron Co	Zinc	30
1		Chas. H. Besly Co	Magnets	8
2		W W Walls & Co	Coment	l o
3 4	**	Millor Hornoga Co	Moil pough	3
5	* *	Inter State School Review	Advortising	1
6	**	R F Stavens	Rooks	2
7	**	Harland Scott	Work	10
8		Isaac Fielding	Postage	īŏ
$\tilde{9}$		F L Bills	2 05,48	45
ŏ	• •	C. L. Strobel	Machine shop roof contract	2,967
ĭ	**	Robert Clark	Paving	5, 267
2	**	Weston Electrical Inst. Co	Wattmeter, etc	211
)3	**	P. E. Taintor	Dairy house floor	2, 967 5, 267 211 35 12
4		W. W. Walls & Co	Lumber	12
5	;;	W. C. Vosburgh Mfg. Co,	Gas fixtures	75
6	::	Robinson & Burr	Sinks, etc	82 2
7		M. Graf Krüsi	Butterfly nets	2
8	1 ::	D. Appleton & Co	Chapman's birds	2
ŏ	::	Richards & Co	Tuoes	2
0		Racine Boat Mfg. Co	Copper noat	1 19
1		W. H. Jones	Machine shop roof contract. Paving Wattmeter, etc. Dairy house floor Lumber. Gas fixtures. Sinks, etc. Butterfly nets. Chapman's birds. Tubes. Copper float. Music. Tuning piano. Music. Mouthpiece and repairs. Expenses. Freightage.	19
2		A. M. Paige	Music	5 24
3		W I Stoole	Mouthniese and rensing	1
4 5		W. G. Johnson	Evnences	31
		C C C & St T. R'T Co	Fraightage	22
$\frac{6}{7}$	4.6	Wahash R R Co	LIVISHUAS C	33
8		I C R R Co.	44 44	39
$\frac{9}{9}$	• •	Pacific Express Co	"	25
9		American Express Co.	"	46
1		Champaign Supply Co	Inspirator and pipe and fittings	85
$\frac{1}{2}$		Malthy & Wallace Co	Pipe and fittings.	40
3		W. F. Hunt.	Locks	13
$\ddot{4}$		Geo. L. Batchelder	Electric lighting material	102
5	4.6	D. W. Shea	Expenses	49
š		A C McClurg & Co	Books	49 235
7		Western News Co	Subscription	2
8		Ginn & Co	Trans. Am. Philological Ass'n	2
$\frac{8}{9}$		C. A. Besore	Inspirator and pipe and fittings Pipe and fittings Locks Locks Electric lighting material. Expenses. Books Subscription. Trans. Am. Philological Ass'n. Lumber. Basket balls. Lumber. Water meter. Water meter. Settees and chairs. Plaster. Hangers. Stationery. Mercury plumb-bob.	4
ő		A. P. Cuningham & Son.	Basket balls	4 2
ĭ		Bevis & Co	Lumber	3
$\dot{2}$		Henry R. Worthington	Water meter	20
3		A. H. Andrews & Co	Settees and chairs	59
4		Stearns Lime and Stone Co.	Plaster	2
5	* *	A. H. Abbott & Co	Hangers	1 9 1
6		D. H. Lloyde & Son	Stationery	9
7		1	1 1 1 1 1	۱ 4

No.	Date.		To whom.	For what.	Amoun
	1895.				1
438	Oct	31	A. H. Revell Co	Desk. Slated paper. Cloth. On contract President's House. Laying walks Expenses Postage. Fittings. Simplex ink Lamp chimneys, etc. Drayage Printing Drayage Hardware. Carbons. Diplomas. Expenses.	\$18
439	000	01	W. A. Olmsted	Slated paper	3
440			G. C. Willis	Cloth	7
441	• •		Bevis & Co	On contract President's House	600 500 62
442			P. E. Taintor	Laying walks	500 (
443			R. P. Morgan	Expenses	62 (
444			Isaac Fielding	Postage	15 (
445			Champaign Supply Co	Fittings	192
446			Lawton & Co	Simplex ink	1 (
447 448			E Finder	Drawage	1 5
449			Champaign Co. Harald	Printing	16
450	••		R S Wilher	Dravage	8
451	• •		Henry Trevett.	Hardware	3 1
452			Central Electric Co	Carbons	12
453			Western Bank Note Eng. Co	Diplomas	25
454	• •		E. G. Howe	Expenses	7
455	••		The M. C. Lilly & Co	Military trimmings	24
456			Pacific Express Co	Hardware. Carbons. Diplomas Expenses. Military trimmings. Freightage Slides. Freightage Slides. Freightage. Chemical apparatus. Filter paper. Chemical supplies Jars, etc. Stakes Blackboards. Hardware. Advertising. Shop supplies. Tile. Shafting, etc. Laboratory supplies. Fire extinguishers. Drawings. Saw slot cutter. Making slides. Photographs. Subjects for art department. Locks. Slate sinks, etc. Process plates. Furnace, etc. Books.  Expenses. Dumb bells. Apparatus. Table. Electric supplies. Laboratory supplies. Laboratory supplies. Laboratory supplies. Cuts, etc. Subscription. Copying. Postage Salary, September, October, 1895 October, 1895.	24 10 1 1 25 C
457	::		Soule Photograph Co	Slides	1 1
458			American Express Co	Freightage.,	25
459	1		Kichards & Co	Chemical apparatus	64
460			Kichards & Co	Filter paper	9 1
461			Fuller & Fuller Co	Unemical supplies	22
462			Kariner Grocery Co	Jars, etc	26
463			Bevis & Co	Diagle boards	10 36
464	**		Own & Lookett II3	Diackboards	36
465			Engine North Bardware Co	Hardware	7 6
466	••		Molthy & Wallace Co	Chan annulias	4
467 468			Chemneign Supply Co	Shop supplies	40
$\frac{1}{4}69$	4.		Union Brick and Tile Co	Tile	46
$\frac{1}{4}70$			Rice Machinery Co	Shafting etc	170
471	••		Eimer & Amend	Laboratory supplies	23
$\hat{4}7\hat{2}$	• • •		Miller Chemical Engine Co	Fire extinguishers.	170 23 31 10
473	• •		A. W. Rea	Drawings	10
474	• •		Brown & Sharpe Mfg. Co	Saw slot cutter	3
475			Charles T. Wilder	Making slides	10 3 57 2 91 46 24 2 36
476	Nov.	15	F. W. Honens	Photographs	2
411			P. P. Caproni & Bro	Subjects for art department	91
478			Yale & Towne Mfg Co	Locks	46
479			J. P. Clow & Sons	Slate sinks, etc,	24
480			Waimsley & Co	Process plates	20
$\frac{481}{482}$			W. H. Londonneille Co.	Packs	30
$\begin{array}{c} 482 \\ 483 \end{array}$			A C MaClung & Co	DOOKS	109
$\frac{484}{484}$	• •		G E Stechert	**	129
485	. 4 4		C. A. Gunn.	Expenses	26
486	• •		The Schumacher Gym. Co	Dumb bells.	- š
487	• •		Narragansett Machine Co	Apparatus	222
488	"		Morse Machine Co	Table	7
489	**		Electric Supply Co	Electric supplies	109 129 26 3 222 7 17 15 12
490	**		E. H. Sargent & Co	Laboratory supplies	15
491			Cambridge Botanical Sup. Co	Cuts, etc	12
492			Macmillan & Co	Laboratory supplies. Cuts, etc Subscription Copying Postage Salary, September, October, 1895 Cotober, 1895 Labor	6
<b>4</b> 93			Harriet Biddle	Copying	32 20
494	1		Frank L. Bills	Postage	32
495			K. K. Porter	Salary, September, October, 1895	20
496			U. Morrow	October, 1895	70
497			Charles P. Frank		45 15
<b>498</b> <b>49</b> 9			Depreil of mon Oct 1905	Tahan	664
ፍሰሰ	6.6		Charles B. Ewalt Payroll of men, Oct., 1895 Payroll of students, Oct., 1895 A. S. Draper T. J. Burrill. S. W. Shattuck E. Snyder	Lapor	246
50U 501	Nov.	30	A S Drepor	Salary for November, 1895	583
$501 \\ 502$	104.	ou	T I Russill	Salary for November, 1895	225
$502 \\ 503$	••		S W Shattnek	"	166
$503 \\ 504$			E. Snyder.	**	166
505			N. C. Ricker		191
506	"		N. C. Ricker I. O. Baker S. A. Forbes. C. W. Rolfe	**	183
507			S. A. Forbes	44	183 83
508			C W Rolfe	**	175
509	**		C. W. Rolle D. McIntosh A. N. Talbot A. W. Palmer F. F. Frederick S. W. Parr H. J. Barton Chas. M. Moss	**	
510	• • •		A. N. Talbot		
511	• • •		A. W. Palmer		
512	• •		F. F. Frederick		
513	4.6		S. W. Parr		
514			H. J. Barton	4,	
	• •		1755		175

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o.	Date.		To whom.		For what.		Amou
	1895.						
16	Nov.	30	D. K. Dodge L. P. Breckinridge	Salary for	November, 1	1895	\$166
11.6			L. P. Breckinridge	;;			166
18			David Kinley		• • •		187
19			Eugene Davenport				83
20 21			E. J Townsend				137
22			E. J Townsend H. E. Summers E. B. Greene Katharine Merrill.			•••••	137 133
23			Katharina Marrill				108
$\frac{20}{24}$			William O Krohn	4.4			150
25			William O. Krohn. James M. White. W. H. Van Dervoort. W. D. Pence.				125
26			W. H. Van Dervoort	**	**		137
27			W. D. Pence	**			116
8	• •		A. H. Daniels	**			100
9			H. S. Grindley		• •		87
0	• • •		T. A. Clark		• • •		108
1			H. S Piatt				83
2			B. V. Swenson		• • • • • • • • • • • • • • • • • • • •		91
3			Geo. D. Fairfield		• • •		83
4			Chas. W. Tooke			• • • • • • • • • • • • • • • • • • • •	83
5			Percy F. Bicknell			• • • • • • • • • • • • • • • • • • • •	129 100
6 7			Melter H. Everett		• •	• • • • • • • • • • • • • • • • • • • •	100
			W. D. Pence A. H. Daniels H. S. Grindley T. A. Clark H. S. Piatt B. V. Swenson Geo. D. Fairfield Chas, W. Tooke Percy F. Bicknell Henry H. Everett Walter H. Jones G. D. Hammond				58 83
$_{9}^{8}$			G. D. Hammond, C. D. McLane. W. E. Sandford J. D. Phillips.		6.6		110
ö	4.6		W E Sandford	4.	4.4		80
1			I D Philling	4.6	4.4		85
$\hat{2}$	• •		William Esty	• •			105
3			Frank Smith	* *			120
4	• •		R. P. Smith				120
5	• •		A. C. Burnham		• •		120 80
6			Helen E. Butterfield	::	• • • • • • • • • • • • • • • • • • • •		75
7			Fred A. Sager		• • • • • • • • • • • • • • • • • • • •		85
8			Ella H. Morrison		**		70
9	1		Robt. A. Wood				80
0			Oscar Quick				75
1			Chag A Comm		4.4	•••••	75 85
2			Frank Smith R. P. Smith A. C. Burnham Helen E. Butterfield Fred A. Sager Ella H. Morrison Robt. A. Wood Oscar Quick G. A. Goodenough Chas. A. Gunn A. H. White G. W. McCluer Edward J. Lake				80
3 4			C W MaCluor	**	4.6		15
5			Edward I Lake	•••	4.6		60
6	• •		Chas. F. Hottes	• • •			60
7	• •		M. S. Ketcham	• • •		********	70
8	• •		J. G. Mosier	::	• •		70
9	**		R. C. Vial	::	••		70
0	::		G. W. McChier Edward J. Lake. Chas. F. Hottes M. S. Ketcham. J. G. Mosier R. C. Vial. Geo. A. Huff Elinor Ellsworth. Paul Chimman	;;			50
1			Elinor Ellsworth				50
2			Paul Chipman				70
3			C. B. Clark		4.4		80
4			A. R. Curtiss			• • • • • • • • • • • • • • • • • • • •	80
5			Henry Jones		4.4		80
6 7			Burton E. Moore		4.6	•••••	50
8			J. H. Wilson. Edward G. Howe		• •		150
9			N A Weston		• •		90
0			Edward G. Howe. N. A. Weston. Lillie A. Clendenin. Chas. N. Cole R. S. Douglass Wm. L. Steele. Marion Thompson Robert K. Porter Geo. W. Graham A. B. Baker M. T. Lindsey I. H. Allen F. J. Foote		• •	*********	68
1	4.4		Chas. N. Cole		• •		78
$\dot{2}$	• •		R S. Douglass		**		75
73	•••		Wm. L. Steele				50
74			Marion Thompson		• •		40
5			Robert K. Porter	1 ::	**		10
6			Geo. W. Graham	::	• •		100
7			A. B. Baker		• •		41
8			M. T. Lindsey		• • •		35
9	١		<u>I. H. Allen</u>	::			35
80			F. J. Foote				75
31			Lillie Heath	1 ::			60
32			Sue W. Ford	::		• • • • • • • • • • • • • • • • • • • •	50
3	1		I. H. Allen F. J. Foote Lillie Heath Sue W. Ford L. A. Boice W. R. Hoffman J. M. Snyder L. G. Lathrop J. J. Johnson J. Morrow J. G. Maynard Archie S. Golden Philip Schwehm W. L. Pillsbury	::		• • • • • • • • • • • • • • • • • • • •	50
34			W. K. Hoffman				3.
35	1		J. M. Snyder		4.4	• • • • • • • • • • • • • • • • • • • •	30
36			L. G. Lathrop				30
37			I Morrow		4.4		70
39			J. G. Maynard				3
90 90			Archie S. Golden		4.4		30
91	• • •		Philip Schwehm	••	• •		
92			W I Dillahamer		4.6		110

о.	Date.		To whom.	For what.	Amou
Ī	1005				
er	1895. Nov.	90	I D Prockerwidge	Salam 2 months to date	\$62
94	1101.	90	S W Shattnek	Salary 3 months to date Expenses and salary to date	162
5			Mary J Snyder	Salary for November, 1895	62
6			Chas. A. Hart	**	62 62
97	**		W. G. Johnson		110
8			L. P. Breckenridge S. W. Shattuck Mary J. Snyder Chas. A. Hart W. G. Johnson C. A. Kofoid B. M. Dugrer	44 44	100
99			B. M. Duggar		88
)(			H. C. Forbes	**	83
1	**		Bevis_& Co	On contract, machine shop	340
2	1 ::		C. L. Strobe	Machine shop roof	612 60
3			C. V. Millar	Salary for November, 1895	60
4			Richards & Co	Chemical supplies	48
5			Josephine Skehan	Herbarium specimens	11
6			G. E. Stechert	Books	10
)7 )8			J. M. White	T leave be an	26 29
)9			M A Paganar	Lumber Care of hat room, Nov. 1895. Salary 3 months, to date Salary, November, 1895.	19
10 10			S A Forbos	Selemy 2 months, to date	62
11			Adolph Hempel	Salary November 1895	60
12			Harlen Scott	Messenger	
3			C. A. Kofoid B. M. Duggar H. C. Forbes Bevis & Co C. L. Strobe C. V. Millar Richards & Co Josephine Skehan G. E. Stechert J. M. White W. W. Walls & Co M. A. Reasoner S. A. Forbes Adolph Hempel Harlen Scott H. C. Forbes	Expenses.	10
4	•••		H. C. Forbes. Richard Kny & Co. Mitchell Bros. Co.	Expenses. Laboratory supplies. Subscription to American Miller	1
5	. * *		Mitchell Bros. Co	Subscription to American Miller	3
6	••		The S. Obermayer Co. Machinist Supply Co. C. N. Clark & Co. Hubbard & Sons	Larvæ Shop supplies Supplies Stone cubes and sand	1 2
7	• •		The S. Obermayer Co	Shop supplies	1
8	• •		Machinist Supply Co	Supplies	
9	**		C. N. Clark & Co	Stone cubes and sand	3
20			Hubbard & Sons	Hardware	
ĭ				Hardware Lime, etc	3
2			Chas. H. Besly & Co	Drass	1 3
3			Pantagraph Print. & Staty Co.	CertificatesTelegrams	4
45			western Union Telegraph Co	Telegrams	2
6			W. R. Howe N. W. Graham Mrs. Helen Campbell	Drayage Expenses to committee meeting	9
7			Mug Holon Comphell	Lastures and expenses	170
8			John Mayer	Salary November 1805	20
$\tilde{9}$			E W Justus	Lectures and expenses. Salary, November, 1895	4
30			E. W. Justus Chas. B. Ewalt Emma Siebert.		î.
31			Emma Siebert	Assistance in drawing	2
32			W. O. Kronn	Expenses	18
3			Illinois Central R. R. Co	Freightage	70
34			Isaac Fielding	Postage Hectograph ribbon Freightage	10
35	1 ::		R. Herbst Wabash R. R. Co Liquid Carbonic Acid Mfg. Co.	Hectograph ribbon	1
6			Wabash R. R. Co	Freightage	1
37	İ		Liquid Carbonic Acid Mfg. Co.	Acid	
8	4		Riley Jewelry Co	Diamond	3
39 10			The North west'r Col Light Co.	Cog	3
1			Hubbard & Sons	Hordwore	
2				Acid Diamond Freightage Gas Hardware Work on charts Postage Machine shop supplies Pipe and fittings Hardwarium cases etc	2 10
3			F. L. Bills	Postage	10
4			Champaign Supply Co.	Machine shop supplies	6
15			Maltby & Wallace Co	Pipe and fittings	6 2
16	• •		Bohingon & Burr	-,,	4
17	**		Bevis & Co H. Swannell E. Henry D. H. Lloyde & Son	Herbarium cases, etc	21
8	**		H. Swannell	Paints, oils, etc Shop and janitors' supplies Stationery, etc Chemical supplies.	1
19	1		E. Henry	Shop and janitors' supplies	83
60	1		D. H. Lloyde & Son	Stationery, etc	3
1			Richards & Co	Chemical supplies	18
2	1			Beams, etc	9
3	1		Clara E. Cummings	N. A. lichens	
4			The Unana Brick Co.  Mittendorf & Kiler  The Caratte	Fibrous packing	4
5			The Hybers Brick Co	Brief ote	4
6			Mittendorf & Kilon	Roy and mirror	7
8			The Cazette	Fibrous packing . Swords and belts Brick, etc. Box and mirror Printing	18
9			Champaian County Honald	Printing Brick Hardware	12
) 30			Clinton Pay and Ride Reich Co.	Daialz	120
31			Henry Trevett	Hardware	22
62			A. C. McClnrg & Co	Books and stationery	10
33	• •		H. H. Everett	Hardware Books and stationery Expenses Hack hire Coal Printing	10
64			E. H. Renner & Bro	Hack hire	
65			The DuQuoin Coal Co	Coal	554

### $List\ of\ Warrants - \hbox{Continued}.$

о.	Date.		To whom.	For what.	Amou
	1895.				
67	Nov. 5	30	F K Roberon & Bros	Carpeting, etc. Lumber, etc. Subscription to Illini, etc. Work on Athletic Park. Labor and material, Nov., 1895.	97
68	1107,	,	C. A. Besore.	Lumber etc	\$7 22
69			F. W. Honens	Subscription to Illini etc	265
70			Agricultural Exper Station	Work on Athletic Park	26
71			Renair Shop, II of I	Labor and material Nov. 1895	279
72			recease Shop, C. of I	Labor and material, 1000	95
73	4.4		Dent Ann Chemistry	Analysis	95 5
74	4 4		Mech Dept Nov 1895	AnalysisLabor and material	158
75			Arch Dept. Nov. 1895	nasoi and maichai	
16	Dec: 1	13	Bevis & Co	Contract for President's House	1 500
7	Dec:, .		S S Reman	Service as architect	1,500 300
8	4.4		Malthy & Wallace Co	Heat's contract President's House	641
9	4 4		Bevis & Co	On contract President's House	3,500
9		- 1	Robinson & Rurr	Work in chemical laboratory	378
ĭ		- 1	City of Urbana	Sower toy	80
2			Electric Lighting & Power Co	Electric nower	160
3		- 1	A S Dranar	Treveling avnances	116
4		- 1	C. W. Sambling	Francia expenses	235
	4 4	-	Ichem Rendelph	Contract for President's House Service as architect Heat'g contract, President's House On contract President's House. Work in chemical laboratory Sewer tax Electric power Traveling expenses Expenses	255 9
5		-	N W Grobert	"	22
		- 1	Alor Maloon	**	22 28
8		-	S A Bullord		40
0		-	D D Morgan	::	11 41
9		-	N D Manuican	"	108
0		-	Dept. App. Chemistry Mech. Dept., Nov., 1895 Arch. Dept., Nov., 1895 Bevis & Co. S. S. Beman. Maltby & Wallace Co. Bevis & Co. Robinson & Burr City of Urbana Electric Lighting & Power Co. A. S. Draper C. W. Spalding. Isham Randolph. N. W. Graham Alex. McLean. S. A. Bullard R. P. Morgan N. B. Morrison Isaac S. Raymond Julia Holmes Smith J. E. Armstrong W. P. Hove		24
1		-	Inlia Holmog Conith		24
3			J E Apportune	Drayage Service 1 <sup>1</sup> 2 month Dec. 15, 1895 Carriage Postage Labor Mailing boxes Subscription to vol. 3, Nidiologist Chairs Subscription and Directory	82 14
4		ì	W D Home	Отоголо	45
4			Champin and Haina D. Wal. Co.	Coursing the month Dec. 15 1905	20
5		- 1	E H Donnor & Dro	Commissions House Dec. 19, 1695	1
6			Lana Fielding	Postogo	10
8		ì	F I Dille	r ospage	82
	٠٠٠	- !	Parmella of man Nov. 1905	Tahan	644
9		- 1	Powells of students Nov. 1995	Lapor	78
		-	E II Comment & Co	Mailinghamas	6
1			E. H. Sargent & Co	Calculation to mal 2 Midialaciat	1
2		- 1	H. R. Taylor	Subscription to vol. 3, Nidiologist	10
3		- 5	F. L. Bills Payrolls of men Nov., 1895. Payrolls of students Nov., 1895. E. H. Sargent & Co. H. R. Taylor C. T. Busch E. O. Vaile Cambridge Entomological Club	Chairs Subscription and Directory to Psyche to Entomological News Manual of Conchology Services and expenses Expenses. Gymnasium apparatus.  Expenses. Thermometers Engravines	13
4		1	E. O. Vaile.	Subscription and Directory	2 18
5	4.4	į	Cambridge Entomological Club	to Psyche	19
6	• •	-	E. T. Cresson	to Entomological News	$\frac{1}{6}$
7		- 1	S. Kaymond Roberts	Manual of Conchology	8
3		- 1	W. H. Van Dervoort.,	Services and expenses	7
9		- 1	I. U. Daker	Campagium apparatus	267
0			Narragansett Machine Co	Gymnasium apparatus	12
1		-	A. G. Spalding & Bro	TI	11
2		i	G. W. McCluer	Expenses	11 11
3			Queen & Co	Thermometers	1
1			Goes Litnographing Co	Engravings	500
5			Lawara G. Bones	L teitinm for indeath biggs	500 300
6			Arms & Hart		200
7	• •		Clinton J. warren		400
8			Osgood & Stone	Delate	100
9	• •		Unnton Pav. & Build. Brick Co	Drick	18
0			macomo Sewer Pipe Co	Subscription and Directory to Psyche to Enysche Gymnasium apparatus.  Expenses Thermometers Engravings Premium for library plans  Brick Sewer pipe Specimens Hotel bill Advertisement Subscriptions Salary for December, 1895	153
1			Bausen & Lomb Optical Co	Specimens	92 4
2			Doane House	Hotel Dill	4
3			III. Soc. of Engin' sand Suv'rs.	Advertisement	267
1			The western News Co	Subscriptions	267 17
5			G. E. Stechert	G.1 for December 400	F00
6			A. S. Praper	Salary ior December, 1895	583 225
7			T. J. Burrill	44 44	225
8			S. W. Shattuck		166
9			E. Snyder	44 44	166
0			N. C. Ricker		191
1			Ira O. Baker		183
$^{2}$			S. A. Forbes	: :: :: :: :: :: :: :: :: :: :: :: :: :	83
3	4.4		C. W. Rolfe		175 150
4			D. McIntosh		150
5			A. N. Talbot	66 66	175
6			A. W. Palmer	**	175
7			F. F. Frederick	44 44	158
8			S. W. Parr		175
9	"		H. J. Barton		166
ŏ			Chas. M. Moss.	**	175
1			D. K. Dodge	**	166
2			L. P. Breckenridge	46 46	166
3			David Kinley	**	187
					83

о.	Date.	To Whom.		For what	•	Amou
	1895.					
45	Dec. 3	1 Arnold Tompkins. Edgar J Townsend. H. E. Summers. E. B. Greene. Katharine Merrill.	Salary, Nov	ember and	d Dec'ber, '95. 1895	\$300
40		Edgar J Townsend	Salary for I	December,	1895	13'
47		H. E. Summers				13
<b>48</b>		E. B. Greene				13:
<b>4</b> 9		Katharine Merrill		• • •		108
50						150
51		James M. White. W. H. Van Dervoort W. D. Pence.	1			128 137
52		W. H. Van Dervoort	1 ::			137
3		W.D. Pence			•••••	110
54		A. H. Daniels H. S. Grindley T. A. Clark H. S Piatt		• • •		100
5		H. S. Grindley		• • •	• • • • • • • • • • • • • • • • • • • •	8
6		T. A. Clark				108 86
7		H. S Piatt		• • •		8
8				• • •		9:
9		Geo. D. Fairfield. Chas. W. Tooke. Percy F. Bicknell. Henry H. Everett.		• • •		8
0	1 ::	Chas. W. Tooke	::	• • •		8
1		Percy F. Bicknell	1 ::	• • • • • • • • • • • • • • • • • • • •		8 129
$^{2}$	::	Henry H. Everett		• • •		100
3		Walter H. Jones				58
4		G. D. Hammond	**	4.4		8
5		Walter H. Jones G. D. Hammond C. D. McLane W. E. Sandford	::	• • • •		110
6		W.E. Sandford	::			80
7		J. D. Phillips		4.4		8
8	::	W. E. Sandford. J. D. Phillips. William Esty. Frank Smith. R. P. Smith. A. C. Burnham. Helen E. Butterfield. Fred. A. Sager. Ella H. Morrison. Roht A. Wood	1			8 10
9		Frank Smith				120
0	""	R. P. Smith	* * * * * * * * * * * * * * * * * * * *	4.4		120 120
1		A. C. Burnham				8
$^{2}$	::	Helen E. Butterfield	••	• •		78
$^{3}$		Fred. A. Sager				85 70
4		Ella H. Morrison	"			70
5		Robt. A. Wood		• •		80
6	::	Oscar Quick				78
7		G. A. Goodenough	**			78
8		Chas. A. Gunn				88
9		A. H. White		• •		80
0		G. W. McCluer				1.
1		Edward J. Lake		• •		60
2		Oscar Quick. G. A. Goodenough. Chas. A. Gunn. A. H. White. G. W. McCluer. Edward J. Lake. Chas. F. Hottes. M. S. Kotokum.		• •		60
3	• • • • • • • • • • • • • • • • • • • •	M. S. Ketchum	::			70
1	• • •	J. G. Mosier				70
5		R. C. Vial.		• • •		70 50
6		M. S. Ketchum. J. G. Mosier. R. C. Vial. Geo. A Huff				50
7		Elinor Ellsworth				50
8		Paul Chipman		4.4		70
9		C. B. Clark. A. R. Curtiss.		44		80
0		A. R. Curtiss				80
1		Henry Jones. Burton E. Moore. J. H. Wilson Edward G. Howe			·	60
2		Burton E. Moore		6.6		80
3		J. H. Wilson				50
1		Edward G. Howe		• •		150
5		N. A. Weston. L. A. Clendenin.				90
6		L. A. Ulendenin		• • •	• • • • • • • • • • • • • • • • • • • •	6
7		Unas. N. Cole		44	• • • • • • • • • • • • • • • • • • • •	78
3		Chas. N. Cole				78
9		wm. L. Steele		• • •	• • • • • • • • • • • • • • • • • • • •	30
0		Marion Thompson		::	• • • • • • • • • • • • • • • • • • • •	40
1	**	Robt. K. Porter W. L. Pillsbury Geo. W. Graham		• • •		10
2	• • • • • • • • • • • • • • • • • • • •	W. L. Pillsbury		• • •	• • • • • • • • • • • • • • • • • • • •	116
3		Geo. W. Graham		4.6	• • • • • • • • • • • • • • • • • • • •	100
1	• • •	IA. B. Baker				41
5	• • •	M E Lindsev	• • • • • • • • • • • • • • • • • • • •	• •		3
3	• • •	I. H. Allen F. J. Foote Albert R. Lee		• •	• • • • • • • • • • • • • • • • • • • •	3
7	•••	F. J. Foote	• • •	• •	• • • • • • • • • • • • • • • • • • • •	75
3		Albert R. Lee		" "		20
)	• • •	Lillie Heath	**			- 60
)	• • • • •	Sue W. Ford	**	4.6		50
L	• •	L. A. Boice	• • •	4.6	`	50
2		W.R. Hoffman		* *		35
3	4.4	J. J. Johnson	* *	4.4		- 30
1	4.4	Albert R. Lee Lillie Heath Sue W. Ford. L. A. Boice W. R. Hoffman J. J. Johnson L. G. Lathrop. J. M. Snyder. A. S. Golden J. G. Maynard. Philip Schwehm	**			30
5		J. M. Snyder	* *	4.4		38
3	• •	A. S. Golden	• •	• •		30
7	* *	J. G. Maynard		* *		30
8	.6 6	Philip Schwehm		• •		25
9	4.4	Philip Schwehm	**	4.4		70
0	4.4	E. W. Justus. C. B. Ewalt.	4.4	4.4		50
1	**	C. B. Ewalt	• •	,		15
2		John Mayer	4.6	6.6		20

1895.   3   Harlen Scott		Date.		To whom.	For what.	Amou
Adolph Hempel		1905			·	
CALL A Total Comments of the c	3 T	)ec.	31	Harlen Scott	Salary for December, 1895	\$10
C. A. Kofold.	í		0,	Adolph Hempel	Surary 191 Decemper, 1909	\$10 60
B. M. Duggar.  H. C. Forbes. S. H. Chadbourne.  Edwards & Docker Co. S. H. Cresson.  Bausch & Lomb Optical Co. Apparatus. Apparatus. Chas. T. Wilder Drayage.  Chas. T. Wilder Making lantern slides. The Gazette Paper. The Typewriter Exchange Ribbon and spring.  Mitchell Bros. Co. The Harris Publishing Publishing Co. The Harris Publishing Publishing Co. Th				C A Kofoid	••	100
B. M. Duggar.  1 S. H. C. Forbes.  2 Edwards & Docker Co. American Naturalist.  3 E. T. Cresson.  4 Bansch & Lomb Optical Co. Apparatus.  5 Chas. T. Wilder Drayage.  6 Chas. T. Wilder Making lantern slides.  7 The Gazette Paper.  8 The Typewriter Exchange Ribbon and spring.  8 The Gazette Paper.  8 The Sylvewriter Exchange Ribbon and spring.  9 Mitchell Bros. Co. American Miller.  1 The Harris Publishing Co. Pishes of N. A.  2 Richards & Co. Cuts.  2 Richards & Co. Apparatus and supplies.  3 Smith & Powell Co. Holstein stock.  4 W. J. Fraser.  5 Central Electric Co. Supplies.  6 Petty & Sayers.  6 Central Electric Co. Gubinet.  8 Walmsley Fuller & Co. Glass.  8 Walmsley Fuller & Co. Glass.  8 Walmsley Fuller & Co. Holstein stock.  9 Buffalo Forge Co. Forge blowers, etc.  10 E. W. Ornian Buller-prists.  11 L. Wild.  12 R. Howe Drayage.  13 F. L. Bills.  14 W. R. Howe Drayage.  15 Isaac Fielding.  16 Mayme Hill.  16 Mayme Hill.  17 Part salary, fall term, 1895.  18 Mayme Hill.  19 Part salary, fall term, 1895.  10 Matthy & Wallace Co. Iron, sand, etc.  10 Expenses.  11 Part Salary, fall term, 1895.  12 Public School Publishing Co.  14 Chas. T. Mills.  15 Champaign Supply Co. Pipe, fittings, etc  16 Chas. A. Strelinger Co. Hardware  17 Dones & Laughlins.  18 Co. Matthy & Wallace Co. Iron, sand, etc.  19 Champaign County Printing Co.  20 J. Hamilton & Son. Lumber.  21 Lyon & Healy  22 W. L. Steele  23 Champaign County Printing.  24 Waller & Co. Hardware  25 Champaign County Printing.  26 J. M. Chase.  27 Public School Publishing.  28 Robinson & Burr.  29 Champaign County Printing.  20 Jones & Laughlins.  30 Champaign County Printing.  41 Colored & Koeper.  42 Richards.  43 Waller & Roper.  44 Watson Faulkner.  45 Part Stales.  46 Part Waller.  47 Part Salary, fall term, 1895.  48 Part Salary, fall term, 1895.  49 Champaign Richards.  40 Part Salary, fall term, 1895.  40 Champaign County Printing Co.  40 Champaign Supply Co.  41 Part Salary, fall term, 1895.  42 Part Salary, fall term, 1895.  43 Part Salary, fall te				Mary J. Snyder	" "	62
B. M. Duggar.  1		• •		Chas. N. Hart	**	62 100
B. M. Duggar.  1 S. H. C. Forbes.  2 Edwards & Docker Co. American Naturalist.  3 E. T. Cresson.  4 Bansch & Lomb Optical Co. Apparatus.  5 Chas. T. Wilder Drayage.  6 Chas. T. Wilder Making lantern slides.  7 The Gazette Paper.  8 The Typewriter Exchange Ribbon and spring.  8 The Gazette Paper.  8 The Sylvewriter Exchange Ribbon and spring.  9 Mitchell Bros. Co. American Miller.  1 The Harris Publishing Co. Pishes of N. A.  2 Richards & Co. Cuts.  2 Richards & Co. Apparatus and supplies.  3 Smith & Powell Co. Holstein stock.  4 W. J. Fraser.  5 Central Electric Co. Supplies.  6 Petty & Sayers.  6 Central Electric Co. Gubinet.  8 Walmsley Fuller & Co. Glass.  8 Walmsley Fuller & Co. Glass.  8 Walmsley Fuller & Co. Holstein stock.  9 Buffalo Forge Co. Forge blowers, etc.  10 E. W. Ornian Buller-prists.  11 L. Wild.  12 R. Howe Drayage.  13 F. L. Bills.  14 W. R. Howe Drayage.  15 Isaac Fielding.  16 Mayme Hill.  16 Mayme Hill.  17 Part salary, fall term, 1895.  18 Mayme Hill.  19 Part salary, fall term, 1895.  10 Matthy & Wallace Co. Iron, sand, etc.  10 Expenses.  11 Part Salary, fall term, 1895.  12 Public School Publishing Co.  14 Chas. T. Mills.  15 Champaign Supply Co. Pipe, fittings, etc  16 Chas. A. Strelinger Co. Hardware  17 Dones & Laughlins.  18 Co. Matthy & Wallace Co. Iron, sand, etc.  19 Champaign County Printing Co.  20 J. Hamilton & Son. Lumber.  21 Lyon & Healy  22 W. L. Steele  23 Champaign County Printing.  24 Waller & Co. Hardware  25 Champaign County Printing.  26 J. M. Chase.  27 Public School Publishing.  28 Robinson & Burr.  29 Champaign County Printing.  20 Jones & Laughlins.  30 Champaign County Printing.  41 Colored & Koeper.  42 Richards.  43 Waller & Roper.  44 Watson Faulkner.  45 Part Stales.  46 Part Waller.  47 Part Salary, fall term, 1895.  48 Part Salary, fall term, 1895.  49 Champaign Richards.  40 Part Salary, fall term, 1895.  40 Champaign County Printing Co.  40 Champaign Supply Co.  41 Part Salary, fall term, 1895.  42 Part Salary, fall term, 1895.  43 Part Salary, fall te	3			W. G. Johnson	"	100
Champaign Supply Co	9			B. M. Duggar	"	83
Champaign Supply Co	ol .			H. C. Forbes.	**	83
Champaign Supply Co	1			S. H. Chadbourne	Conrad .	1
Champaign Supply Co				Edwards & Docker Co	American Naturalist	1
Champaign Supply Co	3			E. T. Cresson	Subscription .	4
Champaign Supply Co				Bausch & Lomb Optical Co	Apparatus	8
Champaign Supply Co		4.4		R. S. Wilber	Dravage	98
Champaign Supply Co				Chas, T. Wilder	Making lantern slides	98
Champaign Supply Co				The Gazette	Paner	1
Champaign Supply Co				The Typewriter Exchange	Ribbon and spring	1 1
Champaign Supply Co				Mitchell Bros. Co	American Miller.	2
Champaign Supply Co				The Harris Publishing Co	Fishes of N. A	3
Champaign Supply Co				J. Manz & Co	Cute	41
Champaign Supply Co				Richards & Co.	Annaratus and supplies	148
Champaign Supply Co	3			Smith & Powell Co	Holstein stock	275
Champaign Supply Co				W. J. Fraser	Freight and expenses	74
Champaign Supply Co		6.6		Central Electric Co	Supplies	19
Champaign Supply Co		4 6		Potty & Savers	Cahinet	24
Champaign Supply Co		4.6		I Carbutt	Dry plates	76
Champaign Supply Co		4.4		Walmsley Fuller & Co	Glass	1 '2
Champaign Supply Co		4 4		Buffalo Forge Co	Force blowers etc	197
Champaign Supply Co		4 4		E E Dunlan	Rlue-nrints	29
Champaign Supply Co				N W Graham	Evnancee	15
Champaign Supply Co		• •		Lydia M Hart	Drawings	16
Champaign Supply Co				F L Bills	Postage	12 10 30
Champaign Supply Co				W R Howe	Dravage	67
Champaign Supply Co		4 4		Isaac Fielding	Stampe	10
Champaign Supply Co				Mayme Hill	Part calary fall term 1895	14
Champaign Supply Co		4 4		H E Sparry	Incurence	25
Champaign Supply Co				Katharine Merrill	Evnances	1
J. M. Chase				Champaign Supply Co	Pine fittings etc	16
J. M. Chase	ň	4.4		Malthy & Wallace Co	Iron sand etc	171
J. M. Chase		6.6		Engene Davennort	Evnences	17
J. M. Chase				Public School Publishing Co	Advertising	1 2
J. M. Chase		4.4		Chas T Mills	Ziu voi tising	20
J. M. Chase		4.4		Engineering News Pub Co	**	42
J. M. Chase		4.4		Mittendorf & Kiler	Chairs mirrors ate	45
J. M. Chase		4.6		Chas A Strelinger Co	Hardware	61
J. M. Chase		4.6		Jones & Laughling	Stool	24
J. M. Chase		4.4		Robinson & Rurr	Cactings	1 -7
J. M. Chase		4 4		Champaign County Printing Co	Printing	
J. M. Chase				I Hamilton & Son	I umbor	0,5
J. M. Chase		4.4		Twon & Hooly	Maraia	3
J. M. Chase				W I. Steele	Fynonges	9
J. M. Chase				Wm Price	Oil and labor	
J. M. Chase		4.6		Watson Faulkner	Points ata	2
Color   Colo				T M Chasa	Deinting etc	14
G. E. Stechert Books  Stanley Electric Mfg. Co. Sections of condensers  Hanson & Van Winkle Co. Brass  Spridel & Roeper Traveling crane  R. Herbst Ribbon for typewriter  The Hohmann & Mauer Mfg. Co. Service to March 15, 1895, 3 months  Standard Oil Co. Oil  J. R. Greenhalgh Crockery  Ch. & Urbana Phœnix Tel.Co. Service to March 15, 1895, 3 months  Walker & Mulliken Baskets, etc.  J. O. Cunningham Legal services  Cunningham & Boggs  Sheldon Brick Co. Sand and cement  G. W. Hoffman Polish powder  Lawton & Co. Duplicator  U. & C. Electrical St. Ry. Co. Gas to November 23, 1895  Mathilde Wergeland Lectures  S. W. Shattuck Petty expenses  Bevis & Co. Brick foundation  American Journal of Psychology  H. Swannell Glass tubes, etc.  Subscription				A C MaClure & Co	Pooks eta	110
Stanley Electric Mfg. Co.   Sections of condensers		4.4		G F Stochort	Pooles	94
Hanson & Van Winkle Co. Brass				Stanlay Floatric Mfr Co	Sections of condensess	3
Spridel & Roeper   Traveling crane				Hongon & Von Winkle Co	Progg	3
Springer & Roeper   Traveling crane				Caridal & Pagaran	Traveling arene	190
The Hohmann & Mauer Mfg. Co   Coll				D Hawket	Dibbon for typowriter	190
The Hollmann & Mader Mig. Co Repairs				The Hohmann & Mana M4- C-	Popoing	
Standard Of Co.  J. R. Greenhalgh				Standard Oil Co	nepairs	1 4
Crockery   Crockery				J. D. Greenhelch	Chookany	1
On & Crossia Figure 10.   Service to March 15, 1835, 3 months.	=			Ch & Urbana Dhamir Mal Ci-	Convice to Manch 15 1905 9 manufacture	4
Walker & Mullikell   Baskets, etc.		4.4		Walken & Mullilian	Postrota ota	41
Cunningham				T O Cuppingham	Local convious	96
Sheldon Brick Co.   Sand and cement				Cuppingham & Boggs	Liegal Services	20 35
Sheaton Brick Co				Chalden Driek Co	Sand and asment	J 58
C. W. HOHIMAI.   POISH powder				C W Hoffman	Polich powder	29
Lawton & Co				G. W. Hollman	Ponsh powder	1
U. & U. Electrical St. Ry. Co.   Gas to November 23, 1895				Lawton & Co	Duplicator	90
Maintide wergeland   Lectures	4			Methilds Wengel 31. Ry. Co	Tas to November 23, 1895	29
S. W. Shattuck   Petty expenses				maining wergeland	Lectures	4
Bevis & Co Brick foundation  Louis N. Wilson American Journal of Psychology  H. Swannell Glass tubes, etc.  Subscription  Wilso Northerny				p. w. Snattuck	remy expenses	
Louis N. Wilson   American Journal of Psychology				Bevis & Co	Brick toundation	5
H. Swannell Glass tubes, etc. Science Subscription				Louis N. Wilson	American Journal of Psychology	10
Science	7			H. Swannell	Glass tubes, etc	. 10
BU '' IMiles Newbower IT above				Science	Subscription	
J. A. Schulte Whistle valve, etc	9	••		Miles Newberry	Labor	.]

о.	Date.	To whom.	For what.	Amou
	1896.			Ì
01	Jan. 1	N. W. Graham	Expenses	\$10
JZ.		R. P. Morgan		7
03	**	Isaac S. Raymond	4.4	\$16 75
)4	•••	Isaac S. Raymond J. E. Armstrong E. H. Rennert Bro The Doane House W. W. Sayers W. R. Howe T. R. Leal C. V. Millar Emma Seibert. F. F. Frederick Lydia M. Hart S. A. Forbes		10 13 185 134
)5	::	E. H. Rennert Bro	Carriage hire. Hotel bill. Draughting. Drayage and grading. Sand and grading. Salary, December, 1895. Assistance in drawing. Expenses	1 8
)6		The Doane House	Hotel bill	
)7		W. W. Sayers	Draughting	12
8	4.6	W. K. Howe	Drayage and grading	180
)9 L0		C V Miller	Salawa December 1905	154
1		Emme Scibert	Assistance in drawing	60
$\frac{1}{2}$		F F Frederick	Evnonces	26
3		Lydia M Hart	Drawings	12
4		S. A. Forbes	Expenses	2
5	• •	C. A. Kofoid	4.	4
6	**	Bevis & Co	On contract	32
7	••	Lydia M. Hart S. A. Forbes C. A. Kofoid Bevis & Co. Bevis & Co. A. N. Talbot P. E. Taintor A. Barr	4.4	32 1,500
8	::	A. N. Talbot	Expenses	272
9		P. E. Taintor	Cement walks, etc	272
20	::	A. Barr	Grading	37
1		P. E. Taintor A. Barr Hamilton & Russell Maltby & Wallace Co. Champaign Supply Co. J. G. Alexander Mfg. Co. Midart Patent Pulley Co. The Billings & Spencer Co. J. Hamilton & Son. Chas. A. Strelinger & Co. The Gazette A. B. Seymour Chapman Bros Bausch & Lomb Optical Co. Brochester Optical Co. Office Specialty Mfg. Co. J. M. Schilling Richards & Co.	Assistance in drawing Expenses Drawings Expenses On contract Expenses Cement walks, etc Grading Pulley and cylinders Shop supplies Pipe, fittings, and sewer pipe Draughting table Machine shop fittings Belt clamps Lumber	35 160 20 94 11
$\frac{2}{3}$		Champaign Supple Co	Snop supplies	1 3
4		I G Alexander Mer. Co	Droughting toble	160
5		Midert Petent Pulley Co	Machine shop fittings	0
6		The Billings & Spencer Co	Relt clamps	11
7		J. Hamilton & Son	Beit clamps Lumber. Shop supplies. Printing. Plants for herbarium Papering.	98
8		Chas. A. Strelinger & Co	Shop supplies	1 13
9	• •	The Gazette	Printing	1'
0		A. B. Seymour	Plants for herbarium	39
1		Chapman Bros	Papering	138 82 83 84 138
2		Bausch & Lomb Optical Co	Camera, microscope, etc	138
3	1	Rochester Optical Co	Photo supplies	82
<b>4</b> 5		Omce Specialty Mig. Co	File cases, etc	1 3
$_{6}^{o}$		J. M. Schilling	U11, etc	1
7		Pentamanh Print's & Sla'x Co	Dan apparatus and suppnes	1 1
ġ		Frank Minnis Co.	Microtone	1
9		V. W. Shuck	Plants for herbarium Papering Camera, microscope, etc Photo supplies File cases, etc Oil, etc Lab. apparatus and supplies Printing and binding. Microtone Hardware Lumber	1 2
0		C. A. Besore	Lumber	38
1	• •	Patrick & Carter Co	Electric apparatus	1 7
$^{2}$		Union Mfg. Co	Water 3 months to March 31, 1895	128
3		Wm. Sim Drug Co	Curtains, etc	
4		R. S. Wilber	Drayage	126 38 126 20 37 21 21 150
$\frac{5}{6}$		Kariner Grocery Co	Jars, soap, etc	1
7		Goog Lithographing Co	Pooles of manuants	3
8		D H Lloyde & Son	Corbon popor ota	1 4
$\overset{\circ}{9}$		Am Arch't & Bldg News Co	Subscription	2
0	• •	Lord & Burnham Co	On contract	15
1		V. W. Shuck. C. A. Besore. Patrick & Carter Co. Union Mfg. Co Wm. Sim Drug Co. R. S. Wilber. Kariher Grocery Co. Standard Oil Co. Goes Lithographing Co. D. H. Lloyde & Son. Am. Arch't & Bldg News Co. Lord & Burnham Co. Sheldon Brick Co. Pottsville Iron & Steel Co. C. L. Strobel	Sand and brick	78
$^{2}$		Pottsville Iron & Steel Co	Deck beams	78 100
3		C. L. Strobel	Machine shop contract	2,042
4		Bevis & Co	Barn contract	1,099
5	1 ::	Bevis & Co	Curtains, etc Drayage Jars, soap, etc. Oil Books of warrants. Carbon paper, etc. Subscription. On contract Sand and brick Deck beams. Machine shop contract Repairs. Steel pulleys, etc.	1
6			Steel pulleys, etc	10
7		U. & C. Electric Street Ry, Co. DuQuoin Union Coal Co	Gas 1 month, December 23, 1895	117 1,264
$\frac{8}{9}$		DuQuoin Union Coai Co	Coal	1,20
0		I. O. Baker. Central Union Telegraph Co	Expenses Services 3 months to March 3, 1896	12,000
1		Frank Smith	Expenses	1
$\frac{1}{2}$	4.4	Frank Smith Bert G. Wilder Lorado Taft	Lecture and expenses	12
3		Lorado Taft	Lecture and expenses	9:
4		J. L. Sammis	Asstance in Chemical Laboratory	10
5		J. L. Sammis W. C. Brenke Florence B. Clarke Harry Keeler W. F. Marker		10 10
6		Florence B. Clarke		1 9
7		Harry Keeler		9
8		W. F. Marker	Clerical work	
9	::	M. A. Reasoner	Care of hat room	1
0		W. W. Beach	Clerical work Care of hat room. Drawings for barn. Work in botanical department. Work in library Labor Books. For Technograph	1 ~
1		H. U. Woodworth	work in botanical department	20
$\frac{2}{3}$		Coordin F. Honnor	Work in library	12
4	4.6	Payroll of man Dog 1905	VOOR IN HOTARY	12 430
5		Payroll of students Dec. 1993	Lapor	298
6	4.4	A. C. McClurg & Co	Books	136
7		G. E. Stechert	4,4	158 100

# ${\it List~of~Warrants} - {\it Continued}.$

Date.		To whom.	For	what.	Amou
1896.		W. I. Lundy. The Schumacher Gym. Co. J. C. Hurd. Eugene Dietzgen Co. H. Mueller Mfg. Co. Bausch & Lomb Optical Co. W. Faulkner. Chas. A. Scheimer Co. General Electric Co. Vermont Farm Machine Co. Creamery Packg. Mfg. Co. Henry Heil Chemical Co. W. A. Harris & Son. W. J. Fraser. Western Union Telegraph Co. J. T. Wolcott. Isaac Fielding. F. L. Bills. Mayme A. Hill J. W. Hill S. D. Kinnear T. R. Leal A. S. Draper	}		
Jan.	15	W I Inndy	Adventising		8
Jan.	10	The Cohemond ham Cross Co	Annomating	• • • • • • • • • • • • • • • • • • • •	4
		I ne schumacher Gym. Co	Apparatus		1
		J. C. Hura	Repairing and pi	astering	1 5
::		Eugene Dietzgen Co	Drawing material	L,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2
		H. Mueller Mfg. Co	Cast brass		
**		Bausch & Lomb Optical Co	Microscopes, etc.		24
***		W. Faulkner	Oils, etc		
::		Chas. A. Scheimer Co	Cement		
		General Electric Co	Armatures		5
• •		Vermont Farm Machine Co	Babcock tester		1
••		Creamery Packg, Mfg, Co	Dairy apparatus	and supplies	6
**		Henry Heil Chemical Co	Forcens, blow pin	es. etc	1
		W. A. Harris & Son	Shorthorn calf	,	18
• •		W J Fraser	Expenses		3
		Western Union Telegraph Co	Telegrams		ĭ
• •		T T Wolcott	Fundance		
		lance Fielding	Doots as		2
		T T Dills	ı ostage	• • • • • • • • • • • • • • • • • • • •	2
		M. Dills	D1		Z
::		mayme A. Hill	Flaying plano		1
::		ド· Δ· 甘Ⅲ·····	Expenses		1
::		S. D. Kinnear	Carpenter work		
		T. R. Leal A. S. Draper T. J. Burrill. S. W. Shattuck	Grading Salary for Janua		13
	31	A. S. Draper	Salary for Januar		58
1		T. J. Burrill.	,-		22
		S. W. Shattuck			16
		S. W. Shattuck E. Snyder N. C. Ricker I. O. Baker S. A. Forbes C. W. Rolfe D. McIntosh A. N. Talbot A. W. Palmer F. F. Frederick S. W. Parr H. J. Barton Chas. M. Moss D. K. Dodge			16
		N C Ricker			19
		I O Pakan			18
		C A Flowbox			8
		S. A. Forbes			10
ri .		C. W. Kone			17
1		D. McIntosh			15
		A. N. Talbot			17
		A. W. Palmer	;; ;;		17
il		F. F. Frederick			15
		S. W. Parr			17
		H. J. Barton			16
		Chas. M. Moss			17
• •		D. K. Dodge			16
		L. P. Breckenridge	, ,, ,,		16
• •		David Kinley			18
		OBAS. M. MOSS. D. K. Dodge L. P. Breckenridge David Kinley. Eugene Davenport. Arnold Tompkins E. J Townsend H. E. Summers. E. R. Greene			8
		Arnold Tompking			15
		E I Townsend			13
		H F Cummons			13
		E D Chaona			13
		E. B. Greene Katharine Merrill			10
:		Katharine Merrill			10
4		W. O. Krohn			15
1		James M. White			12
1		W. H. Van Dervoort			13
		W. D. Pence			11
		W. O. Krohn James M. White. W. H. Van Dervoort W. D. Pence. A. H. Daniels. H. S. Grindley T. A. Clark. H. S. Pistt		• • • • • • • • • • • • • • • • • • • •	10
		H. S. Grindley			8
		T. A. Clark			10
		H. S. Piatt			8
		R V Swongon			9
		Coo D Foirfold			l š
		Chan W Table		•••••	8
1		Chas. W. Tooke			
1		Percy F. Bicknell			12
		Henry H. Everett			10
		Walter H. Jones			5
		William Esty			6
		Fred A. Sager			10
		G. D. Hammond			8
• • •		C. D. McLane			11
		W E Sandford			8
		I D Dhilling			8
: <b>{</b>		Emps b Conitb			12
		Trank Smith			12
·i		r. F. Smith			12
		H. S. Grindley T. A. Clark H. S. Piatt. B. V. Swenson Geo. D. Fairfield Chas. W. Tooke. Percy F. Bicknell Henry H. Everett. Walter H. Jones. William Esty. Fred A. Sager G. D. Hammond C. D. McLane. W. E. Sandford J. D. Phillips. Frank Smith R. P. Smith A. C. Burnham Helen E. Butterfield Ella H. Morrison Robt. A. Wood Oscar Quick G. A. Goodenough Chas. A. Gunn A. H. White G. W. McCluer Edward J. Lake			8
1{		Helen E. Butterfield	1 :: '		7
• •		Ella H. Morrison			7
		Robt. A. Wood			8
		Oscar Quick			7
		G. A. Goodenough			7
		Chas A Gunn			8
		OHAS, A. GUIII			8
		. А. П. W ППС		·	1
		O W MaCliner			

Vo.	Date.	To whom.		For wha	at.	Amou
	1895.					
057	Jan. 31	Chas. F. Hottes	Salary for	January,	1896	\$60
voo						70
059	1	J. G. Mosier		::		70
060 061		R. C. Vial Geo. A Huff. Paul Chipman				70
000		Deed Chimana		• •	•	50
$062 \\ 063$		C P Clork				70
064		C. B. Clark A. R. Curtiss		• •		80
065		Henry Jones	• •	• •		60
066	• •	Henry Jones Burton E. Moore	••	• •		80
067	• • •	LI H Wilson				50
068	**	E. G. Howe				150
069	**	N. A. Weston Lillie A. Clendenin Chas. N. Cole		• •		90
)70	••	Lillie A. Clendenin	"	• •		65
71	• •	Chas. N. Cole		4.4		78
72	**		**	• •		78
73	::	Wm. L. Steele				30
774		Marion Thompson				40
75	::	Wm. L. Steele. Marion Thompson Robert K. Porter				10
776	::	Arthur Leroy Almy	::			40
77	::	Geo. W. Graham	::			160
78	::	A. B. Baker	::			4:
79		M. T. Lindsey		• • • • • • • • • • • • • • • • • • • •		3
80 61		Arthur Leroy Almy Geo. W. Graham A. B. Baker. M. T. Lindsey I. H. Allen F. J. Foote Lillie Heath Sue W. Ford L. A. Bolce Albert R. Lee W. R. Hoffman J. M. Snyder L. G. Lathrop J. G. Maynard A. S. Golden Philip Schwehm M. A. Reasoner				38
81		Tillia Tranth				73
82		Che W. Ford				60
83 84		Due w. Ford				50
85		Albert P. Lee				50
86		W P Hoffmen				20 38
87		I M Snydor	6.6	6.6		38
88	* *	I. G. Lethron		4.4		30
89		J. G. Maynard	**			1.
9ŏ	• •	A S Golden	4.6			3
91	• •	Philip Schwehm	٠.			2
$\tilde{92}$	• •	M. A. Reasoner	Care of hat	room		20
93	• •	John Mayor	Salary for	January.	1896	20 20
94	• •	C. V. Miller. Mary J. Snyder. C. A. Hart W. G. Johnson.				60
95	4.4	Mary J. Snyder				62
96	• • • •	C. A. Hart				63
97	::	W.G. Johnson		• • •		100
98						83
$\frac{99}{9}$		H. C. Forbes			*********	
00		H. C. Forbes. C. A. Kofoid. Adolph Hempel. Adeline W. Rowley.				100
$\frac{01}{02}$		Adolino W. Borrlor				60
03		Miles Newberry	Work			E
03		R M Dugger	Evnongog		• • • • • • • • • • • • • • • • • • • •	2
05	4.6	G C Willis	Flannel an	d cotton		1
06		Kean & DeLang	Copy book	a cotton	• • • • • • • • • • • • • • • • • • • •	
07	• •	C. E. Van Orstrand	Work			
ŏŝ	4.6	Adeline W. Kowley. Miles Newberry B. M. Duggar G. C. Willis Kean & DeLang C. E. Van Orstrand L. S. Foster Chas. T. Wilder R. Friedlander & Son Bernard Quaritch Mayer & Miller	Sabscription	on to "Anl	x,'' 1896	
<b>0</b> 9		Chas. T. Wilder	Negatives		-,	
10	* *	R. Friedlander & Son				
11		Bernard Quaritch	* *	• • • • • • • • • • •		5
12	" "	Mayer & Miller				
13	• •	C. A. Hart. G. E. McHose.	Expenses.			13
14	• • •	G. E. McHose	Skiff, oars,	etc		2
15	• • •	B. F. Gump. E. H. Sargent Co.	Cloth			24
16	**	E. H. Sargent Co	Bottles, cor	.ks		10 20
17	• •		Office rent.	. etc		20
18	**	G. E. McHose	Dravage c	are of hoat		14
19 20	4.4	Bausch & Lomb Optical Co F. A. Holbrook, assignee	Lenses		• • • • • • • • • • • • • • • • • •	118
20 21	4.4	Floatric Light and Dower Co	Unairs, cas	es, etc	ber 1895	58
		Electric Light and Power Co	Motor pow	er, Decem	oer 1895	40
22 23	4.4	Link Belt Machinery Co Soule Photograph Co	material io	r rope arr	ve	146
23 24	4.4	Oneen & Co	Condonair	graes		31
25	.k	Queen & Co J. B. Colt & Co	Automotic	g iens	nt's House	48
26 26			Contract fo	r Prosider	nt's Flores	3,000
27	4.4	J C Chanman & Son	Painting	n new abor	nt s mouse	3,000 44
28	4.6	Wm. Glascock	Earth filling	a new SHOI	nn	8
29	4.4	Bevis & Co J. C. Chapman & Son Wm. Glascock W. R. Howe E. B. Forbes	Earth filling	g, Hew SH	opepartment	2
30	4.6	E. B. Forbes	Work in zo	ollogical d	enartment	8
31		Geo. Pitman E. H. Reinner & Bro Robinson & Burr	Manure	orogical d	Cpar ancut,	1
32		E. H. Reinner & Bro	Carriage h	re		1
	4.4					

lo.	Date.	To whom.	For what.	Amoun
	1896.		Furniture. etc. Hangers, castings, etc. Pipe, fittings, and repairs. Tile. Books. Hardware Sand and brick Labor. Pipe, etc Bucking plates and hammers. Vials and corks Blocks. Toweling, muslin, etc Printing, etc Jars, etc.	
134	Jan. 31	Petty & Sayers	Furniture. etc	\$139
เฮอเ		Maltby & Wallace Co	Hangers, castings, etc	142
L36		Champaign Supply Co	Pipe, fittings, and repairs	124
137		Union Brick & Tile Co	Tile	16 63
138		One of Lockett Handword Co	Books	14
39 <b>40</b>		Shelden Briek Co	Sand and briek	25
41		Urbana Brick Co	Labor	25
42		Hamilton & Russell	Pine etc	17
43	4.4	Fraser & Chalmers	Bucking plates and hammers	30
44		Whitall, Tatum & Co	Vials and corks	9
45		W. T. Falconer Mfg. Co	Blocks	20
<b>1</b> 6	**	G. C. Willis	Viais and orders Blocks Toweling, muslin, etc Printing, etc Jars, etc	19
47		Champaign Co. Herald	Printing, etc	108
48	::	L. V. Manspeaker	Jars, etc	5
<b>4</b> 9		Rait & Henderson Co Henry Trevett. W. L. Pillsbury.	Subscription Hardware Salary for January, 1896	_3
50		Henry Trevett	Hardware	71
51		W. L. Pillsbury	Salary for January, 1896	116
$\frac{52}{2}$		J. Morrow	** ***	
53 54		C B Ewelt	:: :: :::::::::::	50 15
55 55	••	W. L. Pillsbury J. Morrow E. W. Justus C. B. Ewalt Chas. M. Paul E. H. Sargent & Co. Chas. H. Besly & Co J. H. Wood The Schumacher Gym. Co. Central Electric Co Chas F. Wilder Freund & Bernard Chicago Music Co The Henning Music Co Ward Bros. Pantagraph P't'g & Stat'nry Co. Kirkpatrick Grocery Co Fuller & Fuller Co	Laboratory material	5
56 56	"	E. H. Sargent & Co	Bottles, corks, etc	11
57 57		Chas. H. Besly & Co	Bottles, corks, etc	10
58		J. H. Wood	Subscription Apparatus Wire, etc Photographs Music	2
59		The Schumacher Gym. Co	Apparatus	169
60		Central Electric Co	Wire, etc	29
61		Chas F. Wilder	Photographs	1 6
62	***	Freund & Bernard	Music	6
63		Chicago Music Co	44	
64		The Henning Music Co	D' 1' l-	1 1
55		Ward Bros	Binding book	73 91
66 67		Winkpotniak Gregory Co.	Matches, etc	4
58 58		Fuller & Fuller Co	A aide ata	50
69		E. C. Smith	Acids, etc Scale and vernier. Supplies	3
7Ŏ		Jas. G. Biddle	Supplies	2
71		Albany Per. Wrap. Paper Co	Paper	24
72	**	McLean Co. Coal Co	Paper Coal Apparatus Plumbing	64
73		The Link Belt Machinery Co	Apparatus	5
$^{74}$	1	Hubbard & Sons	Plumbing	266
75	D.1.	William Price	Painting	218
76	Feb. 7	Lord & Burnnam Co	Contract for conservatory	1,046 1,601
$\frac{77}{79}$		Kirkpatrick Groeery Co Fuller & Fuller Co E. C. Smith Jas. G. Biddle Albany Per. Wrap. Paper Co. McLean Co. Coal Co The Link Belt Machinery Co. Hubbard & Sons William Price Lord & Burnham Co Bevis & Co G. W. Parker & Son. C. Lloyd Morgan	Painting. Contract for conservatory Contract for new machine shop Furniture	1,601
$\frac{78}{79}$		C. Lloyd Morgan	Lectures	150
$80^{13}$		E. H. Renner & Bro	Carriage hire	3
81		Joseph Mackey	Manure	11
$\tilde{82}$		Henry I. Green	Mimeograph work	5
$8\overline{3}$		Joseph Mackey Henry I. Green Mayme Hill	Salary for January, 1896	14
84		Georgia Hopper	Work in library	22
85	**	Georgia Hopper Zimmerman & Weinshenk	Lectures. Carriage hire. Manure. Mimeograph work Salary for January, 1896. Work in library. Moving machinery Expenses.	15
86	::	H. J. Barton	Expenses	24
87		W. D. Pence	;;	. 5
88		W. D. Pence Arnold Tompkins A. S. Draper W. R. Howe The DuQuoin Union Coal Co	Amount paid for flag	13
39		A. S. Draper	Amount paid for flag	14
90		W. K. Howe	Drayage	116 830
$\frac{91}{92}$		The DuQuoin Union Coal Co	Coal. Turpentine, oil, etc	830
$\frac{92}{93}$		E. Henry Central Electric Co Robinson & Burr B. Fager	Rubber tubing etc	8
93 94		Robinson & Rurr	Rubber tubing, etc	37
95		B. Fager	Lahor	9
96		B. Fager F. K. Robeson & Bro	Labor Cambric and duck	32
97		V. Shuck	Tin work	. 8
98		V. Shuck. Chas. T. Wilder. D. H. Lloyde & Son. Bausch & Lomb Optical Co. Western Union Telegraph Co. F. I. Bills	Lantern slides	36
99		D. H. Lloyde & Son	Stationery, etc	35
00	l ''	Bausch & Lomb Optical Co	<u>Apparatus</u>	30
)1	Feb. 1	Western Union Telegraph Co	Telegrams	19
UΖ	::	F. L. Bills	Postage	43
<b>0</b> 3	::	Lydia M. Hart	Cambric and duck Tin work Lantern slides Stationery, etc Apparatus. Telegrams. Postage Drawings Speaking tubes, repairs Subscription.  Bottles and corks Hard oil finish Expenses Grading. Copying	14
04		Hubbard & Sons	Speaking tubes, repairs	1
05	1	Troop of Ent Seeder of Oct	Subscription	4
06 07		F H Sargent & Co	Rottles and sorks	1 3
08		I C Chanman & Son	Hard oil finish	7
09		R P Morgan	Evnenges	25
10		T. R. Leal	Grading	78 2
	••	The same of the sa	A!	1 .0

No. Date.		To whom.	For wh	at.	Amou	
	1896.					
212	Feb. 1	Josephine Skehan	Work on herbarium	· · · · · · · · · · · · · · · · · · ·	\$13	
213	1	George Gayman	Leather			
214		Richards & Co	Laboratory apparato	is and siinniies	2	
215	::	Richards & Co. Jones & Laughlins Orr & Lockett Hardware Co. Rice Machinery Co. W. H. Horstmann & Co. Public School Publishing Co. W. F. Hardy. W. A. Olmsted. Narragansett Machine Co. The Keny'n News Post'l Sub. Co Bevis & Co. Bausch & Lomb Optical Co. William Sellers Co. Miller Lock Co.	Drawer pulls, etc Shaft			
216	1	Orr & Lockett Hardware Co	Drawer pulls, etc		:	
217	1	Rice Machinery Co	Shaft		6.1	
218		W. H. Horstmann & Co	Flag		6	
219 220		Public School Publishing Co	Advertising Seed. Microscopes, etc			
$\frac{20}{21}$		W. F. Hardy	Miarogappes eta		3	
222		Narragangett Machine Co	Hoisting fixture		1 .	
223		The Keny'n News Post'l Sub Co	Stamps			
224		Bevis & Co.	Stamps Table and drawing of	lesks	15 23	
$2\overline{25}$		Bausch & Lomb Optical Co.	Apparatus	COMBINITION	23	
226	* * *	William Sellers Co	Apparatus Injector		13	
227	• • •	Miller Lock Co	Locks		133	
228		Wm. Miebach & Co	Tin work, etc		1'	
229	<b>)</b>	Medart Patent Pulley Co	Castings			
230	::	Wm. Miebach & Co.  Medart Patent Pulley Co.  Urbana Brick Co.  Pittsburg Reduction Co.  Watson Faulkner.	Tin work, etc Castings Masonry work		1° 2′ 10	
231		Pittsburg Reduction Co	Aluminum		10	
32		Watson Faulkner	Brushes			
333		Odin Coal Co	Coal		40	
234		Watson Faulkner. Odin Coal Co. Electric Appliance Co. Fuller & Fuller Co. J. T. Wolcott. Whitall, Tatum & Co. Henry Trevett. The Gazette. A. C. McClurg & Co. H. H. Everett. Isaac Fielding. Pacific Express Co. The Stauffler J. H. Knowles. Harlen Scott.	Apparatus		1	
35	1	Fuller & Fuller Co	Acetic acid, etc		10	
36	1	Whitell Wotume 9 C	Typewriting Laboratory supplies Hardware		2'	
37		William, Tatum & Co	Laboratory supplies		1	
38 39		The Gezette	Dwinting		18	
40		A C McClure & Co	Printing. Books and stationer		96	
41		H H Everett	Expenses	у	3	
42		Isaac Fielding	Poetago		4	
43	• •	Pacific Express Co	Postage Freightage Books		1	
44		The Stauffler	Books		1	
45	• •	J. H. Knowles.	Door		Î'	
46		Harlen Scott	Messenger for Janu	arv. 1896	10	
47		A C	77 1 1 1		39	
48	::	W. F. Marker	Salary, January, 189	3	40	
249	::	American Express Co. W. F. Marker. Payroll of men, Jan., 1896. Payroll of students, Jan., 1896. A. S. Draper. T. J. Burrill. S. W. Shattuck E. Snyder	FreightageSalary, January, 189 Labor		45	
50	T3 1 0	Payroll of students, Jan., 1896	_ `` <u></u>		208	
51	Feb. 2	A. S. Draper	Salary for February	, 1886	58	
52 53		T. J. Burrill.			225 166	
53 54	4.6	E Spredon			166	
55		E. Snyder. N. C. Ricker			19	
56		I O Baker			189	
57	• •	I. O. Baker. S. A. Forbes. C. W. Rolfe. D. McIntosh			1 83	
58	• •	C. W. Rolfe			17	
59	• •	D. McIntosh			150	
60		A. N. Talbot,			178	
61		A. W. Palmer			173	
		110 to The obeside la				
		r. r. rrederick			158	
63		S. W. Parr			158 178	
$\frac{63}{64}$		A. N. Talbot, A. W. Palmer F. F. Frederick S. W. Parr H. J. Barton			158 178 10	
63 64 65		Charles M. Moss.	44 44		158 178 106 178	
63 64 65 66		Charles M. Moss. D. K. Dodge			158 178 106 178	
63 64 65 66 67	**	Charles M. Moss. D. K. Dodge	44 44		158 178 106 178 166 166	
63 64 65 66 67	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	Charles M. Moss. D. K. Dodge	44 44 44 44 44 44 44 44		158 178 106 178 166 166	
63 64 65 66 67 68		Charles M. Moss. D. K. Dodge	41		158 178 100 178 160 160 157 87	
63 64 65 66 67 68 70		Charles M. Moss. D. K. Dodge	(1		158 178 178 178 160 160 157 87	
63 64 65 66 67 68 70 71		H. J. Barton. Charles M. Moss. D. K. Dodge. L. P. Breckenridge. David Kinley. Eugene Davenport. Arnold Tompkins. E. J Townsend. H. E. Summers.	11 11 11 11 11 11 11 11 11 11 11 11 11		158 178 106 178 166 166 137 87 150 137	
63 64 65 66 67 68 70 71 72		H. J. Barton. Charles M. Moss. D. K. Dodge. L. P. Breckenridge. David Kinley. Eugene Davenport. Arnold Tompkins. E. J Townsend. H. E. Summers.	11 11 11 11 11 11 11 11 11 11 11 11 11		158 178 106 178 166 166 137 87 150 137	
63 64 65 66 67 68 69 71 72 73		H. J. Barton. Charles M. Moss. D. K. Dodge L. P. Breckenridge. David Kinley Eugene Davenport. Arnold Tompkins. E. J Townsend. H. E. Summers. E. B. Greene. Katharine Merrill	11 11 11 11 11 11 11 11 11 11 11 11 11		158 176 177 160 160 157 150 131 131 132 133 103	
63 64 65 66 67 68 69 71 72 73		H. J. Barton. Charles M. Moss. D. K. Dodge L. P. Breckenridge. David Kinley Eugene Davenport. Arnold Tompkins. E. J Townsend. H. E. Summers. E. B. Greene. Katharine Merrill	11 11 11 11 11 11 11 11 11 11 11 11 11		158 177 100 178 166 166 157 151 137 137 137 137	
63 64 65 66 67 68 71 72 73 74		H. J. Barton. Charles M. Moss. D. K. Dodge L. P. Breckenridge. David Kinley Eugene Davenport. Arnold Tompkins. E. J Townsend. H. E. Summers. E. B. Greene. Katharine Merrill	11 11 11 11 11 11 11 11 11 11 11 11 11		155 177 1 1 6 178 178 166 166 187 187 183 133 135 156 156	
63 64 65 66 67 68 71 72 73 74 75		H. J. Barton Charles M. Moss. D. K. Dodge. L. P. Breckenridge. David Kinley Eugene Davenport. Arnold Tompkins. E. J. Townsend. H. E. Summers. E. B. Greene. Katharine Merrill W. O. Krohn. James M. White.	11 11 11 11 11 11 11 11 11 11 11 11 11		155 177 11 0 11 166 166 157 87 153 133 133 100 150 123	
63 64 65 66 67 68 71 72 73 74 75 76		H. J. Barton Charles M. Moss. D. K. Dodge. L. P. Breckenridge. David Kinley Eugene Davenport. Arnold Tompkins. E. J. Townsend. H. E. Summers. E. B. Greene. Katharine Merrill W. O. Krohn. James M. White.			155 177 11 6 166 166 187 187 183 183 183 183 183 183 183 183 183 183	
63 64 65 66 67 68 71 72 73 74 75 76 77 78		H. J. Barton Charles M. Moss. D. K. Dodge. L. P. Breckenridge. David Kinley Eugene Davenport. Arnold Tompkins. E. J. Townsend. H. E. Summers. E. B. Greene. Katharine Merrill W. O. Krohn. James M. White.			155 177 10 ( 177 166 166 166 137 137 133 133 103 122 123 134 100	
63 64 65 66 67 72 73 74 75 77 78 78 78		H. J. Barton Charles M. Moss. D. K. Dodge. L. P. Breckenridge. David Kinley Eugene Davenport. Arnold Tompkins. E. J. Townsend. H. E. Summers. E. B. Greene. Katharine Merrill W. O. Krohn. James M. White.			155 106 1176 166 166 157 87 151 133 133 103 122 123 166 160 187	
63 64 65 66 67 68 69 71 72 73 74 75 78 78 78 78 78		H. J. Barton. Charles M. Moss. D. K. Dodge L. P. Breckenridge. David Kinley Eugene Davenport. Arnold Tompkins. E. J. Townsend. H. E. Summers. E. B. Greene. Katharine Merrill. W. O. Krohn. James M. White. W. H. Van Dervoort. W. D. Pence. A. H. Daniels. H. S. Grindley			155 177 166 177 166 166 167 157 133 133 100 151 123 143 166 100 87	
63 64 65 66 67 71 72 73 74 75 77 78 78 78 81 82		H. J. Barton. Charles M. Moss. D. K. Dodge. L. P. Breckenridge. David Kinley. Eugene Davenport. Arnold Tompkins. E. J. Townsend. H. E. Summers. E. B. Greene. Katharine Merrill W. O. Krohn. James M. White. W. H. VanDervoort W. D. Pence. A. H. Daniels. H. S. Grindley. T. A. Clark.			155 10.0 10.0 173 166 166 166 137 150 133 133 133 135 122 123 166 100 87	
63 64 65 66 67 71 72 73 74 75 77 78 78 78 81 82 83		H. J. Barton. Charles M. Moss. D. K. Dodge. L. P. Breckenridge. David Kinley. Eugene Davenport. Arnold Tompkins. E. J. Townsend. H. E. Summers. E. B. Greene. Katharine Merrill W. O. Krohn. James M. White. W. H. VanDervoort W. D. Pence. A. H. Daniels. H. S. Grindley. T. A. Clark.			155 177 177 166 166 166 178 137 155 133 109 151 160 100 100 85	
63 64 65 66 67 68 69 71 72 73 74 75 76 77 78 78 82 83		H. J. Barton. Charles M. Moss. D. K. Dodge. L. P. Breckenridge. David Kinley. Eugene Davenport. Arnold Tompkins. E. J. Townsend. H. E. Summers. E. B. Greene. Katharine Merrill W. O. Krohn. James M. White. W. H. VanDervoort W. D. Pence. A. H. Daniels. H. S. Grindley. T. A. Clark.			155 1173 1173 1174 1166 1166 1167 1173 1173 1173 1173 1173	
63 64 65 66 67 68 67 71 72 73 74 75 76 77 78 78 81 82 83 84		H. J. Barton. Charles M. Moss. D. K. Dodge. L. P. Breckenridge. David Kinley. Eugene Davenport. Arnold Tompkins. E. J. Townsend. H. E. Summers. E. B. Greene. Katharine Merrill W. O. Krohn. James M. White. W. H. VanDervoort W. D. Pence. A. H. Daniels. H. S. Grindley. T. A. Clark.			155 177 16 166 166 166 157 187 183 183 100 150 122 123 100 83 108 85 85 85	
63 64 65 66 67 68 67 71 72 73 74 75 76 77 78 78 81 82 83 84		H. J. Barton. Charles M. Moss. D. K. Dodge. L. P. Breckenridge. David Kinley. Eugene Davenport. Arnold Tompkins. E. J. Townsend. H. E. Summers. E. B. Greene. Katharine Merrill W. O. Krohn. James M. White. W. H. VanDervoort W. D. Pence. A. H. Daniels. H. S. Grindley. T. A. Clark.			155 177 100 1177 166 166 167 187 187 183 183 183 183 183 183 183 183 183 183	
262 263 264 265 266 267 268 271 273 274 275 276 277 278 278 278 278 278 278 278 278 278		H. J. Barton. Charles M. Moss. D. K. Dodge L. P. Breckenridge. David Kinley Eugene Davenport. Arnold Tompkins. E. J. Townsend. H. E. Summers. E. B. Greene. Katharine Merrill. W. O. Krohn. James M. White. W. H. Van Dervoort. W. D. Pence. A. H. Daniels. H. S. Grindley			155 177 16 166 166 166 157 187 183 183 100 150 122 123 100 83 108 85 85 85	

٠.	Date.	1	To whom.		For what	t <b>.</b>	Amou
	1896.	Ī					
0	Feb. 2	9	Fred. A. Sager. G. D. Hammond C. D. McLane.	Salary for F	ebruary.	1896	\$9
		ŀ	G. D. Hammond				8
2	• •	1	C. D. McLane				11
3	• • •	- 1	W.E. Sandford		• • •		8
1	• • •	1	J. D. Phillips	::	::		8
5	• • •	Ţ,	Frank Smith		• • •		12
3	**	1	R. P. Smith		• • •		12
7	**	1	A. C. Burnham		::		8
3		1:	C. D. McLane. W. E. Sandford. J. D. Phillips Frank Smith. R. P. Smith. A. C. Burnham. Helen E. Butterfield. Ella H. Morrison. Robt. A. Wood.			• • • • • • • • • • • • •	7
)	4.4	1	Ella H. Morrison			• • • • • • • • • • • • • • • • • • • •	3
	4.4	-	Robt. A. Wood		• •		8
1		- [	Oscar Quick				3
	4.4	1	Oscar Quick. Geo. A. Goodenough. Chas. A. Gunn A. H. White. G. W. McCluer. Edward J. Loko				1 8
	4.4	- [	A H White				8
		-1	G W McClnor		4.4		1
		-	Edward J. Lake				ê
1	4.4		Edward J. Lake Chas. F. Hottes M. S. Ketchum.	**			6
3		1	M S Ketchum				7
		1.	J (→ Mosier		• •		
	* *	1	R. C. Vial	• •	• •		7
		- [	Geo. A Huff	••			5
			R. C. Vial. Geo. A Huff Paul Chipman C. B. Clark	• •	• •	**********	7
3	4.4		C. B. Clark	4.6	6.6		8
	4.4			* * * * * * * * * * * * * * * * * * * *	" "		8
۱	• •		Henry Jones Burton E. Moore A. LeRoy Almy	::			6
۱	• • •	- [	Burton E. Moore		• • • • • • • • • • • • • • • • • • • •		8
1		1	A. LeRoy Almy	::			7
3		1	J. H. Wilson Edward G. Howe				5
1	6.6	1.	Edward G. Howe. N. A. Weston. Lilly A. Clendenin. Chas. N. Cole. R. S. Douglass. Wm. L. Steele. Marion Thompson. Robt. K. Porter. Geo. W. Graham. A. B. Baker. M. F. Lindsey. I. H. Allen.		4.4	• • • • • • • • • • • • • • • • • • • •	15
١			N. A. Weston				9
		1	Chag N. Cala				7
	4.4		P S Dongless				7
	4.4	-	Wm I. Steele		6.6		3
5		-	Marion Thompson	4.6	. 6 6		4
	4.4	1	Robt K Porter				i
1	4.4	1	Geo W. Graham	44			10
3		1.	A. B. Baker				4
)	* *	1	M. F. Lindsey	••			3
	• •		I. H. Allen	**			3
			F. J. Foote	::	• • •		7
1	**	1	Lillie Heath		• • • • • • • • • • • • • • • • • • • •		6
3			I. H. Allen. F. J. Foote Lillie Heath Sue W. Ford L. A. Boice		**		5
		].	L. A. Boice				5
	4.4	:	Albert R. Lee	G-1 6 9			6
5		:	W. J. Dillahama	Salary for 5	months	o date 1895 o date	11
	4.6	1	W.L. Fillsbury	Salary for r	months to	1090	15
	4.6	-	S. W. Shattuck	Balary tor a	աօրան տ	J date	6
	4.6	1	L. A. Boice. Albert R. Lee. L. P. Breckenridge. W. L. Pillsbury. S. W. Shattuck. S. A. Forbes Adeline W. Rowley. C. V. Millar. C. A. Kofoid. C. E. Van Orstrand. Mary J. Snyder. W. G. Johnson B. M. Duggar. H. C. Forbes. C. A. Hart.	Salary for F	ehrnery	1896	5
	4 4	1	C V Millar	Swidt y ion I	cor dar y,	1896	Ä
	4 4		Č. A. Kofoid				10 10
	* *	1	C. E. Van Orstrand	Making dias	rams		!
Ęį		1	Mary J. Snyder	Salary for F	ebruary.	1896	6
5	• •	-	W. G. Johnson				10
i		1	B. M. Duggar				8
1	4.4	1	H. C. Forbes		"		8
3		1	C. A. Hart				l - €
		1	Adolph Hempel				6
)	• •		Harlen Scott	**	• • •		1
1	• • •	1	W.K. Hoffman	::	• • •		3
	• • • • • • • • • • • • • • • • • • • •	-	ட். டூ. Lathrop				3
	• • •	1	નું. લું. Maynard	::			8
		1	A. S. Golden			• • • • • • • • • • • • • • • • • • • •	3
	• • •	-	Unas. Wheeler	::			2
	4.4	1	rning schwenm		• •	•••••	2 2
		1	J. J. Johnson	;;			2
3	• •	1	J. Morrow				7
?	4.4		Chan D. E				1
	• •		Unas. D. Ewait	Dublication	of Illia		10
L			C. F. Wohler	Floto	OI 11110		
3		-	H. C. Forbes C. A. Hart C. A. Hart Adolph Hempel Harlen Scott W. R. Hoffman L. G. Lathrop J. G. Maynard A. S. Golden Chas. Wheeler Philip Schwehm J. J. Johnson J. J. Johnson J. Morrow E. W. Justus Chas. B. Ewalt F. C. Beem C. F. Webber Bates & Guild The Eng'g News Publishing Co Seth Thomas Clock Co E. H. Sargent Co	Subsemption		· · · · · · · · · · · · · · · · · · ·	1
		1	The Engly News Publishing Co.	Subscribuo	u	• • • • • • • • • • • • • • • • • • • •	1
1		-	Seth Thomas Clock Co E. H. Sargent Co	Clock			7
"	4.6	ı	THE THE CONTRACT OF THE THE	Viola and ac	mlra		•

# $List\ of\ Warrants{\rm-Continued}.$

To.	Date.		To whom.	For what.	Amou
	1896.				
367	Feb.	29	G. W. Parker & Son	Shelves, tables, etc Freightage Apparatus Freightage Thermometers Freightage Expenses Books Periodicals Expenses Pipe, fittings, etc.	\$142
368	. 0		C., C., C. & St. L. R'v Co	Freightage	67
369			Cambridge Botanical Sup. Co	Apparatus	31
370	**		Illinois Central R. R. Co	Freightage	73
371	4.6		McIntosh Bat'y and Optical Co.	Thermometers	9
372	• •		Wabash R. R. Co	Freightage	8
373			W. O. Krohn	Expenses	25
374			G. E. Stechert	Books	255 9
75	6.6		The Western News Co	Periodicals	9
76			A. N. Talbot	Expenses	24
77	**		H. J. Barton	- 44	4
78			C. W. Rolfe		11
79			T. A. Clark	**	22
80			C. M. Moss	**	18
31			Maltby & Wallace Co	Pipe, fittings, etc	116
32			The Champaign Supply Co	**	141
83			H. W. Rokker	Printing	287
34	" "		A. A. Beal & Co	Plates	7
35			J. Manz & Co	Half-tone plates	7
86			Lemcke & Buechner	Flügeli's Dictionary	4
37			Pantagraph Print. and St'y Co.	Binding and printing	4
38	6.6	-	E. H. Sargent & Co	Pipe, fittings, etc  Printing Plates. Half-tone plates. Flügeli's Dictionary. Binding and printing. Rubber tubing Postage.	23 23
39		. [	F. L. Bills	Rubber tubing Postage. Electric lantern, etc Laboratory apparatus and supplies. Typewriting Grading Assorted marble and stone. Apparatus, etc. Oak desk Bells, etc Books. Settees, etc. Printing Subscription, 1896. Apparatus.	23
Ю	4.4	- {	J. B. Colt & Co	Electric lantern, etc	176
)1		-	Richard, Kny & Co	Laboratory apparatus and supplies.	13
)2		1	J. T. Wolcott	Typewriting	8
)3			T. R. Leal	Grading	86
4			Peoria Steam Marble Works	Assorted marble and stone	11
)5			Bausch & Lomb Optical Co	Apparatus, etc	11 26
6			F. A. Holbrook, Ass'g	Oak desk	26
7		- 1	Electric Appliance Co	Bells, etc	5
8		1	G. E. Stechert	Books	40
9		- 1	Globe Furniture Co	Settees, etc	26
00		- 1	The Gazette	Printing	25
)1			American Machinist	Settees, etc. Printing Subscription, 1896. Apparatus Paper racks, etc. Labor Work on herbarium Work in library. Economic Fungi Hardware.	3
2		1	The Cushman Chuck Co	Apparatus	5
)3			Bevis & Co	Paper racks, etc	41
14		- 1	R. P. Brower	Labor	3
5	4.6	-	Josephine Skehan	Work on herbarium	41 3 15
6			Georgia E. Hopper	Work in library	8
7		- 1	A. B. Seymour	Economic Fungi	3
8			Hubbard & Sons	Hardware	5
9			Chas. A. Schiern Co	Cement	1
0	• •	- 1	Champaign Co. Herald	Printing	31
1			J. C. Chapman & Son	Painting	2
2			The Ohio Storage Battery Co	Cells	614
3	• •	- 1	Park Brothers & Co	Steel	14
4	• •		E. Henry	Brooms, soap, etc	6
5			The Eng'g News Publishing Co	Advertising	6
6		- 1	The DuQuoin Union Coal Co	Coal	305
7		1	The Home Comfort Heating Co	Heating new greenhouse	117
8	• • •	1	C. A. Besore	Work on herbarium Work in library Economic Fungi Hardware. Cement Printing Painting Cells Steel Brooms, soap, etc. Advertising Coal Heating new greenhouse. Lumber, etc Contract on barn Drayage Painting, etc	56
9	• • •	- 1	Bevis & Co	Lumber, etc. Contract on barn. Drayage Painting, etc Chemical supplies. Labor and material.	696
0	• • •		<u>R.</u> S. Wilber	Drayage	25
1	• • •	- 1	Wm. Price	Painting, etc	396
2	• • •	- 1	Chemical Dept	Chemical supplies	7
3	• • •	- 1	Repair shop	Labor and material	134
4	4.		· ·		150 81
5					81
b	March 1	14	N. W . Graham	Expenses to Board meeting	22
7	• • •	- [	J. E. Armstrong		17
8	• • •	- 1	Alex. McLean		31
9		- 1	I. S. Raymond	44 44 44	12
0	• • •		R. P. Morgan		42
1	• •	- )	Alex. McLean I. S. Raymond R. P. Morgan S. A. Bullard		17
2	• •	- 1	a. W. Ingus		$\overline{23}$
3	4.4		W. H. Kiler	Prize in debate	20
4			N. F. Marsh		3ŏ
5	• •	- 11	TO D I col	Canadia a	84
6	4.6		Lydia M. Hart	Drawings.	3
7			A. Tompkins	Expenses	17
8	• •		Mayme Hill	Grading Drawings. Expenses. Salary, February, 1896. Car fare Expenses.	14
9			Albert Lee	Car fare	2
91					

o.	Date.		To whom.	For what.	Amou
	1896.			Chandelier Telegrams. Drayage Labor, brick, etc. Chairs Typewriting. History of Illinois Music. Architect's services Heating machine shop Lectures. Expenses Expenses Plumbing Stone door-sill Laboratory apparatus Work Work in laboratory Repairs. Acid. Acid. ink. etc. Basket, etc Shades and hanging Lamps. Chairs Hardware. Crash, etc. Pillows. Postage Expenses Diplomas Grass seed. Labor. Labor. Copies of Illini and engravings. Labor. Tubes, etc. Journal N. Y. Ento. Society. Cambridge Nat. History. Emery wheels. Oil Janitor supplies Fire-escape, etc Oil cups, etc. Hardware.  Lamps Greenhouse stock Repairs on clock Paint. Belt, etc. Excavation, etc. Decoration of President's House. Architect's services. Supervising pavement Architect's services. Salary for March, 1896	
41	March 1	4	Mrs. A. B. Baker	Chandelier	82
42			Western Union Telegraph Co	Telegrams	\$2 3
43	•••		W. R. Howe	Drayage	51
44			J. B. Bennett	Labor, brick, etc	6
45		ı	The Tobey Furniture Co	Chairs	15
46			J. T. Wolcott	Typewriting	17
47			John Moses	Music	8
48 49	4.4		Rickey & White	A rahitaat's sarvioss	1,800
±∂ 50		1	Malthy & Wallace Co	Heating machine shop	1,118
51 51	March 1	6	D. C. Morgan	Lectures	52
$\bar{i}$	March 1		H. S Piatt	Expenses	52 19
$\bar{53}$			White & Walsh	Plumbing	135
54			C. N. Clark & Co	Stone door-sill	135
55	::		McIntosh Bat'y and Optical Co	Laboratory apparatus	71 4
56	::		W. G. Campbell	<u>W</u> ork	4
57		-	Emma W. Jackman	Work in laboratory	10
58			Robinson & Burr	Repairs	2
59			Puice & Fuller Co	Acid ink ote	4
30 31			F K Robeson & Co	Regist etc.	8 2
51 52		1	Wm Price	Shades and hanging	27
33		1	J. R. Greenhalgh	Lamps	1
34		1	Mittendorf & Kiler	Chairs	73
55	•••		T. H. Trevett	Hardware	16
66			Henry Trevett	6.6	23 11
37			G. C. Willis	Crash, etc	11
38		-	Eichberg & Baer	Pillows	4
39		ı	F. L. Bills	Postage	40
70		ı	American Express Co	Expressage	37 16
71 72			Wooden Bank Note Engine Co	Expenses	110
$^{\prime z}_{73}$			W E Handy	Cross good	110
74			Payroll of man Feb 1806	Lahor	661
75	4.4		Payroll of students Feb 1896	Labor	106
76			The Illini	Copies of Illini and engravings	661 106 11
77	4.4		Bert Fager	Labor	4
78	**		Richards & Co	Tubes, etc	$\frac{1}{2}$
79			Christian F. Grath	Journal N. Y. Ento. Society,	2
30			Lemcke & Buechner	Cambridge Nat. History	7
31			Norton Emery Wheel Co	Emery wheels	4 2
32 33			William F. Nye	Ull	16
รง 84	• •		Malthy & Wallage Co	Fire-escape etc	285
35			The Lunkenheimer Co	Oil cups etc	5
36	**		Orr & Lockett Hardware Co.	Hardware.	22
37	• •		The Power Publishing Co	Subscription	1
38	**		Engineering-Mechanics		2
39	• •		The Art Interchange Co		4
90	**	-	The Engineering Record		5
91			Metropolitan Electric Co	Lamps	5
92		-	J. C. Vaughan	Greenhouse stock	5
93			The Kiley Jewelry Co	Repairs on clock	2
94 95			Watson raulkner	Rolt ate	1
96 96			Agricultural Experim't Station	Excavation etc	37
70	• •		Trapp & Hocking Decorat's Co	Decoration of President's House	471
98		1	James M. White	Architect's services.	300
99	• •		A. N. Talbot	Supervising pavement	300 300
)()	••	-	C. A Gunn	Architect's services	100
)1	March 3	31	A. S. Draper	Salary for March, 1896	583
)2	::		T. J. Burrill		225
)3	::		S. W. Shattuck		166
4	::		E. Snyder		166
)5			N. U. Ricker		191
$\frac{1}{2}$			N. C. Ricker I. O. Baker S. A. Forbes C. W. Rolfe	:: ::	183 85
)7 )8			C W Dolfo		175
ງອ ງ9			D. McIntoch	44 44	
10			C. W. Rotte D. McIntosh A. N. Talbot A. W. Palmer F. F. Frederick S. W. Parr		175
$\frac{10}{11}$			A. W. Palmer		
12	• •		F. F. Frederick		158
13	• •		S. W. Parr	**	175
14	• •		H. J. Barton Chas. M. Moss D. K. Dodge L. P. Breckenridge	44 44	166
15	••		Chas. M. Moss.	66 66	175
16			D. K. Dodge	44	166
17			L.P. Breckenridge	44 44	166
			David Kinley	**	

# $List\ of\ Warrants{\rm--Continued}.$

٥.	Date.	To whom.		For w	nat.	Amou
1	1896.		İ			
19	March	Arnold Tompkins. E. J Townsend. H. E. Summers.	Salary for	March, 18	396	\$8'
20	••	Arnold Tompkins	1			150
21		E. J Townsend	1 ::			13'
22		H. E. Summers				13'
23		E. B. Greene. Katharine Merrill.				133
24		Katnarine Merrili				108 150
5		W. O. Krohn				12
26 27	4.4	James M. White				13'
8		W. D. Pence. A. H. Daniels. H. S. Grindley.				110
9		A. H. Daniels		4.4		100
8ŏ	4.6	H. S. Grindley	• •	• •		8'
31	• •	T. A. Clark	• •			10
2						8
33		B. V. Swenson				9
34		Geo. D. Fairfield		• •		8
5		Chas. W. Tooke	::			8
6		Percy F. Bicknell	::	• • •		12
7		Henry H. Everett	::	• • •		10
8		H. S. Platt. B. V. Swenson Geo. D. Fairfield Chas. W. Tooke Percy F. Bicknell Henry H. Everett. Walter H. Jones. William Esty. Bred A. Sager				5
9		William Esty		• • •	• • • • • • • • • • • • • • • • • • • •	9
0		Fred A. Sager G. D. Hammond.				9
1		G. D. Hallmond				8
2		W E Sandford				8
3 4		C. D. McLane W. E. Sandford J. D. Phillips Frank Smith.			•••••	8
5		Frank Smith				12
6		R P Smith				12
7		R. P. Smith A. C. Burnham Helen E. Butterfield Ella H. Worrison				8
8		Helen E Butterfield				7
9		Ella H. Morrison				7
ŏ	• •	Adeline W. Rowley	1 1	• •		5
ĭ		Adeline W. Rowley	• •			8
$\tilde{2}$	••	Oscar Quick	• •	**		7
3			• •	• •	*************	7
4	• •	Chas. A. Gunn. Alfred H. White. G. W. McCluer Edward J. Lake Chas. F. Hottes. M. S. Ketchum J. G. Mosier		• •		8
5	**	Alfred H. White		• •		۱ ا
6		G. W. McCluer	• •			1
7		Edward J. Lake	::	• •		6
8		Chas. F. Hottes	1 ::	• • •		6
9	;;	M. S. Ketchum				7
9			1			1 4
$\frac{1}{2}$		R. C. Vial				5
3		Geo. A. Huff				7
بى 34		C B Clark		4.4		8
55	• •	C. B, Clark A. R. Curtiss				ě
6	• •	Henry Jones.		4.4		
37		Henry JonesBurton E. Moore	• •	* *		. 8
8	••	A. Leroy Almy	••	• •		
39		A. Leroy Almy J. W. Wilson Edward G. Howe				
O	• •	Edward G. Howe		• •		18
1		N. A. Weston. L. A. Clendenin	••	• •		
2	::	L. A. Clendenin	••	4.6		. (
/3		Chas. N. Cole R. S. Douglass Wm. L. Steele Marion Thompson Pobt. V. Dorton	**	• •		
4		R. S. Douglass		• • •		
5		Wm. L. Steele		• •		.]
6	::	Marion Thompson		• • •	·	
7	::	Robt. K. Porter	1	• • •		
8	1	Robt K. Porter Geo. W. Graham M. T. Lindsey I. H. Allen F. J. Foote		• • • • • • • • • • • • • • • • • • • •		
9	1	M. T. Lindsey	·1 ::			
30		I. H. Allen			• • • • • • • • • • • • • • • • • • • •	
31		F. J. FOOTE		• •		
32		Lillie Heath. Sue W. Ford. L. A. Boice. W. F. Marker.		• •	•••••	
33		Sue w. Ford		4.6	•••••	
34	:	W. F. Monkon			•••••	'
35	1	Albort P. Lee		• •		
36		W P Hoffman	1	• •	•••••	
37		Albert R. Lee. W. R. Hoffman Chas. Wheeler. L. G. Lathrop.				
38 30		IT C T others	-			i .
39	١	L. G. Lathrop			•••••	
$\frac{90}{01}$		J. J. Johnson	•			
91		J. J. Johnson J. G. Manard A. S. Golden Philip Schwehm	•			
$\frac{92}{01}$		Philip Schwohm				
93 04	N	I Morrow				
94 95		J. Morrow E. W. Justus Chas. B. Ewalt		4.4		
		THE TY OUSDUS	• 1			:  :

0.	Date.		To whom.	For what.	Amou
Ì	1896.				
97	March	31	Mary J. Snyder	Salary for March 1896	\$62
98	• •	0.1	B. M. Duggar H. C. Forbes Adolph Hempel	Salary for March, 1896	100
99	4.6		B. M. Duggar	1	1 83
00	4.6		H. C. Forbes	Salary, March, 1896	83
01	4.4		Adolph Hempel	Salary, March, 1896	60
02	**		H. C. Forbes. C. A. Kofoid.	Expenses Salary, March, 1896	4
03			C. A. Kofoid	Salary, March, 1896	100
04	4.6		C. A. Hart		62
05	4.6		C. V. Millar		60
06			Harlen Scott	<u> </u>	10
07			W. L. Pillsbury		166
08			Henry Trevett	Hardware	15
)9	4.4	- 1	G. C. Willis	Crash	25
10	4.4		Fuller & Fuller Co	Salary, March, 1896 Hardware Crash Ammonia Gas Lenses Pipe and fittings Iron pipe	3
11		- 1	Chicago Calcium Light Co	Gas	6
12		1	Bausen & Lomo Optical Co	Lenses	9
13	4.6	ļ	J. E. Snepardson	Pipe and nittings	3
14			The New Years Office	Tom pipe	2
15	4.6		Dendelph Door 34	Dasking material	19
16	6.6		Handler & Midding	Cilro Vol 0	3 25
7			A D Cuppingham & Cop	Panor	25
8			St. Louis & Dig Muddy Cool Co.	Fipe and nttings Iron pipe Lamps Packing material Silva, Vol. 9 Paper Coal Heating apparatus	31
9			Champaign Supple Co	Coal Heating apparatus. Heating contract. Gas, from Dec. 23, '95, to Mar. 20, '96. Books, etc Hardware and Labor Balance on contract. Cabin boat, etc. Postage. Carriage hire. Expenses.	106
20			Malthy & Wallace Co	Heating apparatus	380
21	4 4		High & Ch'mp'on E St P'y Co	Gas from Dec 23 '95 to Mar 20 '06	550
3			A C MaClana & Co.	Rooks of	79
4			V W Shuek	Hardware and Lahor	42
5			C. I. Strobel	Relence on contract	57
6	April	a	H G Bruning	Cahin host etc	1,255 90
7	• • •		F. L. Bills	Postage	90
8			H. Chester	Carriage hire	3
9			R. P. Morgan. Lucy L. Flower Pacific Express Co.	Expenses	38
0			Lucy L. Flower		60
ĭ.	April	15	Pacific Express Co	Freightage	25
2			J. T. Wolcott	Typewriter work	11
3	4.4	1	J. T. Wolcott American Express Co	Expenses.  Freightage Typewriter work Freightage Assistant, Chemical Laboratory Freightage Salary, April, 1896 Freightage Hardware Freightage Expenses.  Writing diplomas Making lantern slides Plumbing Greenhouse stock Expenses. Coal Alcohol Toweling, etc Chemical apparatus Rubber tubing Chemical apparatus Rubber tubing Chemical supplies Gas fittings, etc Apparatus and supplies Filters Chemical supplies Station membership fee, 1895–6 Services to June 15, 1896 Water, 3 months, to July 1, 1896 Laying gas pipe Arches Memorial Combology	36
4			J. L. Sammis	Assistant, Chemical Laboratory	17
5		ı	Wabash R. R. Co	Freightage	6
6			Mayme Hill	Salary, April, 1896	14
7			C., C., C. & St. L. R'y Co	Freightage	61
8		- 1	Henry Trevett	Hardware	5
9		- [	1. C. R. R. Co	Freightage	104
0		-	W. L. Pillsbury	Expenses	9 15
1		-	W, H. Van Dervoort		15 12
2			Arnold Tompkins		12
3		1	H. S Platt		15 29
4	4.4	1	T. A. Ulark		16
5	4.4		Author I Dillahour	Writing diplomas	9
6	4.4		Chas T Wildon	Moking lentorn slides	35
8	4.6	ļ	Hubbard & Sang	Plumbing	28
9		-	E C Hill & Co	Greenhouse stock	7
0	4.4	ļ	G W Graham	Expenses	7
1			DuQuoin Union Coal Co	Coal	692
2			American Spirits Mfg. Co	Alcohol	32
3	4.4		G. C. Willis	Toweling, etc.	35
4	4.4		Richards & Co	Chemical apparatus	5
5	4.6		Goodyear Rubber Co	Rubber tubing	8
6			Fuller & Fuller Co	Chemical supplies	46
7		-	Robinson & Burr	Gas fittings, etc	89
8	4.6		Eimer & Amend	Apparatus and supplies	70
9			Baker & Adamson	Filters	7
0		- 1	Whitall, Tatum & Co	Chemical supplies	9
ĭ			A. A. Agr. Col. and Exp. Stat'n	Station membership fee. 1895-6	10
$\tilde{2}$			C. and Urbana Ph. Tel. Co	Services to June 15, 1896	45
3			Union Mfg. Co	Water, 3 months, to July 1, 1896	125
4	4.4	- }	C. & U. Gas Light's and Fuel Co	Laying gas pipe	48
5	4 4	j	The Babcock & Wilcox Co	Arches	14
6	" "	- 1	S. R. Roberts	Manual of Conchology	6
7	4.4	J	Macmillan & Co	Services to June 15, 1896 Water, 3 months, to July 1, 1896 Laying gas pipe Arches Manual of Conchology Subscriptions Storage Labor Drawings. Telegrams	9
8	" "	- 1	Alexander Stuart	Storage	8
9	" "	- 1	Bert Fager	Labor	8
0		- 1	Lydia M. Hart	Drawings	9
UI.		- 1		m 1	13

# ${\it List~of~Warrants}{\rm -Continued.}$

No.	Date.	To whom.	For what.	Amount
	1896.		Microscope. Apparatus. Paraffin Microscope, etc Subscription Books. Am. Literary Index. Books. Foundry suplies Waste Gear cutter, etc. Typewriting Lumber and cases Indicator Lathe handles. Ammeter, etc Repairs of voltmeter Brick and sand Chairs Wire, etc. Services College Directory Envelopes, printing, etc Brick Ladle bowls	
1672	April . 15	Bausch & Lomb Optical Co	Microscope	\$45 4
$\begin{array}{c} 1673 \\ 1674 \end{array}$		Fraser & Chalmers	Apparatus	4 0
1674		Peter Gray	Paraffin	35 0
1675		The Western News Co	Subscription	59 70 6 3
1676 1677		G E Steehert	Rooks	10 4
1678	4.4	R. R. Bowker	Am. Literary Index	3 6
1679		Estes & Lauriat	Books	5 2
1680	• •	F. B. Stevens	Foundry suplies	13 4
1681	**	Frank E. Fitts Mfg. & Sup. Co.	Waste	14 5
1682	! ;;	Brown & Sharpe Mfg. Co	Gear cutter, etc	10 3
1683 1684	4.4	H. I. Greene	Typewriting	21 6 11 2
1685	4.6	American Steam Gauge Co	Indicator	60 0
1686	66 .	Flather & Co	Lathe handles	2 0
1687	4.6	Electric Appliance Co	Ammeter, etc	54 7
1688	* *	Western Electrical Instru't Co.	Repairs of voltmeter	8 7
1689	4.6	Sheldon Brick Co	Brick and sand	19 0
1690	**	F. A. Holbrook, Assignee	Chairs	5 0
1691		Western Electric Co	Wire, etc	3 6
1692	•••	U. of I. Glee & Mandolin Clubs.	Services	75 0
1693 1694	**	Champaian County Hanald	Envelopes printing etc	5 0 91 5
$1694 \\ 1695$	4.6	Urhana Brick Co	Brick	3 5
1696		Urbana Brick Co. The S. Obermayer Co. The Gazette. J. B. Bennett.	Brick Ladle bowls Printing, etc Labor, cement, etc	3 9
1697	4.6	The Gazette	Printing, etc	8.8
1698	"	J. B. Bennett	Labor, cement, etc	45 3
1699	* *	T. R. Leal	Drayage and grading	68 0
1700		Bevis & Co	On contract	3,678 0
1701		Now Verk and Obje Co	Collecting water samples	1 50
1702 1703	4.4	C A Resore	Lumber	$\begin{array}{c c} 3 & 50 \\ 27 & 80 \end{array}$
1704		Champaign County Print's Co	Printing etc	7 2
1705		Wm. Price	Paints, oils, etc	7 7
1706		The Kariher Grocery Co	Oils, etc	3.8
1707	* *	The Twin City I. and C. S. Co	Ice	5 20
1708	::	Jenny Electric Motor Co	Drayage and grading On contract. Collecting water samples Crookes tubes Lumber. Printing etc. Paints, oils, etc Oils, etc. Ice Motor Forgings	45 0
1709		Chan II Basis Co	Forgings	13 0
$1710 \\ 1711$		A E Foote	Goologies   specimens	7 69 11 0
1712		C. L. Shear	N V Funci	6 0
1713		Richards & Co	Apparatus	95 3
1714	::	Knowlton & Bennett	Supplies	5 2
1715		E. E. Dunlap	Forgings Wire cloth, etc Geological specimens N. Y. Fungi Apparatus Supplies Blue Prints Exercise	37 3
1716		Jenny Electric Motor Co. Jones & Laughlins. Chas. H. Besly Co. A. E. Foote C. L. Shear Richards & Co. Knowlton & Bennett E. E. Dunlap I. O. Baker W. R. Howe Keuffel & Esser Co. Isaac Fielding. Josephine Skehan G. D. Hubbard	Expenses	71 9
1717		W. R. Howe	Drayage Tape Postage Work on herbarium	102 8 4 5
$1718 \\ 1719$		Isaac Fielding	Poetage	25 0
1720	4.6	Josephine Skehan	Work on herbarium	16 5
1721		G. D. Hubbard	Instruction	24 0
1722		Empire Steam Laundry	Washing towels	2 9
1723	::	G. D. Hubbard G. D. Hubbard Empire Steam Laundry Mrs, R. C. Krabbe Payroll of men, March, 1896 Payroll of students, March, 1896	Washing towels. Labor.	6 5
$1724 \\ 1725$		Payroll of students March, 1896	Lapor	476 1
1726	April 30	A S Draner	Salary for April 1896	125 4 583 3
1727	Trb111 90	A. S. Draper T. J. Burrill S. W. Shattuck E. Snyder	Salary for April, 1896	225 0
1728	4.4	S. W. Shattuck		166 6
1729		E. Snyder		166 6
1730		N. C. Ricker	44 44	191 6
1731		N. C. Ricker Ira O. Baker S. A. Forbes C. W. Rolfe D. McIntosh A. N. Talbot A. W. Palmer F. F. Frederick S. W. Parr H. J. Barton Chas. M. Moss	" "	183 3
1732		S. A. Forbes		83 3
1733 1734		D. W. Kolie		175 0
1734 1735		A N Talbot		150 0
1736		A. W. Palmer		175 0 175 0
1737		F. F. Frederick	"	158 3
1738		S. W. Parr		175 0
1739		H. J. Barton.	44	166 6
1740		Chas. M. Moss		175 0
1741		D. K. Dodge		<b>166</b> 6
1742		L. P. Breckenridge		166 6
1743 1744		D. K. Dodge L. P. Breckenridge David Kinley Eugene Davenport Arnold Tompkins	** ** ·············	187 50
1745	4.4	Arnold Tompking		87 50 150 0
1746	4 4	H. E. Summers E. B. Greene	**	137 5
		TT TO TO THE TO		
1747	••	H. E. Summers		137 5

lo.	Date.	To whom.		For wh	at.	Amou
	1896.					
749	April	30 Katharine Merrill	Salary for	April, 189	6	\$108
50		W. G. Krohn. Jas. M. White W. H. VanDervort W. D. Pence				150
51		Jas. M. White				125
52		W. H. VanDervort	1			137
53		W. D. Pence				116
54		A. H. Daniels	;;	4.4		100
55		W. D. Pence A. H. Daniels. H. S. Grindley. T. A. Clark H. S. Piatt B. V. Swenson Geo. D. Fairfield. Chas. W. Tooke. Percy F. Bicknell Henry H. Everett Walter H. Jones. William Esty.	1			87
56		T. A. Clark				108
57 58		H. S Platt				83
8		B. V. Swenson				91
59		Ches. W. Trairneld				83
90		Cnas. W. Tooke		44		83
31		Percy F. Bicknell		• •	• • • • • • • • • • • • • • • • • • • •	129
32		Henry H. Everett				100
33		Walter H. Jones				58
34		William Esty				91
5		Fred A. Sager				91
6		William Esty Fred A. Sager. G. D. Hammond C. D. McLane				83 110
57		U. D. McLane				110
8		W. E. Sandiord				80
9		J. D. Phillips				85
0		Frank Smith	1			120
1		r. r. smith	::			120
2		W. E. Sandford J. D. Phillips Frank Smith R. P. Smith A. C. Burnham Helen E Butterfield	1			80
3	1 ::	Helen E. Butterfield Ella H. Morrison Adeline W. Rowley Robert A. Wood	::			75
4		Ella H. Morrison	1	4.4		70
5		Adeline W. Rowley	1			50
6		Robert A. Wood				80
7		Oscar Quick				75
8		Geo. A. Goodenough		4.4		75
9		Chas. A. Gunn A. H. White G.W. McCluer Edward J. Lake Chas. F. Hottes M. S. Ketchum I. G. Mosier	1			85 80
0		A. H. White				
1		G./W. McCluer			• • • • • • • • • • • • • • • • • • • •	15
2		Edward J. Lake		4.4		60
3		Unas. F. Hottes				60
4		M. S. Ketchum			• • • • • • • • • • • • • • • • • • • •	70
35		J. G. Mosier R. C. Vial Geo. A. Huff Paul Chipman C. B. Clerk		4.4		70
6		R. C. Viai				70
37		Geo. A. Hum		4.4		50
8		Paul Chipman				70
39 90		A. D. Crarking		4.4		80
7U 91		Honey Jones				- 60
$\frac{1}{2}$		Burton F Moore		4.4		80
$\frac{1}{3}$		A Loron Almy		4.4		78
)4		T. W. Wilson				50
)5		Edward C. Howe		4.6		150
		N A Wester				90
)6		I. A. Clandanin				6
)7 )8		Henry Jones Burton E. Moore A. Leroy Almy J. H. Wilson Edward G. Howe N. A. Weston L. A. Clendenin Ches N. Colo			•••••	7
	4	D S Dongless			•••••	1 7
))		W. J. Ctools				78 30
00	1	Will. L. Steele				40
)1	1	Marion Thompson		6.6		10
)2	i]	W. J. Dillaham				
)3	1	L. A. Clendenin Chas. N. Cole R. S. Douglass Wm. L. Steele Marion Thompson Robert K. Porter W. L. Pillsbury C. V. Millar Geo. W. Graham M. T. Lindsey I. H. Allen F. J. Foote				116
4		U. v. Millar				100
)5		M. D. Lindson	1			100
6	1	M. T. Lindsey				35
7		1. H. Allen	1			35
K	01	F.J. Foote				75
9	1	Lillie Heath		**		60
C		pue w. Ford	1 ::			50
11		L. A. Boice				50
12		w. r. Marker				43
l	5	I. H. Allen F. J. Foote. Lillie Heath, Sue W. Ford L. A. Boice. W. F. Marker. Albert R. Lee J. Morrow E. W. Justus Chas. B. Ewalt W. R. Hoffman				20
14		J. Morrow				79
L		E. W. Justus		4.4		50
16	)	Unas. B. Ewalt	1	••		1
17	1	W. R. Hoffman	1	• •		3
18		Chas. Wheeler	1 ::	• •		3
18	1	பூ. G. Lathrop	1 ::	•••		3
20	)):	J. J. Johnson	-1 ::	,		3
21	Li	A. S. Golden	·			3
22	31	Philip Schwehm		•••		2
2:	3	Chas. B. Ewalt W. R. Hoffman Chas. Wheeler. L. G. Lathrop J. J. Johnson A. S. Golden Philip Schwehm M. A. Reasoner. J. P. Adolph F. F. Frederick	.  ''	• •		2
24		J. P. Adolph	.  ''	•••		1
825		F. F. Frederick	Expenses			

26 27 28 29 30 31 32 33 34 35	1896. April	30			
27 28 29 30 31 32 33 34	April	30			
27 28 29 30 31 32 33 34	::		Mary I Snyder	Salary for April, 1896	\$62
28 29 30 31 32 33 34		00	C A Hart	Salary, 101 April, 1030	\$62 62
29 30 31 32 33 34	6.6		W G Johnson		100
30 31 32 33 34			B. M. Duggar	**	83
31 32 33 34			H. C. Forbes	**	83 83
32 33 34	4.4		Adolph Hempel		60
33 34			Harlen Scott	44 44	10
	4.6		Champaign County Herald	Paper	9
25	"		H. C. Forbes	Petty expenses	5
90	4.4		Bloomgren Bros. & Co	Photographs	4
36			J. T. Wolcott	Stenographic work	3
37	4.4		C. A. Hart	Expenses	15
38			American Express Co	Freightage	19
39	4.4		Geo. W. Pitkin & Co	Paint	30
10			The Home Comfort Heat's Co.	Days as	47
41	4-4		Heller & Toy	Drayage	3 16
12	-4.4		F O Voils	Adventising	10
43			Coodmon Pubbon Co	Dubbon tubing	5
44 45	4.4		I & Roymond	Evnance to Roard meeting	6
46	4.6		N W Graham	Exponses to Board meeting	14
47			Alex McLean		30
48	4.4		N. B. Morrison	Paper Petty expenses Photographs Stenographic work Expenses Freightage Paint Plumbing, etc Drayage Freightage Advertising Expenses to Board meeting.  "" Services and expenses Military supplies Drayage Expenses Advertising	50
49			J. E. Armstrong		17
50			D. H. Burnham & Co	Services and expenses	1,000
51	May,	15	Ordance Department U. S. A	Military supplies	7
52			Thomas Berms	Drayage	2
53	• •		E. G. Howe	Expenses	37 700
54			Ricker & White	Architect's fees	700
55			Herald Publishing Co	Advertising	2
56			The Transcript Co		9
57			The Commercial Gazette Co		9
58	6.6		The Chicago Times-Herald		6
59			The Indianapolis Sentinel Co		4
60	4.4		The Inter Ocean	44	16
61	4.4		The Indianapolis Sentinel Co. The Inter Ocean The St. Louis Republic. The Tribune Co The Globe Printing Co. Illinois State Register A. G. Spalding & Bros. T. R. Leal. Price & Sandford. Mittendorf & Kiler. Champaign Supply Co. Maltby & Wallace Co. T. H. Trevett. T. H. Castor & Co. Academy of N. S. of Phila. Gustave E. Stechert. A. C. McClurg Co. A. E. Foote G. W. Parker W. I. Landy The Illio	44	14
62			The Clobe Printing Co	**	14
63 64	4.4		Illinois State Posiston		11 2
65	4.6		A G Spalding & Bros	Tennis note etc	19
66			T R Leel	Grading ate	13 112 1 1 12 317
67	4.4		Price & Sandford	Medicine	111
68			Mittendorf & Kiler	Waste baskets, etc.	12
69	4.4		Champaign Supply Co	Pipe, fittings, etc	317
70			Maltby & Wallace Co		71
71	4.4		T. H. Trevett	Water tank	4
72			T. H. Castor & Co	Books	3
73			Academy of N. S. of Phila	Tennis nets, etc. Grading, etc. Medicine Waste baskets, etc. Pipe, fittings, etc. Water tank Books. Journal. Books.	32
74	4.4		Gustave E. Stechert	Books and stationery Geological specimens Sink, tank, screws, etc Advertising	1
75			A. C. McClurg Co	Books and stationery	46
76			A, E. Foote	Geological specimens	38 228
77			W. Parker	Sink, tank, screws, etc	228
78	4.6		W. I. Lullay	Auverusing	16
79 80			C N Cormon	Sink, tank, serews, etc. Advertising  Membership fee Postage Expenses Salary for April, 1896 Drawings Services, June 30, 1896 Postage Janitor supplies, etc. Thermometers Laboratory supplies Index, etc. Red enamel Illinois School Directory Paper Vases, etc. Steam pipe covering Electric fixtures Oil Chemical supplies Lamps Tile	10
81			F. I. Bills	Postego	90
82	4.4		R M Dugger	Evnances	88 15 100
83	* *		C A Kofoid	Salary for April 1906	100
84	4.6		Lydia M Hart	Drawings	100
85	4.6		Central Union Telephone Co	Sarvices June 30 1806	19
86	4.6		Isaac Fielding	Postage	12
87	6.6		E. Henry	Janitor supplies, etc.	1 3
88	4.6		Eimer & Amend	Thermometers	14
89	**		E. H. Sargant & Co.	Laboratory supplies	2
90	4.4		Library Bureau	Index. etc.	18
91	**		J. G. Nicolet	Red enamel	2
92	**		E. O. Vaile	Illinois School Directory	1
93			Albany Perforated Wraping		1 -
j	**		Paper Co	Paper	24
94			J. R. Greenhalgh	Vases, etc	1 -2
95			Walch & Wyeth	Steam pipe covering	$\overline{\epsilon}$
96	4.4		Electric Appliance Co	Electric fixtures	20
97			Standard Oil Co	Oil	20 11
98	::		Fuller & Fuller Co	Chemical supplies	42
99			Twin City Electric Co	Lamps	4

o.	Date.		To whom.	For what.	Amour
1	1896.				
)1	May 1	5	Hohmann & Maurer Mfg. Co	Repairs	\$2
14		- [	Bevis & Co	Flooring	6
)3		- 1	Locomotive Engineering	Kepairs Flooring Subscription Brass grease cups Steel beam, etc. Subscription Boxes, etc. Microtomes. Dunlicator	6
)4		- 1	Walker & Co	Brass grease cups	6
)5	• • •	- 1	Machinist Supply Co	Steel beam, etc	7
6	• • •		Compressed Air	Subscription	1
)7	4.4	-	Bausch & Lomb Optical Co	Boxes, etc	15
8	4.4	-	Dishard Vary & Co	Pin forceps, etc	24 106
19		-	Lewton & Co	Dunlianton	100
1	4.4		Vale & Towns Mfg. Co.	Locks and kove	4
2	4 4		Western Electric Co	Wire	ī
3		-	Wm. Miebach & Co	Hardware	1
4	* *	i	J. B. Colt & Co	Microtomes. Duplicator. Locks and keys Wire Hardware. Carbons. Water samples Equatorial Telegrams. Expenses. Bayonets	$\bar{2}$
15	* *	-	Edward Busch	Water samples	1
6		- 1	Fauth & Co	Equatorial	425
7	• • •	1	Western Union Telegraph Co	Telegrams	8
8		1	S. W. Shattuch	Expenses	36
9		- 1	A. W. Palmer	n	14
0		1	The United States	Bayonets	4
2			D. H. Brush	Uranance stores	3 14
3		1	A. W. Palmer. The United States. D. H. Brush Mayme A. Hill. Georgia E. Hopper. Payroll of men, April, 1896. Payroll of Students, April, 1896.	Bayonets Ordnance stores Salary, March, 1896 Catalogueing books	15
4			Devrell of mon April 1906	Labor	310
5	4.4	-	Payroll of students April 1806	114001	48
6		İ	W. O. Krohn P. F. Bicknell	Labor Expenses .	16
7	4.4		W. O. Krohn	Expenses	31
8		١	P. F. Bicknell	Library, expenses	7
9			Geo. C. Oxer	Chinch bug cages	3
0		-	Geo. C. Oxer. W. R. Howe. Public School Publishing Co	Library, expenses. Chinch bug cages Drayage Advertising	21 12
1			Public School Publishing Co	Advertising	12
2		- 1	The Engineering News Pub. Co.		6
3	••	-	Walch & Wyeth	Magnesia coverings	33
4		-	Whitell Tetum & Co	Wire netting	33
5		j	John Alling & Co	Hordware	4 2
7		- 1	Wm Price	Magnesia coverings Wire netting. Bottles, etc. Hardware. Glass and setting. Centrifuge. Ticking. Gold medal. Hardware. Electric apparatus. Level, etc. Flanges. Advertisement and subscription. Lumber, etc.	8
8	4.4		Richards & Co.	Centrifuge.	20
9		-	F. K. Robeson & Co	Ticking.	14
0			The Riley Jewelry Co	Gold medal	20
1	• •		Reading Hardware Co	Hardware	. 3
2		1	Electric Appliance Co	Electric apparatus	32
3			Keuffel & Esser Co	Level, etc	24
4		1	Jas. B. Clow & Sons	Flanges	256
5		-	The Illini	Advertisement and subscription	256
6		1	Montgomory Word & Co	Lumber, etc	63
8	4.4	İ	D H Lloydo & Son	Stationary	19
9	4.4	-	Keen & DeLang	Pener	1 1
n.		Į	Macmillan & Co	Rooks	11
1	May 3	o	A. S. Draper	Salary, May, 1895	583
2		1	T. J. Burrill	Advertisement and subscription Lumber, etc. Apparatus Stationery Paper. Books. Salary, May, 1895.	225
3		1	S. W. Shattuck	4.4	166
4		1	Edward Snyder		
5			N. Clifford Ricker		191
6		- 1	Ira O. Baker S. A. Forbes C. W. Rolfe		183
7	• • •	- }	S. A. Forbes		83
8	•••		U. W. Rolfe		175
9			D. McIntosh	4.6	150
1		- 1	A. IV. 18100t	:: ::::::::::::::::::::::::::::::::::::	175 175
2		- [	A. N. Talbot A. W. Palmer F. F. Frederick S. W. Parr	"	158
3		-	S. W. Parr	**	175
4	4.4	- 1	H. J. Barton.		166
5		1	C. M. Moss		175
6		-	C. M. Moss. D. K. Dodge L. P. Breckenridge David Kinley Eugene Davenport Arnold Tompkins. E. J Townsend. H. E. Summers E. B. Greene Katharine Merrill W. O. Krohn. James M. White. W. H. Vandervoort.	**	166
7		-	L. P. Breckenridge	**	166
8		1	David Kinley	4.4	187
9	4.4	- 1	Eugene Davenport		87
0	• •	ļ	Arnold Tompkins	**	150
1	• • •		E. J. Townsend	***	137
2		-	H. E. Summers		137
3	• • • • • • • • • • • • • • • • • • • •	-	E. B. Greene	**	133
4		- 1	Kamarine Merrill	**	108 150
5	**	- }	W. U. Kronn	•••	150 125
6		- 1	James of White	••	137

# $List\ of\ Warrants{\rm--Continued}.$

Vo. Date.		To whom.	Fo	Amou		
	1896.					
78	May 31	W. D. Pence. A. H. Daniels. H. S. Grindley.	Salary, May 189	6	\$11	
779	•••	A. H. Daniels	i ::		10	
80	• • •	H. S. Grindley			8	
81	• • •		1		10	
82		H. S. Piatt. B. V. Swenson. George D. Fairfield. Charles W. Tooke. Percy F. Bicknell.		•••••	8	
83		B. V. Swenson	1		9	
84		George D. Fairfield			8	
85		Charles W. Tooke	1		8	
36	• • •	Percy F. Bicknell			12	
37		Henry H. Evereu			10	
38	• •	Walter H. Jones		• • • • • • • • • • • • • • • • • • • •	5 9	
39	4.4	William Esty			9	
90		C D Hommand				
2	4.4	G. D. Hammond			8	
3		W F Sandford			1. 15	
4		I D Dhilling	4.6		8	
5	4.4	Frank Smith			12	
6	4.4	D D Smith			12	
77	4.4	A C Rurnhom	• •		8	
8		Helen E. Rutterfield			1 7	
9	4.4	Ella H. Morrison			7.	
0	4.4	Percy F. Bicknell. Henry H. Everett. Walter H. Jones. William Esty Fred A. Sager. G. D. Hammond. C. D. McLane. W. E. Sandford. J. D. Phillips Frank Smith. R. P. Smith. A. C. Burnham. Helen E. Butterfield. Ella H. Morrison. Adeline W. Rowley.			5	
1	6.6	D - 1 4 XX7 3			8	
2	6.6	Oscar Quick			7	
3	4.4	George A. Goodenough	**		7	
4	. **	Robert A. Wood. Oscar Quick. George A. Goodenough Charles A. Gunn A. H. White. G. W. McCluer.			8	
5		A. H. White			8	
6		G. W. McCluer			Ĭ	
7		Edward J. Lake			6	
8	4.6	Charles F. Hottes	"		6	
9		M. S. Ketchum			7	
0		I G Mosior			7	
1	• •	R. C. Vial			7	
2	• •	George!A Huff	::		5	
3		R. C. Vial. GeorgelA Huff. Paul Chipman	::		7	
4	• • •	C. B. Clark. A. R. Curtiss Henry Jones Burton E. Moore	::		8	
5		A. R. Curtiss	::		8	
6	• • •	Henry Jones			6	
7		Burton E. Moore			8	
8	4.6	J. H. Wilson. Edward G. Howe N. A. Weston. L. A. Clendenin.			7	
9		Edward C. Haws		•••••	5 15	
1	4.4	N A Wester	4.6		9	
2	4.4	L A Clendenin	**		6	
3	4.6	Charies N. Cole.			7	
4	4.6	R. S. Donglass	• •		7	
5	4.4	Wm L Steele	• •		3	
6	4.4	Marion Thompson	**		4	
7		Charries N. Cole. R. S. Douglass. Wm. L. Steele. Marion Thompson. Robert K. Porter. W. L. Pillsbury. C. V. Millar. George W. Graham. M. T. Lindsey. L. H. Allen	* *		î	
8	4.4.	W. L. Pillsbury	* *		11	
9	**	C. V. Millar	**		6	
0		George W. Graham	" "		10	
1		M. T, Lindsey	• •		3	
2		I. H. Allen			3	
3		F. J. Foote	**		7	
4	"	F. J. Foote Lillie Heath. Sue W. Ford L. A. Boice.			6	
5	• • •	Sue W. Ford	•••		5	
6	• •	L. A. Boice	• •		5	
7	4.4	w.r.marker		••••••	4	
3		Albert K. Lee			2	
9	4.4	J. Morrow		•••••	7	
0	4.4	Charles B. E14		•••••	5	
1		Unarles B. Ewalt		•••••	1	
2	4.6	Charles Wheeler		••••••	3	
3	4.6	Unaries wheeler	4.6		3	
4		Albert K. Lee. J. Morrow. E. W. Justus. Charles B. Ewalt W. R. Hoffman Charles Wheeler L. G. Lathrop. J. J. Johnson A. S. Golden Philip Schwehm. M. A. Reasoner			3	
		A S Coldon			3	
6		Philip Sahwahm			3	
8		M A Passanan			2.	
9		Peter Adolph			2	
0	4.6	M. A. Reasoner Peter Adolph L. P. Breekenridge W. G. Johnson C. A. Kofoid H. C. Forbes Mary J. Snyder	Salary 2 month	ng to data	1. 6.	
1	4.6	W G Johnson	Salary Mor 10	ns, to date 96	100	
2		C A Kofoid	Daiary, may, 10	50	100	
3		H C Forbes			88	
		TTO OF T. OF NOSTORING			62	

## List of Warrants—Continued.

0.	Date.	To whom.	For what.	Amount.	
	1896.				
55	May. 30	Chas. A. Hart	Salary, May, 1896	\$62	
901		Adolph Hempel	Salary, May, 1896	60	
57		Miles Newberry		52	
58		Harlen Scott E. H. Sargent & Co	1	10	
59		E. H. Sargent & Co	Vials, corks, etc	2	
60		F. H. Greene	Military scholarship	22	
31		H. R. Porter		22	
32		R. K. Porter		22 22	
3 34		U. W. Leigh	::		
35	4.4	A I Williamson	"		
36		J E Row		99	
37	4 6	C. W. Leigh. J. H. McKee A. J. Williamson J. E. Row J. E. Trogdon		22	
8		In. F. Drower		22	
39		A. C. Hobart	**	22	
70		A. C. Hobart. W. M. Vigal.	**	99	
71	44	Geo. Anderson		22	
$^{12}$	**	Percy A. Stone	Band scholarship	22	
13		A. R. Mann		22	
4		k. m. Dail	Band scholarship	22 22	
75		L. H. Smith		22	
6		Coo W. Bilow	***	22 22	
77 78		Geo. W. Killey	Salamy 2 months to date	150	
(8) 79		Geo. W. Riley S. W. Shattuck N. C. Ricker	Salary, 3 months, to date Services as architect	300	
30		L. P. Breckenridge	Sarvices as architect	125	
31	4.6	C. D. McLane	Services as architect	30	
2	4.6	Mayme Hill	Salary, May, 1896.	16	
$\tilde{33}$	4.4	Mayme Hill	Salary, May, 1896 Postage Expenses	25	
34	**	F. L. Bills		78	
35	**	B. M. Duggar	Expenses	1	
36	::	T. R. Leal	Grading	41	
37		B. M. Duggar T. R. Leal Monmouth Pottery Co	Flower pots	17	
38		J. C. Vaughan J. T. Wolcott	Tarass seed	10	
39		J. T. Wolcott	Typewriting	28	
90		Metropoliton Floatrie Co	Thermometers, glass, etc Electric supplies Gauges Binding	3	
91 92		Crosby St'm Gauge & Valve Co	Ganges	15	
92 93		Ward Brothers	Binding	4	
94				ī	
$9\overline{5}$		T. H. Trevett F. Weber Co Yale & Towne Mfg Co	Magazine Stationery, etc Hardware	22	
96		T. H. Trevett	Hardware	9	
97	::	F. Weber Co	Instruments	. 11	
98		Yale & Towne Mfg Co	Locks, etc	18	
99		{A. E., Foote,	· Quartz	1	
00	4.6	H. C. Forbes	Expenses	$\frac{3}{52}$	
01		T. R. Leal	Driek	15	
01 03	4.6	Urbana Brick Co	Brick	161	
)3 )4	4,4	Maltby & Wallace Co. Champaign Supply Co. R. S. Wilber J. E. Armstrong.	Heating contract, etc	147	
$05 \\ 05$	• • •	R. S. Wilber	Drayage	. 1 78	
06	••	J. E. Armstrong	Expenses	. 20	
07		IN. W. Granam		. 18	
08		D D Monoro	4.4	63	
09	1	G. P. Clinton W. B. Day Henry Eulert J. H. Clough	Salary, May, 1896. Salary, March, April and May, 1896. Salary, April, and May, 1896.	. 83 250	
10	1 ::	G. P. Clinton	Salary, March, April and May, 1896.	250	
11		W. B. Day	Salary, April, and May, 1896	150	
12		T U Clause	Pont	. 100	
13		W B Dow	Rent, ''		
14 15		W. D. Day	.   F4X Denses	. 31	
16 16		Revis & Co	Services to August 1, 1896 Extras on President's House	401	
17	• • •	P. P. Caproni & Bro	Subjects for art department	103	
18		R. Uttenweiler	Salary, April and May, expenses	103	
19		The Gazette	Printing and stationery	330	
$\frac{1}{20}$		Trapp & Hocking Decor. Co	Picture molding, etc.	9	
$\frac{20}{21}$	**	Petty & Sayers	Desk, etc	151	
22	• •	D. Appleton & Co	Books	. 56	
23		Geo. W. Southwick Co	. Wire lacing	. 6	
24	• • •	Diamond Clamp and Flask Co.	Services to August 1, 1896 Extras on President's House Subjects for art department Salary, April and May, expenses Printing and stationery Picture molding, etc. Desk, etc Books Wire lacing Brass castings Twist drill grinder On contract, Observatory Expenses	. 9	
25		Machinist Supply Co	. Twist drill grinder	. 8	
26		Bevis & Co	. On contract, Observatory	. 1,074	
27	i ·	Fred BennettO. C. Horney	Expenses	. 14	

## List of Warrants—Continued.

0.	Date.	To whom.	For what.	Amou
	1896.			
29	June 9	Chas Small	Copying names Expenses.	\$2
30		D. Kinley	Expenses	38
31	June 15	J E Armstrong	HAPCHSCS	14
32	ounc, 10	S A Bullard		44
33	• •	N. W. Graham		18
34	4.6			30
35		Alex. McLean I. S. Raymond. Dr. Julia H. Smith W. S. Chaplin Ricker & White Chas. W. Leigh W. H. Kiler E. H. Renner & Bro Georgia E. Hopper The Illini F. L. Bills	**	8
36		D. J. J. H. C. H.	4.6	48
27		Dr. Julia H. Smith	a	400
		w. S. Chaplin	Commencement oration	100
38	4.4	Ricker & White	Architect's commission	1,111
39		Chas. W. Leigh	Prize in oratorical contest	20
10		W. H. Kiler		30
11		E. H. Renner & Bro	Carriage hire and drayage	2
12		Georgia E. Hopper	Catalogueing books	17
13		The Illini	Copies of Illini	60
14		F. L. Bills	Postage	63
15		Isaac Fielding.		15
6	4.4	F. L. Bills Isaac Fielding C., C., C. & St. L. Ry. Co. Illinois Central R. R. Co. Pacific Express Co. American Express Co. T. R. Leal	Copies of Illin Postage Freightage Expressage Grading Drawings Work in laboratory Expresses	42
17		Illinois Central R R Co		19
8	4.4	Pacific Evarges Co	Fynraceaga	17
19		American Express Co	Trapicasage	17 27 67
i9 50		m D L and	C 4:	27
		Ludio M. Hout	Grading	0,4
1		American Express Co. T. R. Leal. Lydia M. Hart. R. W. Braucher W. G. Johnson H. O. Woodworth. Sarah E. Webster F. F. Frederick H. E. Summers	prawings	11
2		K. W. Braucher	work in laboratory	2
3		W. G. Johnson	Expenses	9
4		H. O. Woodworth	Work in laboratory. Expenses Work in laboratory. Typewriting Expenses.  Drayage Photographs Botanical supplies. Scales Case and stands. Printing Surveys made Music Tuning piano Music Gravel	9
55		Sarah E. Webster	Typewriting	5
6		F. F. Frederick	Expenses	4
7		H. E. Summers	***	9
8		W. R. Howe	Dravage	14
9		John Shields	2.00	-6
Ó	4.4	J M White	Photographs	100
ĭ	4.4	Cembridge Botenie'l Supply Co	Rotanical supplies	100
2	4.4	Enimber to Morgo & Co	Coolea	12
3		C W Dowlean & Com	Care and stands	38
4		O. W. Farker & Soil	Case and stands	30
55	4.6	Champaign County Printing Co	Frinting	10
.0	4.4	w. D. Pence	Surveys made	10
6		Friend & Bernard	Music	5
		Lyon & Potter Co	Tuning piano	18
8		Walter H. Jones	Music	2
9		Martin Bibbus	Gravel	20
0		Chas. T. Wilder	Lantern slides	17 30
1		E. E. Dunlap	Blue prints	30
2		Geo. Allen	Sheep	60
3		Eugene Davenport	Expenses	8
4	• • •	Champaign County Herald	Printing	5
5		P. E. Taintor	Cement floors	415
6	4.6	Edward Bush	Collecting samples of water	1
7		G. L. English & Co.	Minerals	9
8		Academy Nat Science of Phil	Scales Case and stands. Printing Surveys made Music Tuning piano Music Gravel Lantern slides. Blue prints Sheep Expenses Printing Cement floors Collecting samples of water Minerals Proceedings Books	25
9		The Werner Co	Rooks	10
ŏ		Petty & Savers	Cases etc	79
ñ		P. E. Taintor Edward Bush G. L. English & Co Academy Nat. Science of Phil. The Werner Co Petty & Sayers A. S. Draper The Gazette Amelia Powers	Expenses Printing Cement floors Collecting samples of water Minerals Proceedings Books Cases, etc Expenses Printing Stenographic work Expenses Expressage Freight and drayage Printing, etc Window shades Printing	92
$\hat{2}$	4.4	The Gazatta	Dwinting	84
3		Amelia Powers	Cton comerbie work	54
4		Amelia Powers	Stenographic work	1
5	4.6	E. G. Howe H. C. Forbes	Expenses	15
		μ. C. Forbes		(
6	::	American Express CoR. S. Wilber	Expressage	2
7	•••	R. S. Wilber	Freight and drayage	8
8	• •	E. F. Hartman	Printing, etc	25
9		G. T. Meyer Co	Window shades	4
Ю		H. W. Rokker.	Printing	49
1		C. W. Johnson	The Nautilus	1
$\hat{2}$		G. T. Meyer Co. H. W. Rokker. C. W. Johnson Pantagraph P. & S. Co.	Printing, stationery, etc	66
3		B. Zelle	Office rent	
4		Worton Union Welson De	Unice rent	18
)5		Western Union Telegraph Co	Telegrams	16
96 96		G. C. Willis Racine Boat and Mfg. Co	musiin, crash, etc	15
10		nacine Boat and Mfg. Co	Inspection of boat	24
7		B. Zelle A. C. McClurg & Co Payroll of students May, 1896 Payroll of men, May, 1896 A. S. Drapper	Office rent. Telegrams. Muslin, crash, etc. Inspection of boat. Office rent. Books, etc. Labor. Salary for June, 1896	(
98		A. C. McClurg & Co	Books, etc	461
99		Payroll of students May, 1896	Labor	81
Õ		Payroll of men. May. 1896	**	491
)1	June 30	A. S. Draper. T. J. Burrill. S. W. Shattuck. Edward Snyder	Salary for June, 1896	588 225
14		T. J. Burrill	1,202 0 22.77 2000	225
)3		S W Shattuck	**	166
)4		INCOME AND AND AND ADDRESS OF THE PARTY OF T		166

## List of Warrants—Continued.

lo.	Date.	To whom.		For v	vhat.	Amou
205	June 30	N. Clifford Ricker	Salary for	June, 1	896	\$191
206 207		Ira (). Baker		.,,		183
207		S. A. Forbes C. W. Rolfe		4.4		83
08		C. W. Rolfe				175
09		II) Meintosh				150
10		A. N. Talbot A. W. Palmer F. F. Frederick S. W. Parr	• • •			175
11		A. W. Palmer				175
$\tilde{1}\tilde{2}$		F. F. Frederick	٠٠	4.4		158
13		S. W. Parr	• •	4.4		175
14						166
15		C. M. Moss D. K. Dodge L. P. Breckenridge				175
16		D. K. Dodge				166
17	4.4	L. P. Breckenridge				166
18		David Kinley	• •	4.6		187
19		Eugene Davenport		4 4		87
20	6.6	Arnold Tompkins		4.6		150
21	4.4	E. J Townsend	• •			137
22	6.6	H. E. Summers		4 4		137
23	6 6	E B Greene		4.6		133
24	4 4	Katharine Merrill		4 4		. 108
25	4.4	W O Krohn	6-6	4 4		150
26	4.4	James M White	4.6	4 4		125
7	4.4	W H VanDervoort		. 44		137
8		W D Pence		4.4		116
9		A H Daniels		4.6		100
0	4.4	L. P. Breekenridge David[Kinley Eugene Davenport Arnold Tompkins E. J. Townsend H. E. Summers E. B. Greene Katharine Merrill W. O. Krohn James M. White. W. H. VanDervoort W. D. Pence A. H. Daniels H. S. Grindley T. A. Clark				87
1	6.6	H. S. Grindiey T. A. Clark H. S. Piatt B. V. Swenson Geo. D. Fairfield Chas. W. Tooke Percy F. Bicknell Henry H. Everett Walter H. Jones. William Esty		6.6		108
$\bar{2}$		U C Diett	6.6	4 4		88
3		D V Swongen	6.6	4.4		91
4	4 4	Coo D Hoinfold	4.6	4.6		85
5	4.4	Chas W Tooks	4.4			8
6	4.4	Donar F Dialmoll	4.4			129
7	4.4	Uonny U Evonott	6.6	4.6		100
8	4 4	Welter H. Jones		4.4		58
9	4.6	William Fater	4.4			91
0	4.4	William Esty				91
1		C D Hammand				
1		G. D. Hammond		4.4	• • • • • • • • • • • • • • • • • • • •	83 110
2	4.6	William Esty. Fred A. Sager G. D. Hammond C. D. McLane				
3	4.4	G. D. McLane W. E. Sandford J. D. Phillips Frank Smith B. P. Smith A. C. Burnham				80
4	4.4	อี. ก. Luniibs	4.4			85
5	4.4	Frank Smith				120
6	6.6	B. P. Smith				120
7	4.6	A. C. Burnnam				80
8	4.4	Helen E. Butterfield Ella H. Morrison				75 70
9	4.4	Ella H. Morrison			• • • • • • • • • • • • • • • • • • • •	
0	6.6	Adeline W. Rówley Robert A. Wood Oscar Quick Geo. A. Goodenough				50
1		Robert A. Wood				80
2		Oscar Quick				75
3		Geo. A. Goodenough				75
4	4.6	Chas. A. Gunn		4.6		85
5		Chas. A. Gunn A. H. White G. W. McCluer Edward J. Lake Chas. F. Hottes				80
6		[& w. McCluer]				15
7		Edward J. Lake				60
8	• • •	Chas. F. Hottes	::	44		60
Q+						70
0	::	J. G. Mosier R. C. Vial Geo. A Huff Paul Chipman				70
11	• • • • • • • • • • • • • • • • • • • •	K. C. Vial	::			70
2	• • •	Geo. A. Huff				50
3	•••	Paul Chipman		• •		70
41		U. B. Glark				80
5	• • •	A. R. Curtiss				80
61	• • •	Henry Jones				60
7	• •	Burton E. Moore	• • •			80
ν.	"	A. Leroy Almy				37
9	• •	J. H. Wilson	• •			50
n		Edward G. Howe	• •			150
1	• •	N. A. Weston		4 4		90
2		Lillie A. Clendenin		4 4		65
3	• •	Chas. N. Cole		4.6		75
4	••	R. S. Douglass		4 4		75
5	• • •	Wm. L. Steele.	• •	6.6		30
6		Marion Thompson		4.4		40
7	4.4	Robt, K. Porter	4.4	4.4		10
8		C. V. Miller		4 4		60
9		Geo W Graham	4.4	4.4		100
0	44	M T Lindsey				35
1		A. R. Curtiss Henry Jones Burton E. Moore A. Leroy Almy J. H. Wilson Edward G. Howe N. A. Weston Lillie A. Clendenin Chas. N. Cole R. S. Douglass Wm. L. Steele Marion Thompson Robt, K. Porter C, V. Miller Geo, W. Graham M. T. Lindsey I. H. Allen F. J. Foote	4.4	4.6		35
2	4.6	F. J. Foote Lillie Heath	4.6	. 44		75
		x . v . r uule		4.4		40

## List of Warrants—Concluded.

э.	Date.		To whom.		For w	hat.	Amo
	1896.						
34		30	Sue W. Ford	Salary for	June. 1	896	5
55			L. A. Boice				5
36			W. F. Marker				4
37			Albert R. Lee				2
38	4.4		J. Morrow		4 4		3
39			J. Morrow E. W. Justus		4.4		2
0	4.4		Chas. B. Ewalt				
1	6.6		Richard Uttenweiler				5
2			W. R. Hoffman				3
3	-4 4		Chas. WheelerL. G. Lathrop		4 4		3
14	4.4		L. G. Lathrop				3
5	6.6		J. J. Johnson		• • •		3
6			A. S. Golden		4 4		3
7	4.4		Philip Schwehm				2
8			W. B. Dav				7
9			Henry Eulert			*************	5
ŏ			Henry Eulert J. H. Clough T. R. Leal	Rent for J	une, 1896		30
1			T. R. Leal	Grading. e	te		4
$\hat{2}$			Golden & Kimball	Hardware			2
3	4 4		Orr & Lockett Hardware Co			• • • • • • • • • • • • • • • • • • • •	1
4			Champaign Supply Co	Pipe and fi	ttings		ı î
5			7. R. Leal Golden & Kimball Orr & Lockett Hardware Co Champaign Supply Co Maltby & Wallace Co C. A. Besore Henry Trevett Odin Coal Co				4
6			C. A. Besore	Lumber			7
7			Henry Trevett.	Hardware			
8			Odin Coal Co	Coal			
9	4.4		Hubbard & Sons	Lock			
0	4.4		Lawton & Co	Duplicator			
1			E. J. Anthony	Printing			
2			C. W. Spalding	Taxes and	expense	s	1,74
3			A. W. Palmer	Expenses.	· · · · · · · · · · · · · · · · · · ·		1
1			W. L. Pillsbury	Salary, Jui	ie. 1896.		11
5			Bausch & Lomb Optical Co	Apparatus			- 3
3		- 1	W. G. Johnson	Expenses.			
7	4.4	- 1	G. E. McHose	Labor			1
3		į	E. H. Sargent & Co.	Laboratory	supplie	s	î
)		1	Justus Pfetzing	Chairs etc.	Suppire		$\frac{1}{2}$
)		- (	Anchor Line Store	Life prese	rvers		_
	• •	-	B. F. Gump	Bolting clo	th		
2	4.4	- 1	F. L. Bills	Postage			5
3		- 1	Oscar Bedell	Clay and la	bor		_
Ļ		1	J. D. Phillips	Lettering	diplomas	s	6
5		-	Bevis & Co	Contract of	n Observ	atory	2,51
3		1	C. A. Besore Henry Trevett Odin Coal Co Hubbard & Sons Lawton & Co E. J. Anthony C. W. Spalding A. W. Palmer W. L. Pillsbury Bausch & Lomb Optical Co W. G. Johnson G. E. McHose E. H. Sargent & Co Justus Pfetzing Anchor Line Store B. F. Gump F. L. Bills Oscar Bedell J. D. Phillips Bevis & Co Western News Co Ward Bros. Western News Co Ward Bros. Petty & Sayers Ill Soc Eng. and Surveyors Bevis & Co Ceng. and Surveyors Bevis & Co Ceng. and Surveyors Bevis & Co Western News Co Ward Bros. Co Berg. and Surveyors Bevis & Co Co Co Co Co Co Co Co Co Co Co Co Co C	Books			-, 9
1	4.4		Western News Co	Subscripti	on		
3	• •	1	Ward Bros	Binding			9
)	• •	- 1	American Contractor	Advertisin	g		
)		- 1	The Smith-Premier Typew'r Co	Typewrite	ř		5
	" "		James G. Biddle	Candles			-
1			Petty & Sayers	Drawing to	ıbles		11
1			Ill. Soc. Eng. and Surveyors	Advertisin	g		1
L		1	Bevis & Co	Stakes			_
	"	į	Urbana Brick Co	Brick			9
;	"	- 1	Western Bank-note & Engr. Co	Diplomas.			2
1		1	J. T. Cook	Photograp	h		
3	• •	-	Champaign County Printing Co	Binding			2
۱		ļ	W. CTOTOSINIID	Liettering v	xınaows		_
١		- 1	G. E. Stechert	Books			1
		- 1	Rait & Henderson Co	Natural Sc	ience		•
		ı	R. Friendlander & Son	Books			19
	4.6	- 1	E. B. Forbes	Expenses			10
		1	S. A. Forbes	reportations.			7
		- 1	S. A. Forbes C. A. Kufoid.	Expenses	Biologic	al Station	5
		- 1	Mary J. Snyder	• • •	- IOIOEIU	ai Station	1
ź	4 4	- 1	Jas. E. Armstrong	4.4			1
			N W Graham				1
	4 4	- 1	N. W. Graham Alex. McLean				2
	4.4	- [	Julia H. Smith				3

Financial Statement of the University of Illinois [not including State Laboratory of Natural History or the Agricultural Experiment Station] for the ten months ending June 30, 1896.

RECEIPTS, SEPTEMBER 1, 1895—June 30, 1896.		
Balances— United States appropriation	\$15,720 13 148,200 85	
From State Appropriations— Yaccine Laboratory.		<b>\$163</b> , 920 98
Library building. Engineering College, furnishing and fitting. Astronomical Observatory	150,000 00 5,000 00 10,000 00	
From other sources—		168,000 00
Interest Rents Fees of University students Fees of Preparatory students Gross receipts of departments and laboratories Sale of land Miscellaneous	\$11,019 14 2,259 31 17,655 50 3,264 50 4,894 84 12,800 00 576 77	
Overdraft	1,237 08	53,707 14
		\$385,628 12
Expenditures, September 1,1895—June 30,1896.		
Of United States Appropriations— Architectural department	\$29 97	
Salaries for instruction	15,690 16	<b>\$15,720 13</b>
Of State Appropriations— Erection of Engineering Hall	2,813 81 1,704 00	
Laboratory of Vegetable Physiology Library Hall. Fire protection Library College Engineering Furnishing and fitting Engineering Hall Shop practice Chemical Laboratory, improvements	18, 180 14 3, 256 15 1, 478 49	146 020 60
Of other funds— Overdraft. Board expense. Buildings and grounds Fuel and lights Stationery, postage, and printing Preparatory school Gross expenses of departments and laboratories. Incidental Water supply Furniture and fixtures Heating apparatus. President's House. School of Pharmacy. Salaries for instruction and services. Premium and interest on bonds. Miscellaneous	4,538 47 1,501 75 4,572 20 5,695 33 1,130 98 375 00 519 45 431 96 17,980 63 1,429 42 4,014 51	53,707 14
Balance, State Appropriations		\$170, 180 25
Danance, Bluie Appropriations		\$385,628 12
		φυου, 040 14

# Financial Statement of the Illinois State Laboratory of Natural History, for the fiscal year ending June 30, 1896.

RECEIPTS.		
Balance from last report. For field, office, and incidental expenses. For improvement of library. For salaries and assistance For illustration of State Entomologist's report. For publication of bulletins. For investigation of insect disease. For one-half expense of Biological Station of University of Ill.	\$271 01 1,500 00 1,000 00 3,650 00 250 00 500 00 1,500 00 1,500 00	
• EXPENDITURES.		
For field, office, and incidental expenses For improvement of library For salaries and assistance For lapsed to treasury from appropriation for illustration of State Entomologist's report For publication of bulletins For investigation of insect disease For one-half expense of Biological Station of University of Ill Balance		\$1,500 00 1,000 00 3,631 90 250 00 1,500 00 1,500 00 289 00
	\$10, 171 01	\$10,171 0

# Financial Statement of the Agricultural Experiment Station, University of Illinois, for the year ending June 30, 1896.

RECEIPTS.		
Appropriated by Congress	\$204 49 140 00	\$15,000 0
From Station farm, etc	2,904 53	3,249 0
EXPENDITURES.		\$18,249 0
Board expense Books and publication Botanical apparatus Buildings and repairs Buildings and repairs Builetins Chemical apparatus and supplies Fuel and lights Incidentals Meteorological apparatus Meteorological apparatus Printing, stationery, and postage Salaries Seeds and trees Tools and supplies Wages Special expenditures on wood durability, and field experiments on the peculiar clay soil found in a part of Southern Illinois.	\$91 06 248 71 80 33 48 25 1, 307 60 642 53 211 82 128 32 9 95 119 45 6, 531 66 858 47 4, 399 14	
Farm stock	224 15 15 00	15,000 0
Other funds	\$3,082 74 166 28	\$3,249 (
		\$18,249 (

# BIENNIAL REPORT

OF THE

# ILLINOIS STATE LABORATORY

OF

# NATURAL HISTORY

To the Trustees of the University of Illinois.

GENTLEMEN: The operations of the State Laboratory of Natural History during the past two years have been carried successfully forward along the customary lines of investigation, with a notable expansion, under the stimulus of appropriations made by the last legislature, in the study of the contagious diseases of insects and in the work of the Illinois River Biological Experiment Station.

The insect-disease work took during the summer of 1895 the direction of an investigation of the causes of our general failure in field experiments with white muscardine of the chinch-bug, together with an investigation of a newly discovered disease of the common squash-bug. Among additional subjects studied, was a destructive disease of grasshoppers in the West, material for which was obtained from a correspondent in Colorado, and the so-called white plague of the common cabbage worm.

The general result of our studies of the white muscardine has been to discredit still further the practical utility of that disease for field operations on a large scale. In consequence of this outcome very few distributions of infected material have been made from my office during 1896, and those only in response to direct requests from farmers. The material as sent out has been accompanied, as in all my previous sendings, with explicit warning to the effect that no definite reliance was to be placed on it, but that its use was to be regarded as an experiment only. It now seems quite clear, as the general result of all our investigations of this complicated subject, that the circumstances under which artificial field infection of chinch-bugs with the whitemuscardine fungus will take practical effect in a way to produce any important benefit are at least so rare and unusual that the whole subject must at present be assigned to the limbo of unverified theories.

A more promising result was obtained from an investigation of a bacterial disease of the common squash-bug, which proved to be highly contagious and

298

promptly fatal under laboratory conditions closely similar to those obtaining in the field. A laboratory study of this disease, and of the organism characterizing it, was completed by my Assistant in this department, Mr. B. M. Duggar, and his paper on the subject is now going through the press.

During the present season particular attention has been given to a new disease of the army worm, which had the effect to destroy the greater part of the individuals composing an outbreak of this species early in the present year; and to a critical study of occurrences connected with a general disappearance of the chinch-bug, or the marked diminution of its numbers, in regions where it was abundant last year, and where it made a threatening beginning this spring. Careful and systematic studies have been made to determine, so far as practicable, the precise causes of this diminution in numbers in the field, and particularly to ascertain whether contagious diseases, bacterial or other, not hitherto detected were now discoverable. have been thus far either negative or incomplete, the death of chinch-bugs being due, so far as observed and determined, either to the direct effect of the weather of the season or to one or both of the two contagious diseases of that insect thus far known to us. Some of our experiments are, however, still incomplete, and certain clues in my possession, when followed out, may possibly lead to other conclusions.

The work of the Biological Experiment Station has made very satisfactory progress under somewhat embarrassing conditions, due especially to insufficiency of funds for the continuous maintenance of our work on the scale originally planned. The equipment fund has all been expended in the building and furnishing of a laboratory boat as a field headquarters and students' laboratory; in the purchase of a launch and in the substitution of more powerful machinery for that originally furnished with it; and in the purchase or manufacture of various pieces of apparatus required for our peculiar work.

Owing to the practical exhaustion of funds, the laboratory boat, established for the summer on Quiver Lake, was brought down to Havana September 1, 1896, and placed, together with the launch, in charge of our general Station assistant, Mr. Newberry, who takes the responsibility of the care and protection of all our Station property during the fall and winter at a salary of \$20 a month. The work of the Station is not, however, completely suspended, the Superintendent, Dr. Kofoid, visiting Havana once a fortnight for the usual systematic round of observations, collections, and other operations, at the various substations in our field.

The Station bills are all paid except a few recently received, in process of payment now and there is a comfortable balance in the appropriations for the current year, beyond those covered by expenditures to which we are committed. In accordance with your authorization at your last meeting I have discontinued Mr. Adolph Hempel's services, simply because it was impossible to continue his salary with our funds, and have engaged Dr. Kofoid as Station Superintendent, at his former salary (\$1,200 a year), to June 30, 1897.

Full particulars concerning the scope of our operations, the amount and character of the work done, the results now ready for report, the papers

completed, and those published or in press, I ask leave to file as a special supplementary report, for general circulation. I should be glad to have your order for a separate print of a thousand copies of this report, with illustrations, to be separately bound in pamphlet form at the expense of the State Laboratory of Natural History. I will only say now, in general, that the conclusions already reached, especially in Dr. Kofoid's department of so-called plankton work, cannot fail to command the close attention and strong interest of scientific men, the world over, engaged in investigations of this class.

The summer opening of the Station to investigating and other independent students resulted in the acceptance of our invitation by twenty-two persons, five of whom were finally prevented from attending. Our accommodations were limited to fifteen workers additional to the Station force, but as the seventeen who arrived did not all present themselves at once, we were able to provide satisfactorily for them. These seventeen visitants represented the states of Ohio, Michigan, Illinois, Iowa, Nebraska, and Utah. members of college or university faculties; five were teachers of biology in high schools or academies; two were city school superintendents; and two were college students in advanced courses. The colleges and universities represented by them were the Weslevan University, at Bloomington, Ill.; the Nebraska Wesleyan University; Carthage College, at Carthage, Ill.; Knox College, at Galesburg; Lincoln University, at Lincoln; Eureka College, at Eureka; Cornell College, at Mt. Vernon, Ia.; Drake University, at Des Moines, Ia.; the University of Utah, Salt Lake City; and the University of Illinois. The high schools and academies sending instructors to the Station were University School, Cleveland, O.; Detroit High School, Detroit, Mich.; the Public High School at Dwight, Ill., and the high schools at Havana, Ill., and Marshalltown, Ia.

They were a competent and energetic group of students; a credit to the Station, and in some respects an aid rather than a hindrance to our work. Two of them, Professor Kelly, of Cornell College, Iowa, and Mr. Beardslee, of University School, Cleveland, Ohio, are preparing papers presenting the scientific results of their Station investigations, which they have kindly placed at my disposal for publication in the State Laboratory Bulletin as a part of the series of papers growing out of the Station work. Our summer visitants were, I think without exception, pronounced in their appreciation of the opportunity offered them, and emphatic in their expressions of surprise at the attractiveness of the situation and the richness of the biological field in which the Station is established. Several of them have already filed requests for admission next year.

The success of the "Summer Opening," together with several conversations which I have had with teachers of biology, public school superintendents, and the like, have convinced me that it is incumbent upon us, if in any way practicable, to extend this offering of an opportunity for midsummer work to public school teachers of biology, and I have taken some preliminary steps to that end. As this is purely instructional work, however, it does not fall within the province of the State Laboratory of Natural History, but belongs to the University relationship, and need not be discussed in this report.

The general entomological work of the State Laboratory has been mainly economic in purpose, and as it will be reported by me to the Governor, I do not include it here.

Respectfully submitted.

S. A. Forbes.

Director of Laboratory.

## SPECIAL REPORT

OF THE

# BIOLOGICAL EXPERIMENT STATION.

To the Trustees of the University of Illinois.

Gentlemen: The Biological Experiment Station of the University of Illinois was founded mainly to represent the University and the state in an important field of scientific investigation; to do its part towards making the people of the state at large acquainted with the state itself; to stimulate and to aid the educational activities of the public schools in respect to the biological subjects and to reform, in some respects, their methods; and to put a foundation of precise and comprehensive knowledge of the system of aquatic life under the practical art of the fish-culturist, especially as this is represented by the operations of the Fish Commissions of our interior states.

It hardly need be said that an educational institution may not properly assume and keep the name of university which is content to depend wholly on the abilities and activities of others for the store of knowledge which it distributes to its students, contributing nothing on its own part to the common stock. Such a condition of complete dependence marks it as at best a secondary school. It is also beneath the dignity of a sovereign state to depend wholly on others for the fundamental elements of its welfare, making no effort to render any return in kind. On the other hand, a state university owes its first duty to the people of its own state, and should investigate by preference subjects which concern their welfare. Even though it may do valuable work in remoter fields, it neglects its own sphere of essential and immediate usefulness if it lets its own territory remain unexplored, and its own special problems lie without solution.

The teaching of biology has been for many years required in the public schools of Illinois, but it is a commonplace complaint that this work is far less valuable than it should be, and that its progress is grievously hampered because most of our teachers of science have a very imperfect acquaintance with the subject matter which should be taught and with the most fruitful methods of biological instruction. The University of Illinois, through its

Biological Station, can do a great service to education at this juncture by opening up our local natural history to teachers of elementary biology, and by making them acquainted in a thoroughly practical way with the most useful special methods in this field. We seem just now, indeed, in admirable position to lead the way along a new line of progress by helping to bring teacher and pupil, under favorable conditions, into the presence of living nature out of doors, adding to the methods of the class room and the laboratory of biology those of observation, study, and instruction in the field.\*

The art of the fish-culturist is to our waters what the art of agriculture is to our tillable lands. Each was in the beginning purely empirical, resting on a small store of common knowledge gained by the crude experience of the uneducated and the untrained. Agriculture has now been largely placed on a scientific foundation, and vigorous efforts are making all over the civilized world to extend, to deepen, and to render more exact in every direction our acquaintance with the sciences which underlie the practice of this oldest of the arts. The development of fish-culture has, however, lingered far behind that of its companion subject, compared with which it is indeed still in the stage of barbarism. We treat the product of our natural waters with a degree of intelligence and skill scarcely above that which the Indian exhibited in his rude attemps at agriculture before the time of Columbus. Our Biological Station was founded in part with the hope of helping to do for fish-culture what our forty or more agricultural experiment stations are now doing for the agriculture of the United States.

To accomplish these various ends, it was necessary that a subject should be chosen and that a location should be found offering a suitable field for scientific research of a kind to reward the skilled investigator with results of scientific value, and that these results should also interest a larger public than that which is prepared to appreciate and to utilize purely technical work. It was essential that this location should be readily accessible from the University. and that it should be attractive, comfortable, and convenient as a center of operations for visiting investigators, and for general and elementary students of our field biology. The purposed relation to fish-culture of course required that it should be on or near some lake or stream, or, better still, on some system of waters including both lakes and streams in large variety and in close proximity. After a careful study of the University environment, I selected in 1894 the Illinois River and its dependent waters as our general field, and the vicinity of Havana, in Mason county, as the principal seat of our operations. Our two years' experience here has served only to confirm our first impression, that a very suitable and, indeed, highly fortunate selection had been made.

<sup>\*</sup>A genuine field-work summer school would be as far ahead of laboratory work for teachers—the class who are wrestling with nature study in the grades—as the laboratory is ahead of the old-fashioned text-book. It would be a distinct advance upon anything ever attempted, so far as I know. in this country.—WILBUR S. JACKMAN.

#### LOCATION AND FIELD OF OPERATIONS.

The Illinois River near Havana has a maximum width of about five hundred feet at the lowest stage of water, and a maximum depth at that stage of approximately ten feet. For a distance of about five miles, at the town and above and below, it runs along the foot of a steep sandy bank or bluff, ranging from forty to eighty feet in height, itself the edge of an extensive deposit of glacial sand, extending with little interruption some seventy miles along the eastern side of the river, and perhaps a dozen or fifteen miles in width from east to west. The bottom of this bed of sand is not anywhere exposed near Havana, and has not been reached, so far as I have learned, by any borings in that vicinity. From the foot of the bluff, at or near the water's edge, is a more or less general oozing of clear cold water sometimes flowing forth in springs of considerable size, and sometimes forming small marshy tracts between the river and the bluff.

The opposite or western bank of the river here is of black earth, the border of an alluvial bottom three or four miles wide, in which are several ponds and lakes, and through which Spoon River winds its way, entering the Illinois nearly opposite the town. At the upper end of this five-mile stretch the river leaves the sandy bluff, having thence alluvial banks for some distance northward. The remnant of an old river bed continues upward, however, from this point along the bluff in the form of a narrow bay one and a half miles in length, the so-called Quiver Lake, open to the river below, and receiving Quiver Creek at its upper end. This creek, largely formed by the drainage of a sandy tract to the east and north, empties into the broad and shallow head of the lake through a muddy and weedy flat. Quiver Lake, like the river below, has a sandy bank and margin on the east, and a mud bank on The natural drainage of the sand escapes in large quantities along the eastern side of this lake, keeping the shore constantly saturated with cold water, to a greater or less width according to the level of the lake, and modifying greatly, when the river is low, the character of the waters of the lake itself. A broad bay of this Quiver Lake extending to the west from near its middle, forms what is known as Dogfish Lake, with shores of black alluvial earth all around.

The other waters of the vicinity included in the system of Station operations are Thompson's Lake, a shallow body of water about five miles long by one mile wide, lying in the bottoms near the western bluff; Flag Lake, a shallow muddy pond or, more correctly, a marsh, about three miles in length, largely overgrown in summer with the club-rush, water-lily, and arrowleaf; and Phelps Lake, a small pond of dead water, three fourths of a mile in length, with almost no vegetation, in the midst of a densely wooded bottom-land.

The field headquarters of the Station party, the summer location of the laboratory boat, was at the foot of Quiver Lake, against the sandy eastern bank. The top of the bluff is here wooded at the edge and for a variable distance back with oak and hickory and ash and other common hard-wood upland trees. Cottonwoods, walnuts, locusts, coffee-trees, elms, and pecans of

a considerable size, extending in a rather ragged line, offer a very welcome shade at the foot of the bluff at about high-water mark. An abundant supply of very pure and delightfully cool water is easily reached everywhere, either in running springs or by driving down an iron pipe for a few feet in the sand and screwing on a common cistern pump.

The occasional narrow, swampy flats along the eastern bank of Quiver Lake and beside the river between that lake and the town, are usually tangled thickets of underbrush and swamp-land trees, which at certain seasons of the year are gay with multitudes of flowers and vocal with the songs of a great variety of birds. The general aspect of the flora of the sandy bluffs is quite unusual for Illinois, many plants occurring there abundantly which are rarely seen in ordinary situations. The bottom-lands become covered in late summer and autumn with an immense growth of composite plants, setting the intervals and recesses of the forest ablaze with yellows, purples, and reds, and loading the air with the heavy odor of the upland Eupatorium.

This forest itself, beginning at the water's edge with a billowy belt of pale green willows, is an untamed tract of primitive wilderness, differing from that through which the Indian hunted his prev only by the absence of the small percentage of its growth which had a commercial value. Subject to periodical overflow, it has not even been fenced. Elms and pecans and sycamores tower overhead or slowly moulder where they fall, and vines and creepers clamber over the underbrush in a growth like that of a semi-tropical jungle. The shallow lakes and swamps are glorious in their season with the American lotus and the white water-lily, the former sometimes growing in tracts of a hundred acres or more, over which its gigantic peltate leaves, borne on tall slender stems, flash in the sun as they bend to the summer wind. In July and August many of the lakes are nearly filled with submerged vegetation, and in the latter part of the season a film of the duckweeds forms along the shore and floats in large patches down the sluggish current of the stream. Water-fowl abound at the period of their migrations, and fish lie on the shallows, basking in the summer sun in numbers such that dozens may be seen at a time as one floats along in a boat.

The microscopic life of the water is equally varied and abundant, a measurement of the quantity present in a cubic meter of water showing that with a single reported exception\* it is at certain times far in excess of the amount recorded for any other situation in the world. The variety of species present is equally remarkable. The list of those occurring in a single cubic meter of water from the river at Havana in the month of July contains about twice as many as any of the lists of those found at the same time in the lakes of northern Germany or in our own Great Lakes.

The bluff beyond the bottoms to the west is higher than that on the east, and usually of a very different character. Strata of carboniferous rock, sometimes containing veins of coal, outcrop locally near their base, while the

<sup>\*</sup>Dobersdorfer See, Holstein.

<sup>-20</sup> U. I.

higher slopes are formed of yellowish clays, ditched and gullied by the rain, with occasional small streams flowing through gorge-like valleys from the level uplands of the country farther west.

The description thus far given applies to the lower stages of water only. When the river is at flood the entire bottom-land from bluff to bluff is often wholly under water, lakes, streams, and marshes being then confounded in one unbroken sheet from three to five or six miles across. As the river level varies some eighteen feet between high and low water mark, it may reach in its deepest part a depth of nearly thirty feet. These periods of inundation are very commonly two in a year, one beginning in late winter or spring with the melting of the snows, and the other coming most frequently in June or July, as a consequence of the early summer rains. The rise at either or both these periods is occasionally so small that no very marked effect on the biology of the river is produced. It was, in fact, fortunate for our operations that the first two years of our occupancy of the Station were marked by this comparative uniformity in the river level. Observations and collections made at this time have given us a fairly steady biological base line, by comparison with which variations in other years may be detected, due to extensive overflow and subsequent recession of the waters.

The plan and purpose of our work was such as to make it necessary that we should choose a number of regular stations—called substations in our reports—at which collections should be made and observations placed on record at regular periods for the entire year, and one year after another. These substations, thirteen in number, were chosen to represent the greatest variety of biological situations which the territory within our reach would permit. They have been sufficiently characterized in the introductory part to a report by the Station Entomologist, Mr. C. A. Hart, on the entomology of the Illinois river and adjacent waters, published in the Bulletin of the State Laboratory of Natural History in 1895. It may be said in general that the substations chosen represent the springy bank and sandy margin of Quiver Lake and of the river itself in both swift and sluggish water, the opposite mud bank of river and lake, shallow mud flats overgrown with water weeds, the bed of river and lake in the deepest water occurring, and three forms of bottom-land lakes, together with a fourth occasionally visited. Thompson's Lake gives us a permanent body of water of some little depth, always opening into the river, even at its lowest stage, but contrasting with Quiver Lake in the fact that this opening is long and tortuous, while in the latter it is half as broad as the lake itself. Matanzas Lake, on the eastern side of the river but below the town, is substantially intermediate in character between these two. Like Quiver Lake, it has a high, wooded, sandy eastern shore and low forest-covered mud banks on the west, with an inlet at the head, which is, however, smaller than Quiver Creek. The flow of spring water from the sand is much more abundant. Like Thompson's Lake, its outlet is narrow, but it is very short. This lake commonly has more vegetation than Thompson's and less than In Flag Lake we have little more than a fairly permanent Quiver Lake. swamp, subject, indeed, in extraordinary years to be dried out completely, but overflowed again from the river at every slight rise. Phelps Lake, on the other hand, serves as an example of the highly variable conditions prevailing in a pool filled up at every general overflow, but isolated on the retreat of the waters, and drying out entirely in the very driest years.

#### ESSENTIAL OBJECTS.

It is the general, comprehensive object of our Biological Station to study the forms of life, both animal and vegetable, in all their stages, of a great river system, as represented in carefully selected typical localities. This study must include their distinguishing characters; their classification and variations; their local and general distribution and abundance; their behavior, characteristics, and life histories; their mutual relationships and interactions as living associates; and the interactions likewise between them and the inanimate forms of matter and of energy in the midst of which they live. We are, in short, to do what is possible to us to unravel and to elucidate in general and in detail the system of aquatic life in a considerable district of interior North America.

So vast a subject must of course be intelligently divided and studied part by part, in some systematic order, to avoid a dissipation of effort and to insure the speedy attainment of some definite and tangible results. obvious divisions are the systematic, the biographical, and the ecological; and this is the order, broadly speaking, in which the general investigation must be carried on. Both systematic and biographical biology have a high independent value in our scheme, but both are with us chiefly means to the remoter end of a study of the interactions of associate aquatic organisms, and of their relations to nature at large. It is thus the ecological idea which is to lead in the organization and development of our work. A systematic survey of the biological assemblage is a necessary preliminary step, and the tracing of life histories and the recognition and description of immature stages is a scarcely less essential prerequisite; for without the knowledge which these studies are to give us, it would be obviously impossible to make any comprehensive study of variations, distribution, and ecological relationships.

The ecology of the Illinois River is greatly complicated, and the difficulty of its study intensified, by certain highly and irregularly variable elements of the environment. Apart from those secular and more or less inconstant features of climate and weather which must be taken into account wherever such studies are prosecuted, we often have here the evidently very large and highly intricate reactions produced by periodic variations in the river level, and the consequent enormous extensions and corresponding diminutions of the mass of the waters and of the area covered by them. Fortunately for the possibilities of success in so difficult a field, progress in it does not require that the entire system of life should be studied as a unit at first. Special problems may be selected, of a kind to be brought easily within the available time and the capacities of the individual investigator, which, being worked out one by one, may be later brought together as contributions to a

solution of the larger problems involved. While it is true, for example, that nothing in or about the waters studied which in any notable way affects any of the great groups of the system can be wholly a matter of indifference to the scientific student of fish-culture, the interests of every species being more or less intimately bound up with the interests of every other, yet provisional conclusions, at least, with regard to this, that, or the other kind of fish, or with regard to fishes at large, may be reached which will have considerable practical value, long before the entire system of interactions and relationships is fully understood. It is not necessary that we should know the food of every species of fish in the locality before we can generalize profitably the food relations of any one, although inferences from such provisional generalizations must always be held subject to modification as our knowledge of related matters grows. A similar remark may be made with respect to such purely scientific matters as the limits and causes of variation, a very useful knowledge of which may be acquired without a full and final theory of variation in general.

In actual practice it has been found that our work may best be opened up by comprehensive studies of the classification such as will give us a critical knowledge of all the forms occurring in our field, and access to the published literature of each; and by parallel or slightly subsequent studies of their habits, life histories, and local distribution and abundance.

#### GENERAL METHODS.

The principal methods of the Biological Station are those of field and laboratory observation and record, collection, preservation, qualitative and quantitative determination, description, illustration, generalization, experiment, induction, and report.

By close and persevering observation in the field, we learn much of the actions, habits, and haunts of animals, of the special conditions under which they live, and of many similar matters; which cannot possibly be learned in any other way; and not a little of this knowledge is necessary to an intelligent treatment of both general and special problems in biology.

The acute, persevering, sympathetic observer of living nature—the "old-fashioned naturalist," in short—is best to be understood as a "synthetic type," all of whose best qualities should be not only preserved but intensified among his variously differentiated progeny. If I may generalize my own experience, I must say that it is extraordinarily difficult at the present time to find for this work the trained and intelligent naturalist, habituated to the methods of the close observer, whose eye nothing escapes, but whose mind rapidly and skilfully sifts the miscellaneous offerings of his senses, holding the significant and suggestive, and letting slip the trivial and the unessential. There seem to be among our younger college men ten practical embryologists to one good observer. It is, in fact, the biological station, wisely and liberally managed, which is to restore to us what was best in the naturalist of the old school united to what is best in the laboratory student of the new.

On the other hand, the variety of uses which must now be made of preserved material in the course of our Station studies necessitates the frequent employment of the nicest methods of the histological laboratory, and a complete acquaintance, at least, with laboratory methods in general.

Definite and precise comparisons of different aquatic localities with respect to their biology have first been made possible in some considerable measure by the comparatively recent introduction of more or less exact quantitative methods for the collection and determination of the biological contents of the water. These, commonly known as plankton methods, enable us also to study the biological history of any locality to which they are fully applicable, by making it possible to bring into close comparison the organic contents of the water from day to day, from season to season, and from year to year. Unfortunately, these methods are not as yet capable of application to all aquatic forms in all situations, but have been used successfully only for the smaller plant and animal forms of the clear open water.

By using always identical apparatus in a perfectly uniform manner for the accumulation of microscopic and semi-microscopic objects in such waters and preserving the product by identical methods, it is possible to make and keep collections which may serve as a means to a precise comparison of the mass of organic life in the waters studied, or of the number of individuals representing any selected species.

In our own Station work these plankton operations have been carried forward from the beginning at all the substations where open water could be found in condition to permit the hauling of our plankton net, or, later, the use of the plankton pump. A large number of quantitative determinations of collections so made have been worked out in a way to give the actual quantity of organic life in a cubic meter of water for each situation studied by this method, and enumerations of various forms have likewise been made under the microscope by methods such as to give us reliable data for a comparison of the various waters with reference to the number of such forms in a cubic meter of water. Approximately quantitative collections have likewise been made, wherever possible, in situations which do not permit the use of this plankton apparatus, but with results far less reliable, of course, because based mainly on personal estimates, and made by the use of less precise and exhaustive methods.

It seems not impossible that quantitative and numerical plankton work will be found to have a certain value as a ground of inference concerning the biological contents of water which cannot be searched by the plankton apparatus. In other words, definite, if general, relationships may be found to exist between the amount and composition of the plankton in the free and open water of a given lake or stream at any given time and the mass and variety of living forms contained in the marginal shallows or imbedded in the mud of the bottom.

Considerable modifications have been made at the Station since it opened, in the details of the quantitative method, often forced upon us by the peculiarities of the location and the special conditions under which our work was

carried on, and interesting improvements in special apparatus have resulted from the effort to overcome our peculiar difficulties. A paper on our plankton methods and apparatus is now in course of preparation by the Superintendent of the Station, Dr. C. A. Kofoid, to whom this department of the work has been assigned.

As our work progresses, and special problems are taken up for separate and continuous investigation, the experimental method will necessarily come prominently into use. The object of biological experimentation is the interpretation of nature, and, like all intelligent experimental work, it must be suggested and guided by observation and hypothesis. With us it is the ecological field in which experiment is especially called for. Given certain phenomena of local distribution, of relative abundance, of association, of habit, of variation, and the like, whose causes it is desirable to ascertain, it is incumbent upon us, by a critical and exhaustive study of the environment, to find the materials for rational hypotheses as to such causes, and to test such hypotheses by experimental procedure. It is thus always the field observation, or the laboratory observation made under conditions which involve the least practicable departure from natural conditions actually existing, which must precede and suggest the experiment. The method and the general object of this work resemble thus more closely, on the whole, those of the agricultural experiment station—which is, indeed, a biological station under another name and devoted to a special endthan those of the laboratory of experimental physiology; and it is because ours is to be in the end and in its final objects a station for the solution, by experimental methods, of both special and general problems in the field of ecology that it was christened by its official board of control the Biological Experiment Station of the University.

#### EQUIPMENT.

The main features of our present equipment are the laboratory boat and its contents, the steam launch, a number of skiffs, and the apparatus and belongings of the Illinois State Laboratory of Natural History and of the biological departments of the University of Illinois, both of which are placed, without restriction, at the service of the Station force.

#### THE FLOATING LABORATORY.

Our ultimate objects do not limit us to any single field, but will eventually compel us to transfer at least a part of our operations to other points for purposes of comparison and contrast. Indeed, the Illinois River work is but a convenient point of departure for an investigation of the whole Mississippi River system. These facts have made necessary for us a movable construction of considerable size, carefully designed and thoroughly equipped for our work. Furthermore, the great changes of water level and the enormous expansion of the area covered at flood in the region over which we operate, would make a location on shore oftentimes extremely inconvenient as working quarters for our Station force. There is a great advantage also in a position

in the very midst of our field, where contact with the objects of our interest must be almost continuous. It seemed, consequently, clear that a house-boat, or so-called cabin-boat, of special construction, furnished as a biological laboratory but with an equipment for minor experiments also, would meet our needs far more precisely than a building on shore.

This laboratory boat, launched in April, 1896, was built at Havana from plans drawn up under my direction by Messrs. Gunn and McLane of the architectural department of the University. A strongly built hull of Washington fir supports a deck 20x60 ft., upon which is a cabin 16x56 ft. In building the hull extraordinary pains were taken to obtain a steady construction. A three-inch solid bulkhead was run lengthwise through the middle, and two keelsons divide the space between this central bulkhead and the gunwales. Lateral strength was given by four series of diagonal braces, set as shown in Figure of cross section of cabin and placed every two feet, and by three hog-chains run from the bottom of each gunwale over the middle bulkhead. As a consequence, the floor of the boat proved to be remarkably steady, no tremor being noticeable in the use of the higher powers of the microscope on minute objects suspended in fluids. The interior of the hull is ventilated by means of four hatchways with movable covers, two at each end of the deck.

The cabin has six large windows on each side, made freely movable for ventilation, and also transom ventilators above the windows. The roof is penetrated by four large ventilators, and walls and roof are made double, as a protection against the heat, by ceiling with Georgia pine. By virtue of these arrangements, the laboratory rooms were remarkably comfortable during even the hottest weather of the year.

The interior of the cabin is divided into four rooms: an office and library at one end 11 feet and 6 inches by 16 feet, occupied by the Station staff; a main laboratory 29 by 16 feet, primarily for visiting students and for the experimental equipment; a kitchen 8 feet and 8 inches by 12 feet, with gasoline stove and other cook's equipment, in which mid-day meals can be prepared for the Station force; and a small closet or store-room adjacent. The main laboratory is provided with tables, two to each window, and with shelving against the walls for books, note-boxes, specimens, etc., while down the center of the room is a sink table 3x22 ft., covered with zinc and furnished with a water supply for numerous small aquaria. A long overhead zinc-lined tank is supplied by iron piping, with a screw end outside the boat to which the discharge pipe of a hand force-pump can be readily attached. Stopcocks and glass and rubber tubing make the necessary connections with the tanks and jars used for aquarium work, the overflow being carried off by drainage pipes which empty outside the hull. The space beneath the central table is enclosed with doors and provided with shelves for general storage.

The boat has no motive power, but is intended to be towed from place to place as occasion requires. Our steam launch "Illini," proved, indeed, to have sufficient power to transport this boat under ordinary circumstances.

This launch, built by the Racine Boat Manufacturing Company, of Racine, Wisconsin, is 25 feet long by 6-foot beam, and is licensed to carry seventeen The machinery furnished with it was replaced during the summer by a compound engine, of four and a half horse-power, with keel condenser. Both boiler and engine were designed by Assistant Professor VanDervoort, of the University department of mechanical engineering, and the engine and the speed propeller were made under his direction at the University shops. The launch was not designed especially for speed, the distances to be covered. in our work being usually very short. It gives us, however, a rate of about six miles per hour. It is entirely safe in all weathers to which it may be exposed in our situation—a point of special importance to us, since our regular routine of field work must be carried out without reference to storm or tem-Four skiffs of various sizes and a portable canvas boat complete perature. the aquatic equipment.

The more peculiar items of the field and laboratory apparatus are the plankton equipment, the breeding-cages for aquatic insects, and a specially constructed centrifugal machine for the rapid precipitation and condensation, in graduated tubes, of the product of quantitative collections. This last was a modification of the centrifuge used by physicians, the tubes and tube carriers being the same, but the mechanism being specially designed for us by Professor VanDervoort, and made under his supervision at the University shops. The plankton apparatus first used consisted of a peculiar conical net (Apstein pattern) made of No. 20 silk bolting cloth. This was hauled through the water obliquely from bottom to top, a distance of thirty meters, at a perfectly uniform rate, the movement being timed by seconds counted with watch in hand. The net was suspended to a carrier and drawn along a tightly stretched line, to which it was hung by means of pulleys, the various particulars of the arrangement being devised by Assistant Professor Smith, in charge of the plankton apparatus and the Station itself during the first year. In May, 1896, this plankton net was superseded by a hand force-pump, selected after considerable investigation of various styles, of a size and weight to be conveniently managed in a large skiff. The feed pipe of this pump is long enough to reach the bottom in our deepest water, and the discharge pipe delivers into a straining net suspended in the water from a float to secure the contents of a vertical section. The further end of the feed pipe is sunk to the bottom and slowly raised to the surface, the pump being meanwhile worked by an assistant in a perfectly regular manner. Minor features of the apparatus and items of the procedure will be described in a special paper on our Station methods, now in course of preparation by the Station Superintendent.

For keeping insect larvæ under perfectly natural conditions, but exposed to continual observation, small cubical boxes were used, with two sides and the bottom of wood and the other two sides of wire gauze, and a cover of glass set in a wooden frame which overhung the top of the cage, fitting closely to the sides. These cages were placed around a large float in the lake or river in such a manner as to be kept about half full of water, which, of course had free access through the wire gauze sides.

The laboratory boat was amply stocked with compound and dissecting microscopes, and a supply of chemicals, glassware, and apparatus for [the preservation of specimens and for microscopical technology. It was equipped for fifteen workers in addition to the Station staff. The excellent working library of the State Laboratory of Natural History was freely drawn upon for everything needed in aid of the special work in progress at the time, and the library appropriation of the Laboratory was also used as necessary to supply desiderata. This aquatic establishment was found in all respects so satisfactory and convenient, that rented rooms in the town, similarly furnished, were presently abandoned by the entire party, all preferring to work upon the boat.

#### ORGANIZATION AND STAFF.

The staff of the Biological Station is composed of the Director and certain Assistants of the State Laboratory of Natural History, all of whom are appointed by the Trustees of the University of Illinois, and all except the Director upon his nomination. This officer is responsible for the organization, equipment, and general and financial administration of the Station, for the plan and objects of its operations, for the establishment and assignment of departments, for the main features of the papers and reports, and for the editorial supervision of the Station publications. The Superintendent, who is appointed as such officer, although borne upon the list of the assistants of the State Laboratory, has immediate charge of the Station force, and is responsible to the Director for the execution of its plan of operations. He is allowed a large latitude with regard to details, and, in the absence of the Director, all the workers at the Station are under his immediate orders.

From the establishment of the Station in April, 1894, until June 30, 1895, Mr. Frank Smith, at first Instructor and later Assistant Professor in the University department of zoölogy, served as Superintendent, devoting his time continuously to Station work until January 1, 1895. He had special personal charge of the quantitative collections—the so-called plankton work—during this period. He also began during the summer of 1894, a systematic study of the oligochæte worms of the Station and its vicinity, which he has continued to the present time, giving to this subject his vacations entire, and such time as is left him after the performance of his duties in his University department. He was assisted in his work from May to September, 1894, inclusive, by Mrs. Dora Smith, who served the Station as its microscopical technologist during that period. Begining with July 1, 1895, the Station has been in charge of Dr. C. A. Kofoid, as Superintendent, with the planktology of the situation as his special department. He also acted as superintendent of construction during the building of the laboratory boat. His entire time has been given to the Station work, except for the teaching of one University class for one term, undertaken as an exchange of services with the zoölogical department.

The entomological work has been, since the commencement, in charge of Mr. C. A. Hart, Systematic Entomologist of the State Laboratory, assisted

for two of the summer months of 1895 by Mr. Ernest B. Forbes. Mr. Hart's share in the regular routine of Station operations has been the making of the inshore and longshore collections at the various substations. In addition to his studies of the habits and life histories of aquatic insects, he has listed the Mollusca of the collections from the beginning. From September 8, 1894, to July 1, 1895, he was the sole continuous occupant of the Station, being responsible during that period for the regular field work, carried on with the assistance of visiting parties from the State Laboratory at Urbana.

Mr. Adolph Hempel was engaged without interruption upon a study of the Protozoa and Rotifera of the Station from its opening to June 1, 1896. At this time the condition of his eyes forbade further use of the microscope, and he was placed in charge of the Station launch as its licensed engineer. He occupied the Station alone during the winter of 1895-96, keeping up, with such assistance as it was necessary to engage from time to time, the regular routine of collections and observations at the various substations.

Miss Lydia M. Hart, Artist of the State Laboratory, has devoted a large part of her time to drawings in illustration of the various papers prepared by the Station force. She was at Havana during about a month of 1895, the remainder of her work in this direction having been done at the State Laboratory.

Mr. Ernest B. Forbes has served during the vacation period of three seasons, the first as a general zoölogical assistant, the second as an assistant in the entomological field work, and the third in making a special study of the Cyclopidæ of the Station collections.

Periodical chemical analyses of various waters collected at the Station have been made, from the first opening, under the direction of Professor A. W. Palmer, of the chemical department of the University of Illinois. Mr. C. F. Hottes, Botanical Assistant in the University, made several trips to the Station with Superintendent Smith during his regular visits in the winter of 1894-95, and both he and Professor T. J. Burrill, of the University department of botany, have made occasional collections of aquatic plants.

Mr. Miles Newberry, an experienced fisherman of Havana, has served the Station very efficiently from the beginning as a general assistant. He has been particularly serviceable as an aid in planktou work, and has had immediate charge of the boat and of the aquatic equipment generally.

#### GENERAL EXHIBIT OF RESULTS.

Although the first report of results accomplished in a field so extensive and complicated as that occupied by our Biological Station must necessarily be largely an exhibit of work in progress, it seems possible to make a statement which shall give a comprehensive, if somewhat indefinite, idea of the outcome of operations thus far undertaken. This report may be made most conveniently under the heads of plankton operations, collections accumulated, ento-

mological studies, molluscan collections and determinations, fresh-water worms, studies of Protozoa and Rotifera, chemical determinations, reports and publications, and the summer opening of the Station.

#### PLANKTON OPERATIONS.

The minute plant and animal life suspended in the waters of a river system, moving downwards with its current and washed to and fro by its waves, composes what is known to the modern biologist as the plankton of its waters. The Station operations in this field were primarily directed to a study of the amount of this plankton in the various locations selected, its seasonal and other periodic changes, its local and vertical distribution, its composition as to the species represented, and its relation in the general system of aquatic life. Our field of operations is a unique one, as yet practically untouched by the scientific investigator, in so far as it is limited to a river system and its dependent waters.

The plankton substations in 1894 and 1895 were five in number, one in the river, a short distance above the foot of Quiver Lake, another in Quiver Lake itself, a third in Dogfish Lake, a fourth in Thompson's Lake, and a fifth in Flag Lake, between Thompson's Lake and the river. To these were added in 1896 a substation at Phelps Lake, from which, indeed, a single quantitative collection had been made in 1894, and another in Spoon River, a short distance above its mouth. From these various substations a thousand quantitative collections have been made since the Station opened, those from April, 1894, to June 30, 1895, by Professor Frank Smith, or under his immediate direction, and those subsequent to that time by Dr. C. A. Kofoid. All these tows have of course been carefully preserved by methods such as to permit their quantitative comparison, and about three fourths of them have been quantitatively determined by Dr. Kofoid by methods of precise measurement. A considerable beginning has also been made in the enumeration of their contents by counting under the microscope.

Various modifications of plankton methods, elaborate tests of the apparatus used and of the methods of discussion current, and other items of improvement in the equipment and in the methods of planktology will be reported by Dr. Kofoid in a paper on this department of our work, now nearly ready for the press. For certain general conclusions of considerable interest and of at least provisional value reference may be made to the same paper.

#### COLLECTIONS ACCUMULATED.

The total number of lots of specimens collected since the opening of the Station amounts to 6,628, besides 5,500 pinned insects. Of the former, 434 lots contain materials for a study of the food of animals, 300 of them being the contents of the stomachs of fishes; 270 are specimens of vertebrates; 3,560 are preserved collections of invertebrate animals; 1,823 are towing-net collections; and 543 were collections of Rotifera and Protozoa, most of which were studied alive because incapable of satisfactory preservation. The entire

number of collections, including under this head each object or lot of objects specially numbered and separately entered on our notes or in the accessions' catalogue of the Station, is thus nearly 12,000. Besides these, mention should be made of about 400 microscopical slides of serial sections of oligochæte worms made for Professor Smith in the course of his studies of that group.

#### LIST OF COLLECTIONS.

Shallow-water collections with Birge net.	232
Qualitative collections with surface net	592
Quantitative collections with plankton apparatus	999
Protozoa and Rotifera collections	543
Vermes "	490
Urustacea	167
Arachnida ''	235
Insecta (liquid collections).	2,245
Insecta (pinned specimens).	5,500
Mollusca collections	388
Fishes	196
Amphibia	59 15
Reptilia.	15
Food collections.	434

#### ENTOMOLOGICAL STUDIES.

It has been thus far the primary object of the entomological studies made by Mr. Hart to make us fully acquainted with each species in all its stages as a preliminary to investigations along other lines. To this end extensive search has been made of all varieties of situation in the waters of the Station field, the species at each location being listed at each visit, and collections being also made. The regular typical localities represented by the substations have been further searched at regular intervals for two years. About five hundred lists and illustrative collections have thus been accumulated. The biological observations and breeding-cage experiments made during this time are recorded on some seven hundred note slips.

The Hymenoptera and a large part of the Diptera and Lepidoptera have been worked up, and reported upon in a paper on the entomology of the Illinois river and adjacent waters, published as Article VI. of Volume IV. of the Bulletin of the State Laboratory of Natural History. Since this publication, much additional information concerning these groups has been acquired. Careful studies have been made on some of the smaller Diptera, on the waterbeetles, and upon the Neuroptera, Thysanura, and Hydrachnidæ. The dragonfly collections have been determined by Mr. J. G. Needham, formerly Instructor at Knox College, and by Mr. C. C. Adams, an assistant in the State Laboratory.

These entomological collections represent some 350 species of insects. Every effort has been made to identify, by breeding, eggs, larvæ, and pupæ of insects aquatic in any stage. About 275 hitherto undescribed forms have thus been obtained, and immature stages of about 225 species have been accurately identified.

#### MOLLUSCAN COLLECTIONS AND DETERMINATIONS.

The Station collections of mollusks, made mostly by Mr. Hart, contain about 11,000 specimens, 600 of which are clams (Unionidæ). All this material, except that most recently brought in, has been examined and determined by various American specialists. About eighty-five names of aquatic or semi-aquatic mollusks have thus been obtained, and their distribution and life history have received special attention. The Unionidæ have been studied with reference to characters derived from the entire animal, and much interesting information has been accumulated concerning their relationships, life histories, and parasites.

#### FRESH-WATER WORMS.

The greater part of the time of Professor Smith available for State Laboratory work has been devoted to a study of the oligochæte worms (earthworms and their allies) found in and about the Illinois River and other waters near Havana. Most of this work has necessarily been of a systematic character, although progress has been made along other lines. The importance of systematic work on this order is shown by the fact that with the exception of descriptions of two species published in Vol. III of the Bulletin of the State Laboratory,\* almost nothing has been known of the representatives of the group in the Mississippi Valley, and but little, indeed, for all the eastern part of the United States.

Collections have been made from all the regular substations and at various places in the bottom-lands and along the shores of the river to a point two miles south of Havana. Many of the worms obtained were studied while living, and for further study about seventy bottles of specimens have been prepared and preserved in alcohol or formaline. For a successful study of most of these worms serial sections are indispensable, and thus far about four hundred microscopical slides of such sections have been made and used.

The work of identification is now nearly completed, and probably nearly all of the different species occurring in the region are represented on our lists. Of the thirteen families of Oligochæta recognized by Beddard, nine are represented at Havana by thirty species belonging to sixteen genera. Less than one half of these species occur in Europe, and the remainder, with few exceptions, are known only from the United States. Two new generá and at least seven new species have thus far been found by us.

Numerous experiments have been made in rearing naidiform worms, and considerable new information has thus been acquired concerning their asexual reproduction.

Identification and description of the planarian worms of the Station collections has been kindly undertaken for us by Professor W. M. Woodworth, of

<sup>\*</sup>Art. IV. "On the Anatomy and Histology of a New Earthworm (Diplocardia communis), gen. et sp. nov., by H. Garman; and Art. VII., "On an American Earthworm of the Family Phreoryctide," by S. A. Forbes.

Harvard University, to whom all our material has been sent, much of it alive. The work on these collections has all been done, and Professor Woodworth's paper is nearly ready for publication.

#### STUDIES OF PROTOZOA AND ROTIFERA.

These minute animal forms of the Station fauna have been very patiently and thoroughly worked out from day to day for nearly two years by Mr. Adolph Hempel. As most of them could not be studied to advantage except in a living state, they have been determined as fast as collected. five hundred collections have thus been critically overhauled, and annotated lists of species and descriptions of new forms have been prepared and either published, or made ready for publication, in the Bulletin of the State Laboratory of Natural History. 102 species of Rotifera (three new) and 80 species of Protozoa (five new) have thus been listed from our situation by Mr. Hempel, and several others have been identified by Dr. Kofoid, in the course of his studies of the plankton, since Mr Hempel's work was suspended as a consequence of injury to his eyes. Among these latter acquisitions was one of the most remarkable and important rotifers known to science, a species of the genus Trochosphæra, which is famous in the annals of zoölogy for the light which it throws upon the zoölogical relationships of the Rotifera at large. This genus, founded on a species discovered by Professor Semper in 1872 in pools in the rice fields of the Phillipine Islands, is now further represented only by collections made at Brisbane, Australia; in the Yangtse-Kiang, in China, and by the Illinois River specimens observed by Dr. Kofoid in the summer of 1896.

#### CHEMICAL DETERMINATIONS.

In a thoroughgoing study of the œcological system of an aquatic situation, the chemical condition of the waters will necessarily be an important element, and the Station has consequently done what was possible to it in its present state to institute and encourage chemical studies of the waters from which its biological materials are collected. It is much to be desired that very frequent examinations should be made of the waters at all the typical substations with a view to tracing their chemical history at each throughout the day and under the changing conditions of season, stage of water, and the like. The gaseous contents of the waters are of special interest and importance to us, since they have probably most to do with the welfare of aquatic animals and plants. It has been impossible, however, during these first years to provide for more than the usual form of chemical examination of water as made for sanitary purposes, and even this would have been impracticable if the chemical department of the University of Illinois had not responded generously to my request that such analyses be undertaken.

Beginning in May, 1894, collections of water from the river and from various other points in the Station field have been made at regular intervals by Station assistants and shipped to the Chemical Laboratory of the University, where they have been examined either by Professor A. W. Palmer, or

by assistants working under his direction. Since the beginning of this work it has been merged in that of a Chemical Survey of the waters of the State, established at the University in consequence of appropriations made by the State legislature to that end during the winter of 1895. One hundred and ninety-three analyses in all have now been completed, and a report setting forth the comparative results will be published during the current year.

#### REPORTS AND PUBLICATIONS.

The final major product of our Station work must be in the form of published papers and reports, our material accumulations being of merely secondary interest and value, and often of only temporary use. Necessarily, however, so soon after the organization of the work, it has not been possible to prepare and to publish papers of a sort adequately to represent the ideals of the Station management, or to illustrate its final ends. Nevertheless, eonsiderable contributions to science resulting from the investigations of the Station staff have already been printed or are now in press, and the preparation of manuscript is going actively forward in several departments. Quite in accordance with our original expectation, visiting students who have availed themselves of the facilities of the Station have prepared, or are now preparing, papers embodying the results of their investigations, credit for which must belong in part to our establishment, without which they would not have been written.

The principal contributions now in print are papers by Mr. Hart, Mr. Hempel, and Professor Smith. The first of these is an article by Mr. Hart on the entomology of the Illinois River and adjacent waters, filling one hundred and twenty-five pages of our Laboratory Bulletin and illustrated by fifteen half-tone plates. Professor Smith's additions to a knowledge of our oligochæte worms have appeared as two papers of the Laboratory Bulletin, describing four new species and a new genus of these animals, with a large amount of anatomical and histological detail. We have also printed an article by Mr. W. H. Ashmead, of the United States National Museum, on parasitic Hymenoptera bred from aquatic insects at Havana, containing descriptions of three new species. Four new species of Protozoa and three of Rotifera from Station situations have been described by Mr. Hempel in an article of the State Laboratory Bulletin, accompanied by five plates of illustrative figures.

We have now going through the press a third paper by Professor Smith, containing a description of a new genus and two new species of oligochæte worms from Havana and of one from Florida, together with a description of the reproductive organs of Pristina, upon which subject nothing has heretofore been known. This article will be accompanied by four plates. A paper on the Ostracoda of North America, by Mr. R. W. Sharpe, a graduate student of the University, is also in press. This article has been made to include the product of a careful examination, of the collections made in this group from the opening of the Station to the midsummer of 1896. It is accompanied by ten plates.

Mr. Hempel's observations on the Protozoa and the Rotifera of the Station, accumulated during two years' continuous study, are in hand in the form of

a completed manuscript, accompanied by thirty folded sheets setting forth in tabular form the distribution of the various species at each substation and also throughout the Station field for the different months of the year. This report was finished last September and will be printed without delay.

Dr. Kofoid has lately filed a report, which is about to go to press, on methods and apparatus in use in plankton work at the Station, accompanied by seven illustrative plates. He has in hand six other papers, which will doubtless be ready for publication before the end of the current fiscal year. These will include reports on the local distribution of the plankton in the Illinois River and its adjacent waters, on the sources of error in the plankton method, on the plankton of the river during the years 1894, 1895, and 1896, on the plankton of Phelps Lake,—a body of water of the ephemeral type,—an article on *Trochosphæra*, and one on *Cotylaspis insigne*—a remarkable parasite of the river clams.

Professor Smith has under way a general report on our oligochæte collections, to consist of about fifty pages of text, with several plates. This report will contain a synoptic key and illustrated descriptions of species for use in identifying forms occurring in the State.

Mr. Hart, Station Entomologist, and Mr. J. G. Needham are working conjointly upon a report on the dragon-flies of the Station waters and their vicinity, and a list of the mollusks with biographical and ecological notes is in course of preparation by Mr. Hart.

Two senior students of the zoölogical department of the University, Mr. E. B. Forbes and Mr. F. W. Schacht, are engaged in thesis investigations, under the personal supervision of the Director of the Station, which will result in the preparation and publication of papers on entomostracan groups, one the Cyclopidæ, the other the Centropagidæ, of North America, including of course the Station collections.

I have myself undertaken to prepare, and have nearly finished, a comprehensive article on the Crustacea of the Biological Station field, with analytical synopses of all the groups and illustrative figures for the use of the student of our aquatic fauna.

A paper on the planarian worms found at Havana is now reported as practically ready for the press in the hands of Dr. W. M. Woodworth, of Harvard University. Articles in course of preparation by visiting investigators are "The Mycetozoa collected near Havana, Illinois, during the summer of 1896," by H. C. Beardslee, of University School, Cleveland, Ohio, and "Statistical Record of the Trematoda Parasitic in the Unionidæ," by Professor H. M. Kelly, of Cornell College, Iowa.

The excellent work done by the Station Artist, Miss Lydia M. Hart, in illustration of nearly all the papers of the foregoing list, is deserving of particular mention. One hundred and three drawings have been made by her of new or otherwise interesting animal forms, besides several drawings of pieces of apparatus and other features of the equipment.

General mention may also be made in this connection of the publication and widespread distribution of a preliminary report upon the Station\* illustrated by seventeen plates of the situation and surroundings, and of a small illustrated pamphlet descriptive of the Station and its work, inviting advanced students and other competent investigators to share its privileges during the vacation months of 1896.

#### SUMMER OPENING OF THE STATION.

With the launching and equipment of the cabin-boat it first became possible for us to offer the facilities of the Station to students outside our own official group. Anticipating this opportunity, a pamphlet of twenty-four pages, containing twelve half-tone plates, was distributed in the fall of 1895, describing the Station and its surroundings, its equipment, its plan of operations, and its program for the season, and making the following offering.

"The establishment and recent equipment of the Biological Station of the University of Illinois will afford a unique opportunity to a limited number of competent students to become acquainted with the plant and animal forms and with the system of life of a continental river and its dependent waters, and with comprehensive methods and modern apparatus of investigation in aquatic biology. This opportunity, it is believed, will be valued not only by interior students who would like to enlarge their personal knowledge of the aquatic life of their own territory, but also by investigators of experience in other fields who may wish to extend their studies, for the sake of comparison, into a department of American biology hitherto practically unexplored."

"For these reasons, and notwithstanding the fact that this Station was established especially as a means of research by its own staff, it has been decided of open it for the months of June, July, and August to biological investigators and to students of some experience in zoölogical or botanical work. The present accommodations are sufficient for only sixteen persons additional to the Station force. Applications for admission must consequently be made in advance and at as early a day as practicable, with precise specification of the period for which the applicant wishes to occupy a table in the Station laboratory."

"Applications for admission to the Station will be entertained this first year only from independent investigators and from students of biology who have had sufficient experience to render systematic instruction and continuous supervision unnecessary. Other things being equal, instructors in biological science in colleges and public high schools will be given the preference."

"Tables on the laboratory boat or in the rooms on shore, and other general laboratory facilities, will be provided for those whose applications are accepted; ordinary microscopic reagents will be supplied; and access will be given to the biological library of the Station. Books will also be loaned, as needed, from the library of the State Laboratory of Natural History and

<sup>\*</sup>See Bien. Rep. Direc. Ill. State Lab. Nat. Hist., 1893-94, p. 14.

from that of the University of Illinois. Occupants of the laboratory will be expected to furnish their own microscopes or to pay a small fee for the use of those of the University. They are advised to bring also any collecting apparatus in their possession, as the laboratory equipment may otherwise be insufficient for all wishing to use it. Students must furnish their own alcohol for private collections, and especially expensive reagents—such as osmic acid or platinum-chloride."

"Although the Station is established and maintained primarily for a study of life histories, interactions of organisms, and reactions with the environment, no restriction will be placed upon the lines of zoölogical or botanical work to be pursued by those in attendance. In making application, however, the candidate should describe the nature of the study he wishes to pursue, and should also indicate the kind and amount of preparation for such work he may already have had. Applications will not, as a rule, be considered later than a fortnight previous to the time at which a table is desired, and no formal permission will be given for a stay of less than two weeks. Within these limitations visitors may come and go at any time within the months of June, July and August."

"Reports on the Protozoa, rotifers, oligochæte worms, Cladocera, and insects of the Station, and perhaps on one or two other groups also, will be in print by the 1st of June. and will be furnished free of charge to those desiring to make studies in these groups.\* These papers will contain analytical keys, descriptions of species, genera, etc., or references to descriptive literature accessible at the Station, together with much biological and ecological detail."

"While no provision is made for formal instruction, it is expected that the membership of the Station will be organized as a biological club to hold stated meetings for conference, discussion, and occasional lectures by the Station force or by visiting specialists."

"An incidental fee of \$5 a month will be charged to each participant."

The privileges thus tendered were finally accepted by seventeen persons, who were in attendance during the summer for periods ranging from three to ten weeks. Although the number of tables available for outside use was only fifteen, not all of this group were present at a time, and the floating laboratory afforded sufficient accommodations for all who came. The states and institutions represented and the subjects to which special attention was given are shown by the following list:

- C. C. Adams, B. S., Assistant in Biology, Wesleyan University, Bloomington, Illinois. Dragon-flies.
- H. C. Beardslee, A. B., Instructor in Science, University School, Cleveland, Ohio. Fleshy fungi, Myxomycetes, and aquatic flora.
- Miss L. L. Conover, B. S., Teacher of Botany, High School, Detroit, Michigan. Algæ and Myxomycetes.

<sup>\*</sup> It proved impossible to carry out the intention expressed in this paragraph, but the unlimited use of the library facilities of the State Laboratory of Natural History made fully good to visitors the substance of this offering.

Charles Fordyce, Principal of the Normal Department, Biology, Nebraska Wesleyan University, University Place, Nebraska. Fresh-water Algæ and general biology.

- H. A. Fraser, B. S., Teacher of Biology, High School, Joliet, Illinois. Fresh-water sponges and general biology.
- W. K. Hill, A. B., Superintendent of Schools, Carthage, Illinois. Freshwater Algæ.
- G. W. Horton, Superintendent of Schools, Dwight, Illinois. Rhizopoda and general biology.
- H. M. Kelly, A. M., Professor of Biology, Cornell College, Mt. Vernon, Iowa. Trematoda parasitic in clams.
- J. G. Needham, M. S., Instructor in Zoölogy, Knox College, Galesburg, Illinois. Life histories of dragon-flies.
- C. S. Oglevee, B. S., Instructor in Zoölogy and Botany, Lincoln University, Lincoln, Illinois. Protozoa and general biology.
- C. E. Phillips, Millington, Illinois. Student at Eureka College, Eureka, Illinois. General biology.
- Mrs. W. S. Pierce, Teacher of Science, High School, Havana, Illinois. General biology.

Maurice Ricker, B. S., Teacher of Chemistry and Biology, High School, Burlington, Iowa. Hydrachnidæ and general biology.

- L. S. Ross, M. S., Professor of Biology and Geology, Drake University, Des Moines, Iowa. Cladocera of Iowa and Manitoba.
- F. W. Schacht (U. of I., '97), Moline, Illinois. The Centropagidæ of the locality in connection with thesis investigation.
- R. W. Sharpe, B. S., Teacher of Biology, High School, Danville, Illinois. Ostracoda.
- C. A. Whiting, Sc. D., Professor of Biology, University of Utah, Salt Lake City, Utah. General biology.

#### FINANCIAL RESOURCES AND EXPENDITURES.

The entire sum available for the equipment of the Station and its maintenance for three years and three months has been \$10,300, \$1,800 of which was appropriated by the Trustees of the University March 13, 1894, for the commencement of the work, and the remainder of which is derived from legislative appropriation made in June, 1895. Two thousand five hundred dollars of this latter appropriation was for building and equipment and \$6,000 for running expenses for two years. The equipment fund has been expended in the purchase and modification of the Station launch "Illini," in building, furnishing, and equipping the floating laboratory and in providing various minor items of apparatus and furniture.

The floating laboratory or cabin-boat cost \$1,573 furnished and equipped, the contract price for construction being \$1,255. Five thousand five hundred and six dollars had been expended September 30, 1896, on account of salaries and general expenses of the Station, a balance of \$1,394 remaining in hand to the credit of the appropriation. The salaries for this period of thirty months have been \$4,218,—an average of about \$140 per month,—and the general expenses of the work have been \$2,187—approximately \$73 per month.

#### PRESENT NEEDS AND FUTURE DEVELOPMENT.

The principal present needs of the work, apart from a fund sufficient for its maintenance on existing lines, are (1) more elaborate provision for chemical investigations, (2) a salary fund sufficient to enable me to add an experienced botanist to our present staff, (3) a site of three or four acres near the foot of Quiver Lake, and (4) provision for two principal buildings on shore and for a small system of permanent ponds with a pumping equipment for their maintenance.

The necessary chemical work will undoubtedly be provided for by the Chemical Survey of the waters of the State if the funds available for that survey are made sufficient to enable the University chemists to meet our wishes in this respect. As already said under another head in this report, chemical analyses are a matter of the first importance to the whole investigation we have undertaken. They will have a very great incidental value also outside our own field because of their bearing upon questions of public health as affected by pollution of the waters of the Illinois River by sewage and other waste from the towns above, and ultimately from Chicago by way of the drainage canal.

A knowledge of the plant life of the river is scarcely second in importance to that of its animal life; a fact which has been evident to me from the beginning, but which, nevertheless, I have been compelled largely to ignore because of lack of funds to provide for continuous botanical investigation. Several competent zoölogists were already in our employ as assistants in the State Laboratory of Natural History, and zoölogical investigation could consequently be provided for with little difficulty and at a relatively small expense. Furthermore, the smaller animal forms—the rotifers and the Protozoa can be successfully studied as a whole only in the living state, while microscopic plants are capable of preservation in condition to make their subsequent determination practicable. Our plant collections can consequently still be worked up by a botanist having an expert knowledge of aquatic forms. It is very much to be desired that another year may not be allowed to pass without provision for this indispensable part of our general subject, without which, indeed, final conclusions concerning the ecology and economics of our aquatic biology cannot possibly be reached.

The efficiency of our corps of workers and the quantity of the results of their work would be very greatly increased if provision were made for their continuous maintenance on Quiver Lake. Our daily trips to and from the town proved very wasteful of time and opportunity, and have added greatly to the expense of running the Station launch. Furthermore, notwithstanding the great usefulness of our floating laboratory, it is in some respects insufficient for the more advanced stages of our work, and should be supplemented by a laboratory building in the immediate neighborhood. Experimental researches will presently require a larger equipment than that now at our disposal in the jars and small aquaria to which we are at present confined.

Finally, if the Station is to be utilized to the fullest extent as a means of instruction to teachers in the public schools, permanent provision for this work must certainly be made.

These various needs can be met by the purchase of a small tract of land now lying practically waste, by the erection of a small building on the bank of Quiver Lake which shall combine additional facilities for laboratory investigation with living quarters for the Station staff, by the excavation of ponds on the Station grounds and the construction of a water tank and pump, and by the building of a large pavilion, with some connected rooms, for midsummer work by visiting students.

Concerning the immediate future of the work, I beg to say that it is my present wish and intention, if the Station is maintained on a scale and under conditions to make it possible, to extend its work especially along three principal lines. The preliminary systematic survey having been now largely completed, I hope next to select specific problems for solution by experimental methods, working towards definite ecological results of scientific value. Studies of the lower forms of aquatic life in our situation are now so far advanced as to make it profitable to bring into our scheme of regular operations the fishes of these waters. A particularly thorough, continuous, and comprehensive study of them should be made from various points of view, in the hope especially of helping the fish-culturist to more intelligent methods and to more certain and permanent results.

Although the Station was founded primarily for investigation and its expenditures up to the present time have all been made directly to that end, it is very apparent that it has a highly important work to perform in the interests of public education. I hope to occupy fully and at once this broad field of usefulness which now lies so plainly open before us, not only by continuing and enlarging our offerings to advanced students and to investigating naturalists, but especially by providing all needed facilities and instruction in field biology and in special pedagogical methods to present and prospective teachers of the natural history subjects in all grades of the public school. As a first step to this object, I have already submitted to you a plan for a summer school of field biology to be opened during the vacation season of next year. This work should, I do not doubt, become a permanent and prominent feature of the Station operations.

I ought not to close this general review and presentation of the affairs of the Biological Station without calling your attention to the cordial and appreciative manner in which our enterprise has been received by expert judges of high rank in this country and abroad. Important articles on its work have appeared in several of the leading scientific journals of Europe and America, and our official correspondence also contains many expressions of warm interest in our success from eminent men in various parts of the world.

It gives me further pleasure to express to you my high appreciation of the capable, energetic, and successful work of my associates on the Station staff. Neither the broiling heat of the July sun nor the midwinter's cold have been able to interrupt or even to delay the regular progress of the very laborious

and exacting routine of their operations; and the steady strain of long months of confining work at the microscope has been taken by them with the patient enthusiasm of the trained investigator at work in a fruitful field. The contagion of the example of this little group of indefatigable naturalists is clearly affecting the life of related departments of the University, and it must in time make itself sensibly felt throughout the state and the country in the advancement of biological science and in the improvement of our methods of biological instruction.

Respectfully submitted.

November 30, 1896.

S. A. Forbes,

Director.

# AGRICULTURAL EXPERIMENT STATION.

To the Board of Trustees of the University of Illinois.

Gentlemen:—An examination of the lists given below of articles published in the bulletins issued and of experiments carried on will give a good idea of the work of the Station for the two years ending June 30, 1896.

#### LIBRARY.

The number volumes and pamphlets entered upon our accessions catalogue in the library is 4,288. The number of bulletins 2,818.

#### PUBLICATIONS.

Eleven bulletins, Nos. 34 to 44, inclusive, and two annual reports have been published. The bulletins contained in all 344 pages. Seventeen thousand copies are printed, and the circulation amounts to 15,500. Two annual reports contained 16 pages each.

The bulletins contained articles as follows:

Bulletin No. 34, August, 1894, 20 pp. Experiments with Wheat 1893-4. Experiments with Oats, 1894.

Bulletin No. 35, August, 1894, 4 pp. The Russian Thistle in Illinois.

Bulletin No. 36, August, 1894, 24 pp. Stock Feeding in Illinois. Index to Bulletins 17 to 36.

Bulletin No. 37, February, 1895, 24 pp. Corn Experiments, 1894.

Bulletin No. 38, March, 1895, 62 pp. Experiments with the Muscardine Disease of the Chinch Bug, and the Trap and Barrier Methods for the Destruction of that Insect.

Bulletin No. 39, April, 1895, 32 pp. The Russian Thistle and Some Plants that are Mistaken for it.

Bulletin No. 40, April, 1895, 28 pp. Potatoes Experiments of 1892-3-4, with a Statement of some Results Obtained at other Stations. Fungus Diseases of the Potato. An Experiment to Prevent Scab and Leaf Blight of the Potato.

Bulletin No. 41, March, 1896, 16 pp. Experiments with Wheat, 1888-1895.

Bulletin No. 42, March, 1896, 18 pp. Corn Experiments, 1895.

Bulletin No. 43, April, 1896, 28 pp. Composition and Digestibility of Corn Ensilage, Cow Pea Ensilage, Soja Bean Ensilage, and Corn Fodder.

Bulletin No. 44, May, 1896, 88 pp. Insect Injuries to the Seed and Root of Indian Corn.

#### NEW WORK.

Upon recommendation of the Board of Direction of the Station, new work has been authorized as follows:

December 5, 1894.

- 1. To test the digestibility of some foods for cattle.
- 2. To study methods of ripening cream for its better preservation and for the better keeping qualities of butter.

March 12, 1895.

- 1. Soil experiments with field crops.
- 2. Irrigation experiments.

June 11, 1895.

- 1. Establishing varieties of red clover by selection.
- 2. Improvement of Indian corn by selection and careful breeding.
- 3. Companion and catch crops for Indian corn.
- 4. Methods of pasteurizing cream and milk.

September 4, 1895.

Indian corn and its relations from every conceivable point of view, including, among other things, the following items:

- 1. Its botanical, chemical, and physiological characters and requirements.
- 2. Its culture.
- 3. Breeding.
- 4. Its relations to the elements of fertility.
- 5. Ascertaining what rotations or systems of cropping are best adapted to the largest practicable production of corn both in acreage and yield, and to maintain the fertility of corn lands.

December 10, 1895.

Field experiments with a view to determining in what way the peculiar clay soil of a considerable portion of southern Illinois may be cultivated to best advantage, two tracts of land to be secured, one of three acres at Edgewood, the other of fifteen acres at Odin.

March 10, 1896.

- 1. Experiments with Kafir corn.
- 2. Investigations of pear blight.

### EXPERIMENTS CONTINUED AND UNDERTAKEN.

The following table gives the number and title of each experiment that has been in hand during the year. In the first column to the right of each title is given the year when the experiment was begun; in the second the experiments in progress are marked; and in the last column, is stated in which bulletin, or bulletins, a report upon the experiments may be found, if any has been published:

# Table Showing Experiments in Hand During Two Years.

Z		When	ď	ا <u>ک</u>
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ě	Class and title of experiment.	ğ	17	l £.g
3.		100	e	, , , , , , , , , , , , , , , , , , ,
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<u>.</u>		P.	:	Z
No. experiment.		:		ported in ulletins Nos
<u></u>				1
	Ti -1.1 Ti			
	Field Experiments— Corn, testing varieties Corn, time of planting Corn, depth of planting Corn, thickness of planting Corn, depth of cultivation Oats, quantity of seed per acre Oats, compact or loose seed-bed Oats, time of sowing Oats, depth of sowing. Clovers, comparison of species Rotation, University experiments continued Wheat, quantity of seed per acre Wheat, depth of sowing Corn fodder, effect of ripeness Oats, testing varieties Corn, cross fertilization of Corn, rate of growth			
1	Corn, testing varieties	1887-8	x	4, 8, 13, 20, 25, 31, 37, 42 4, 8, 13, 20, 25, 31, 37, 42
3	Corn, time of planting			4, 8, 13, 20, 25, 31, 37, 42
4	Corn, depth of planting			
1 3 4 5	Corn, thickness of planting	' '	x	4, 13, 25, 31, 37, 42
9	Corn. depth of cultivation		x	4, 8, 13, 20, 25, 31
12 13 14 15 17 23 65 67 71 84	Oats, quantity of seed per acre.	4.4		4, 5, 15, 20, 25, 31, 37, 42 4, 13, 25, 31, 37, 42 4, 8, 13, 20, 25, 31 3, 7, 12, 19, 23 3, 7, 12, 23, 41 3, 7, 12, 23, 41 3, 7, 12, 23, 41
13	Oats compact or loose seed-hed	4.6	x	3 7 12 23
14	Oats time of sowing			3 7 12 23 41
15	Outs, time of sowing.			2 7 19 22 41
17	Cloudes comparison of angelog		x	0, 1, 12, 20, 41
11	Detetion II increased of species		X.	
40	Rotation, University experiments continued	4000 0	x	8, 12, 31, 37 11, 17, 22, 34, 41
65	w near, quantity of seed per acre	1888-9		11, 17, 22, 34, 41
67	w neat, depth of sowing	1		17,22
71	Corn fodder, effect of ripeness		x	31
84	Oats, testing varieties		x	7, 12, 19, 23, 34, 41 21, 25, 31, 37 13, 20, 25, 31, 42 17, 22, 34, 41 20, 25, 37
89 90	Corn, cross fertilization of		x	21, 25, 31, 37
90	Corn, cross termination of Corn, rate of growth. Wheat, test of varieties. Corn, effect of removing tassels To improve and produce varieties of cereals. Oats, mixing varieties when sowing. Forage plants other than grass and clovers, trials of.		x	13, 20, 25, 31, 42
116	Wheat, test of varieties	1890-1	x	17, 22, 34, 41
134	Corn effect of removing tassels	1891	x	20, 25, 37
139	To improve and produce varieties of careals	1201_9	X	20,20,01
145	Oste mixing varieties when soming	1902_9	Δ.	
	Forego plants other than swans and clauses totals	1094-9		
155	rorage plants other than grass and clovers, trials	4004		
4=0	of Tile drainage trials of in southern Illinois	1894	X	
156	Tile drainage, trials of in southern Illinois		X	
163	Corn, listing. Corn, amount of water required for one pound of dry matter in crop		x	37
164	Corn, amount of water required for one pound of			
			x	
165	Corn, improvement by selection and careful breed-	1		
	ing		x	
166	Corn companion and catch crops for		x	
167	Corn, companion and catch crops for	4.4	x	
168	Clover, red, establishing varieties by selection		x	
169	Irrigation		X	
172	Irrigation Kafir corn, as a grain and forage plant	1896		
173	Management of stiff class soil at Odin and Edm	1990	x	
119	management of still clay son at Odin and Edge-			
	wood		x	
	Th			
	Feeding Experiments.			
37	Cost of production of young steers	1887-8	x	9, 16, 36
28	Cost of production of young colts			
146	Pigs, comparison between wheat and corn in feed-			
	ino <sup>*</sup>	1892-3	x	
150	Cows, economic methods in feeding	• • •	x	[
170	Digestibility of some foods for cattle tested	1894-5	x	43:
			_	
	Dairying Experiments			
106	Milk tests, investigation of	1888-9		9, 18, 27
132	Milk production how affected by a grain ration fed	2000	• • • • • • • • • • • • • • • • • • • •	0,10,21
102	to come on organ	1891		24
135	to cows on grass	1091		24
199	milk production, now affected by an increasing	1001 0		
138	grain ration	1891-2	· · · · · ·	24
190	milk, actually of requisite for highest product of			
	churn, and methods of producing that degree of			
	_acidity			32, 33
151			x	24
171	Pasteurizing cream and milk, methods	1894-5	x	
	Tree Culture—	l l		
31	Orchard soil cultivation and management	1887-8	x	
31 33	Annles testing new variation	1000	x	21
34	Annles testing new vericties by ton grafting	**	X	21
35	Annles testing hardiness of most confident		ă.	
99	Apples, testing new varieties.  Apples, testing new varieties by top grafting  Apples, testing hew varieties of root-grafted and double-worked trees			
0.0	Doors to the second sec		x	
36 37	rears, testing new varieties		x	
37	riums, testing new varieties		x	
38 39	Unerries, testing new varieties		x	
39	Apples, testing nardiness of root-grafted and double-worked trees. Pears, testing new varieties Plums, testing new varieties. Cherries, testing new varieties. Forest trees, growing of Testing and improving native fruits. Testing the effects of stock and scion upon each other.	1	x	26-
79	Testing and improving native fruits	1888-9	x	21
80	Testing the effects of stock and scion upon each			
		"	x	
91	Peach trees, winter protection of		x	

## Table Showing Experiments—Concluded.

No, experiment	Class and title of experiment.	When begun	In progress	Reported in bulletins Nos.
102 114	Tree Culture—Concluded. Trees, protection from mice, rabbits and insects Apple trees, methods of propagation by whole and	1889	x	
126 127	piece roots University experiment orchard Orchard, soil cultivation and management of young		X	21
174	trees Investigation of pear blight	1891 1896	X	
40 41 42	Grapes, methods of training	1897-8	X X X	21, 28 28 21
43 44 45 46 52	Small Fruit Culture. Blackberries, testing varieties Raspberries, testing varieties Strawberries, testing varieties Strawberries, method of management Raspberries, soil management.		X X X X	21, 30 21, 30 21, 30
48 49 108 109 141 153 154	Gardening— Beans, testing varieties. Sweet corn, testing varieties. Potatoes, investigation of their diseases Tomatoes, investigation of rot in. Potatoes, test of varieties. Potatoes, use of commercial fertilizers upon. Corn, use of commercial fertilizers upon.	1890	X X X X	4, 8, 13 40 40 40
55 51	Tree and Vine Culture— Fungicides, use of	1887-8	X X	15, 21
78 76 92 93 107 105 120 129	Miscellaneous— Record of soil temperatures Meteorological record from August 17, 1888. Canada thistle, extermination of Fruits, production of new varieties from seeds Woods, testing durability of. Investigation of a bacterial disease of corn Cross fertilization of plants, testing effects of Investigation of red rust in blackberries and rasp-	;; 1889 1887–8	X X X X X X	21 6 21
158	berries. Chinch bugs, investigation of their contagious dis- eases.		x x	29 33, 38
159 160	of smut in broom corn		X X	40
161 162	Study of histological structure of corn Study of the weeds of Illinois		X X	35.39

Thomas J. Burrill,
President of Board of Direction.

# INDEX.

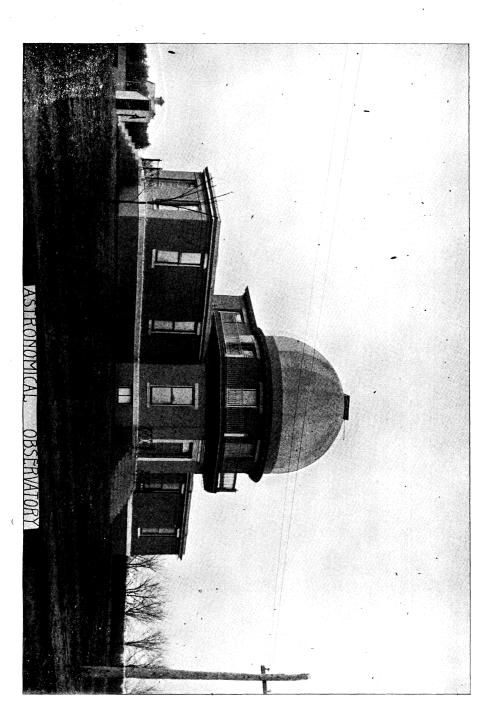
Accounts and business	. 18
See "Financial system." Accredited schools, certificates	
Visitor	251
1 m.: i == 14	
Agricultural Experiment Station— Advisory board Board of Direction. Reorganization	. 254
Beorganization 15	9 249
Reports. 22.46.75.99.166.196.216.25	2.32
Architectural department, changes in course	5, 100
Architectural department, changes in course. 100 Armstrong, James E., elected President of the Board of Trustees. Astronomical Observatory, location	. 214
Astronomical Observatory, location	. 230
Athletic Fark, name changed to inmois Field	. 400
Bicknell, Percy F., communication with regard to library  Biological Experiment Station, see University of Illinois Biological Experiment Station Board of Trustees	. 21
Biological Experiment Station, see University of Illinois Biological Experiment Station	
By-laws amended.	
Election of officers	1, 219
Meeting of September 25, 1894.	19
November 15, 1894	. 36
November 15, 1894 December 5, 1894	. 41
January 10, 1895	. 57
'' February 12, 1895 '' March 12, 1895.	. 61
March 12, 1895.	87
June 11, 1895 Adjourned session, Chicago, June 27, 1895	. 119
Proceedings, 1895-96.	. 157
Meeting of September 4, 1895.	. 15
September 19, 1895.	. 179
December 10, 1895 December 27, 1895	. 180
March 10, 1896	214
' April 22, 1896.	236
Adjourned session, May 25, 1896	. 239
Meeting of June 9, 1896. June 26, 1896	. 246
June 26, 1896	. 265
Bond of contractor for Library Hall	261
Of Treasurer	77
Bruner, Professor J. D. resignation	77
Bruner, Professor J. D., resignation. Brush, Captain D. H., appointed professor of military science	59
Bryant, J. H., congratulations	37
Resignation	61
Resolution concerning Burnham, A. C., appointed assistant in mechanical engineering Appointed instructor in mathematics.	80
A mointed instructor in methanical engineering	121
Granted leave of absence.	237
Granted leave of absence. Burnham, D. H., appointed architect of Library Hall.	191
ResignationBurrill, Professor T. J., appointed President of the Board of Direction of the Agricul-	212
Burrill, Professor T. J., appointed President of the Board of Direction of the Agricul-	
Power as A grigal transfer of Chatian	20
Ruprill evenue 182	200
tural Experiment Station.  Reports, see Agricultural Experiment Station.  Burrill avenue	, 200
Campbell, Walter S., appointed a fellow in College of Engineering	249
Carman, Albert P., appointed professor of physics. Carnahan, D. H., appointed assistant in French.	238
Chemical analyses, schedule of charges for.	248
Chicago College of Pharmacy	214
Smoogs Comego of Thermach	, ==0

Chipman, Paul, appointed assistant in testing laboratory Clark, T. A., appointed assistant professor of rhetoric	158 111 252
Coal experiments. Cole, Mary Maude, appointed a fellow in the College of Literature and Arts. Cole, Charles N., appointed assistant in the Preparatory School. College of Agriculture, reorganization	78 248 121
College of Agriculture, reorganization       159,         College of Physicians and Surgeons       41,58	169 3, 67
Colleges, order of. Committees, standing	222
Daniels, Arthur H., appointed assistant professor of philosophy  Davenport, E., appointed dean of the College of Agriculture and agriculturist of the Experiment Station.  Professor of animal husbandry.  Degrees conferred.  Douglass, R. S., appointed assistant in the Preparatory School.  Draper, A. S., President—  Inauguration of.  19.25	111 42
Professor of animal nuspandry.  Degrees conferred. 50,87,213, Douglass, R. S., appointed assistant in the Preparatory School. Depart A. S. President—	246 158
Draper, A. S., President— Inauguration of. 19,25 Reports .20,71,87, Address to the 39th General Assembly. Appointed a member of the Board of Direction of the Agricultural Experiment Station. Duggar, B. M., appointed botanical assistannt in Laboratory of Natural History. Resignation.	), 36 , 214
Appointed a member of the Board of Direction of the Agricultural Experiment Station.	198
Duggar, B. M., appointed botanical assistannt in Laboratory of Natural History	114 245
Ellsworth, Elinor, appointed assistant in vocal music	121 9. 36
Ellsworth, Elinor, appointed assistant in vocal music.  Engineering Hall, dedication	187 102 168
Faculty	9
By-laws of	68 102
Financial statements. 126. Agricultural Experiment Station. 156. Laboratory of Natural History. 156,	. 265 . 297 . 297
University         .155,           Financial system         .205,           Flag law indistructs         .254, 262	296 222 263
Faculty       By-laws of         Fairfield, Geo. D., appointed assistant professor of Romance languages.       95,         Financial statements.       126.         Agricultural Experiment Station.       156.         Laboratory of Natural History.       155,         University.       155,         Financial system.       205,         Flag law indictments.       254, 262,         Flower, Lucy L., elected member of the Board of Trustees.       254, 262,         Forbes, S. A., report from Biological Experiment Station       114,         Report from Laboratory of Natural History.       114,	61 302 , 298
Fraser, W. J., appointed instructor in dairying.  Appointed assistant agriculturalist in the Experiment Station.  Frederick, F. F., title changed to professor of art and design.	
Garnett, Charles H., appointed a fellow in the College of Literature and Arts	248 222
Gas contract . Goodenough, Geo. A., appointed instructor in mechanical engineering	184 158
Grindley, H. S., appointed susperintendent of Buildings and Grounds	108 111 , 111
Garnett, Charles H., appointed a fellow in the College of Literature and Arts.  Garvin Machine Co.  Gas contract.  Goodenough, Geo. A., appointed instructor in mechanical engineering.  Graham, G. W., appointed Superintendent of Buildings and Grounds.  Grindley, H. S., appointed assistant in chemistry.  Appointed assistant professor of chemistry.  Grovns, Charles Wesley, commission,  Gunn, C. A., resignation.	195 216
Hammond, Geo. D., appointed assistant professor of history	179 4. 85
Hopkins, C. G., appointed chemist of Agricultural Experiment Station	40 111 264
Hammond, Geo. D., appointed assistant professor of history	248 , 102
Illinois Field, name given to Athletic Park.  Instructional force, plan for government of	235 , 103 , 237
Inventories	, 264
Jones, Walter Howe, appointed director of Department of Music	, 102 106
Klipstein, E. C appointed instructor in architecture.  Kofoid, Charles A., appointed susprintendent of Biological Station.	248 121 114

Lake, Edward J., appointed assistant in art and design	11 48
Lands surveyed 1 Laboratory of Natural History, report from director 114,2	.68 298 16
Library Hall, erection. 1 Chime of bells 226.2 Bids 226.2	13 222 239
Contract for         2           Heating contract         2           Book-stack contract         2	142 143 143
Lake, Edward J., appointed assistant in art and design       1         Appointed instructor in free-hand drawing.       22         Land sale       125, 1         Lands surveyed       1         Laboratory of Natural History, report from director       114, 2         Staff       2         Library Hall, erection       1         Chime of bells       2         Bids       2         Contract for       2         Heating contract       2         Book-stack contract       2         Location       124, 2         Plans       161, 169, 178, 179, 184, 190, 198, 200, 208, 212, 219, 228, 233, 2         Library policy       21, 1	!28 !36 !87
McKay, F. M., resolutions concerning	10 48 48 96
Medical entrance examinations	93 219 248
Molony, M. T., Attorney General, communications from	.87 .02 .48
Machine shops, reorganization of.       119,122,1         Medical entrance examinations       119,122,1         Millitary Department, report concerning, by Lieutenant Baker       2         Millitary band, certain members paid       2         Milne, Edward L., appointed a fellow in the College of Science       2         Molony, M. T., Attorney General, communications from       29,         Moore, Burton E., appointed instructor in physics       1         Morrison, Ella H., appointed director of physical culture for women       95, 1         Title changed to director of physical training for women       2         Myers, Geo. W., appointed associate professor of mathematics       1         Title changed to associate professor of astronomy and mathematics       2	250  11  245
Patent, machine designed in the shops.  Patterson, A. S., appointed assistant in French  Piatt, H. S, appointed assistant professor of Romance languages  Leave of absence.  President's house  Quick, Oscar A., appointed instructor in physics  125, 163, 1	116 164 158
Raab, Henry, resolutions concerning Rhoades, L. A., appointed assistant professor of German language and literature. 2 Riehl, E. A., appointed a member of the Board of Direction of the Experiment Station. 2 Rules for government of students, amendment. 1	59 242 76 104
Sager. F. A., appointed assistant in physics.  Appointed assistant professor of physics	20 187
Sager, F. A., appointed assistant in physics.  Appointed assistant professor of physics.  School of Pharmacy.  See Chicago College of Pharmacy.  Senate Committee, report on University	90
Services rendered persons not connected with the University 1 Shattuck, Professor S. W., appointed Business Agent 30,1 Bond 1,1	120 183 183
Reports	255 184
Smith, Frank, appointed assistant professor of zoölogy. 2 Smith, Dr. Julia Holmes, appointed a member of the Board of Trustees. Smith, Ralph P., appointed instructor in German	244 61 59
Snow, W. A., appointed assistant entomologist of Laboratory of Natural History	251 242
South farm lease 2 Spalding, C. W., Treasurer, bond 101.1	252 102
Reports	23 107
2   Students, pointest action and voting   2   Students, summaries of   17, 18,   Summer School   49,1	55 64
School of Pharmacy.  See Chicago College of Pharmacy. Senate Committee, report on University Services rendered persons not connected with the University Services rendered persons not connected with the University Shatuck, Professor S. W., appointed Business Agent	.11 .68 .11
Thompson, Marion, appointed fellow in College of Literature and Arts	06 02 02 34 11

## UNIVERSITY OF ILLINOIS.

University, report concerning, by committee of the Senate. University of Illinois Biological Experiment Station	90 , 302 163
Vaccine Laboratory	<b>, 12</b> 3
Water supply contract Water survey of the State White, A. H., granted leave of absence White, J. M., made associate professor of architecture White Street, resolution against opening it across the campus. Wills, O. T., military scholarship Wilson, J. H., appointed foreman in the foundry Women, physical training for Wood, R. A., appointed instructor in mechanical engineering	248 77 264 158 77
Zinkeisen, Frank, appointed assistant professor of history	, 102 179



### BIOLOGICAL STATION. PLATE I. FIELD OF BIOLOGICAL STATION OPERATIONS. LOW WATER.

DRAWN BY LYDIA M. HART. Wagon Road

Bluff.

Substation. Qeoo Forest.
Sandbar.

Scale of Miles.

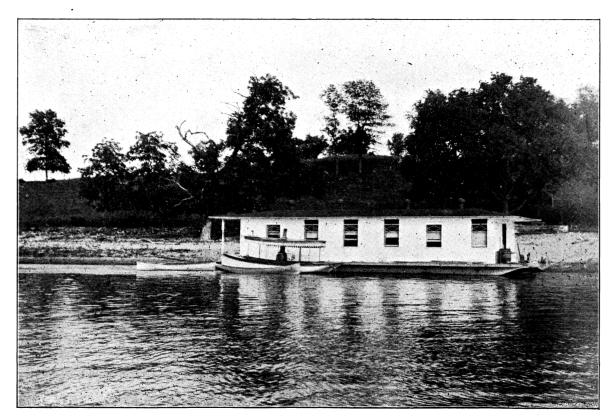
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DRAWN BY LYDIA M. HART. Wagon Road

Bluff.

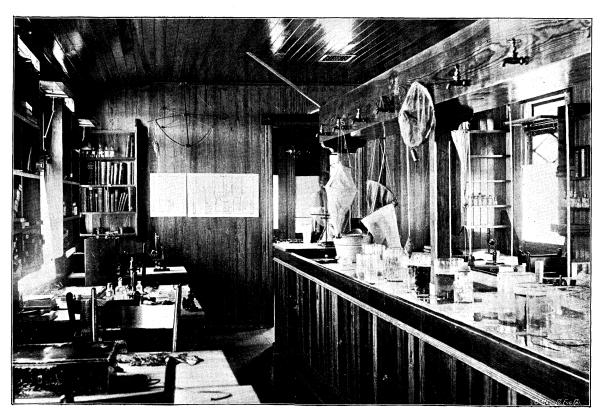
Substation. Qeoo Forest.
Sandbar.

Scale of Miles.

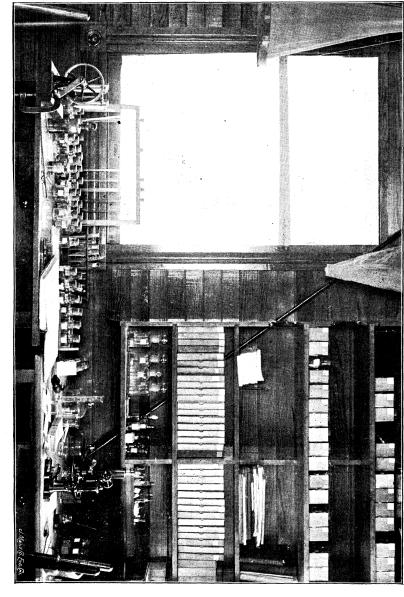


FIELD HEADQUARTERS, FOOT OF QUIVER LAKE.

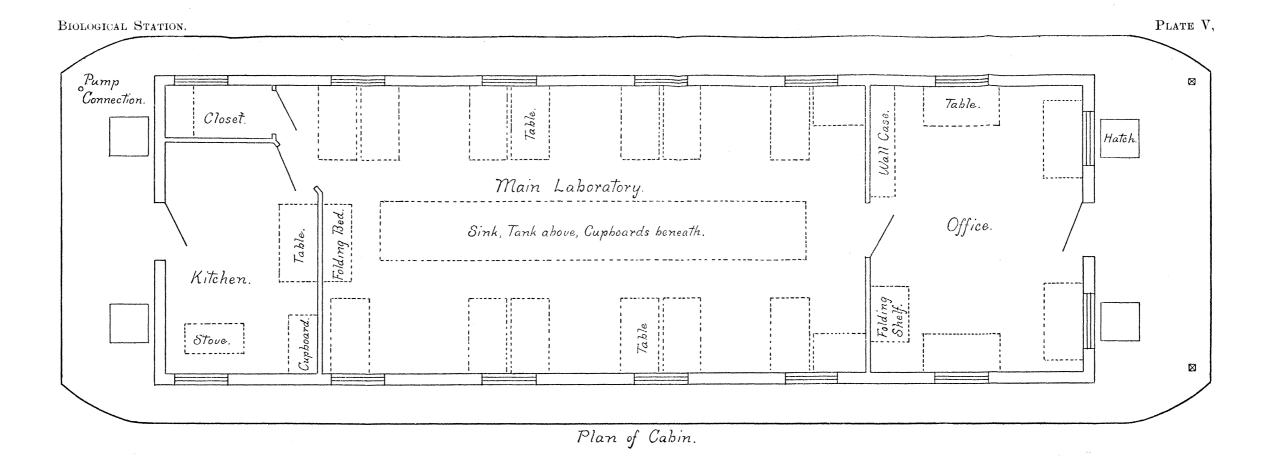
BIOLOGICAL STATION. PLATE III.

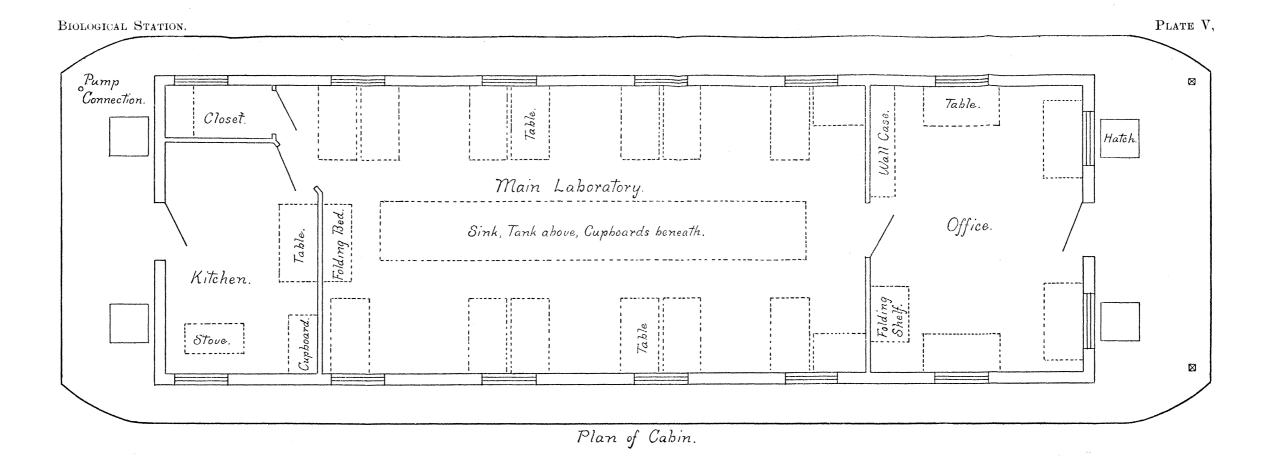


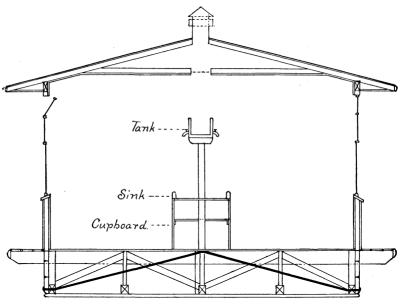
MAIN ROOM OF LABORATORY BOAT.



STAFF ROOM IN LABORATORY BOAT.





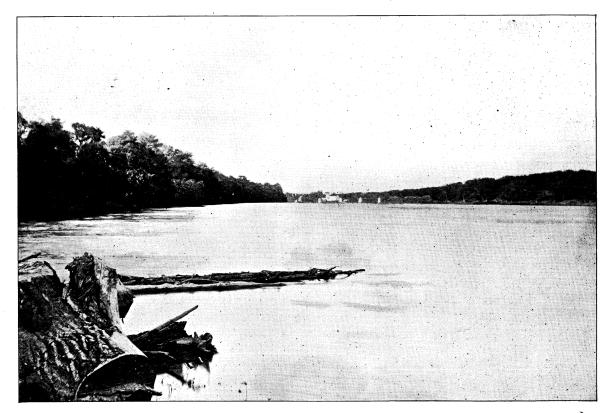


Cross Section of Cabin.



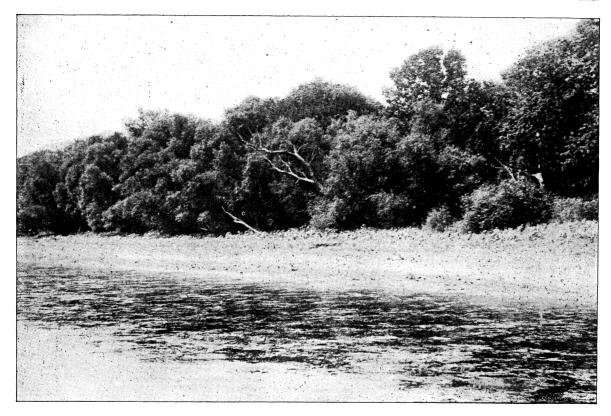
TAKING A PUMP PLANKTON, ILLINOISIRIVER.

PLATE VIII.

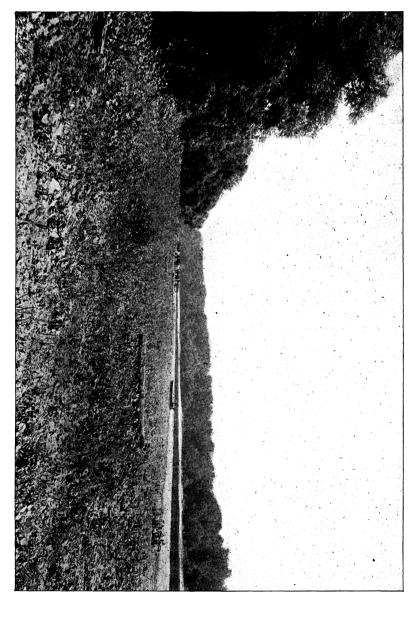


ILLINOIS RIVER, LOOKING NORTH TOWARDS HAVANA.

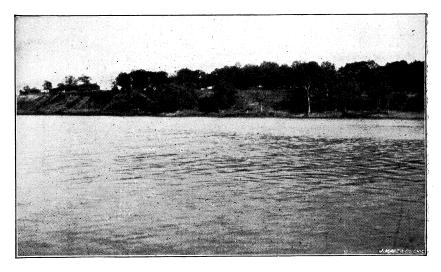
BIOLOGICAL STATION. PLATE IX.



WEST BANK OF RIVER. SUBSTATION E.



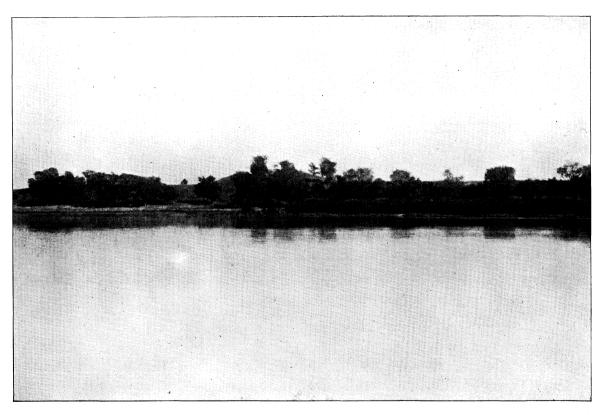
EXPOSED\_SLOPE OF WEST RIVER BANK AT LOW WATER.



EAST BANK OF ILLINOIS RIVER. SUBSTATION H.



STATION LAUNCH, IN QUIVER LAKE.



EAST BANK OF QUIVER LAKE. TWIN MOUNDS.



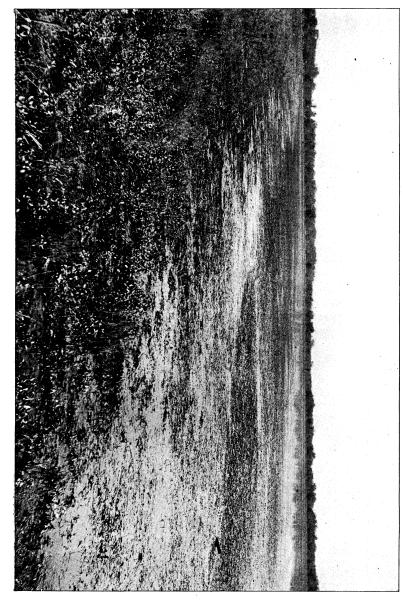
BIOLOGICAL STATION. PLATE XIII.



QUIVER LAKE, SUBSTATION C. MIDSUMMER.



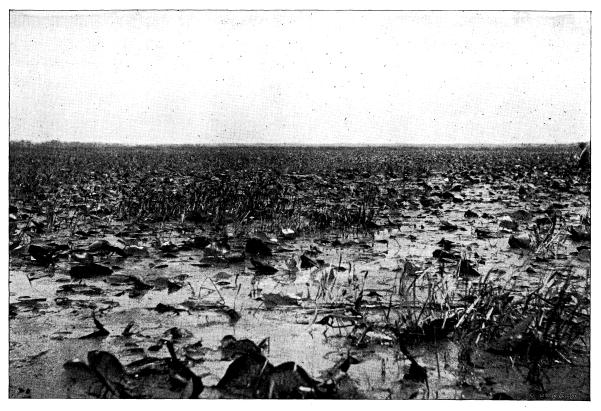
BIOLOGICAL STATION. PLATE XIV.



DOGFISH LAKE. MIDSUMMER,



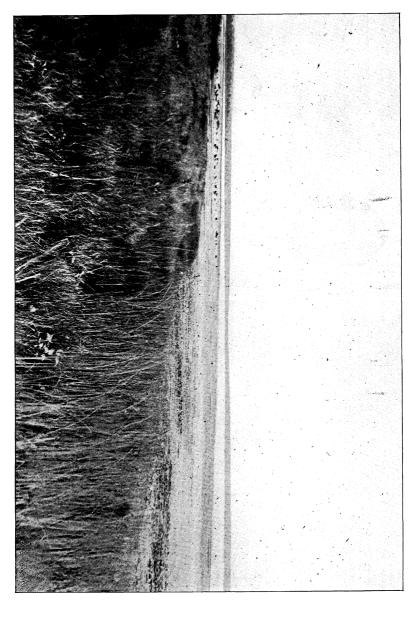
BIOLOGICAL STATION. PLATE XV.



FLAG LAKE, LOOKING NORTH.

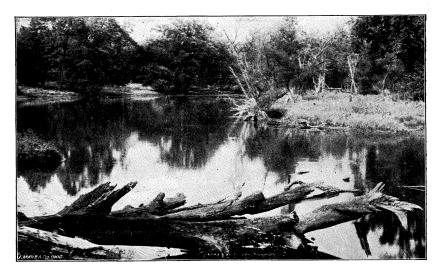


PLATE XVI.



THOMPSON'S LAKE, LOOKING SOUTH.





DEEP SLOUGH, NEAR MATANZAS LAKE.



QUIVER CREEK, ONE MILE FROM LAKE.

BIOLOGICAL STATION, PLATE XVIII.



SPOON RIVER, NEAR ITS MOUTH.

BIOLOGICAL STATION. PLATE XIX.



BOTTOM-LANDS AT HIGH WATER.



BIOLOGICAL STATION. PLATE XX.



BOTTOM-LAND FOREST, NEAR MATANZAS LAKE.

