## NINETEENTH REPORT

(Seven annual, twelve biennial.),

#### OF THE

# BOARD OF TRUSTEES

OF THE

# UNIVERSITY OF ILLINOIS

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

FOR THE TWO YEARS ENDING SEPTEMBER 30, 1898.

SPRINGFIELD, ILL. Phillips Bros. State Printers. 1898.

#### UNIVERSITY OF ILLINOIS,

URBANA, November 1, 1898.

HON. JOHN R. TANNER, Governor of Illinois,

SIR:—I have the honor to submit to you herewith, in compliance with the law, the nineteenth report of the Trustees of the University of Illinois, for the two years ending September 30, 1898.

I am, very respectfully, your obedient servant,

WILLIAM L. PILLSBURY,

Corresponding Secretary.

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	Men.	Women.	Total.
GRADUATE SCHOOL	37	5	42
RESIDENT GRADUATES	13	2	15
Colleges- Seniors Juniors	$\frac{88}{92}$	11 10	99 102
Sophomores.	125	28	153
Freshmen	147	34	181
Specials	40	51	91
Total	542	141	683
WINTER SCHOOL IN AGRICULTURE	15 15	$\frac{1}{2}$	16 17
Seniors	54	3	57
Juniors	121	3	124
Total	175,	6	181
PREPARATORY SCHOOL	136	43	179 <sup>,</sup>
	883	193	1.076
Deduct counted twice	1		1
Total in University	882	193	1,075

## Summary of Students-1896-97.

# Summary of Students-1897-98.

	Men.	Women.	Total.
Graduate School Resident Graduates	57 9	5 7	62 16
Seniors. Juniors. Sophomores. Freshmen. Specials.	83 93 117 173 72	$ \begin{array}{r} 10\\ 30\\ 21\\ 44\\ 53\\ \end{array} $	93 123 138 217 125
Total	60,4	170	774
WINTER SCHOOL IN AGRICULTURE	23		23
Law School— First year. Third year.	$33 \\ 4$	2	35 4
Total	37	2	39
SCHOOL OF MEDICINE— Seniors. Juniors. Sophomores. Freshmen	121 98 88 84	4 6 1 6	125 104 89 90
Total	391	17	408
SCHOOL OF PHARMACY- Seniors Juniors Special	48 89 1	2	50 89 1
Total Preparatory School	138 145	$\frac{2}{54}$	149 199
Deduct counted twice	$1,338 \\ 1$	245	1,583
Total in University	1,337	245	1,582

# PROCEEDINGS

# BOARD OF TRUSTEES

OF THE

# UNIVERSITY OF ILLINOIS.

FOR THE

### Year Ending August 31, 1897.

MEETING OF SEPTEMBER 15, 1896.

The Board of Trustees of the University of Illinois met in the President's office at the University, in Urbana, Illinois, at 3 o'clock p. m. Tuesday, September 15, 1896.

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

The minutes of the regular meeting of the Board held June 9. and of the special meeting held June 26, 1896, were approved. The Secretary was directed to add to the statement in the minutes of June 26th with regard to the quashing of the indictment found against the members of the Board of Trustees under the flag law, that the indictment was quashed by Judge Wright on the ground that he held the law to be unconstitutional.

President Draper presented the following paper:

#### DESTRUCTION OF CHEMICAL LABORATORY.

#### To the Board of Trustees:

Early in the morning of Sunday, August 16th, a fire was discovered in the Chemical Laboratory, and before it could be extinguished the entire building and contents, save the outside walls and a portion of the basement, were destroyed. The only explanation of the origin of the fire is that about two hours before its discovery a thunder storm, accompanied by lighting of unusual severity, passed over the University. One flash of lightning was so vivid and so close as to startle all the people who were in the neighborhood. As the fire was discovered about two hours after this occurrence, and as there was no one in or about the building in the meantime, with no fires or lights -2 U. I.

in the structure, and no opportunity for spontaneous combustion, so far as is known, it is reasonable to suppose that the fire originated from a flash of lightning. Before it was discovered it had made great headway from the main floor through the second and third floors. The fire departments of Champaign and Urbana were upon the grounds very soon after the discovery and rendered heroic and effective service, but notwithstanding their best efforts, and probably because of the ignitible character of the chemicals stored in the building, destruction soon followed. The roof fell in and carried with it the main part of three floors.

I suppose the loss upon the building itself would aggregate \$40,000 to \$50,-000. It would certainly require more than that amount to make another building suitable to take its place. There was much valuable apparatus and the next year's supply of chemicals in the building. Some part of the stock of chemicals was fortunately saved, but the loss of apparatus was nearly complete. I suppose a moderate estimate of the loss of apparatus and supplies would be \$20,000 to \$25,000.

Work was commenced instantly to remove the debris. Members of the Board were requested to meet here on the following Wednesday morning and Messrs. Morgan, Morrison, Bullard, Raymond, and Graham were here. After fully discussing the matter they unanimously agreed upon a plan of action. This was to put a new roof of substantial character over the structure, to patch up the interior for temporary use, at the least possible cost and in the least practicable time, with a view to the abandonment of the building as a chemical laboratory and to the converting of it to some other purpose as soon as the State could make provision therefor. The precise action of the members of the Board who were present will be reported to you by the Secretary and will require your action. The work determined upon has been rapidly prosecuted under the supervision of Associate Professor James M. White, of the department of architecture, and the building is now practically ready for use. I do not think we have lost any students in consequence of the disaster, although much inconvenience and some embarrassments are unavoidable.

A. S. DRAPER,

President.

#### THE CORPS OF INSTRUCTION.

#### To the Board of Trustees:

I make the following recommendations as to the Corps of Instruction:

1. That Professor Daniel Kilham Dodge be granted leave of absence, because of sickness, for the fall term, upon half pay. It has been arranged that Professor Dodge's work shall be carried through the fall term by other members of the Faculty of the College of Literature and Arts, with such additional assistance as may be necessary to many the details of their work, which we shall be able to employ, I think, for the time being, without material loss to the interests of the University.

2. That Assistant Professor George Daniel Hammond be granted leave of absence for the year, without salary and in consequence of sickness, and that George Henry Alden, Ph. D., be appointed Acting Assistant Professor of History for the year, at a salary of \$70 per month for ten months from September 1st.

3. In June last John Edward McGilvrey, A. B., was, by your authority, appointed Assistant Professor of Pedagogy and Visitor of High Schools, at a salary af \$1,200 per annum. Your approval is requested.

4. That the salary of George A Huff, Jr., Assistant Director of the Gymnasium and Coach of the Athletic Teams, be \$1,200 per annum.

5. In July last Carlton Raymond Rose, Ph. M., was, by your authority, appointed Instructor in Chemistry, at a salary of \$70 per month for ten months from September 1st. Your approval is asked.

6. In August last Mr. Edwin Hall Pierce was, by your authority, appointed Instructor of the Violin and Conductor of the Military Band, at a salary of \$80 per month for ten months from September 1st. Your approval is requested.

7. In August Mr. Joseph Cullen Blair was, by your authority, appointed Assistant Horticulturist, with rank of Instructor in Horticulture, at a salary of \$1,000 per annum, one-half to be paid by the University and one-half by the Agricultural Experiment Station. Your approval is requested.

8. In June last Ernest C. Klipstein was appointed Instructor in Architecture, but declined the appointment. I recommended the appointment of Seth Justin Temple to the position, at a salary of \$80 per month for ten months from September 1st. Following is a statement of his career: Mr. Tomple is a graduate in architecture from Columbia University, New York, in 1892; Instructor in Architecture at the Metropolitan Museum of Art, New York, for two years; had the Columbian Fellowship in Architecture in 1885 and spent nearly two years traveling and studying in Europe. He is very highly recommended by Professor W. R. Ware, of Columbia University.

9. In July last Harry Keeler, B. S., was, by your authority, appointed Assistant in Chemistry, at a salary of \$50 per month for ten months from September 1st. Your approval is asked.

10. In July last William Charles Brenke, B. S., was, by your authority, appointed Assistant in Mathematics, at a salary of \$70 per month for ten months from September 1st. Your approval is requested.

11. It has become necessary to provide an additional Instructor in German. Professor Rhoades and Mr. Smith each have four classes and in most of them there are more students than can be instructed advantageously. The demands are likely to grow greater rather than less during the year. I therefore recommend that the President be allowed to engage an additional Instructor at not more than \$70 per month for the remainder of the year.

12. That the title of Walter Howe Jones be that of Professor of Music; that the title of Miss Adeline Whitney Rowley be Instructor in Vocal Music; that the title of Charles Nelson Cole, of the Preparatory School, be Instructor in Latin and Greek; that the title of Reuben S Douglass, of the Preparatory School, be Instructor in Mathematics; the changes in title to be without change of salary.

A. S. DRAPER, President.

The recommendations of the foregoing paper were, on motion of Mr. McLean, approved.

#### POSTOFFICES.

#### To the Board of Trustees:

There is considerable confusion, and I think some harm, arising out of the fact that there are two postoffices near the University, through which we receive our mail. Persons connected with the University, living in the adjacent cities and sympathizing with the local feeling of rivalry which exists between them, frequently seek to promote the interests of one or the other by the exclusive announcement that one or the other postoffice is the postoffice of the University. In my judgment it would be well for the Board of Trustees to give direction in the premises. While the University is within the corporate and geographical limits of the city of Urbana, it is, in fact, as convenient to one city as to the other. While there is a free delivery of mail through the Urbana office, it will always be necessary, in the interest of expedition, to receive mail through the Champaign office, for the University has become so extensively associated with the name of the latter city that it will never be possible for us to prevent mail matter being addressed to us at that office, and nearly as much time and inconvenience is experienced in the forwarding of mail through the regular channel from Champaign to Urbana and thence to the University as would be experienced by sending it around by Chicago or St. Louis. Moreover, it seems to me that there is a certain advantage to be derived from our being publicly identified with both cities; and it seems to me, also, that it is only just that we should publicly recognize our relations with each.

I therefore respectfully recommend that, in all future publications of the University, and in all official correspondence by representatives of the University, it be plainly stated that both Champaign and Urbana are postoffices through which mail matter will be received.

A. S. DRAPER, President.

#### The recommendations of the foregoing paper were approved.

#### POLICING AND LIGHTING BUILDINGS AND GROUNDS.

#### To the Board of Trustees:

I have frequently expressed the feeling that there is a lack of security about the University. I think that circumstances now make it imperative for us to take some decisive steps to remove the insecurity. We suffer very little loss or annoyance through the acts of our own students. We are continually overrun by outsiders who spend their time idling about the grounds, both day and night. The result is frequent injury to property, some thievery, and a continual menace to the quietness and good order imperative to the institution.

Although not arising from the depredations of outsiders, so far as we know, we have twice during the last year had fire in our buildings, each of which was in the night, and the last of which was very disastrous. These things impress upon us the necessity of closer care. I have made application to the City Council of the city of Urbana for the passage of ordinances making certain acts of lawlessness which have been directed to be stopped by previous action of the Board, infractions of the public peace and punishable as misdemeanors. The Council has responded to such application in a way which seems to meet the difficulty and cover the ground, so that when offenders are hereafter apprehended it seems possible that they may be punished.

Now, I think that we need more light about the campus, the service of a night watchman and, perhaps, of a day policeman as well. I have made application to the Mayor and Council of the city of Champaign to maintain an arc light at the intersection of Green and Wright streets, the most prominent entrance to the University grounds from the Champaign side. The matter is now under consideration. I have seen the Electric Light Company in reference to continuing the arc lights, which we maintain upon the campus, beyond twelve o'clock midnight, the hour named in the contract. The company offers to continue the lights until 3:30 a. m. in the summer time and until 4:30 a. m. during the six winter months, at an advance of \$3.00 per lamp per year. I therefore recommend,

1. That two additional lamps be installed upon the campus.

2. That the proposition of the Electric Light Co. to continue the lights until 3:30 a. m. and 4:30 a. m. at \$3 additional per lamp per year, be accepted.

3. That the Department of Buildings and Grounds be authorized to employ a night watchman at a salary of not exceeding \$40 per month, whose duty it shall be to patrol the grounds and inspect the buildings continuously during the hours from 6 o'clock p. m. to 6 o'clock a. m.

4. That the Department of Buildings and Grounds be authorized to employ a day policeman at a salary of not exceeding \$40 per month, who shall be clothed in policeman's uniform, and whose duty it shall be to be about the grounds and render such police service as may be necessary between the hours of 6 o'clock a. m. and 6 o'clock p. m.

5. That janitors in the employ of the University be required to wear a uniform to be prescribed by the Superintendent of Buildings and Grounds.

A. S. DRAPER, President.

On motion of Mr. McLean, the recommendations of the foregoing paper were approved with the exception of that regarding a day policeman, which was referred to the Committee on Buildings and Grounds with instructions to report as soon as possible.

#### STEAM HEATING DEPARTMENT.

Upon recommendation of Professor Breckenridge, Superintendent of Steam Heating, approved by President Draper, Mr. J. Morrow was employed for twelve months from September 1, 1896, at \$75 a month; Mr. E. Justus for ten months from September 1, 1896, at \$50 a month; Mr. Chas. Ewald for ten months from September 1, 1896, at \$20 a month; and Mr. John Doughty at \$50 a month from September 1, 1896. Also the Superintendent of Buildings and Grounds was authorized to employ from time to time such additional help as might be necessary to carry on the work of this department.

For repairing the heating apparatus in the Chemical Laboratory \$225 was appropriated, and the Superintendent of the Heating Department was instructed to have these repairs made.

For the purchase of fittings and pipe \$75 was appropriated.

For installing electric lighting in Engineering Hall and Machinery Building \$200 was appropriated.

The request of \$150 for running expenses in steam engineering laboratory work was referred to the Committee on Buildings and Grounds.

On motion of Mr. Morgan, the request of the Librarian, Mr. Bicknell, for an assistant, was indefinitely postponed.

On recommendation of President Draper, \$100 was appropriated for the purchase of apparatus in the Preparatory School.

It was voted that the architects of Library Hall be directed to have designed and placed in the vestibule of the building a suitable bronze tablet, and to have the names of the Board of Trustees, the President of the University, the architects, and the contractors inscribed thereon.

#### ADVISORY BOARD FOR SCHOOL OF PHARMACY.

The following communication from the State Pharmaceutical Association was presented to the Board by President Draper:

#### Illinois Pharmaceutical Association.

SPRINGFIELD, July 29, 1896.

#### Hon. A. S. Drager, President University of Illinois, Champaign, Ill.,

DEAR SIR: I have the honor to transmit to you the names of ten registered pharmacists selected (upon your suggestion) by the Illinois Pharmaceutical Association at their meeting in Springfield July 29, 1896, from which to select an Advisory Board of five members for the Department of Pharmacy of the University of Illinois. Henry Biroth, 481 25th St., Chicago.
W. M. Sempill, 135 Clark St., Chicago.
A. E. Ebert, 426 S. State St., Chicago.
Andrew Scherer, 383 N. State St., Chicago.
H. H. Green, Bloomington.
Henry Swannell, Champaign.
Theo. C. Loehr, Carlinville.
H. H. Rogers, Kankakee.
Thomas Knoebel, East St. Louis.
F. Lueder, Peoria.

Respectfully submitted,

#### F. FLUERY, Secretary.

It seemed best that the Advisory Board should consist of ten members and the persons nominated were unanimously selected.

On motion of Mr. McLean, it was voted to hold a special meeting of the Board October 6, 1896, at the School of Pharmacy, Chicago, Illinois.

The proposition to set eight stone posts so as to prevent driving across the lawn on the north side of Green street was referred to Mr. Morgan for investigation and report. Later in the session, on recommendation of Mr. Morgan, \$160 was appropriated for the purpose of setting stone posts or boulders for such purpose, as the Committee on Buildings and Grounds might deem advisable.

A communication was received from the Julia F. Burnham Hospital Association, of Champaign; asking for the use of Military Hall on the evening of November 23d. Action was postponed until the next morning.

A communication from John Deere & Co., of Moline, Ill., with regard to a breaking plow given to the University at the time of the World's Fair, and the claim of certain parties in Henry county to the ownership of the plow were referred to Mr. Morgan, the sense of the Board being that it is very desirable that the plow remain at the University.

#### STATE LABORATORY OF NATURAL' HISTORY.

The biennial report of the State Laboratory of Natural History was presented by the Director, Professor Forbes, and it was ordered that it be printed in the biennial report of the Board of Trustees.

#### AGRICULTURAL EXPERIMENT STATION.

President Draper presented a report from the Director of the Agricultural Experiment Station, Professor Davenport.

In accordance with the recommendations of the report and of the report from the Advisory Board of the Experiment Station, to be found below, the salary of Mr. Powers was made \$75 a month for the months of August and September and appropriations of Station funds were made to meet the following estimates:

For Quarter Ending September 30, 1896–General Fund.		
Salaries Library Publications Scientific apparatus.	190	00
Total	\$675	00
Furniture and fixtures	$\begin{array}{c} 25\\ 60\\ 25\\ 125\\ 100\\ 35\\ 105\\ 115\\ 300\\ 60\\ 40\\ 225\\ \end{array}$	00 00 00 00 00 00 00 00 00 00 00 00 00
Total	\$3, 752	50
From Farm Fund. Seeds, plants and sundry supplies	\$500 250	
Total	\$750	00

#### AGRICULTURAL EXPERIMENT STATION-ESTIMATES.

The following report was received from the Advisory Board of the Agricultural Experiment Station:

REPORT OF ADVISORY BOARD.

UNIVERSITY OF ILLINOIS, September 15, 1896.

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

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

Paper A is a statement of expenditures for the quarter ending June 30, 1896.

Paper B is a statement of expenditures for the year ending June 30, 1896.

Paper C is a list of warrants drawn Nos. 248 to 343, inclusive, for the quarter ending June 30, 1896, and is accompanied with vouchers for the same for audit.

PAPER A-STATEMENT OF EXPENDITURES FOR THE QUARTER ENDING JUNE 30, 1896.

Board expense Buildings and repairs Builetins. Chemical apparatus and supplies Fuel and lights. Incidentals. Printing, stationery, and postage. Salaries Seeds and trees. Tools and supplies.	$\begin{array}{r} 323 & 28 \\ 61 & 97 \\ 18 & 52 \\ 45 & 35 \\ 1, 622 & 50 \\ 61 & 71 \\ 485 & 12 \end{array}$
Wages	1.177 60
Sundry. Southern Illinois experiments	
Total	\$4,786 63

PAPER B-STATEMENT OF EXPENDITURES FOR THE YEAR ENDING JUNE 30, 1896.

Board expense	\$91.06
Books and publications	248 71
Botanical apparatus and supplies	80 33
Buildings and repairs	48 25
Bulletins,	1,307 60
Chemical apparatus and supplies	642 53
Fuel and lights	211 82
Incidentals	128 32
Meteorological apparatus.	$995 \\ 11945$
Printing, stationery, and postage	6,531 66
Seeds and trees.	83 56
Tools and supplies.	
Wages	4.399 14
1) <b>***</b>	-,
Sundry.	
Wood durability experiment. Southern Illinois experiments. Farm stock.	· 32 48
Southern Illinois experiments	191 67
Farm stock	15 00
Total	\$15,000 00

The Director of the Station, Professor Davenport, read to the Board his quarterly report to the President of the University. The estimates included in this report for the expenses of the current and next quarters were approved and the appropriations for the same were recommended. It was also recommended that the compensation of Mr. W. A. Powers in the Dairy Department be \$75 a month for August and September.

The Board recommended the appointment by the Trustees of a delegate to represent the Station at the Washington meeting of the Association of American Agricultural colleges and Experiment Stations, his expenses to be paid from Experiment Station funds.

The following resolution was adopted by the Advisory Board:

*Recolved*. That it is the sense of the Advisory Board of the Agricultural Experiment Station of the University of Illinois that a separate building, devoted to the needs of instruction and experimentation in agriculture, ought to be provided at the earliest practicable date.

Respectfully submitted,

T. J. BURRILL,

President Advisory Board.

President Draper and Professor Davenport were appointed delegates to the meeting of the Association of American Agricultural Colleges and Experiment Stations to be held in Washington next November, as representatives of the University and the Agricultural Station respectively, and it was ordered that the expenses of the former be paid from University funds and of the latter from Station funds.

President Draper presented a request from the Athletic Advisory Board asking that a man be furnished to take charge of the athletic grounds and tennis courts until Thanksgiving Day. It was considered that the Superintendent of Buildings and Grounds had already full power with regard to this matter, and it was left in his charge.

Upon request of Professor Forbes, \$200 was appropriated for use in the Department of Physiology, and \$100 for that of Hygiene.

Upon request of Professor Kinley, \$75 was appropriated to be used in investigation of the spread of "tenant farming in Illinois," and of the "cost of production of corn and oats in Illinois." 1896.]

Mr. Morrison asked to be relieved from the committee on letting coal contracts, and on motion of Mr. Bullard, Mr. McLean and Mr. Graham were appointed to act with the Business Manager as such committee.

Mr. Morgan, to whom the matter had been referred, reported with regard to the claim of Mr. S. S. Beman, architect of the President's 'House, and recommended that it be paid; the amount being \$445.56. The report was approved and the bill was ordered paid.

President Draper invited the members of the Board to attend a meeting of the Corps of Instruction at the Physics Lecture Room in the evening and the invitation was accepted.

The Board then adjourned to meet at 9 o'clock a. m. Wednesday.

#### SESSION OF WEDNESDAY.

When the Board met pursuant to adjournment the same members were present as on Tuesday, except Dr. Smith and Mr. Inglis.

The Finance Committee made the following reports which were received for record:

URBANA, Sept. 1896.

#### 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 1651 to 2125, series 1893–94; 1 to 2150, series 1894–95; 1 to 1425, series 1895-96, inclusive, have been issued, and finds the same correct and properly receipted, with the exception of 787, series 1895-96, for \$50,000, which was not issued. Your committee recommends that this warrant be cancelled.

N. B. MORRISON, S. A. BULLARD, Finance Committee. URBANA, ILL., Sept. 16, 1896.

#### Io the Board of Trustees.

GENTLEMEN: Your Finance Committee begs leave to report that it has examined the vouchers of the Agricultural Experiment Station, Nos. 248 to 353, inclusive, for the expenses of the Station for the guarter ending June 30, 1896, and has found the same correct.

Your committee has also examined the report for the year ending June 30, 1898, and has found it correct.

Respectfully submitted,

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

The Secretary made the report required of him with regard to Endowment Fund securities maturing during the next six months, and this report was referred to the Finance Committee.

The Secretary presented the following report, which he had received from the Treasurer:

#### TREASURER'S REPORT.

# CHARLES W. SPALDING, TREASURER. IN ACCOUNT WITH THE UNIVERSITY OF ILLINOIS, JUNE 30, 1896.

1896.		Dr.		
May June	3	Balance. Received bond No. 4. City of Urbana, due June 1, 1896. Received coupons, City of Urbana, due June 1, 1896	\$1,000 00 385 00	\$236, 323-20
		Received coupons, Village of Mansfield, due January 1, 1896	213 00	
••	4	Beceived coupons, school district Champaign county due June 1, 1896	182 50	a
" "	12	Received interest due January 1, 1896, on land contract No. 98, John T. Eagan	52 50	-
**	18	Received coupon, Homer township, district No. 2		
••	19	Received bond, school district. Montgomery county,	375 00	
s s .	19	Illinois, due June 15, 1896 Received coupons, school district, Montgomery county,	1,000 00	
••		Illinois, due June 15, 1896. Received from W. L. Pillsbury, returned salary of G. P. Clinton for March, 1896, to be credited to U. S. Ex.	420 00	
••	97	periment Station	· 83 34	
	21	paign county, due July 1, 1896	150 00	3,861 34
1				\$240, 184 54
1896.		Cr.		
June	30	By amount paid out of general fund, as per list of war-		
		rants attached hereto By amount paid out of State appropriation for salaries,	\$3,268 52	
		etc., as per list of warrants attached hereto	12,729 65	
	30	By amount paid out of State appropriation for library building, as per list of warrants attached hereto	1,115 30	•,
••		By amount paid out of State appropriation for library, as per list of warrants attached	446 61	
••		By amount paid out of State appropriation for labora- tory of Natural History, as per list of warrants at-	850 16	
* *	30	tached hereto By amount paid out of State appropriation for cabi-	38 84	-
•• •	30	nets, as per list of warrants attached By amount paid out of State appropriation for Engi- neering College, as per list of warrants attached	776 76	
**	30	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 war-	1,086 53	
••	30	rants attached hereto By amount paid out of Stare appropriation for build- ing and equipment, Biological Experiment Station,	151 60	
"	30	as per list of warrants attached hereto By amount paid out of State appropriation for appara- tus and material, as per list of warrants attached	70 44	, .
••	30	bereto By amount paid out of State appropriation for shop	20 75	
		practice, as per warrants attached hereto By amount paid out of State appropriation for Chemi-	115 17	
••		cal Laboratory, as per list of warrants hereto	61 75	
		By amount paid out of State appropriation for fire pro- tection, as per list of warrants attached hereto	62 76	
••	30	By amount paid out of State appropriation for paving streets and walks, as per list of warrants attached hereto	2 72	
••	30	By amount paid out of United States Experiment Sta- tion fund, as per list of warrants attached hereto	941 90	•
· • •	30	By amount paid out of Experiment Station farm fund,	· · · · · ·	
	J	as per list of warrants attached hereto	44 04	\$21,783 51

	1	1	
	Balances, June 30, 1896-		
	Endowment fund U. S. Experiment Station fund	\$34,745 93	
	U.S. Experiment Station fund	2,968 91	
	Farm fund	153 30	
	General fund	2,942 41	
	State Appropriations		
	For salaries etc	3,153 80	
	For Library Hall	144,208 85	
	For library	348 30	
	For Laboratory Natural History.	816 80	
	For Cabinets.	675 80	
	For Engineering College	6,223 70	
	For Engineering College. For Astronomical Observatory. For fitting and furnishing Engineering Hall	13,28924	
	For fitting and furnishing Engineering Hell	1,925 70	
1	For building and equipping Biological Experiment	1, 520 10	
	Station.	113 23	
	For Biological Experiment Station expense	6 97	
	For apparatus and material	348 89	
•	For shop practice	63 87	
	For Chemical Laboratory	1,827 74	
	For Laboratory of Vegetable Physiology	1,021 14	•
	For fue protection		
	For fire protection For paving streets and walks	529 23	
	For paving streets and walks		
	For establishing, equipping and maintaining a lab-	9 000 00	e910 101 09
	oratory for propagating pure vaccine virus	3,000 00	\$218,401 03
			0940 104 54
	,		\$240, 184 54
		1	

The committee on bids for furnishing coal for the ensuing year reported as follows:

URBANA, ILLINOIS, September 16, 1896.

To the Board of Trustees of the University of Illinois:

GENTLEMEN: Your committee on bids for furnishing coal for the University for the ensuing year, after careful investigation, would recommend that the order for supplying coal be awarded to the Odin Coal Company at the prices named in its bids, and that the Business Manager be authorized to carry out the terms of this report.

Respectfully submitted,

ALEX. MCLEAN, NELSON W. GRAHAM,

Committee.

The report of the committee was adopted.

It was voted that the janitors receiving not to exceed \$35 a month should be paid an additional \$2 a month; also that it should be left to Captain Brush and the Superintendent of Buildings and Grounds to determine of what the uniform should consist, which, by the action already taken, the janitors about the University are required to wear hereafter.

It was ordered that the Business Manager should get watchman's registers or clocks and have them placed on the upper floors of each of the buildings to be inspected by the night watchman. An appropriation of \$100 was made therefor.

Professor Shattuck was appointed Business Manager, the appointment to commence September 1, 1896, and to continue until otherwise ordered; salary \$600 a year.

It was ordered that the fees for instruction upon the violin and other stringed instruments should be, For students of music only-

	First	Second	Third
	Term,	Term.	Term.
Two lessons a week	\$21 00	\$16 00	\$16 00
One lesson a week	11 00	9 00	9 00

For students paying fees in other departments of the University-

•	First Term.	S .cond Term.	Third Term.
Two lessons a week	\$16 00	\$11 00	\$11 00
One lesson a week	9 00	6 00	6 00

A proposition in writing from the National Medical College, of Chicago, presented by Dr. Smith, and a verbal communication from the College of Physicians and Surgeons, of Chicago, were referred for investigation and report to a committee consisting of President Draper and Messrs. Armstrong, McLean, Raymond, and Morgan.

President Draper stated that the tenant on the south farm, Mr. Hedges, thinks it would be but fair that he should have some reduction in his rent on account of the nearly complete failure of his oats crop. The Farm Committee was given power to adjust the matter.

The Secretary was instructed to inform the Julia F. Burnham Hospital Association that, while the Trustees felt great interest in the success of the Hospital, and were entirely in sympathy with the benevolent work the Association had undertaken, they did not, after careful consideration of the matter, deem it wise to grant the use of Military Hall for the charity ball, as requested.

The Committee on Buildings and Grounds made the following report:

To the Board of Trustees:

GENTLEMEN: Your Committee on Buildings and Grounds begs leave to report that the work in its charge is progressing satisfactorily.

#### ASTRONOMICAL OBSERVATORY.

The contracts for the construction of the Observatory have been completed. The contracts for instruments are well under way and the last instrument will be here in a short time.

The building has cost \$6,654 including extras amounting to \$209.

We ask that Professor C. D. McLane be paid \$100 for services as superintendent in the construction of this building. We recommend that \$60 be appropriated for connecting the electric lighting apparatus of the Observatory with the Electric Light Company's lines.

#### CMEMICAL LABORATORY.

The Committee has taken charge of the improvements in the Chemical Laboratory made necessary on account of the fire, upon authority given by the Executive Committee. 1896.7

The Committee submits the report of Professor White with regard to the work, and recommends that \$2,000 additional, as suggested in his report, be appropriated for completing the work.

The Committee also recommends that the building be washed down so that all fire stains may be removed.

The Committee further recommends that a payment of \$80 be made to Professor White for his services as architect in charge.

#### To the Committee on Buildings and Grounds:

GENTLEMEN: As architect in charge of the repairs upon the Chemical Laboratory, which were directed by you Aug. 19th, I have to report that the work has progressed very favorably and that the changes, so far as the inside of the building is concerned, will be practically completed by tomorrow evening.

The completing of the balance of the exterior work will not interfere with the use of the building.

The work in the interior has been of a temporary nature and has cost about \$2,000. This includes all carpenter work, plastering, cleaning, and kalsomining of walls, plumbing, ventilating (including a new 6 H. P. motor), and fixed furniture, such as chemical desks and hoods and apparatus cases. Probably \$200 or \$300 will be necessary to complete this work, besides what will be needed for movable furniture, such as settees, chairs, and tables.

The roof is constructed as a permanent feature and being all new it was feasible to make it contract work. Bids were received from three firms on a trussed roof supported on the outside walls only, and covered with slate. All flashings, valleys, and aprons were specified to be copper, the cornice, galvanized iron, and the gutter, tin.

The bids were:

J. C. Sedgwick, Champaign, \$3,931.

L. M. Moore, Danville, \$4,170.

H. M. R. Construction Co., Chicago, \$5,550.

The contract was awarded to J. C. Sedgwick.

The appropriation of \$2,500 made for this work was only a guess at the cost, for there were then no drawings available upon which to base an estimate. The deficit on the roof is \$1,431, and the interior work will exceed the appropriation by about \$200. Some furniture is also still needed. It will require an additional appropriation of about \$2,000 to meet these items.

To make the building as sightly as possible on the exterior the brick work should be washed off. This is an expense I can not estimate, but it certainly can not be very great and I ask that it be authorized.

Respectfully submitted,

JAMES M. WHITE, Associate Professor of Architecture.

#### LIBRARY HALL.

The work on the Library Building is progressing satisfactorily, and in the opinion of the Committee the contractors are doing the work well. The report of the architects and superintendents, which is here inserted, and made part of this report, is expressive of the greatest confidence that the work is going on according to the contract and specifications.

UNIVERSITY OF ILLINOIS, Sept. 16, 1896.

#### To the Building Committee of the Board of Trustees.

GENTLEMEN: We beg leave to present the following report on the progress of the Library Building.

A delay of several weeks occurred in putting in the stone foundations, caused by the sickness of the quarry manager and retarded shipment of stone. But this delay has now been fully compensated by the excellent progress made in all other parts of the work, which is further advanced now than was expected. With favorable weather, the erection of the steel framing of the roof will commence before Oct. 1st., and the roof will doubtless be completed and the building enclosed before Nov. 1st. This will permit the work of finishing the interior to be carried on during the entire winter, as the contractors will provide sufficient temporary heating apparatus.

We report with pleasure that the sub-contract for roofing and copper work has been let to one of the very best and most reliable Chicago contractors in this line, thus securing a tight and permanent roof for the building, not the least important portion of the structure.

The external walls are to be completed by Oct. 1st, excepting the upper part of the tower, which will be cut and set during the month. Over forty stone cutters have been employed for some time past, cutting all stone here, so that delays in transportation will be avoided.

You will doubtless have noticed that the carved ornamentation around entrance, as well'as the main cornice, has been temporarily omitted, until  $\mathbf{p}$  ing, so as to avoid danger of injury in setting, and to leave it fresh and sharp.

The Expanding Metal Fireproofing Co. has completed the concrete floor of the book room, ready to receive structural steel work. This floor is afterwards to receive two inches of concrete filling and one inch Alsen's cement topping, finished hard and smooth, like the last concrete sidewalks, and to remain without any wooden floor. We have made experiments on the Alpha cement used on this work, and find it fully equal to the best German Portland cement in all respects. Experiments made on sample slabs of this concrete and expanded metal floor, one foot wide and three feet eight inches long between supports, subjected to a center breaking load, exhibit a corresponding breaking load of 600 pounds per square foot of floor, uniformly distributed, giving a factor of safety of nearly 6. This system of fireproof construction is better and more satisfactory than we had expected.

The walls of the book room have been held back to permit erection of structural steel work of book cases before putting in scaffolding for masons. The stone is all cut as far as the second story floor and can be rapidly set in place. The Library Bureau informed us today that this structural steel work was shipped yesterday, and that workmen will come today, to erect it at once. Therefore no further delay is likely to occur, if the weather continues favorable.

We report with pleasure that all contractors, sub-contractors, mechanics and laborers, employed in the building, have so far appeared to be willing and even anxious to do good, honest work, and furnish acceptable materials in the building, and no difficulty has occurred in getting our directions carried out promptly and carefully. We have each visited the building from two to four times daily during the progress of the work.

The estimates and payments to contractors on account of the Library Building are as follows:

Estimate of value of all labor and matorials from beginning to Sept. 1st Deduct 15 per cent. reserve	\$	$\substack{\textbf{42,506}\\\textbf{6.376}}$	
Total payments Certificates have been issued as follows:		36,130	00
July 1, 1896 August 1, 1893	\$	$3.106 \\ 10,925$	00
September 1, 1896		22,099 36.130	
10041	μ	50,150	00

Very respectfully submitted,

RICKER & WHITE, Architects of Library Building. The Committee recommends the appropriation of \$150.00, as requested by Professor Breckenridge, for steam engineering laboratory work.

#### Respectfully submitted,

S. A. Bullard, R. P. Morgan, I. S. Raymond,

#### Committee on Buildings and Grounds.

The report of the Committee was adopted and appropriations were made as therein recommended.

It was voted that Professor Breckenridge and Mr. Bullard should visit the University of Wisconsin, the University of Michigan, and the Ohio State University for the purpose of inspecting their heating, lighting, and power plants, and making a report to this Board with regard to a plant for these purposes at this University.

#### CHEMICAL LABORATORY REPAIRS.

The Secretary laid before the Board the following resolution, and a report from the Executive Committee.

#### URBANA, ILLINOIS, August 19, 1896.

At a conference of certain members of the Board of Trustees of the University of Illinois held this day in the office of the President of the University, at which there were present Messrs. Bullard, Graham. Morgan, Morrison, and Raymond the following resolution was unanimously adopted:

Whereas, The burning of the Chemical Laboratory confronts the Board of Trustees with the question of its permanent and temporary repairs, and,

Whereas, The building had in consequence of the rapid increase of the students become seriously inadequate to the needs of the Chemistry Department of the University, and at an early date would have become wholly inadequate; and

Whereas, The necessity of immediate provision for the Chemistry Department is imperative and there is no money appropriated with which to meet such an emergency so that what is used must be taken from the appropriation for ordinary running expenses, though fully needed therefor, therefore be it *Resolved*. That any repairs made should not be made with the view of re-

Resolved, That any repairs made should not be made with the view of reestablishing that building as the permanent Chemical Laboratory, but that steps be taken to put the building, at the least possible expense, in a condition so that it may be used temporarily by the Chemistry Department until the State shall make permanent provision therefor.

#### REPORT OF THE EXECUTIVE COMMITTEE.

#### URBANA, ILLINOIS, August 19, 1896.

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

GENTLEMEN: Your Executive Committee reports that pursuant to a call sent out by the President of the Board, Mr. Armstrong, the Committee this day met in President Draper's office at the University, there being present Messrs. Bullard and Raymond, and transacted the following business:

Twenty-five hundred dollars was appropriated to put a roof on the Chemical Laboratory, which had been seriously damaged by fire on the morning of Aug. 16th.

An appropriation of one thousand dollars was made to restore the partitions, and one thousand dollars for furniture, etc.

The Committee on Buildings and Grounds was intrusted with this work and instructed not to restore the mansard story, but to put a permanent roof.

on immediately above the second story. The Committee was also instructed to make other repairs on the building in a temporary way and with as little expenditure of money as possible.

An appropriation of twenty-five hundred dollars was made for the purchase of apparatus and supplies and the making these purchases was put into the hands of the Business Manager, and Professor Palmer and Parr.

Respectfully submitted,

W. L. PILLSBURY, Clerk.

S. A. BULLARD. Chairman, Protem.

The resolution was approved and adopted by the Board as its own, and the acts of the Executive Committee were confirmed. The Business Manager presented his report.

BUSINESS MANAGER'S REPORT.

UNIVERSITY OF ILLINOIS, September 15, 1896.

James E. Armstrong, President Board of Trustees, University of Illinois: SIR:-I have the honor to hand you herewith the following financial

statements:

Paper A, a showing of the current appropriations June 30, 1896. Paper B, the same for the State appropriations.

Paper C, a list of vouchers presented for audit, being Nos. 1426 to 2350, inclusive, series 1895-96.

Paper D, estimates for the twelve months ending June 30, 1897. Paper E, appropriations the Board is requested to make at this time. Papers F, G and H, bills for which appropriations are requested. I also ask for the appropriation of the balance, \$750, of the State appropriation for shop practice, as it is a matter of economy to purchase the iron, coke, etc., for the year, at this time.

An additional appropriation for the new roof of the Chemical Laboratory will be required.

Paper I, a statement of receipts for June. 1896.

Paper K, the inventory of apparatus and furniture.

PAPER A-CURRENT APPROPRIATIONS.

June 9, 1896.	Appro- priated.	Expended.	Balance.
Board expenses. Salaries for instruction {Current	$2,000 \ 00 \ 50 \ 00$	$\begin{cases} 2, 692 \ 47 \\ 5, 370 \ 75 \\ 889 \ 00 \\ 11 \ 30 \\ 15 \ 10 \\ 44 \ 99 \\ 156 \ 58 \\ 455 \ 00 \\ 54 \ 21 \\ 268 \ 58 \\ 56 \ 96 \\ 154 \ 65 \\ 2 \ 36 \end{cases}$	\$246 88 12,581 78 1,399 54 984 90 2,955 01 443 42 
Incidental expenses. Sundries. Furniture and fixtures. Heating apparatus. Water supply. Minnesota lands School of Pharmacy. Commencement. Treasurer's expenses. Taxes on Minnesota lands.	$\begin{array}{c} 400 \ 00 \\ 500 \ 00 \\ 125 \ 00 \\ 100 \ 00 \\ 3, 042 \ 75 \\ 270 \ 00 \\ 20 \ 86 \\ 127 \ 59 \end{array}$	3 52 17 35  439 00 170 00 20 86	$\begin{array}{c} 253 \ 09 \\ 496 \ 48 \\ 482 \ 65 \\ 125 \ 00 \\ 100 \ 00 \\ 2, 603 \ 75 \\ 100 \ 00 \\ \ldots \end{array}$
Taxes on Minnesota lands		127 59	

#### PAPER B--STATE APPROPRIATIONS.

Receive	ed.	Expended.	Balance.	Assigned.
or the Years 1893-1895.				1
\$295, 801 450	L 14 ) 00 ) 00	\$295,801 14 425 07 127 16	\$24 93 22 84	\$24 93 22 84
\$296,401	14	\$296,353 37	\$47 77	\$47 77
or the years 1895-1897.			•	
500 9 500 d horticulture	00	\$1,400 00 213 43 462 89 287 62 290 25		\$86 57 37 11 212 38 9 75
<u>\$3,000</u>		\$2,654 19	\$345 81	\$345 81
ological Experiment Station	00	\$1,500 00	<u></u>	·····
periment Station equipment 2,500	00	2,379 80	\$120 20	\$120 20
nesota lands	00	3.200 00		
s, etc	00	9,212 98	87 02	87 02
Observatory	00	4,221 67	10,778 33	10,778-33
Vegetable Physiology 2,000	00	1,911 98	88 02	88 02
150,000	00	5,796 55	144,203 45	144,203 45
n	00 (	1,029 66	970 34	970 34
	00 (	2,871 42	128 58	128 58
	00	\$351 05	\$648 95	\$648 95
g and catalogue         1,900           contest         100           Literature and Arts, books         200           ind         200           isewer         201           isewer         201           ischools         305	$\begin{array}{c} 19\\ 39\\ 00\\ 00\\ 59\\ 00\\ 08\\ 00\\ 00\\ 00\\ 00\\ 00\\ 00\\ 00\\ 00$	$\begin{array}{c} \$3, 320 \ 00\\ 63, 101 \ 55\\ 9, 754 \ 39\\ 494 \ 77\\ 332 \ 43\\ 2, 340 \ 59\\ 292 \ 50\\ 250 \ 08\\ 817 \ 27\\ 1, 046 \ 50\\ 812 \ 76\\ 62, 938 \ 26\\ 70 \ 60\\ 1, 050 \ 81\\ 100 \ 00\\ 1, 050 \ 81\\ 100 \ 00\\ 812 \ 76\\ 70 \ 60\\ 812 \ 76\\ 70 \ 60\\ 812 \ 76\\ 70 \ 60\\ 812 \ 76\\ 70 \ 60\\ 812 \ 76\\ 70 \ 60\\ 812 \ 76\\ 70 \ 60\\ 812 \ 76\\ 70 \ 60\\ 88 \ 23\\ 169 \ 27\\ -588, 185 \ 67\\ \end{array}$	461 64 5 23 67 57 82 50 2 73 3 56 61 74 19 40 849 16 200 00 60 86 	461 64 5 23 67 57 82 50 2 73 3 50 61 74 19 40 849 16 200 00 60 86 
		1		

•	Received.	Expended.	Balance.	Assigned.
College of Engineering— Machine shop Mechanical engineering and physics Civil engineering and physics Laboratory of Applied Mechanics and Municipal and Sanitary Engineering Architecture College of Engineering Unassigned	\$17,008 04 2,911 16 3,325 00 1,600 00 1,600 00 1,500 00 500 00 1,555 80	$\begin{array}{c} 2,602 55 \\ 2,705 05 \\ 321 65 \\ 268 82 \\ 805 60 \end{array}$	619 95 1,278 35 1,331 18 694 40 305 52	$\begin{array}{r} 308 \ 61 \\ 619 \ 95 \\ 1,278 \ 35 \\ \end{array}$
Furnishing and Fitting Engineering Hall- Electric wiring. Civil engineering. Architecture. Municipal and Sanitary Engineering. Mechanical department. Electrical engineering and physics. College library and parlor. Unassigned	412 50 1,042 11	\$1, 191 77 383 48 439 61 151 13 220 83 763 10 161 58	\$19 31 255 13 174 53 191 67 279 01 239 37 529 48	\$19 31 255 13 174 53 191 67 279 01 239 37
Shop practice Chemical Laboratory	\$1,500 00			
Vaccine Laboratory Illinois State Laboratory of Natural History	3.000 00		3,000 00	3,000 00

# Paper B-State Appropriations.-Continued,

BUSINESS MANAGER'S REPORT OF RECEIPTS FOR JUNE, 1896.

University examintion fees	\$20 00	
Preparatory examination fees	9 00	
Preparatory laboratory bills.	66 601	
Greenhouse sales	62  15	
Mechanical department	14 60	
Civil engineering department bills	49 60	
Physics laboratory bills Chemical laboratory bills	176 55	
Chemical laboratory bills	838 08	
Botanical laboratory bills	1 55	
Zoölogical laboratory bills	48 45	
Geological laboratory bills	25 83	
Physiological laboratory bills	5 00	
Incidental.	2 00	
Minnesota land rents	128 74	
		\$1,448 15
	1.45	

$\begin{array}{llllllllllllllllllllllllllllllllllll$					
Apparatus and equip- ment.         and illus- traive material.         Coll ma- cal ma- terial.         TOTAL.           Botanical department.         \$2,028 24         \$3,340 00         \$50 00         \$5,418 22           Physical laboratory         9,007 50         154 41         9,161 9           Electrical engineering         9,432 80         936 50         426 46         10,795 7           Veterinary science         1,25 75         25 00         15 00         1,165 7           Veterinary science         1,217 75 25 00         16 16         115 0           Art and design         1,214 00         430 45         1,125 83 19,399           Steam department         10,287 86         605 92         10,893 7           Physiology         11 10 15         175 50         238 96         119 00           Applied thematics         19 25         10,000 8         3,631 60         10,000 8           Mucipal and Sanitary Engineering         3,957 45         33 30         850 78         4,841 5           Applied chemistry         319 83         33 00         850 78         4,841 5           Music department         3,069 65         1,000 80         9,267 66           Music department         3,057 45         33 30         850 78		PERMANENT.		VARIABLE	
$\begin{array}{llllllllllllllllllllllllllllllllllll$	DEPARTMENT.	and equip-	and illus- trative	cial ma-	TOTAL.
······	College of Engineering. Chemical laboratory. Physical training. Romance languages. Horticulture.	$\begin{array}{c} 9.007\ 50\\ 9.432\ 80\\ 7\ 25\\ 1.125\ 75\\ 98\ 91\\ 1.291\ 40\\ 1.673\ 44\\ 333,95\\ 10,287\ 86\\ 1.110\ 15\\ 3.575\ 59\\ 10,000\ 00\\ 22,131\ 61\\ 19\ 25\\ 8.266\ 85\\ 3.957\ 45\\ 3.19\ 88\\ 1.150\ 00\\ 870\ 33\\ 3.069\ 65\\ 9.077\ 33\\ 3.069\ 65\\ 9.077\ 33\\ 3.155\ 00\\ 37,999\ 33\\ 1.12\ 25\\ 1.29\ 75\\ 1.503\ 87\\ 5590\ 25\\ 5534\ 34\\ 1.80\ 00\\ 684\ 65\\ \end{array}$	936 50 45 30 25 00 430 45 17, 472 00 605 92 175 50 1, 985 00  1, 000 80 33 30  1, 341 81 168 27  83 50	154 41 426 46 15 00 16 16 2253 83 12, 683 50 238 96 119 00 1, 400 08 	$\begin{array}{c} {\rm s5,41824}\\ {\rm 9,16191}\\ {\rm 10,79576}\\ {\rm 5255}\\ {\rm 11,16575}\\ {\rm 11,16577}\\ {\rm 11,16516}\\ {\rm 19,39927}\\ {\rm 13,01745}\\ {\rm 10,89378}\\ {\rm 11,52461}\\ {\rm 11,52461}\\ {\rm 11,52461}\\ {\rm 10,000000}\\ {\rm 23,53166}\\ {\rm 19,25765}\\ {\rm 19,26765}\\ {\rm 319285}\\ {\rm 11,17680}\\ {\rm 31,17680}\\ {\rm 150000}\\ {\rm 80080031}\\ {\rm 155000}\\ {\rm 800870366}\\ {\rm 4,41146}\\ {\rm 4,108275}\\ {\rm 11,165501}\\ {\rm 13550137}\\ {\rm 13,55000}\\ {\rm 31,155000}\\ {\rm 13,155000}\\ {\rm 13,155000}\\ {\rm 13,155000}\\ {\rm 13,155000}\\ {\rm 13,155000}\\ {\rm 13,16553434}\\ {\rm 14,166551}\\ {\rm 14,165511}\\ {\rm 16,53434}\\ {\rm 18,000\\ {\rm 65465}\\ {\rm 18,000}\\ {\rm 65465}\\ {\rm 10,000100}\\ {\rm 11,000100}\\ {\rm 10,000100}\\ {\rm 10,000100}\\ {\rm 10,000100}\\ {\rm 10,000100}\\ {\rm 10,000100}\\ {\rm 11,000100}\\ {\rm 10,000100}\\ {\rm 10,000100,000}\\ {\rm 10,000100,000}\\ {\rm 10,000100,000100,000}\\ {\rm 10,000100100,000}\\ {\rm 10,000100,000}\\ {\rm 10,000100,000}\\ {\rm 10,000100,000}\\ {\rm 10,000100,000}\\ {\rm 10,000100,000000}\\ {\rm 10,000000000,000,000000,000000,000000,000000,000000,000000000000,00$
	,			\$23,733 71	

#### INVENTORY, SEPTEMBER 1, 1896.

#### FURNITURE AND FIXTURES.

Natural History Hall Military Hall		
Engineering Hall Engineering Mechanical Department	\$11,688 49 2,197 13	13,885 62
		\$37,839 17

Respectfully submitted,

S. W. SHATTUCK, Business Manager.

Paper C and accompanying vouchers were referred to the Committee on Finance.

The appropriations were made as called for in paper E for the four months ending December 31, 1896.

#### APPROPRIATIONS.

Board expenses. Salaries for instruction and President. Salaries for services. Buildings and grounds Fuel and lights and electric power. Stationery and printing. Repair shop. Preparatory School. Mechanical department. Architectural, Agricultural, Horticultural, Military. and Civil Engi- neering departments. Laboratories. Library and apparatus. Incidentals. Farniture and fixtures. Heating apparatus. Water supply.	$\begin{array}{c} \textbf{4, 650 00} \\ \textbf{1, 000 00} \\ \textbf{2, 600 00} \\ \textbf{600 00} \\ \textbf{300 00} \\ \textbf{100 00} \\ \textbf{600 00} \\ \textbf{400 00} \\ \textbf{400 00} \\ \textbf{500 00} \\ \textbf{500 00} \\ \textbf{400 00} \end{array}$	
Greenhouse Advertising School of Pharmacy— Salaries for instruction Salaries for services	100 00 \$2,250 00 590 00	\$50,245 00 1,000 00 \$51,245 00
Apparatus and materials Coal, gas, water, telephone, stationery, printing, etc Rent of building. Agricultural Experiment Station—general fund Agricultural Experiment Station—farm fund	$ \begin{array}{r} 1,000 \ 00 \\ 600 \ 00 \\ 1,200 \ 00 \\ \hline $3,750 \ 00 \\ \hline 750 \ 00 \end{array} $	\$5,550 00 \$4,500 00

Also, the balance, \$750, of the state appropriation for shop practice was assigned for the use of the Mechanical Department.

The bills of the Treasurer, Mr. Spaulding, amounting to \$310.98, for accrued interest and premiums paid for the purchase of bonds for the endowment fund were referred to the Committee on Finance, with power to act.

The bill of H. T. Sperry & Son, amounting to \$42.45, for insurance on guns, was allowed and ordered paid.

The bill of Cunningham & Boggs, for expenses and services, \$202.81, was allowed and ordered paid.

Professor Shattuck asked that the pay of his clerk be increased from \$45 to \$50 per month, and it was so ordered.

Professor Forbes was authorized to employ a messenger in his office at a salary of \$12 a month to January 1st and \$15 thereafter.

For repair of microscopes in the Zoölogical Department and purchase of some additional parts, \$100 was appropriated.

On motion of Mr. Raymond, \$25 was appropriated for incidental expenses on the south farm.

President Draper and Messrs. Armstrong, Morrison, and Bullard were appointed a committee to consider and report to the Board at its next meeting as to appropriations to be asked for at the next session of the General Assembly.

The Board directed Mr. Morrison to say to the gentleman asking for the loan of an eagle from the Museum, to be carried in the political procession the next day, that the Board declined to grant the request.

On motion of Mr. McLean, the question of appointing a permanent attorney of the Board, which, by resolution adopted at the meeting of June 26th, was to be considered at this meeting, was laid over until the next meeting.

The Board adjourned.

W. L. PILLSBURY, Secretary. JAMES E. ARMSTRONG, President.

# MEETING OF SEPTEMBER 30, 1896.

The Board of Trustees of the University of Illinois met in special session at the office of the Superintendent of Public Instruction, in Springfield, Illinois, at 9 o'clock a. m., Tuesday, September 30, 1896, pursuant to the following call issued by the Secretary September 24, 1896:

"Upon the call of the President, Mr. James E. Armstrong, there will be a meeting of the Board of Trustees of the University of Illinois at the office of the Superintendent of Public Instruction, in Springfield, Illinois, at 9 o'clock a. m., Wednesday, September 30, 1896, for the purpose of visiting the State Fair and to transact such business as may be duly presented."

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

Mr. Morgan stated that he had investigated the claims made with regard to the plow which was given to the University at the time of the World's Fair, and that in doing this he visited John Deere & Co., at Moline, and other interested parties in Henry county. He stated his conclusion to be that the plow should be returned to the Old Settlers' Society of Henry county.

On motion of Mr. Morrison it was voted: First, that the report of Mr. Morgan in regard to the Glen plow be approved and all the papers in respect to the plow be placed on file; second, that upon formal application from the Executive Committee of the Old Settlers' Society of Henry county the plow be surrendered and shipped to the address the Committee may designate.

Mr. Bullard read a communication from President Draper with regard to the location on the campus of certain water mains.

On motion of Mrs. Flower, the Committee on Buildings and Grounds was instructed to visit the University and report with regard to the matter at the meeting of the Board to be held in Chicago next Tuesday.

Mr. Armstrong reported for the Executive Committee that it had instructed the Superintendent of Buildings and Grounds to see that the place at the boiler house where the coal is put was suitably inclosed, and that it had appropriated \$100 for that purpose. The action of the Committee was confirmed.

The Board adjourned.

W. L. PILLSBURY, Secretary. JAMES E. ARMSTRONG, President.

# MEETING OF OCTOBER 6, 1896.

The Board of Trustees of the University of Illinois met in special session at the School of Pharmacy, 465 State street, Chicago, Illinois, at 2 o'clock p. m., Tuesday, October 6, 1896, pursuant to the following call issued by the Secretary, October 1, 1896:

"Upon the call of the President, Mr. James E. Armstrong, there will be a special meeting of the Board of Trustees at the School of Pharmacy, 465 State street, Chicago, Illinois, at 20'clock p. m., Tuesday, October 6th, for the purpose of attending the opening of the School of Pharmacy and to transact such business as may be properly presented."

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

Upon recommendation of President Draper, \$100 was appropriated for prizes at the oratorical contest.

An appropriation of \$30 was also made for prizes at the Accredited High School contest.

Upon recommendation of President Draper, Professor Myers was made Director of the Astronomical Observatory.

A communication from Professor Forbes with regard to a summer school at the Biological Experiment Station was referred to the Committee on Instruction.

At the request of the Business Manager, Professor Shattuck, an appropriation of \$300 was made for furniture for the Astronomical Observatory.

A design for a tablet to be placed in Library Hall, prepared by the architects, Messrs. Ricker & White, was referred to a committee consisting of Messrs. Morgan, Bullard, and Raymond, with power to act.

The Board adjourned to attend the opening exercises of the School of Pharmacy.

JAMES E. ARMSTRONG, President.

W. L. PILLSBURY, Secretary.

# MEETING OF DECEMBER 8, 1896.

The Board of Trustees of the University of Illinois met in the President's office at the University, in Urbana, Illinois, at 3 o'clock p. m., Tuesday, December 8, 1896.

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

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

President Draper laid before the Board his report to the State Superintendent of Public Instruction concerning the University. The report was approved.

President Draper presented the following report from Professor Davenport, Director of the Agricultural Experiment Station.

REPORT OF THE DIRECTOR OF THE EXPERIMENT STATION.

UNIVERSITY OF ILLINOIS, November 30, 1896.

A. S. Draper, President University of Illinois.

DEAR SIR:—During the quarter the University herd has been increased by two very fine bull calves, one a Shorthorn, and the other a Holstein-Friesian. Both are fine specimens and will do us credit, if they develop as they promise. The cows are considerably milked down, but are in thriving condition, and the bulls are really coming to be something unusually fine.

We are yet putting a good share of the energy of the Station into the question of the best methods of supplying milk to the city trade. There are many and perplexing problems involved, a few of which are peculiar to our conditions, but most of which are inherent in the business.

Mr. Fraser nominally took charge of the work in August, but at that time, and because of the sickness of Professor Holden for a considerable time after, he was very much occupied with the affairs of the field and in helping to install the new order of things. Since he has confined his attention to the milk trade he has put a force into things that has not hitherto appeared in the management of this feature of our affairs. He spent nearly two weeks during November in the Elgin district in studying methods and machinery there, and I have great reason to hope that at last we have a management that will manage

I am not at all satisfied with the condition of experimental work left behind by Mr. Powers to be embodied into a bulletin on pasteurization. Most of his work was done before a Director was appointed, and it happened to be a case that needed more than ordinary direction. I succeeded in bringing his ex-

. 41

periments to a close and in obtaining most of the results of his work in a very indifferent shape. By putting work enough into this matter it will be possible to make something of a bulletin on the subject.

At the last meeting of the Board of Direction in June it was voted to buy at least fifteen sheep and to expend thirty dollars for hogs. I bought soon after five good breeding ewes of E. E. Chester. The prevalence of hog cholera made it seem unwise to engage in a feeding experiment with hogs, and after considerable delay I carried out the spirit of the resolution in what seemed to me the best way by purchasing twenty-seven lambs for winter feeding.

More than 2,000 bushels of corn have been harvested, most of which involves some sort of experiment. That grown on the 140 plats of one tenth acre each was most carefully harvested. On each plat the yield of grain and stover was taken separately to learn the "personal equation" of each piece of ground. Yields have ranged from seventy bushel to ninety six bushels per acre, which latter is more than double the average yield of good corn, and very near the upper limit of the crop.

Whenever the so-called "corn disease" appeared careful maps were made locating every affected hill and so accurate is the work that we shall be able to tell if the disease appears on a given spot another year, even to a particular hill.

A new method of correcting for variations in yield, due to soil differences, was devised and tested this year with very satisfactory results. It consists in repeating frequently the same variety or treatment as a standard, and we are extending the principles into experimental feeding by comparing everything with a "standard feed."

A corn breeding experiment is unique and has developed many curious facts. This is mainly because care was taken to separate the seed before shelling into the thirteen different types to be found in the variety. Plantings were made from the predominant types and for various mixtures and the result shows that certain types are greatly more persistent than others, but that there is general correspondence between planting and crop. Experiments this year show disastrous results from self-fertilization of corn, and nothing but the mass of notes can adequately show the curious results of the many different plantings.

The rape plant this year proved a valuable forage crop with us, but no better results than heretofore have followed the attempts to grow crimson clover. Kafir corn has flourished, but the yield, which is about forty bushels an acre, is too small to be profitable where Indian corn will succeed.

In the horticultural department Mr. Blair has been busy in removing useless trees and hedges, renovating orchards and sod, trimning borders, and repairing walks and drives, and in giving things a general air of tidiness. He will make plantings of small fruits in the spring that will add to the attractiveness of the gardens, and be in a sense something of an experiment. He has also tested the possibilities of straightening trees that had commenced to lean to one side. An elm by the warehouse was carefully brought to an upright position, and its future behavior will be carefully noted.

The chemical laboratory is fairly established in Natural History Hall, and apparatus, to replace that destroyed by the fire, is well in for a restricted line of work. What has been bought is of excellent quality. Samples of soil from Odin and Edgewood have been secured to replace those lost by fire, and many samples of corn are in preparation for analysis in anticipation of an exhaustive study of the chemical composition of corn and its variability.

Dr. McIntosh, in company with Dr. Burrill, has examined many specimens of the so called hog cholera, but with negative results, the indications being that the disease was principally swine plague rather than hog cholera.

For Quarter Ending December 31, 1896-Farm Fund.		
Feeding stuffs Tools.implements and machinery Live stock Traveling expenses	\$30 25 71 30	00 75
Total	\$156	75
For Quarter Ending March 31, 1897–General Fund.		
Salaries. Labor. Publications Postage and stationery. Freight and express. Heat light, and water Seeds, plants, and sundry supplies. Feeding stuffs Library. Tools, implements, and machinery. Furniture and fixtures. Scientific apparatus Traveling expenses. Buildings and repairs.	$\begin{array}{c} \$1, 938\\ 385\\ 300\\ 25\\ 60\\ 262\\ 100\\ 175\\ 125\\ 100\\ 275\\ 30\\ 50\\ \end{array}$	00 00 00 00 00 00 00 00 00 00 00
Total	\$3,750	00
From Farm Fund.		
Labor Seeds, plants, and sundry supplies	\$440 300	
Total	\$740	c <b>o</b>

### ESTIMATES.

The schedule of estimates for the winter quarter is self explanatory. Respectfully submitted.

E. DAVENPORT,

## Director of the Experiment Station.

Appropriations were made of Experiment Station funds according to the estimate by the Director.

The President reported that the Faculty of the University recommended Mr. C. M. Lewis for the degree of B. S. in Architecture, he having completed the course in due form, and the Board authorized the President to confer the degree.

Appropriations were made according to the recommendations of the following paper:

To the Board of Trustees:

I respectfully recommend the following appropriations to departments:

1. For the Astronomical Department, the sum of \$100 for apparatus, viz.: a barometer.

2. For the Department of Mechanical Engineering, \$150 for unusual operating expenses in the laboratory.

3. For the Department of Agriculture, the sum of \$250 for the purchase of cows and apparatus, in preparation for the Winter School.

4. For the Department of Physics, the sum of \$600 for apparatus.

5. That the sum of \$95 be appropriated to the Department of Zoölogy for apparatus for the class in embryology.

Respectfully submitted,

A. S. DRAPER, President. The Business Manager was authorized to contract, upon receiving a satisfactory bid, for furnishing the chemical and botanical laboratories of the University with supplies and apparatus, to be imported, not exceeding \$1,600 in amount.

## LAW SCHOOL.

President Draper presented the following recommendation as to the organization of a Law School as a part of the University:

### To the Board of Trustees.

The time has arrived when it seems to me that the interests of the University imperatively demand that the Board shall take decided steps looking to the organization of a Law School. This can be established here without very great difficulty or expense. In order to insure it at the opening of the next University year I recommend:

1. That the Board appropriate \$3,500 for the salaries of instructors during the year 1897-98.

2. That the Board appropriate \$3,000 for the purchase of books.

3. That the Board appropriate \$500 for any other other expenses necessarily incurred in this connection.

4. That the President be authorized and requested to present to the Board, at as early a date as practicable, detailed plans for the contemplated School.

Very truly yours,

A. S. DRAPER, President.

It was voted to establish a Law School as proposed, and appropriations were made therefor as recommended.

The Business Manager was authorized to lease, for use of the Experiment Station, two tracts of land, one for \$25 a year rental, at Odin, and the other at \$10 a year rental, at Edgewood.

The request for a messenger in the College of Engineering was postponed.

The report of the Superintendent of Buildings and Grounds was referred to the Committee on Buildings and Grounds.

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

WHEREAS, The Chicago College of Pharmacy has become the School of Pharmacy of this University; in order that this Board may be fully and promptly advised of the doings and workings of said School, therefore be it

Resolved, That a standing committee, consisting of five members (the President of the University and the Business Manager being two of these) be appointed, which shall report to this Board at its regular meetings concerning the School of Pharmacy.

## MEDICAL SCHOOL.

The special committee, to which was referred at the meeting of the Board held Sept. 15, 1896, propositions from two medical schools of Chicago, made the following report.

## To the Board of Trustees.

Your committee appointed at the last regular meeting, to consider a proposition from the College of Physicians and Surgeons of Chicago, looking to

the absorption of that institution by the University, respectfully reports that the committee visited the institution in October and thoroughly inspected the same. It held a very full conference with the officers thereof, and it has since received from them a statement showing the receipts and expenditures of the institution during the three years prior to the present one. The proposition of the Board of Trustees is, briefly, to the effect that they shall rent to the University the property of the College, consisting of the College building and of its furnishings and appurtenances, and transfer to the University its good will; and that the University shall thereupon assume the full authority for the future conduct of the institution.

The College of Physicians and Surgeons seems to stand exceedingly well in the public sentiment of Chicago. It is certainly one of the three most prominent and thoroughly well established institutions of its character in the city. Its location, in close proximity to the Cook County General Hospital, is highly advantageous. Its building is not of such a character as we would construct upon the part of the State of Illinois, but it is exceedingly roomy and apparently very well adapted to the purpose for which it is used. There were about 280 students in the institution last year and we are advised that there are 310 registered up to the present time this year. It seems to be shown that the tuition fees go considerably farther than is necessary to meet the expenses.

The committee is of the opinion that the University could absorb the institution without being in any danger of incurring expense in behalf thereof. If the same result should be obtained in this connection as in the case of the School of Pharmacy it would apparently be a good step for us to take. Doubtless the assumption of the institution by the State University would serve to increase materially the attendance. On the other hand, the students and alumni of the College of Physicians and Surgeons would thereby become related to and interested in the State University, and that fact would operate to our advantage in many ways. Again, it is surely incumbent upon the State of Illinois to maintain professional schools in connection with its State University, and particularly to exert its great influence towards the uplifting of medical training and practice.

It does not seem important that there should be any special haste about the matter, for the reason that the institution is fully organized and it is not imperative that there should be any decided steps taken until nearer the close of the present college year.

The committee therefore recommends:

1. That, without entering into any agreement in the matter, the Board express its intention of accepting, at a later day, the proposition made by the Board of Trustees of the College of Physicians and Surgeons, reserving to itself, of course, the right to suggest or require modifications as to detail.

2. That the Board of Trustees appoint a committee, or continue the present one, with instructions to proceed with the investigations and perfect plans as to details, and report thereupon at a subsequent meeting.

Your committee was also charged with the duty of reporting upon a proposition from the National Medical College in Chicago, looking to an absorption of that institution. The committee visited the institution, held interviews with its officers, and thoroughly considered the whole matter. Practically, in view of our recommendation as to the College of Physicians and Surgeons, it is thought unadvisable to take any steps in connection with the National Medical College at present.

Respectfully submitted,

JAMES E. ARMSTRONG,

Chairman.

The report of the committee was approved and the committee was continued with instructions to report further at the March meeting of the Board. A bill for legal services was presented from Messrs. Mann, Hayes & Miller. While this bill was under consideration the following resolution, offered by Mr. McLean, was adopted.

Resolved, That the Finance Committee be requested to communicate, by correspondence or otherwise, with the attorneys who have charges against this Board for legal services in relation to obtaining payment of appropriations, and ascertain which of said attorneys performed said services, and adjust, if possible, reasonable fees for such services and report to this Board at its next meeting.

President Draper's bill for traveling expenses amounting to \$130.40 was approved and ordered paid upon recommendation of the Finance Committee.

The Committee on Instruction presented the following report, which was adopted.

### SUMMER SCHOOL.

## To the Board of Trustees.

The Committee on Instruction respectfully reports that Professor Forbes has presented to the Commitee a proposition involving the continuance of the Summer School opened by him last summer at the University Biological Station on the Illinois River, and widening its field of work. His plan contemplates a united effort between himself, Professor Tompkins, and Professor Burrill, together with some others, for the development of a summer school of very high grade in Biological work and in Pedagogy. The plan seems feasible to the Committee, and the very high standing of the men who project it is an assurance of the best work in the directions indicated. Such a school would have a distinguishing end in view and an individuality which would be unique. The gentlemen referred to desire the support of the University in the matter, although they assure the Committee that they are not seeking personal remuneration. After fully advising with them upon the matter, the Committee recommends as follows:

1. That the school may be established under the authority of the University.

2. That the several steps taken in connection therewith shall be with the approval of the President of the University.

3. That the University shall be responsible for any deficit in expenses, not including the salaries of any instructors, up to the limit of \$500.00.

4. That the tuition fees, if they shall exceed the expenses, shall be divided among the instructors as they shall agree.

The matter of a women's dean, which was talked of at the last meeting has been considered by the Committee on Instruction, and several very desirable women have been suggested for the place. The Committee respectfully recommends that President Draper be authorized, as soon after Christmas as practicable, to have personal interviews with these women, as it is important that the right person should be obtained, and a personal interview would go farther than any amount of recommendations.

Respectfully submitted,

LUCY L. FLOWER,

Chairman.

The resignation of Mr. W. A. Snow of his position as Entomological Assistant in the State Laboratory of Natural History was, on recommendation of the Committee on Instruction, accepted, to take effect November 20, 1896.

Upon further recommendation of the Committee, the Director of the Laboratory was authorized to employ Mr. C. C. Adams, of Bloomington, at a salary of \$40.00 a month for such time as may be necessary, not to extend beyond June 30, 1897; and to engage Mr. H. O. Woodworth, of Champaign, from time to time, as may be necessary, for field entomology, at \$3.00 a day. Also on recommendation of the Committee, Mr. C. A. Hart's salary was increased to \$900.00 a year for the last half of the current fiscal year.

President Draper announced to the Board that Miss Katharine Merrill had resigned her position as Assistant Professor of the English Language and Literature the resignation to take effect August 31, 1897. The resignation was accepted.

Professor Breckenridge and Mr. Bullard made a report of an inspection of heating, lighting, and power plants, which they had made by order of the Board.

## HEATING, LIGHTING, AND POWER PLANT.

### URBANA, ILL., December 5, 1896.

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

GENTLEMEN:—We have visited the universities of Wisconsin, Ohio, and Michigan, have carefully inspected their systems of heating, lighting, and power distribution, and take pleasure in making to your honorable body the following report:

We found the authorities at each University very anxious to show us every attention, and we were given access to all the information possible. We met in each case the person in charge of the plant, and have much valuable data from these plants concerning cost, as well as details of construction. We have arranged in tabular form most of the information obtained and this table accompanies this report in blue print form.

### GENERAL FEATURES COMMON TO ALL PLANTS INSPECTED.

All the plants inspected have all their boilers in one station, all distribute the steam through pipes carefully covered and suspended in tunnels. Each plant has a large and high brick stack producing strong draft. All water of condensation is returned to boiler house.

### SPECIAL FEATURES OF NOTE AT THE DIFFERENT PLANTS.

University of Wisconsin.—Here the boilers are all equipped with the "Roney Mechanical Stokers" and the coal delivered to the boiler house is all weighed, dumped into a hopper, and elevated to coal bunkers in front of the boilers. The ashes are elevated to a platform outside of the house and carted away each day. Very much noise and dust accompany this work. Here there is no lighting plant, but we were told that \$25,000 would be asked for this year for this purpose, and an addition would be built to the present boiler house for this work.

They have a Gren Economizer, capacity 500 H. P., for heating the feed water by escaping gases, as well as a forced draught outfit, of the same capacity, consisting of fan and engine combined. This is used in severe weather to increase the capacity of their plant. They do all their own pumping of water for university uses, besides pumping water for use at the Capitol nearly a mile away. But very little smoke was made, but sometimes they introduced a steam jet above the grate bars. The floor of the boiler house is about 15 feet below grade. Size of boiler house is 55x100x25.

Three cuts accompany this report showing the interior of their boiler room, the interior of their pumping plant, and a corner of the boiler house. The most important data are on the blue print. University of Michigan.—A cut of the boiler house and chimney is shown on page eight of this report. The floor of the boiler room is about 13 feet below grade. The tunnels are quite extensive, making a complete circuit of the rectangular campus. The tunnel runs under nearly all the buildings heated, and advantage is taken of any heat radiated from the pipes by letting it into the basement of the buildings. No stokers are used. The chimney is a handsome one.

The part of the building extending to the left is the lighting plant. They have not, however, installed in it any generators, but will ask for money for this lighting machinery from the coming legislature. There are engines in different buildings now running from the high pressure mains in the tunnels. This feature they consider bad and hope to avoid as soon as possible.

Ohio State University.—This plant is still in progress of construction and was perhaps the most instructive of any plant inspected. Their boiler house is 55x100: their engine house is 40x60, with a sub-basement, 8 feet clear head-room. This basement is cemented and serves as a store house and place for condensers and transformers.

Their coal handling machinery, which has recently been installed, was the most perfect arrangement seen. It operated with much less noise and with but very little dust. Their ash conveyor runs the entire length of their boiler house, and the ashes are automatically delivered into a hopper from which they can be drawn into a wagon.

They have installed in their boiler house three types of mechanical stokers, the Murphy, the Acme, and the Babcock & Wilcox chain grate. They evaporate  $8^{1}_{2}$  pounds of water per pound of coal, using nut and pea sizes. The smoke issuing from their chimney was very slight. Their piping arrangements and small details were the most perfect of any which we saw, and when their plant is completed it will be a model plant. Their plan of operation is to generate electricity in their engine house and distribute it for power and lighting purposes. They have already installed eleven (11) two-phase motors aggregating 160 H. P. These operate the fans for ventilation in the several buildings where that system is employed, as well as the different departments of their shop practice work. The wires are all carried to the buildings through the tunnels.

They have in course of construction three new buildings, and have just completed 1,100 feet of new tunnel, using paving brick for its construction, it being somewhat larger, and, according to their experience, more satisfactory.

### NEEDS OF THE UNIVERSITY OF ILLINOIS RELATING TO NEW CENTRAL HEATING, LIGHTING, AND POWER PLANT.

Our present heating plant has been the result of continually adding to a plant originally designed for heating two buildings. The boiler house is only 30x75, and the operations of firing, cleaning, and repairs are often carried on with much difficulty and loss of time. Our boilers are not working efficiently for want of a proper draft; our chimney is a continually smoking nuisance; and our boiler house is so situated that the usual direction of the smoke is over and into our buildings. A large part of the water of condensation is not returned to our b iler house, involving increased fuel consumption for heating new water, as well as subjecting our boilers to increased scale formation. Upon the completion of our Library Hall we can not furnish sufficient steam for heating it. Neither can we set additional boilers in our present house or connect them to our now over crowded chimney. We are also operating three small boilers at the shops situated at the other side of our campus, so that it is always smoky.

Under the conditions existing it seems very desirable to make a radical change in our entire plant, and reorganize on an entirely new basis. The following plan is suggested as a basis upon which to work:

1. Change location of our two present plants to the lowest point on our campus, *i. e.*, between Engineering Hall and the Machinery Building.

2. Build here boiler house, engine room, and dynamo room, either in one building or closely connected.

3. Building a new chimney.

4. Install all our boilers in the boiler house, all our engines in the engine room, and all our electrical machinery in the dynamo room.

5. Distribute steam for heating purposes through mains properly carried in tunnels.

6. Generate electricity at this plant for distribution through the tunnels, using it for both power and lighting purposes.

7. Install electric motors at all places where power is needed for running fans or openating machinery.

The advantages af such an arrangement as outlined above would be of the greatest importance. We should mostly eliminate the smoke nuisance. We should operate under maximum economic conditions both as to cost of fuel and labor. We should be able to use all our exhaust steam for heating purposes, and we could easily run 2,000 incandescent and 20 arc lamps without materially increasing our fuel consumption. We could put down a well and do a large part of our pumping. We could use a much cheaper grade of fuel. We could arrange for cheaper hauling by rail connections to our boiler house.

We should have a modern and model plant. Its value as an investment would be undisputed. Its value as an educational feature would be of the greatest importance to our engineering students. This fact is worthy of more than passing notice. Our students do not largely come from engineering centers, and they carry away wrong ideas from being educated in close proximity to poor engineering features.

Costs-It would cost to build and equip the plant outlined above, \$95,000.

The principal items of this amount are as follows:

Buildings— Boiltr room, engine room and dynamo room	\$35,000 00
Chimney. Apparatus for mechanical draft.	6,000 00
Apparatus for mechanical draft Construction of 2,200 ft. of tunnels at \$5.00	4,000 00 11,000 00
Coal and ash handling machinery.	4,500 00
Additional boiler capacity-250 H. P.	4,500 00
Automatic stokers (400 H. P).	3,000 00 1.000 00
Moving old boilers. Putting steam mains and returns in tunnels, installing tanks, pumps, traps, etc.	5,500 00
Light and Power— Electric light and power machinery at central plant, capacity 2,000 incan- descent, 20 arc and 100 H. P. generators Putting wires in tunnels from central plant to each building Motors to replace engine now running New engines ror running dynamos	$\begin{array}{c} 7,500 & 00 \\ 2,500 & 00 \\ 2,000 & 00 \\ 1,500 & 00 \end{array}$
Pumping Plan <sup>t</sup> Installation of deep well pump, and pipes to all buildings Plans, specifications and superintendence	$3,000\ 00$ $4,000\ 00$
Total	\$95,000 00

The electrical machinery now in the basement of University Hall would be more satisfactorily placed in a part of this building, and it would relieve the main building of dangers to which it is now subjected.

In addition to the matter submitted in this report, your committee has obtained some twenty-five large blue prints showing in detail the construction and general arrangement of the heating systems visited, as well as numerous photographs of buildings and special features seen at different places, all of which will be very useful, if such a plant should be erected at this University.

Very respectfully submitted,

S. A. BULLARD, L. P. BRECKENRIDGE.  $49^{\circ}$ 

The report of the committee was received and referred to the Committee on Legislative Appropriations.

The Treasurer's report was presented by the Secretary and was referred to the Finance Committee.

# TREASURER'S REPORT.

CHARLES	w.	SPALDING,	TREASURER.	IN	ACCOUNT	WITH	THE	UNIVERSITY OF	ILLINOIS
			SE	PTE	MBER 30, 1	896.			

<del></del>	-			
1896.		Dr.		
June	30	Balance		\$218,401
July 		Received of Austin, Cook county, coupons, due July 1, 1896. Received of District No 3. Sangamon county coupons,	\$575 00	
		due July 1, 1896. Received from bond No. 1, Sidney district No. 1, Cham-	250 00	
• •	2	paign county, due July 1, 1896. Received coupons. Sidney district No. 1, Champaign	,840 00	
* *	3	Received coupons. Champaign county, due July 1, 1896.	$\begin{array}{c} 210 & 00 \\ 2,250 & 00 \end{array}$	
••		Received coupons, Broadlands school district, No. 10, Champaign county, due July 1, 1896	50 00	
		Received coupons, school district No. 3, Montgomery county, due July 1, 1896	130 00	
		Received coupons, Litchfield school district, due July 1, 1896	$\begin{array}{c} 440 & 00 \\ 630 & 00 \end{array}$	
••		Received coupons, Gallatin county, due July 1, 1896 Received part of coupons, Kankakee county, due July 1 1890	1,900 00	
• •	8	1, 1896. Received coupons, Logan county, due July 1, 1896 Received coupony, Macoupin, due July 1, 1896	750 00	
" •	8	Received coupons, Macoupin county, due July 1, 1896 Received coupons. Macoupin county, due July 1, 1896	1,800 09	
••	- 8	Received coupons. Pike county, due July 1, 1896	2,030 00	
		Received from U. S. Experiment Station warrant, due July 1, 1896 Received credit, farm fund, per advice from W. L.	3,750 00	
		Pillsbury.	581 10	
••	18	Received bond No. 1, Illiopolis school district, due July 11, 1896	1,000 00	
• •	18	Received coupons, Illiopolis school district, due July 1, 1896.	100 00	
٠.	25	Received from State Treasurer, U. S. appropriation.	22,000 00	
. 4 4	28	due July 1, 1896. Received bond No. 2, Taylorville township, Lue August 1, 1900, called under option.	1,000 00	
••	<b>28</b>	Received coupons, Taylorville township, due August 1, 1896	1,140 00	
	28	Received bond No. 173, Macoupin county, due July 1, 1899, called under option	500 00	
••	28	Received balance of Kankakee county coupons, due July 1, 1896.	500 00	
* *	$\frac{28}{28}$	Received coupons, Morgan county, due July 15, 1896 Received bonds Nos, 48, 49, 50, Pittsfield school district,	1,400 00	
••		due July 1, 1896. Received coupons, Pittsfield school district, Pike coun-	3,000 00	
<b></b> .		ty, due July 1, 1896. Received from treasurer of Pope county, Minnesota, on	630 00	
August	3	account of excess of payment in taxes	31 02	
	3	Champaign county, due August 1, 1896 Received coupons. district No. 1, Champaign county.	2,000 00	
**		due August 1, 1896 Received coupons, Mattoon, Coles county, due August	360 00	
4 6 ·		1, 1896 Received bond No. 4, Morgan county. district No. 1, due	150 00	
	4	August 1, 1896	1,000 00	
-6.6	5	August 1, 1896 Received from State Treasurer, appropriation for Lab-	420 00	
	10	oratory of Natural History, due July 1, 1896 Received from S. W. Shattuck, paid warrants on ac-	9,900 00	
6 6		count of general fund	1, 183 04	
		count of general fund	903-92	

Treasurer's Report-Continued.

1896.		Dr.		
August	31	Received from State Treasurer, payment of the follow- ing appropriations— For Minnesota taxes. For salaries, etc. For addition to library For addition to apparatus and appliances. For materials and shop practice For increase of scientific cabinets and collections For one-half operating expenses of Biological Ex-	\$1,600 00 90,000 00 3,000 00 1,500 00 1,000 00	
September	$\frac{15}{21}$	periment Station Received from S. W. Shattuck on account of farm fund Received Montgomery county coupons, due August 1,	$\begin{array}{c} 1,500 \\ 300 \\ 00 \\ 00 \end{array}$	
* *		Received from S. J. Hallquist, principal on contract	60 00	
* *		No. 76 Received from S. J. Hallquist, accrued interest on con-	286 50	
* *	30	Received from S. W. Shattuck, on account of farm	15 05	
••	30	fund, paid warrants Received from S. W. Shattuck, on account of general	443 44	
••		fund, paid warrants Interest, June, July, August and September, 1896, on	3,010 73	
••		Interest, June, July, August and September, 1896, on	490 85	
		all other balances, at 2 <sup>1</sup> 2 per cent	1,714 85	\$390, 344 5
1896.		Cr.		
September	30	By amount paid out of general fund, as per list of war-	<b>64</b> 6 6 4 4 4	
• •	30	rants attached hereto By amount paid out of endowment fund, as per list of	\$16,840 14	~
• •	30	warrants attached hereto By amount paid out of U. S. Experiment Station fund,	8,200 00	
* *	30	as per list of warrants attached hereto By amount paid out of farm fund, as per list of war-	5,610 86	
••	30	rants attached hereto By amount paid out of U. S. fund, as per list of war-	982 36	-
-6.6	30	rants attached hereto. By amount paid out of State appropriation for salaries.	3,452 43	
4.4	30	etc., as per list of warrants attached hereto By amount paid out of State appropriation for Library	12,892 57	
-6 6	30	Hall, as per list of warrants attached hereto By amount paid out of State appropriation for library,	37,041 90	
••	30	By amount paid out of State appropriation for Labora- tory of Natural History, as per list of warrants at- trabed howite	347 25	
••		By amount paid out of State appropriation for cabi-	3,256 48	
-4 4	30	by amount paid out of State appropriation for Engi- neering College, as per list of warrants attached	26 85	
	30	hereto. By amount paid out of State appropriation for Astro- nomical Observatory, as per list of warrants attached	1,301 04	
••		hereto. By amount paid out of State appropriation for fitting and furnishing Engineering Hall as per list of war-	8,761 94	
••	30	and rathand hereto. By amount paid out of State appropriation for build- ing and equipment, Biological Experiment Station,	454 99	
**	30	as per list of warrants attached hereto By amount paid out of State appropriation for appara- tus and material, as per list of warrants attached	120 20	
••	30	hereto	353 47	
		practice, as per warrants attached hereto	254 31	
••	30	By amount paid out of State appropriation for Chemi- cal Laboratory, as per list of warrants hereto By amount paid out of State appropriation for fire pro-	3,722-32	
-66	30	By amount paid out of State appropriation for fire pro- tection, as per list of warrants attached hereto By amount paid out of State appropriation for paving streets and walks, as per list of warrants attached	18 14	
		streets and walks, as per list of warrants attached hereto.	466 14	

Treasurer's Report-Concluded.

1896.	Cr.	· · · ·	
September 30	By amounl paid out of State appropriation for estab- lishing, equipping and maintaining laboratory for propagation of pure vaccine virus, as per list of war- rants attached hereto	\$527 65	;
	Balances- General fund Endowment fund. United States fund. U. S. Experiment Station fund Farm fund. State Appropriations- For salaries, etc. For library building. For Laboratory Natural History. For Cabinets. For Cabinets. For Cabinets. For Cabinets. For Astronomical Observatory. For fitting and furnishing Engineering Hall. For expenses of Biological Experiment Station. For apparatus and material. For shop practice. For fire protection. For fire protection. For Laboratory of Vegetable Physiology. For fire protection. For Laboratory of Pure Vaccine Virus.	$\begin{array}{c} 86,844 \ 73\\ 36,172 \ 43\\ 18,547 \ 57\\ 495 \ 48\\ 84,861 \ 23\\ 107,166 \ 95\\ 3,001 \ 05\\ 7,460 \ 32\\ 1,648 \ 95\\ 4,922 \ 66\\ 4,527 \ 30\\ 1,470 \ 71\\ 1,506 \ 97\\ 2,995 \ 42\\ 1,309 \ 56\\ 88 \ 02\\ 952 \ 20\\ 63 \ 09\\ 2,472 \ 35\\ \end{array}$	\$104,631 04
	Less Overdrafts-State Appropriations- For building and equipping Biological Experiment Station	\$287,615 04	285,713 49
			\$390, 344 53

On motion of Mr. Raymond, a rebate of \$200.00 was allowed the tenant on the south farm on his rent due September 1, 1896.

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

## SESSION OF WEDNESDAY MORNING.

When the board met pursuant to adjournment the same members were present as on Tuesday afternoon.

The question of furnishing steam heat to the contractors of Library hall was referred to Professor Breckenridge and the Business Manager with power to make a contract with regard to this matter, if they deemed it best to do so.

The request of Mr. J. J. Johnson to be paid for clothing lost at the time of the fire in the Chemical Laboratory was not granted.

The committee on legislative appropriations made the following report:

### STATE APPROPRIATIONS.

UNIVERSITY OF ILLINOIS, Dec. 8, 1896.

## To the Board of Trustees:

The committee appointed at the last meeting to report to the board touching requests which need to be made of the legislature in behalf of the University, respectfully offers the following: The legislature should be asked, immediately upon assembling, to pass an emergency appropriation bill restoring to the sum appropriated for general operating expenses the amount taken therefrom to repair Chemical Laboratory so that it could be temporarily used, and to make good the loss upon the chemicals and apparatus. The amount, as stated by the business manager, is \$14,461.13.

The following items should, in the judgment of the committee, be provided for in the general university appropriation bill:

1. It is imperative that provision shall be made for a new central heating plant, as the present one is altogether inadequate for the increasing needs. The new buildings can not be warmed by it. It is old and a portion of the boilers are unfit for use and never used except in emergencies. It is a menace to University Hall. It seems advisable to the committee that when a new central heating plant is constructed provision shall be made in it for housing the electrical apparatus now in the basement of University Hall, thus removing the menace which that plant is to the safety of the large building. For this purpose \$85,000.00 is necessary.

2.' The burning of Chemical Laboratory in August last creates the necessity for a new structure to take its place. The chemistry department is one of the most important in the University. Indeed it may be said that it is of more consequence than that of any other university in the west. The old building has become inadequate to its needs. Following the suggestion of the Board, made at the time the building was patched up for temporary use, we recommend that the legislature be asked to make provision for a new building. The committee is of the opinion that \$75,000.00 will be needed for the structure and that \$20,000 more will be needed for furnishing and equipping it.

3. The University has long stood in need of an agricultural building. The need is so apparent, and the interest so great and so representative of the people of Illinois, that there is no necessity for arguing it. We think a separate building should be erected with an attached or adjacent structure in which may be carried on a school, teaching by practical demonstration all of the various processes of dairying. These two structures together can doubtless be erected for \$80,000.

4. We recommend the appropriation of the sum of \$20,000.00 for reconstructing the old Chemical Laboratory. Although the interior of that building was entirely destroyed, the outer walls were left intact, and a new and substantial roof has been placed upon it and the interior quickly fixed up for temporary use. A moderate sum of money would reconstruct this building so as to make it altogether worthy of use for some other needed university purpose. The purpose to which it seems best adapted, and which is most pressing, is that of a women's building, and we are of the opinion that the sum needed would admirably adapt it to that end. The needs of the women's department are certainly great. It is in contemplation that there shall be a dean of that department appointed at an early day. There is necessity for an office and meeting rooms, as well as for a gymnasium, toilet accommodations, etc. The number of women students at the University is less than it should be, and may readily be increased if proper provision is made for them. We think that the interest is of so much consequence that all friends of the University are agreed that we need a distinctive building devoted to the interests of the women students.

5. We can not with propriety longer delay the erection of a men's gymnasium. Military hall is now devoted to gymnasium purposes. It has no proper conditions for a gymnasium and its use as such materially interferes with military drill and instruction. Our own professor of military science has complained about this, and at his recent visit to the University Major General Wesley Merritt sharply called attention to it. We have a large number of young men whose health the University is bound to conserve. They need every facility for physical training and exercise, as well as accommodations for toilet and bathing purposes. A building could be suitably constructed, with apparatus, baths, etc., for \$60,000. We think it should be asked for. 6. The ordinary growth of the University necessitates an increase in the appropriation for operating expenses. At least \$110,000 a year has become necessary.

7. The library building is going to be very nearly, but probably not quite finished out of the appropriation already made therefor. That appropriation has been taxed for iron book stacks when it was not so intended. It will be necessary for the legislature to make an appropriation to complete the building. We think \$5,000 will be sufficient for that purpose. It will also be necessary to make an appropriation for furnishing the building, for which we think the sum of \$8,000 will be moderate but will suffice.

8. Our library needs augmentation. For years the legislature has postponed liberal appropriations for this purpose on the ground that we lacked library accommodations, but provision has now been well made in that direction. The committee is of the opinion that the legislature should, at the least, give us \$20,000 for each of the two succeeding years for library purposes.

9. The College of Engineering will always be under the necessity of liberal support, if it is to maintain its position at the head of such institutions in the West. An engineering equipment is expensive. It deteriorates rapidly, and the progress of invention creates the continual necessity of reinforcing an extension of equipment. At least \$25,000 per year is necessary in this connection.

10. The equipment of the Astronomical Observatory needs to be supplemented. The building has been erected and some of the equipment purchased and installed, from the appropriation made by the last General Assembly. The professor in charge submits a detailed statement showing the need of an appropriation of between \$9,000 and \$10,000. We recommend that the sum of \$7,000 be asked for this purpose.

11. The board has frequently considered the the importance of purchasing the two pieces of property within our general boundaries and known as the Chase property, and no one can look over the University without seeing the desirability of doing so. The property was offered a year or more ago for \$7,000, and we advise that the sum of \$15,000 be appropriated for its purchase and the purchase of other property adjoining our grounds valued at about \$8,000.

Tabulating the foregoing recommendations, and including some small and usual items, the committee recommends that the legislature be asked to appropriate the following amounts:

Taxes on Minnesota lands (per annum)	\$1,800
Additions to apparatus and appliances (per annum)	3,000
Materials for shop practice (per annum)	2,000
Increase of scientific apparatus and collections (per annum)	1.000
For fire protection (per annum) For maintenance of buildings and grounds (per annum)	1,000
For bridge over Silver Creek on Burrill avenue	3,000 800
For maintenance of Vaccine Laboratory (per annum)	1,500
For equipment of Astronomical Observatory	7,000
For purchase of the Chase and other property	15,000
For library books (per annum)	20,000
For extending engineering equipment (per annum)	25,000
For book stacks and other fixtures in Library Hall For furnishing Library Hall	5,000 $8,000^{\circ}$
For salaries of administrative officers, teachers, and employes (per annum)	110,000
For Central Heating Plant, and for moving and installing electrical laboratory	80,000
For new Chemical Laboratory	75,000
Fixtures for Chemical Laboratory	20,000
For Agricultural Building and Dairy Laboratory	80,000
For Men's Gymnasium, baths, etc	60,000
For reconstructing old Chemical Laboratory for the purpose of a Women's build- ing	20,000
11g	40,000

To the above will have to be added the appropriations for the State Laboratory of Natural History, which have been submitted by Professor Forbes, as follows:

For field work and office and incidental expenses, per annum For the improvement of the library, per annum For salaries and assistance, per annum For the publication of bulletins, per annum For the illustration of the biennial report of the State Entomologist, per annum. For the expenses of the Illinois Biological Station, per annum.	$\$1,500\ 1,500\ 4,000\ 750\ 250\ 3,000$
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Respectfully submitted,

N. B. MORRISON, J. E. ARMSTRONG, S. A. BULLARD, A. S. DRAPER,

Committee.

Mrs. Flower offered the following resolution as an amendment to the report:

Resolved, That the old Chemical Laboratory be converted into a women's building, provided that a building be added or erected adjacent thereto and that between the two provision shall be made for the office of Dean of the Women's Department, suitable parlor and meeting rooms, gymnasium, with toilet and bathing accommodations, department of household economics, with refectory for the use of the university people in general, and a dining room and living accommodations for fifty or more women students, and that the appropriation asked for be increased to such sum as the Department of Architecture shall say is necessary for the several purposes above specified.

The amendment was adopted, and the report as amended was adopted.

A communication was received from Cunningham & Boggs with reference to the Bruner case. It was ordered that the balance of the Appellate Court costs, \$9.90, should be paid, and that the attorneys should be instructed to carry the case up to the Supreme Court.

The Secretary was instructed to reply to a letter from Mr. Palmer with regard to the McMurry case that the Board declined to take, at present, any step in regard to this case, inasmuch as it involves questions similar to those which will be passed upon by the Supreme Court in the Bruner case.

Mr. Morrison, from the Committee on Finance, presented the bond of Professor S. W. Shattuck as Business Manager. The bond was approved and deposited with the Secretary.

Mr. Pillsbury, as Registrar, presented his report of fees, etc., due from students of the University and of the Preparatory School for the quarter ending September 30, 1896.

This report was referred to the Finance Committee.

He also presented his report as Secretary, of the bonds belonging to the endowment fund which would fall due June 30, 1897, and the payments falling due on the land contracts during the same period; also a report of interest accruing on bonds belonging to the endowment fund during the quarter ending September 30, 1896. These reports were referred to the Finance Committee.

On motion of Mr. McLean, the President of the University, and the Business Manager were instructed to report at the next meeting of the Board the name of some suitable person to be employed as an attorney of the Board, and also the terms upon which he could be so employed.

The Board then adjourned to meet at 2 o'clock p. m.

## SESSION OF WEDNESDAY AFTERNOON.

Upon recommendation of President Draper \$150 was appropriated for running expenses of the Mechanical Engineering laboratory for the quarter ending March 31, 1897; also \$120 for the purchase of a volume fan and engine combined for use in experiments with different coals.

The Business Manager, Professor S. W. Shattuck, presented his report, which was referred to the Finance Committee.

BUSINESS MANAGER'S REPORT.

UNIVERSITY OF ILLINOIS, December 8, 1896.

James E. Armstrong, Esq., President of the Board of Trustees, University of Illinois.

SIR:—I have the honor to hand you herewith the following financial statements, and report for the three months ending September 30, 1896:

Paper A is a statement of the general current appropriations September 30, 1896.

Paper B is that of the State appropriations.

Paper C is that of the U. S. fund.

Paper D is that of the Laboratory of Natural History.

Paper E is that of the Agricultural Experiment Station.

Paper F is that of the School of Pharmacy.

Paper G is an estimate of receipts and expenses for the nine months ending June 30, 1897.

Paper H is a list of appropriations the Board is requested to make for the three months ending March 31, 1897.

Paper I is a report of my receipts for the three months ending September 30, 1896.

Paper K is a list of general University vouchers presented for audit, being 1 to 500, inclusive.

Paper L is a list of Laboratory of Natural History vouchers presented for audit, being 1 to 96, inclusive.

Paper M is a list of Agricultural Experiment Station vouchers presented for audit, being 1 to 77, inclusive.

Paper N is a list of School of Pharmacy vouchers presented for audit, being 1 to 38, inclusive.

Paper O is a bill of expenses which the Treasurer, C. W. Spalding, requests to be paid.

	Appro- priated.	Expended.	Balance.
Board expenses . Salaries for instruction and for President Salaries for services . Buildings and grounds. Fuel and lights	$\begin{array}{c} \$846 \ \$8\\ 47, \$91 \ 78\\ 6, 049 \ 54\\ 984 \ 00\\ 4, 955 \ 01\\ 1, 043 \ 42\\ 2, 220 \ 00\\ 545 \ 73\\ 831 \ 42\\ 543 \ 02\\ 845 \ 35\\ 97 \ 64\\ 753 \ 09\end{array}$	$ \begin{array}{c} \left\{ \begin{array}{c} 3,923 \\ 7,934 \\ 9,613 \\ 19 \\ 9,076 \\ 48 \\ 171 \\ 23 \\ 1,300 \\ 19 \\ 591 \\ 88 \\ 297 \\ 33 \\ 192 \\ 11 \\ 78 \\ 53 \\ 1,461 \\ 93 \\ 10 \\ 25 \end{array} \right\} \\$	$\left.\begin{array}{c} \$552 \ 18\\ \$552 \ 18\\ \end{smallmatrix}\right\} 26, 420 \ 45\\ \$13 \ 67\\ 3, 654 \ 82\\ 451 \ 54\\ 1, 463 \ 12\\ 248 \ 46\\ 639 \ 31\\ 464 \ 51\\ 1, 383 \ 42\\ \$7 \ 39\\ 277 \ 43\end{array}\right.$
Sundries.         Furniture and fixtures         Heating apparatus         Water supply         Minnesota lands.         Greenhouse         Commencement .         Senator Morrill's bust.         Stone posts         Tenant farming, etc., in Illinois         Architect's fees         Watchman's register.         Interest and premium,         Attorney's fees         South farm         Coal house         Accredited high schools         Military scholarship.	$\begin{array}{ccccc} 406 & 48\\ 482 & 65\\ 250 & 00\\ 100 & 00\\ 100 & 00\\ 100 & 00\\ 45 & 00\\ 75 & 00\\ 455 & 00\\ 100 & 00\\ 310 & 98\\ 202 & 81\\ 25 & 00\\ 100 & 00\\ 30 & 00\\ 15 & 00\\ \end{array}$	63 64 125 00 67 28 15 79 58 50 45 00 	160 00 75 00 100 00

### PAPER A-CURRENT APPPOPRIATIONS.

# PAPER B--STATE APPROPRIATIONS.

-	Received.	Expended.	Balance.	Assigned.
. For the Years 1893-1895.				
Closed out Buildings and grounds	\$296,353 4777		•••••	
	\$296,401 14	\$296,401 14		
For the years 1895-1897.				
Salaries, etc.— Closed out. Salaries for instruction. Salaries for services Heating apparatus Library catalogue. Buildings and grounds. Toilet rooms. Art and design Physical training School of Music. Lectures. Agriculture. Preparatory School. Advertising and catalogue. Oratorical contest. College of Literature and Arts, books. Athletic fund. Illini Recredited schools. Technograph Signal bells.	$\begin{array}{c} 1,200\ 00\\ 400\ 00\\ 1,500\ 00\\ 375\ 00\\ 2,250\ 00\\ 1,220\ 00\\ 2,250\ 00\\ 1,000\ 00\\ 3,500\ 00\\ 100\ 00\\ 2,900\ 00\\ 100\ 00\\ 200\ 00\\ 500\ 00\\ 100\ 00\\ 300\ 00\\ 100\ 00\\ 100\ 00\\ \end{array}$	72, 714 74 600 80 400 C0 1, 042 17 292 50 53 05 818 17 1, 950 85 3, 188 02 70 60 0, 276 07 482 04 	$\begin{array}{c} \$10, 848 \ 45\\ 2, 000 \ 00\\ 599 \ 20\\ 1599 \ 20\\ 196 \ 95\\ 401 \ 83\\ 82 \ 50\\ 196 \ 95\\ 401 \ 83\\ 299 \ 15\\ 1, 000 \ 00\\ 311 \ 98\\ 119 \ 40\\ 1, 623 \ 93\\ 100 \ 00\\ 200 \ 00\\ 17 \ 96\\ 5500 \ 00\\ 100 \ 00\\ 215 \ 05\\ 100 \ 00\\ 36 \ 77\\ \end{array}$	$\begin{array}{c} 2,000\ 00\\ 599\ 20\\ 599\ 20\\ 457\ 83\\ 82\ 50\\ 196\ 95\\ 196\ 95\\ 196\ 95\\ 196\ 96\\ 1198\\ 1198\\ 1198\\ 1198\\ 1198\\ 100\ 10\\ 100\ 00\\ 100\ 00\\ 100\ 00\\ 215\ 05\\ 100\ 00\\ \end{array}$

	<b>.</b>			
	Received.	Expended.	Balance.	Assigned.
Salaries, etc.—Concluded. Botany Mechanical laboratory. Chemical laboratory and repairs Furniture and fixtures. Furnishing and fitting Astronomical	150 00 9,080 00 400 00	\$5,787-40 34-94	\$150 00 150 00 3, 292 60 365 06	$\begin{array}{r} 150 & 00 \\ 3, 292 & 60 \\ 365 & 06 \end{array}$
Observatory Unassigned	300 00 50.070 00		300 00 50,070 00	300 00
Apparatus and materials— Closed out. Applied chemistry. Chemistry. Psychology. Zoölogy. Physiology and hygiene. Botany and horticulture. Geology. Mathematics. Unassigned.		381 39	$\begin{array}{c c} \$73, 538 & 66 \\ \hline \\ \$100 & 00 \\ \$72 & 76 \\ 80 & 91 \\ 329 & 41 \\ 511 & 38 \\ 298 & 61 \\ 400 & 00 \\ 300 & 00 \\ 520 & 00 \\ \hline \end{array}$	\$23,468 66 \$100 00 372 76 80 91 329 41 511 38 298 61 400 00 300 00
	\$6,000 00	\$3,086 93	\$2,913 07	\$2,393_07
Operating Biological Experiment Station	\$3,000 00	\$1.539 91	\$1,460 09	\$1,410.09
Biological Experiment Station equipment	\$2,500 00	\$2,500 00	<u> </u>	<u> </u>
Taxes on Minnesota lands	\$3.200 00	\$3,200 00		<u></u>
Paving streets, letc	\$9,300 00	\$9,236 91	\$63 09	\$63 09
Astronomical Observatory	\$15,000 00	\$10,572 70	\$4,427 30	\$4.427 30
Laboratory of Vegetable Physiology	\$2,000 00	\$1,911 98	\$88 02	\$88 02
Library Hall	\$150,000 00	\$42,835 05	\$107.164 95	\$107,164 95
Fire protection	\$2,000 00	\$1.145 30	\$854 70	\$854 70
Library	\$6,000 00	\$3.207 87	\$2,792 13	\$2,792 13
Cabinets— Geology General Unassigned	\$400.00 600.00 1,000.00 \$2,000.00	·····	\$48 95 600 00 1,000 00	\$48 95 600 00  \$648 95
College of Hugin conjug	\$2,000 00	\$351.05	\$1.648 95	
College of Engineering— Machine shop. Mechanical engineering and physics Electrical engineering and physics Civil engineering Laboratory of Applied Mechanics and	\$17,008 04 3,104 85 3,829 85 1,852 42	2,655 96 2,861 51	$\begin{array}{c} 448 & 89 \\ 968 & 34 \\ 618 & 86 \end{array}$	448 89 <sup>9</sup> 968 34 618 86
Municipal and Sanitary Engineering. Architecture College of Engineering.	$1,852 42 \\ 1,752 42 \\ 600 00$	1,275 81	1,539 36 476 61 356 43	$\begin{array}{r} 1,539 \ 36 \\ 476 \ 61 \\ 356 \ 43 \end{array}$
	\$30,000 00	\$25,591 51	\$4,408 49	\$4,408 49
Furnishing and Fitting Engineering Hall- Electric wiring. Civil engineering. Architecture. Municipal and Sanitary Engineering. Mechanical department. Electrical engineering and physics. College library, parlor, etc.	\$1, 191 77 478 43 770 38 401 30 563 78 1, 193 39 400 95	402 23 555 95 219 53 220 83	\$76 20 214 43 181 77 342 95 430 29 156 67	\$76 20 214 43 181 77 342 95 430 29 156 67
	\$5,000 00	\$3,597_69	\$1,402 31	\$1,402 31
Shop practice	\$3.000 00		*1.156 32	\$1.156 32
Chemical Laboratory	\$5,000 00	\$3,584 70		
Vaccine Laboratory	\$3,000 00	\$600 75	\$2,399 25	\$2,399 25

# Paper B-State Appropriations-Concluded.

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	Received.	Expended.	Balance.	Assigned.
Year ending June 30, 1897. Salaries for instruction Unassigned	\$20,000 00 2,000 00 \$22,000 00	·····	2,000 00	

### PAPER C-UNITED STATES FUND.

## PAPER D-LABORATORY OF NATURAL HISTORY.

	Received.	Expended.	Balance.	Assigned.
For the years 1895-1897. General balance July 1, 1896. Salaries Field, office, etc. Library Bulletins Report of entomclogist. Contagious diseases of insects. Biological Experiment Station.	$     \begin{array}{r}       3,650 \ 00 \\       1,500 \ 00 \\       1,000 \ 00 \\       500 \ 00 \\       250 \ 00 \\     \end{array} $	\$770 82 230 76 157 16 102 65 35 00 530 81 1,497 28	\$246 73 2,879 18 1,269 24 842 84 397 35 215 00 969 19 2 72 \$6,822 25	2,879 18 1,269 24 842 84 397 35 215 00 969 19 2 72

### PAPER E-AGRICULTURAL EXPERIMENT STATION.

	Appro- priated.	Expended.
For the quarter ending September 30, 1896.		
Salaries Labor.	\$1,927 45 908 92	
Publications	452 25	
Freight and express Chemical supplies	$   \begin{array}{c}     25 & 36 \\     47 & 12   \end{array} $	
Seeds, plants, sundries	113 55	
Library	95 18	95 18
Tools and machinery	42 08	42 08
Furniture and fixtures	30 38 13 10	
Scientific apparatus Live stock	50 00	
Traveling expenses	29 73	29 73
Contingent expenses	14 88	14 88
	\$3,750 00	\$3,750 00

### UNIVERSITY OF ILLINOIS.

	Appro- priated.	Expended.	Balance.
For the quarter ending September 30, 1896. Salaries for instruction Salaries for services. Buildings and grounds. Stationery and printing. Furniture and fixtures Incidentals. Sundries. Advertising. Fuel and lights Laboratories.	$\begin{array}{c} 750 & 00\\ 2,000 & 00\\ 100 & 00\\ 200 & 00\\ 253 & 75\\ 1,000 & 00\\ 500 & 00\end{array}$	$\begin{array}{c} 1,037 \ 41 \\ 45 \ 88 \\ 38 \ 16 \\ 80 \ 52 \\ 150 \ 54 \\ 910 \ 07 \\ 310 \ 25 \\ \hline \end{array}$	962 59 54 12 61 84 119 48 103 21 89 93

PAPER F-SCHOOL OF PHARMACY.

The Board is also requested to appropriate<sup>\*</sup><sub>x</sub>a definite sum to pay the expenses of the committee to inspect heating plants.

At the Scptember meeting of the Board \$100.00 was appropriated for a detector clock, to be placed in each of the University buildings. No purchase has been made, as a desirable system would cost \$200.00, 1 am told.

In this connection attention is requested to Paper P.

It seems desirable that some action should be taken in regard to several of the land contracts, which, I understand, are delinquent in payments for two years. I believe that in some of these cases the land should be taken possession of by the University.

Attention is called to Paper Q.

Respectfully submitted,

S. W. SHATTUCK,

Business Manager.

The following appropriations were made as recommended by the Business Manager:

APPROPRIATIONS.

	1	
University—		
Board expenses	\$400 00	
Board expenses Salaries for instruction and President	27,000 00	
Salaries for services	3,300 00	
Buildings and grounds	1,000 00	
Fuel and lights	2,000 00	
Stationery and printing	500 00	
Rensir shap	300 00	
Repair shop Mechanical department	500 00	
Departments	400 00	
Laboratories.	600 00	
Library and apparatus	50 00	
Inorary and apparatus	500 00	
Incidentals	125 00	
Water supply	120 00	00C CTT 00
		\$36,675 00
School of Dhammoor		
School of Pharmacy-	00 050 001	
Salaries for instruction	\$2,250 00 375 00	
Salaries for services		
Buildings, rents, etc	1,000 00	
Stationery, printing and postage	100 00	
Furniture and fixtures	100 00	
Fuel and lights	300 00	
Laboratories	100 00	
Incidentals	200 00	
		\$4,425 00
Agricultural Experiment Station—		
For quarter ending December 31, 1896	\$156 75	
For quarter ending March 31, 1897:		
General fund	3,750 00	
Farm fund	748 00	
		\$4,654 75

Papers I, K, L, M and N, presented by the Business Manager, were referred to the Finance Committee.

On motion of Mr. McLean, the Treasurer's bill, excepting the item of \$211.75 to J. S. Huey, attorney, was allowed and ordered paid: amount, \$110.45.

Professor Breckenridge's bill of traveling expenses, amounting to \$62.09, and Mr. Bullard's bill, amounting to \$77.40, were ordered paid.

The Business Manager was directed to correspond with those persons holding land contracts who had been long delinquent in the payment of interest, and to arrange, if practicable, for the payment of arrearages on said contracts, or for their surrender.

The matter of the payment of a note of \$1,500.00, falling due February 19, 1897, secured by mortgage on the property received from the Chicago College of Pharmacy, was referred to the Committee on the School of Pharmacy, with power to act.

The Committee on Buildings and Grounds made the following report:

URBANA, ILLINOIS, December 9, 1896.

### Io the Board of Trustees of the University of Illinois.

GENTLEMEN:—Your Committee on Buildings and Grounds desires to report upon matters referred to it as follows:

We recommend that a section of hose be provided in the place of the one destroyed by fire in the Chemical Laboratory last summer.

We recommend that a cement floor be placed in the corridor of the basement of Natural History Hall, and an appropriation of \$200.00 for this purpose. The basement is used constantly and it has become necessary that this work should be done.

We recommend an appropriation of \$400.00 for finishing the equipment of the Astronomical Observatory. This amount completes the work of the building.

We recommend that Professor White be paid \$100.00 in full for services and expenses in supervising and superintending the reconstruction of the Chemical Laboratory.

We recommend that the Superintendent of Buildings and Grounds place wire screens over the windows of Military Hall for their protection.

The construction of the library building is progressing in a very satisfactory manner. The building will soon be enclosed, and so protected from the weather that work may be pursued during the winter. From the progress of the work during the existence of the contract we judge that the building will be completed on time, and will be in every satisfactory.

It is reported to your Committee by the architects that by a change in the plastering, prepatory to the decoration of the building, and the ommission of such decoration as is included in the present contract, a saving of \$1,540.00 may be made. We recommend this change in the contract and that the amount thus saved, together with \$1,500.00 more, making a total of \$3,040.00, be appropriated for decoration in the building.

We recommend that the oak floor called for in the present contract be omitted from the two main wings of the basement of the building, and that a cement floor with white sanded smooth top be substituted therefor. This will result in a small reduction in cost, the exact amount of which we can not state. respectfully submitted,

S. A. BULLARD, I. S. RAYMOND, LUCY L. FLOWER,

## Committee on Buildings and Grounds.

The report was adopted and appropriations were made as therein recommended.

The President announced the following as members of the standing Committee on School of Pharmacy: Alex. McLean, chairman; Dr. Smith, N. W. Graham, President Draper and Professor Shattuck.

On motion of Mr. Raymond, the tenant on the south farm was given the privilege of deferring his January payment of rent to April 1, 1897, on condition of his paying 6 per cent interest on the amount so deferred.

The architects of Library Hall presented a design for a bronze tablet to be placed in the vestibule of that building. The design was approved, and it was ordered that a bronze tablet of the same design should be placed in Engineering Hall. For this purpose \$175.00 was appropriated.

The Committee on Buildings and Grounds was directed to take measures to prevent the further staining of the walls of Engineering Hall by the drippings from the sills of some of the windows, and \$100.00 was appropriated for this purpose.

The board adjourned.

W. L. PILLSBURY,

Secretary.

JAMES E. ARMSTRONG, President.

# MEETING OF MARCH 9, 1897.

The Board of Trustees of the University of Illinois met in the President's office at the University at Urbana, Illinois, at 3 o'clock p. m., Tuesday, March 9, 1897.

The members present were Messrs. Armstrong, Bullard, McKay, McLean, Morrison, Pearce, Raymond, Smith and Mrs. Carriel and Mrs. Flower; those absent were Governor Tanner and Mr. Inglis.

The recently elected members of the Board, Messrs. Smith and McKay, and Mrs. Carriel, had, each of them, before the meeting of the Board, filed with the Secretary the usual oath of office.

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

The Committee on the School of Pharmacy made the following report:

URBANA, February 13, 1897.

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

GENTLEMEN:—Your committee on the School of Pharmacy, to which was referred the matter of the mortgage on certain lots deeded to the University by the Chicago College of Pharmacy, falling due February 15, 1897, reports that it found that Mrs. J. Freeksen, the holder of the mortgage, did not wish to extend the same. Your Committee also found that it would take some time, also that the cost would be considerable, to replace the mortgage. Accordingly the Business Manager was instructed to pay off the mortgage amounting, principal (\$1,500.00) and interest (\$45.00), to \$1,545.00. This was done and the mortgage was duly satisfied. Papers and documents with regard to the same are now on file in the Business Manager's office.

Respectfully submitted,

ALEX. MCLEAN, N. W. GRAHAM, S. W. SHATTUCK, Committee on School of Pharmacy.

Mr. Morrison, from the Finance Committee, reported with regard to the matter of attorney's fees which was referred at the last meeting of the Board that he had made some inquiries with regard to the matter, but desired further time. On motion of Mr. Bullard, further time was given.

# ELECTION OF OFFICERS.

The President then announced that the next order of business was the election of officers, and called for nominations for the position of President of the Board. Mr. Bullard nominated Mr. F. M. McKay, and there being no other nomination, Mr. McKay was elected President of the Board by acclamation and took the chair at once.

On motion of Mr. McLean, the President of the Board appointed Messrs. McLean and Raymond and Mrs. Flower to prepare resolutions concerning the services of Mr. Armstrong, the retiring President.

Mr. Armstrong nominated Mr. W. L. Pillsbury for the offices of Corresponding Secretary, Recording Secretary, and Registrar, and there being no other nomination, the election was made by acclamation.

On motion of Mr. McLean, the election of a Treasurer was made a special order for 10 o'clock Wednesday morning.

Messrs. Smith and Bullard were elected to constitute, with the President of the Board, the Executive Committee.

On motion of Mr. McLean, Andrew S. Draper was unanimously elected President of the University for the term of two years.

The President then presented his several recommendations:

## THE WOMAN'S DEPARTMENT.

## To the Board of Trustees.

I recommend that a new department in University administration be created, which shall be known as "The Woman's Department," at the head of which shall be an officer whose title shall be "Dean of the Woman's Department," and I propose the following general outline of the functions of this officer:

1. The Dean of the Woman's Department shall be charged with the general oversight of all the women students of the University. She shall seek to become their representative, guide and friend. It shall be her duty to aid and advise them in their University work and in social life, to the end that the highest attributes of independent but true womanly character may here be developed.

2. She shall seek the improvement and extension of those lines of University work in which women students are most interested, and shall endeavor to enlarge all instrumentalities which will promote their physical and intellectual vigor.

3. She shall seek the fullest information touching the progress of events throughout the world, which are of special interest to women, and shall represent the Woman's Department of the University upon public occasions and in the educational and periodical press, whenever it seems advisable and practicable to do so, without engaging in extreme and doubtful projects or entering into controversies about which the people are widely divided.

4. She shall be expected to have constant knowledge of the work and effectiveness of all the women teachers in the University, and to advise with and suggest to them and, if necessary, direct them as to all matters within the field of her general duty.

5. She shall be a member of the Council of Administration and invested with the powers and duties of such position.

I also recommend that for the present the position of Dean of the Woman's Department be coupled with that of Assistant Professor of the English Language and Literature, soon to become vacant through the resignation of Miss Merrill, and that the salary for the next year be \$1,500.00 for the positions so combined.

I nominate for Dean of the Woman's Department, and Assistant Professor of the English Language and Literature, Miss Violet D. Jayne, of Minneapolis, Minnesota. Miss Jayne graduated from the University of Michigan, taking the degree of A. B., in 1887. She made a specialty of English Literature during her under graduate course. In 1887-88 she was assistant principal of the high school at Crookston, Minnesota. In 1888-89 she spent her time at Ann Arbor in study. In 1889-91 she had charge of the English department at the State Normal School, Oshkosh, Wisconsin. 1891-92 was spent in Europe, passing two semesters at the University of Zurich, Switzerland, where she made a specialty of German literature. Her travels in Europe took her to Holland, Germany, France, Switzerland, Italy, Greece, and Turkey. In 1892-3 she had charge of the English department at Wheaton Seminary, Norton, Massachusetts. From 1893-96 she had charge of the English department in the State Normal School at San Jose, California. In 1896, after passing the required examination, she received the degree of A. M. from the University of Michigan, having studied for the same *in absentia*. The present year she has been studying for the degree of Doctor of Philosophy at the University of Minnesota, specializing in English Literature. She expects to receive her degree there another year upon presentation of a thesis and by passing the required examinations.

I have communicated with the principal of the State Normal College at San Jose, California, and I have seen the principal of the State Normal School of Oshkosh, Wisconsin, and the presidents of the universities of Michigan and Minnesota, in reference to Miss Jayne, and have received from them the warmest commendations of her qualities. She is a woman of attractive appearance, quick intelligence, strong scholarship, greatly devoted to the interests of young women, and apparently possessing an ability to accomplish what she undertakes. She is thirty years of age, which is perhaps an immature age for so weighty a responsibility. Moreover she has never filled an independent administrative position, but she is very ambitious to do so and is confident of success; and with her thorough intellectual discipline and entire familiarity with university operations, I am led to have that confidence also. She is possessed of the spirit and is intensely interested in the work of State universities, and I think that fact is of consequence in connection with the position under consideration.

She is to sail in May and pass the summer in visiting and studying the places in England which have become historic as the birth-places of the masterpieces of English literature.

After the most painstaking investigation of all candidates giving any reasonable indication of meeting our demands, I have become convinced that Miss Jayne gives more promise of filling the position to our advantage than any other. I recommend her with an appreciation of how much is involved, but with much confidence that her appointment is a wise step for us to take.

A. S. DRAPER,

President.

The Board concurred in the President's recommendations, on motion of Mr. Armstrong, and appointed Miss Violet D. Jayne Dean of the Woman's Department, and Assistant Professor of the English Language and Literature at a salary of \$1,500 a year, the term of service to begin September 1, 1897.

### INSTRUCTOR IN RHETORIC.

### Io the Board of Trustees.

Miss Helen Butterfield has advised me that she does not desire re-appointment to her present position for another year. I respectfully recommend for appointment to the instructorship in rhetoric Miss Gertrude Buck, of Indianapolis, Indiana, at a salary of \$70 per month for ten months commencing September 1, 1897, and upon the understanding that if her services are altogether satisfactory she shall remain during the ten months beginning September 1, 1898, and shall receive as salary therefor \$80 per month.

Miss Buck is a graduate of the University of Michigan, has taken her second degree there and is now a candidate for the doctor's degree at the same institution. She was assistant in Englisk at the University of Michigan from January, 1896 to January, 1897. She is now teaching in the Indianapolis high school. I have received the strongest commendations for her from President Angell and Professors Isaac W. Demmon, John Dewey, and Francis M. Scott. Professor Scott says: "Miss Buck by nature and by training is better fitted for such a place than any other student I have ever had in my classes. While she was my assistant, at a merely nominal stipend, she did as much work as any instructor on the ground, at the same time carrying on her graduate studies, writing articles and addresses, and organizing plans for raising money for the women's gymnasium, performing numerous social functions, and doing all these things so quietly that no one not intimately acquainted with her could have had any suspicion of her phenomenal industry." Miss Buck has done some graduate work at the University of Chicago. She has already written not a little for the monthly magazines, including the American Journal of Politics, and the Forum. She has a strong article in the March Educational Review. I recently went to Indianapolis to see her and have acquired the belief that she is a young woman of unusual attainments who will be a more helpful assistant to Professor Clark in his very important department than any other person of whom I have knowledge.

I ought not to pass from this matter without expressing the regret which every one at the University feels at having Miss Butterfield leave us. She has filled her position admirably and won the esteem of everybody associated with the University. Our regret at losing her will be somewhat mitigated, however, by the fact that she leaves us to enter marriage relations which entitle her to the congratulations of her innumerable friends.

A. S. DRAPER, President.

The Board also approved this recommendation and appointed Miss Gertrude Buck, of Indianapolis, instructor in rhetoric upon the terms suggested by the President.

#### TROUBLE BETWEEN SOPHOMORES AND FRESHMEN.

### To the Board of Trustees.

Upon the evening of January 21st last there occurred in Urbana a clash between members of the two lower classes of students, which was of sufficient consequence to become the subject of a report to the Board of Trustees.

For several years an effort has been made to induce students not to hold secret social gatherings. Hearing that this wish of the University authorities was likely to be disregarded, I sent for the President of the freshmen class twice in the fall term, advised him of our wishes in the matter, and offered a room and the protection of the University to that class for the purpose of a class supper. What was said in reply led me to believe that our wishes would be complied with. About 8:30 o'clock on the evening of January 21st, the mayor of Urbana telephoned me that there was an outbreak in the streets. I advised him that the University could not undertake to maintain the public peace, but would support the city authorities in any vigorous measures which they might take to do so. It turned out that the freshmen had prepared for a supper in a public hall and that the building had been assaulted by members of the sophomore class. Members of the freshmen class going to the hall were set upon and maltreated. The most active agent in causing disorder was a chemical compound which was foul smelling and dangerous to the extent that it would destroy clothing and burn the skin. One young lady received this in her eyes and in consequence was unable to see for several

days. Two students were arrested. The mayor finally dispersed the students by ordering the fire department to turn water upon them. The affair caused a great uproar among the students and was widely reported in the newspapers.

I looked upon this affair as thoroughly disgraceful. That young men should invite young women to go to a social gathering, and that young women should accept such invitations, with the perfect understanding that there was likely to be a physical contest, and that any student would throw a chemical into the face of another, knowing that it was likely to disfigure that face and destroy eyesight for life, was to me amazing.

I called a meeting of the Council of Administration at nine o'clock the next morning and we commenced an investigation which lasted almost uninterruptedly for ten days. Upon advice of the Council a convocation of all connected with the University was held at four o'clock upon the next afternoon after the occurrence, at which the degrading character of the affair was commented upon and the sense of right and decency in the student body was appealed to. Offenders were asked to come and admit their participation in order that there might be some excuse for leniency, but none came. The senior and freshman classes very soon held meetings and expressed their regrets.

For several days it seemed as though we should be unable to locate definitely the responsibility. I was surprised to find that the thought was very prevalent in the student body that it was disloyal for one student to inform against another, no matter how serious an offense had been committed. The position was taken that, while the University would look with disfavor upon tattling among students in all ordinary affairs, yet it was the duty of a student to answer all questions touching violation of law or grave misconduct endangering the life or reputation of an institution, and that students known to have material information of such misconduct and refusing to divulge it would be expelled. The greatest stress was laid upon efforts to ascertain who had procured, given out, or thrown the chemical which was the great agent for all the mischief, and also who had been in league with or opposed the police.

Early in the investigation the following letter was sent to the State's Attorney of Champaign County, which will indicate my views upon a very important phase of the subject:

PRESIDENT'S OFFICE, UNIVERSITY OF ILLINOIS.

January 25, 1897.

### Hon. A. J. Miller, State's Attorney, Urbana, Illinois:

DEAR SIR: -It seems well to express to you the earnest desire of all connected with the management of the University that the students who threw a noxious and dangerous chemical, and who resisted the police in the streets of Urbana Thursday night last, shall be brought to justice. Students who were only present, or mere on-lookers, are probably not blameless, although there are some extenuating circumstances in their cases; but one who threw a chemical into the crowd, knowing that it would destroy clothing and was likely to disfigure the face or destroy the eyesight of another for life, deserves nothing short of imprisonment; and one who in any way participated in securing or preparing the foul compound, or otherwise contributed to the results deserves the same thing; so does one who resisted or assaulted the police; and one who has information which would convict another of a crime, and refuses to divulge it, becomes a participant therein, and is little less deserving of the severest punishment. No code of honor can be invoked to justify one in protecting an enemy of public order. These matters go to the very stability of society and to the very life of the University. The very fact that the evil doers are college students affords no shadow of excuse for them. Indeed their crimes are the more reprehensible and deserving of the severest punishment, because of their intelligence and because they ought to be counted upon to support rather than overthrow the law. The University authorities are investigating every scrap of information bearing upon the unfortunate affair, with the intention of requiring all who have forfeited the privileges of the University to withdraw therefrom. As was to have been expected, we are experiencing some difficulty in securing reliable evidence fixing the responsibility upon individuals, but we have much information and the net-work is beginning to draw closely about a relatively small number who are apparently guilty. With your better facilities for compelling the attendance of all witnesses and examining them under oath, and with the aid of judicial forms and experience, I am sure you can locate the blame with greater certainty and come nearer reaching all who are culpable.

We shall be glad to put you in possession of such information as we have and will support you in all ways we can. If you should think that you need the assistance of associate counsel, the University will provide it, and we will be obliged to you for any evidence touching the guilt of students, which you or the police may have.

The most energetic action by the University and the public prosecutor, acting together, is demanded by all the circumstances of the case. There is every reason to believe that only a small number of students are seriously implicated. The rest should be relieved of the stigma which must rest upon all unless the guilty are punished. The people of the State who support this University, and who have a pride in its development, must be shown that the University is able to rid itself of the unworthy and that the people of the cities in which it is located have moral sense, civic pride, and nerve enough to take a course which will prevent a recurrence of such a flagrant violation of the public peace.

### Very truly yours,

A. S. DRAPER, President.

The investigation revealed the fact that the chief of police of the city of Urbana was intoxicated upon the evening of the disturbance and was really in league with the mischief makers. The mayor of that city was advised by me, in writing, of that fact, and an offer made to aid him in securing the evidence which would establish the charge, but nothing was done by either the State's Attorney or mayor in the directions indicated.

A patient and painstaking investigation finally established the guilt of nine students, and as a result one of them was suspended for the rest of the year and eight were expelled.

No mistakes were made, for in each case there was a subsequent admission of the correctness of the finding of the council. No student was expelled who did not procure, distribute, or use the chemical, and who, in addition to this, did not either refuse information or answer untruthfully.

Subsequent to this investigation, at my request, all the members of the freshman class and all save half a dczen of the sophomore class have joined in assurances to the Council of Administration that they will attend no more secret class gatherings and will not engage in any assault upon students, and that they will do what they can to uphold the authorities of the University.

It will scarcely be appreciated by one not upon the ground, but it is nevertheless a fact that this affair caused us more trouble and put upon the University authorities a heavier weight of responsibility than we have heretofore been called upon to bear while I have been associated with the institution. To expel so many students, and thus break up their college course, is a serious matter. It involved a great deal of sorrow as well as perseverence on the part of the University authorities, and nothing but humiliation for the accused and grief for parents and friends. I am sure that if all students could have seen all phases of the matter, there would be no repetition of the conduct which necessitated this action.

We have done what we could to impress a useful lesson upon all connected with the University. I have no sympathy whatever with the idea that there is a standard of conduct and honor for college students which is at all different from the standards which all good citizens uphold and observe. Nor can I look with indifference upon that tendency which is common in college life to shield another by refusing information or by lying, no matter of what offense that other may be guilty. Society could not exist upon such a basis, and neither can universities. When offenses are committed which tear down or stain the good name of a great institution, every true man's hand must be against the offender.

I believe all connected with the University see these things more clearly than before this unfortunate occurrence. I observe no resulting ill will among the students. The extent to which the Faculty and the students and the alumni of the University, as well as the people in the adjacent cities, and particularly the warmth which the newspaper press of the State has sustained us in this trying emergency, is extremely gratifying.

I ought to add that the Faculty has been thoroughly united touching all that has been done regarding this unhappy incident in our University life, and that the members of the Council of Administration are specially deserving of commendation for the patience and persistence with which they pursued a tedious and trying investigation. The result certainly vindicates the wisdom of the Board of Trustees in creating the Council of Administration and in vesting that body with complete jurisdiction over the discipline of the University.

A. S. DRAPER, President.

Upon motion of Mr. Smith, the Board unanimously approved and heartily commended the Council of Administration in relation to the disturbances which recently occurred between the freshman and sophomore classes on January 21st last.

Upon motion of Mr. McLean, it was voted that the paper be printed as a part of the minutes of the Board.

The following resolution was adopted:

### BASE-BALL GAME AT BELOIT.

WHEREAS, The University of Illinois base-ball team played an intercollegiate game with the team of Beloit College at Beloit, Wisconsin, in May last under an agreement that Beloit should pay Illinois the sum of \$70.00 to cover their expenses and Beloit refused to finish the game because of an alleged erroneous ruling of the umpire and also refused to pay over the money, although they received all of the gate receipts and

WHEREAS, It was mutually agreed to submit the whole matter to Mr. Casper W. Whitney, athletic editor of Harper's Weekly, to decide what was right and to abide his determination and

WHEREAS, After hearing and considering the matter, Mr. Whitney decided that there was no ground for the Beloit team refusing to finish the game and that it should pay the money to the Illinois team without further delay, and

WHEREAS, The Beloit team still refuses to pay over the money, therefore

*Resolved*, That a respectful communication be sent to the Board of Trustees of Beloit College stating the facts and requesting said Board to require the Athletic Association or Managers at said College to pay said money to the Athletic Advisory Board of this University without further delay.

The following recommendations with regard to the management of the affairs of the Agricultural Experiment Station were presented by President Draper, and were adopted on motion of Mr. Raymond:

### AGRICULTURAL EXPERIMENT STATION.

By law the management of the Agricultural Experiment Station is vested in the Trustees of the University. That the two institutions are placed under one management signifies the legislative intent that they shall supplement each other and that their work shall be related. The Station work should be aided, whenever practicable, by the professors in the University and in return should afford material for their scientific courses. The accounts of the Station should be kept separately and the funds of each institution should be used for its work, but with a view to promoting the effectiveness of the other so far as is not inconsistent with its own interests. To secure results in the administration of the affairs of the Station it must have an organization of itsown, with executive authority and centralized accountability; but to secure coöperative effort and that unity of spirit which is important among all the different interests under the management of the Trustees of the University, that organization must be subordinate to the general administrative officers of the University. It is of the highest moment that the work of the Station shall be of a practical character and bear directly upon the agricultural interests of Illinois and hence that the management of the Station shall have the advice, regularly and continuously given, of persons who may be safely assumed to represent those interests with intelligence and foresight. To attain these ends the following regulations are adopted for the administration of the Station.

1. The Dean of the College of Agriculture shall be, *ex-officio*, Director of the Agricultural Experiment Station.

2. The Director of the Station shall have the custody of all property appertaining to the Station; shall be responsible for its proper care, and shall see that all buildings, lands, roads, implements, animals, etc., are maintained in a thrifty and attractive condition; shall have supervision of the officers and employés of the Station, laying out their work so that it will be of interest and consequence to the farmers of the State, and shall see that that work is prosecuted with capability and assiduity and reported in timely bulletins; and shall employ such authorized assistants and laborers as may be necessary, require faithful service, and discharge them at his discretion. In a word, he shall be the administrative head of the Station, vested with complete executive authority, and charged with responsibility for carrying out the action of the Board of Trustees and attaining the purpose for which the Station was established, in the largest measure practicable.

3. The Board of Trustees will appoint all officers of the Station and fix their compensation, and will from time to time grant appropriations for paying other employés and laborers and meeting all the other expenses of the Station, but such employés and laborers shall be appointed by the Director. For any act, however, incurring financial liability, or continuing the same, the Director must find his authority in the action of the Board of Trustees.

4. The Director shall make formal, written reports to the President of the University on the first day of each month. These reports shall keep the President advised in a general way, of:—(a) changes in employes; (b) the operations upon the farm, so far as crops and their disposition are concerned; (c) the accession of animals and the death or diposition of any; (d) the results of the dairy operations; (e) the work of the horticulturists. (f) the character of experiments undertaken, and the progress thereof; (g) the progress of the work upon bulletins, and the publication of the same; (h) any other matters of interest appertaining to the Station. In the absence of specific directions from the Board of Trustees the Director shall advise with the Board of Trustees, he shall deliver to the President, for transmission to the Board of Trustees, any information or recommendations which he may think well to offer that body.

5. All Station accounts shall be kept by the Business Manager of the University, and all business transactions shall be subject to the rules of the Board of Trustees concerning general University business.

6. The Director shall require officers having charge of experiments, or taking observations, to report the same to him with regularity and as often as the nature of the same may make it desirable, and he shall cause the records thereof to be neatly transcribed in substantial books for preservation.

7. There shall be an Agricultural Experiment Station Advisory Board consisting of the Director of the Station, the Vice-President of the University, the Director of the State Laboratory of Natural History, two members of the Board of Trustees to be appointed by the Board at the annual meeting at which it selects its own officers and one member to be appointed by the Board upon the recommendation of each of the following bodies, viz.: The State Board of Agriculture, the State Horticultural Society, and the State Dairymen's Association. The Advisory Board shall select its own presiding officer and shall meet quarterly in the week prior to the meeting of the Board of Trustees at such particular time as it shall determine. The Director shall lay all needed information touching the work of the Station before the Advisory Board, and it shall consider and recommend to the Board of Trustees such lines of policy and such scientific experiments as it believes of most consequence to the agricultural prosperity of the State. The Director shall keep a record of the proceedings of this Board and transmit its recommendations to the President of the University for presentation to the Board of Trustees.

Upon recommendation of the General Faculty authority was given to confer the degree of B. S. in Architecture upon Edward Ellsworth Orr. Also upon recommendation of the General Faculty it was voted to increase the number of Fellowships from six to eight, and to make the stipend attached to each \$300.00 a year.

The following resolution was adopted:

*Resolved*, That the Board of Trustees of the University of Illinois, in recognition of the liberality of the donors mentioned in the following list of persons and institutions, who have contributed valuable publications to the Astronomical Observatory of this University, returns to them severally its grateful acknowledgement and thankful appreciation of their generous courtesy:

Titles of Work.	No. of Volumes.	From What Institution.	By Whom Presented.	Value.
Harvard Photometry Pub. of Amer Ephemeris Pub. Washburn Obs'y Star Catalogues Von Engelhart's Pub Pub. of von Kussner's Ob- servatory in Vienna	10 8 2 2	Harvard College Obs'y U. S. N. Obs'y Washburn Obs'y U. S. W. Dept Priv. Ast. Obs., Dresden. Von Kussner's Obs'y	Prof. New comb Prof. Comstock Superintendent Baron v. Engelhardt	$50 \ 00 \\ 20 \ 00$

Twelve or fifteen volumes of Coast Survey Reports by the Superintendent of the Coast Survey, and a large number of pamphlets and minor publications.

Also the following:

*Resolved*. That the sum of one hundred and eighty dollars be appropriated for collinating telescopes, and equipping them, at the Observatory; and also that the sum of seventy-five dollars be appropriated for painting the internal surface of the dome, and calking and cementing the doors and windows at the Observatory.

The President presented a communication from certain florists in the neighborhood objecting to the University selling plants and cut flowers, in answer to which the Secretary was directed to reply respectfully that the University never seeks a commercial business and never solicits buyers; but when in the prosecution of its ordinary work, it has products which people are glad to come and purchase, and it can thereby extend its work, it must feel free to do so; and that the small sale of flowers can not be held to work a hardship to others, when it is remembered that such sales have been made from the beginning, and long before the correspondents engaged in business; and also that the growth of the University has created a demand for flowers many times greater than its own sales.

The matter of making an appropriation to print the prize essay on Banking in Illinois, written by Charles Hunter Garnett, a graduate of the University in 1896, was, on motion of Mr. Morrison, referred to the Committee on Publication, with instructions to examine the essay and report to the board at its next meeting.

Professor Kinley's title was changed to "Professor of Economics."

A telegram was received from Mr. Inglis stating that he was unavoidably detained in Springfield and could not attend this meeting of the Board.

The following resoultion was adopted:

*Resolved*, That appropriate certificates shall be issued at the proper time to graduates of the School of Pharmacy who are duly recommended therefor by the faculty of the said School and approved by the vote of the General Faculty of the University.

Upon recommendation of the Council of Administration, the Board, on motion of Mr. Armstrong, approved the following additions and changes in the catalogue:

1. The announcement of a Law School.

2. The announcement of a course, in the College of Literature and Arts, *preparatory to law*. This course is composed of subjects now offered in the departments of economics, history, public law and administration and rhetoric, and is announced as a course likely to constitute one year's work of the three required for the degree of Bachelor of Laws.

3. The readjustment of the courses in physics, chemistry, and electrical engineering, necessitated by the appointment of a new professor of physics a year ago.

4. The addition of a course in philosophy and one in English Literature.

5. The reduction of the number of credits required for graduation in the chemical group, College of Science, from 41 to 40. This will make the requirement uniform in all departments of the University.

6. The arrangement of courses in elementary chemistry and physics conjointly, leading to the degree of B.S., and a change of the name of the "Chemical Group" to that of the "Chemical and Physical Group,"

7. The reconstruction and extension of the courses in astronomy in the mathematical group, College of Science.

8. Sundry unimportant changes, not numerous, made necessary by the above changes.

On motion of Mr. McLean it was voted that the standing committees of the Board should be as follows:

Agriculture, four members; Buildings and Grounds, four members; Finance, three members; Instruction, four members; Publication, three members; Library, five members, including the President of the University, the Business Manager, and the Librarian; Students' Welfare, four members; School of Pharmacy, five members, including the President of the University and the Business Manager. The Report from the Advisory Board of the Agricultural Experiment Station, and from the Director of the Experiment Station were presented by President Draper and were referred to the Committee on Agriculture.

A communication was received from Mr. H. H. Greene, of Bloomington, tendering his resignation as a member of the Advisory Committee of the School of Pharmany, on the ground of his having accepted another official position, and of his having retired from the practice of Pharmacy. The resignation was accepted.

The proposition of Ottenheimer & Co. with regard to uniforms for the Battalion was referred to the Secretary and Business Manager.

The request of I. H. Hill for the return of fees was denied.

President Draper said that he had been consulted by the city authorities of Urbana with regard to joining with the city in paving University Avenue along the north of the campus and on the east between University Avenue and White Street. The Board instructed the Secretary to notify the Mayor of the City of Urbana that the Board was in favor of the construction of the pavement, and would ask the Legislature to make an appropriation covering its share of the expense.

The Board appropriated \$275.00 or so much thereof as might be needed, for the purchase of the instruments mentioned below for use of the Department of Mechanical Engineering.

1. A locomotive registering speed counter. 2. A special pyrometer. 3. A carpenter separating calorimeter. 4. Three way cocks and detent motives.

A further request from the department of mechanical engineering for \$150,00 for running expenses of the mechanical engineering laboratory during a spring term, was denied.

President Draper presented the report of the Superintendent of Buildings and Grounds which was referred to the Committee on Buildings and Grounds.

It was voted that the Business Manager, after consulting with Professor Carman, should order, upon a satisfactory bid, physical apparatus and supplies, to be imported, not exceeding in amount \$1,000.00.

Mr. N. W. Graham's bill for expenses, amounting to \$15.32, was ordered paid.

The Secretary stated that Mr. A. D. Barber, of Hamilton, Mr. E. A. Riehl, of Alton, and Mr. H. B. Gurler, of DeKalb, had been recommended by the Illinois State Board of Agriculture, The Illinois State Horticultural Society, and The Illinois State Dairymen's Association, respectively, to represent them on the Advisory Board of the Agricultural Experiment Station. These gentlemen were appointed as recommended.

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Messrs. Raymond and Morrison were also appointed members of the Advisory Board.

On motion of Mr. Raymond, \$500.00 was appropriated with which to make an exhibit at the next Illinois State Fair, and the arrangements for the exhibit were put in charge of the President of the University and the Faculty.

On motion of Mr. Smith the Board adjourned to meet at 9 o'clock a. m., Wednesday.

## SESSION OF WEDNESDAY.

The Board met pursuant to adjournment at 9 o'clock Wednesday morning and there were present the same members as on the afternoon before, excepting Mr. Pearce.

President McKay announced committees as follows:

## STANDING COMMITTEES.

Agriculture.-Raymond, Morrison, McLean, Pearce.

Buildings and Grounds.-Bullard, Flower, Armstrong, Raymond.

Finance.-Smith, McLean, Morrison.

Instruction.-Flower, Inglis, Armstrong, Raymond.

Publication.-Morrison, Draper, Pillsbury.

Library.-Draper, Inglis, Carriel, Shattuck, Bicknell.

Students' Welfare.-Carriel, Flower, Smith.

Pharmacy.-McLean, Armstrong, Bullard, Draper, Shattuck.

## COLLEGE OF PHYSICIANS AND SURGEONS.

Mr. Armstrong offered the following preamble and resolutions which were adopted:

WHEREAS, The College of Physicians and Surgeons, of Chicago, has made a proposition to the University of Illinois, whereby a department of medicine can be established in connection with said university without expense to the State for maintenance, therefore, be it

Resolved, That the University of Illinois shall hereby establish a medical department in the City of Chicago, and that the property known as the College of Physicians and Surgeons shall be leased for that purpose upon terms to be mutually agreed to by committees from the two institutions; that a committee consisting of the President of the University, the Business Manager, and three members of the Board of Trustees, to be appointed by the Chairman of the Board, shall be given power to execute a lease upon such terms as they shall agree.

The President appointed on this committee Mr. Armstrong, Mrs. Flower, and Mr. Smith.

On motion of Mr. Bullard the election of a Treasurer was postponed until the next regular meeting.

On motion of Mr. Morrison, the Committee on Finance was instructed to present to the Trustees at that meeting the name of a person suitable to be appointed Treasurer. 1897.]

The Committee on the School of Pharmacy made the following report:

## SCHOOL OF PHARMACY LEASE.

#### URBANA, ILLINOIS, March 10, 1897.

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

Gentlemen:—Your Committee on the School of Pharmacy begs leave to report that the lease on the building occupied by the School of Pharmacy expires May 1, 1897. Your Committee suggests that it be authorized to lease the premises now occupied on such terms as may be deemed best for the interests of the School, and to report its action at the next meeting of the Board.

Respectfully submitted,

Alex. McLean, A. S. Draper, S. W. Shattuck,

#### Committee on School of Pharmacy.

On motion of Mr. Smith the report of the Committee was approved, and the authority asked for was given.

On motion of Mr. Morrison \$500 was appropriated for the Summer School.

The Secretary presented to the Board applications from two parties for the position of superintendent of buildings and grounds. It was also stated by members of the Board that a large number of similar applications had been received by them. In view of this the Board adopted the following preamble and resolution:

WHEREAS, Numerous applications have been made to the Board for the position of superintendent of buildings and grounds when there is no vacancy in said position, therefore

*Resolved*, That in the opinion of the Board all University positions should be kept on the merit basis. No officer or employé should be removed except for good cause, and whenever an appointment is made, it should be made solely with regard to special fitness.

On motion of Mr. Raymond, Mr. Heath and Professor Talbot were invited to make a statement with regard to the proposed celebration by the Alumni Association at commencement time.

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

Resolved, That the sum of \$500 be appropriated for commencement expenses to be in charge of a committee consisting of Messrs. Raymond and Smith and President Draper and that, if such committee think it well, and is able to purchase permanent table furnishings for the future use of the University out of such appropriation, they be at liberty to make such purchase.

The Executive Committee reported that, January 12, 1897, upon recommendation of the Director of the State Laboratory of Natural History, it had made the salary of Mr. C. C. Adams, entomological assistant in the State Laboratory of Natural History, \$50 a month.

This action of the Executive Committee was confirmed.

The bill of the Garvin Machine Co., of New York, amounting to \$82.46, for freight and repairs on machines loaned to the University at the time of the World's Fair, was ordered paid. President Draper reported with regard to employing counsel by the Board that the special committee to which the matter was referred considered that, in view of the establishment of a Law School, such an appointment would not be necessary.

The report of the committee was approved and the committee discharged.

The Secretary presented the Treasurer's report, which was referred to the Committee on Finance.

## TREASURER'S REPORT.

CHARLES W. SPALDING, TREASURER, IN ACCOUNT WITH THE UNIVERSITY OF ILLIN OIS

•		1	
1896.	Dr.		
1330.	<i>D</i> 7.		Í
September October 	30 Balance 2 Jasper county coupons, due October 1, 1896 7 U. S. Experiment Station warrant, due October 1, 1896 10 From S. W. Shattuck, on account of School of Pharmac 15 31 From S. W. Shattuck, paid warrants on account of far	. 3,750 00 y 2,000 00 1,000 00	\$285, 713 49
	fund 31 From S. W. Shattuck, paid warrants on account of general fund	f 2,409 84	
November	4 From S. W. Shattuck, on account of School of Pharmac 12 14 Union school district. Cass county coupons, due Noven	1,000 00	
• • • •	ber 1, 1896. 16 From S. W. Shattuck, on account of general fund 30 From S. W. Shattuck, paid warrants on account of	325 <b>0</b> 0 2,000 00	
December	general fund	500 00	
• • • • • •	2] Interest on land contract No. 53 16 From S. W. Shattuck, on account of School of Pharmac 24	2,000 00	
• •	<ul> <li>24 Principal on land contract No. 117, Joseph Cuta</li> <li>28 Crawford county coupons, due January 1, 1897</li> <li>29 Gallatin county coupons, due January 1, 1897</li> <li>29 Remainder of principal on land contract No. 63, R. (</li> </ul>	600 00 630 00	
••	Braaten. 29 Interest on land contract No. 63 29 Principal on land contract No. 80, W. Doering	. 120 00	
4 6 6 6 6 6	<ul> <li>29 Interest on land contract No. 80</li> <li>30 Principal on land contract No. 65, Joseph Cuta</li> <li>30 Interest on land contract No. 65</li> <li>31 Principal on land contract No. 116, Joseph Hollan</li> </ul>		
* *	31 Interest on land contract No. 116	. 86 30 of 2,388 52	
	31 From S. W. Shattuck, paid warrants on account farm fund 31 From C. W. Spalding, treasurer, interest at 4 per cent	510 98 nt	
••	on endowment fund for October, November, and D cember, 1896	366 54	
	funds at 2 <sup>1</sup> 2 per cent for October, November, and D cember, 1896	1,236 18	
1896.	Or.		\$313,957 57
× 1990'	Ur.		
December	31 By amount paid out of general fund, as per list of warrants herewith. 31 By amount paid out of U. S. Experiment Station fun	\$13,508 16	;
	as per list of warrants herewith	3,821 64	
	31 By amount paid out of farm fund, as per list of wa rants herewith	844 25	il

DECEMBER 31, 1896.

Treasurer's Report—Concluded.

December "	31       By amount paid out of School of Pharmacy fund, as per list of warrants herewith	$\begin{array}{c} 4,075 \ 42\\ 13,327 \ 37\\ 22,232 \ 62\\ 40,861 \ 48\\ 1,339 \ 58\\ 2,056 \ 41\\ 2,056 \ 41\\ 2,056 \ 41\\ 339 \ 58\\ 2,056 \ 41\\ 339 \ 58\\ 3,09\\ 439 \ 61\\ 337 \ 44\\ 381 \ 09\\ 29 \ 00\\ 598 \ 59\\ 63 \ 09\\ 494 \ 09\\ 29 \ 00\\ 598 \ 59\\ 63 \ 09\\ 494 \ 09\\ 88,130 \ 79\\ 37,184 \ 58\\ 3,551 \ 31\\ 5,220 \ 20\\ 1,036 \ 41\\ 412 \ 21\\ 59,198 \ 88\\ 3,551 \ 31\\ 5,220 \ 20\\ 1,036 \ 41\\ 412 \ 21\\ 59,198 \ 88\\ 3,551 \ 31\\ 5,220 \ 20\\ 1,036 \ 41\\ 412 \ 21\\ 11\\ 412 \ 21\\ 59,198 \ 88\\ 3,551 \ 31\\ 5,220 \ 20\\ 1,036 \ 41\\ 412 \ 21\\ 11\\ 412 \ 21\\ 59,198 \ 88\\ 3,551 \ 31\\ 5,220 \ 20\\ 1,036 \ 41\\ 1,12 \ 21\\ 21\\ 21\\ 21\\ 21\\ 21\\ 22\\ 21\\ 22\\ 22\\$	\$108,988 73
	Chemical Laboratory. Laboratory of Vegetable Physiology. Fire protection Vaccine Laboratory	$ \begin{array}{r} 1,121 & 20 \\ 59 & 02 \\ 353 & 61 \\ 1,978 & 29 \\ \hline \end{array} $	204, 968 84 \$313, 957 57

The Business Manager, Professor S. W. Shattuck, presented his report.

## BUSINESS MANAGER'S REPORT.

UNIVERSITY OF ILLINOIS, March 9, 1896.

James E. Armstrong, Esq., President of the Board of Trustees, University of Illinois.

SIR:-I have the honor to present to you herewith the following report:

Paper A is a statement of the general current appropriations December 3, 1896.

Paper B is that for the State appropriations.

Paper C is that for the U. S. fund.

Paper D is that for the Laboratory of Natural History.

Paper E is that for the Agricultural Experiment Station.

Paper F is that for the School of Pharmacy.

## UNIVERSITY OF ILLINOIS.

[March 9

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December 31, 1896.	Appro- priated.	Expended.	Balance.
Board expenses	$\begin{array}{c} \$846 \ 88\\ 48, 589 \ 80\\ 6, 049 \ 54\\ 1, 084 \ 90\\ 4, 955 \ 01\\ 1, 043 \ 42\\ 2, 220 \ 00\\ 650 \ 63\\ 831 \ 42\\ 543 \ 04\\ 2, 845 \ 35\\ 97 \ 64\\ 871 \ 60\\ \end{array}$	( 5,793 67	$\left.\begin{array}{c} 129 \ 22 \\ 583 \ 74 \\ 1,943 \ 09 \\ 8 \ 19 \\ 69 \ 42 \\ 210 \ 61 \end{array}\right.$
Sunaries. Furniture and fixtures Heating apparatus Water supply Minnesota lands. Greenhouse Stone posts Tenant farming, etc., in Illinois. Watchman's register. South farm. Accredited high schools Coal experiments. Coal experiments. Coal experiments. Coal experiments. Coal experiments. Treasurer's expenses. President's expenses. President's expenses.	$\begin{array}{c} \textbf{1,019 35}\\ \textbf{496 48}\\ \textbf{496 48}\\ \textbf{482 65}\\ \textbf{250 00}\\ \textbf{100 00}\\ \textbf{100 00}\\ \textbf{100 00}\\ \textbf{160 00}\\ \textbf{75 00}\\ \textbf{30 00}\\ \textbf{100 00}\\ \textbf{120 00}\\ \textbf{9 90}\\ \textbf{139 49}\\ \textbf{110 45}\\ \textbf{130 40} \end{array}$	3 65  139 49 110 45	304 61 396 56 22 72 3 42 31 50 160 00 75 00 100 00 21 35 30 00 120 00 9 90

## PAPER A-CURRENT APPPOPRIATIONS.

## PAPER B--STATE APPROPRIATIONS.

<b>D</b> ecember 31, 1896.	Received.	Expended.	Balance.	Assigned.
Salaries, etc.— Closed out Salaries for instruction. Salaries for services. Heating apparatus. Buildings and grounds. Toilet rooms. Toilet rooms. Art and design. Physical training. School of Music. Lectures. Agriculture. Preparatory School. Advertising and catalogue. Oratorical contest. College of Literature and Arts, books. Athletio fund. Illio. Accredited schools. Technograph. Signal bells. Botany (herbarium, etc.). Mechanical laboratory. Chemical laboratory. Chemical laboratory. Chemical laboratory (repairs.) Furniture and fixtures.	$\begin{array}{c} 2,00000\\ 1,20000\\ 2,80000\\ 2,80000\\ 2,25000\\ 1,22200\\ 0,25500\\ 1,22200\\ 0,25500\\ 1,90000\\ 2,00000\\ 10000\\ 20000\\ 10000\\ 50000\\ 10000\\ 10000\\ 10000\\ 10000\\ 10000\\ 10000\\ 15000\\ 30000\\$	$\begin{array}{c} 84, 692 \ 09\\ 639 \ 82\\ 951 \ 16\\ 2, 580 \ 33\\ 294 \ 22\\ 120 \ 13\\ 878 \ 60\\ 2, 120 \ 48\\ \hline 3, 308 \ 43\\ 84 \ 90\\ 2, 562 \ 51\\ \hline 156 \ 14\\ 486 \ 86\\ 64 \ 68\\ 66 \ 150 \ 00\\ \hline \\ \hline 137 \ 47\\ \hline \\ \hline 82 \ 92\\ \hline \\ \hline 63 \ 07\\ 7, 944 \ 51\\ \end{array}$	$\begin{array}{c} 248\ 84\\ 219\ 67\\ 80\ 78\\ 129\ 87\\ 343\ 40\\ 129\ 52\\ 1,000\ 00\\ 441\ 57\\ 105\ 10\\ 337\ 49\\ 100\ 00\\ 43\ 86\\ 13\ 14\\ 350\ 40\\ 162\ 53\\ 100\ 00\\ 162\ 53\\ 100\ 00\\ 17\ 08\\ 150\ 00\\ \end{array}$	$\begin{array}{c} & \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $

December 31, 1896.	Received.	Expended.	Balance	Assigned.
Salaries, etc.—Concluded. Furnishing Astronomical Observatory Zoölogical department Bronze tablet. Electric lighting. Physics Unassigned.	300 00 95 00 175 00 200 00 600 00 46, 119 10	197 86	$\begin{array}{r} 95 & 00 \\ 175 & 00 \\ 2 & 14 \\ 600 & 00 \\ 46, 119 & 10 \end{array}$	
	\$180,000 00	\$125,599 38	\$54,400 62	\$8,281 52
Apparatus and materials— Closed out. Applied chemistry. Chemistry Zoölogy. Physiology and hygiene. Botany and horticulture. Geology. Mathematics Astronomy. Unassigned.	$\begin{array}{c} \$1,400 \ 00\\ 100 \ 00\\ 700 \ 00\\ 800 \ 00\\ 800 \ 00\\ 680 \ 00\\ 400 \ 00\\ 300 \ 00\\ 500 \ 00\\ 20 \ 00\end{array}$	520 60 647, 89 328 51 300 00 41 86	$\begin{array}{c} \$94 \ 80 \\ 193 \ 88 \\ 41 \ 34 \\ 191 \ 75 \\ 279 \ 40 \\ 32 \ 11 \\ 71 \ 49 \\ 458 \ 14 \\ 20 \ 00 \\ \end{array}$	\$94 80 193 88 41 34 191 75 279 40 32 11 71 49 458 14
х.	\$6,000 00	\$4,617 09	\$1,382 91	\$1,362 91
Operating Biological Experiment Station	\$3,000 00	\$1,999 21	\$1,000 79	\$1,000 79
Paving streets, letc	\$9.300 00	\$9,300 00		
Laboratory of Vegetable Physiology	\$2,000 00	\$1,940 98	\$59 02	\$59 02
Astronomical Observatory	\$15,000 00	\$10,727 98	\$4,272 02	\$4,272 02
Library Hall	\$150,000 00	\$83,694 53	\$66, 305 47	\$66, 305 47
Fire protection	\$2,000 00	\$1,646 39	\$353 61	\$353 61
Library	\$6,000 00	\$4,897 85	\$1,102 15	\$1,102 15
Shop practice	\$3,000 00	\$2,563 34	\$436 66	\$436 66
Chemical Laboratory	\$5,000 00	\$3,894 34	\$1,105 66	\$1,105 66
Vaccine Laboratory	\$3,000 00	\$1.078 49	\$1,921 51	\$1,921 51
Cabinets— Geology General Unassigned	\$400 00 600 00 1,000 00	\$351 05	\$48 95 600 00 1,000 00	\$48 95 600 00
· ,	\$2,000 00	\$351 05	\$1,648 95	\$648 95
College of Engineering— Machine shop. Mechanical engineering and physics Civil engineering and physics Laboratory of Applied Mechanics and Municipal and Sanitary Engineering.	\$17,008 04 3,104 85 3,829 85 1,852 42	\$17,008 04 2,900 78 3,092 23 1,535 47	\$204 07 737 62 316 95	\$204 07 737 62 316 95
Municipal and Sanitary Engineering. Architecture College of Engineering.	$\substack{1,852\\1,752\\600\0}$	$\substack{1,212\ 57\\1,308\ 66\\353\ 97}$	$\begin{array}{c} 639 & 85 \\ 443 & 76 \\ 246 & 03 \end{array}$	$\begin{array}{c} 639 & 85 \\ 443 & 76 \\ 246 & 03 \end{array}$
	\$30,000 00	\$27,411 72	\$2,588 28	\$2,588 28
Furnishing and Fitting Engineering Hall- Electric wiring Civil engineering Architecture. Municipal and Sanitary Engineering Mechanical department. Electrical engineering and physics College library, parlor, etc	$\begin{array}{c} \$1,191 & 77\\ 478 & 43\\ 770 & 38\\ 401 & 30\\ 563 & 78\\ 1,193 & 39\\ 400 & 95 \end{array}$	\$1, 191 77 412 13 605 69 234 53 324 30 813 24 266 31	\$66 30 164 69 166 77 239 48 380 15 134 64	\$66 30 164 69 166 77 239 48 380 15 134 64
	\$5,000 00	\$3,847 97	\$1,152 03	\$1.152 03

## Paper B-State Appropriations-Concluded.

## UNIVERSITY OF ILLINOIS.

#### PAPER C-UNITED STATES FUND.

<b>Dec</b> ember 31, 1896.	Received.	Expended.	Balance.	Assigned.
Year ending June 30, 1897. Salaries for instruction	\$22,000 00	\$21 <b>, 20</b> 5 59	\$794 41	\$794 41

## PAPER D-LABORATORY OF NATURAL HISTORY.

December 31, 1896.	Received.	Expended.	Balance.	Assigned.
General balance July 1, 1896 Salaries Field, office, etc Library Bulletins Report of Entomclogist Contagious diseases of insects Biological Experiment Station	$     \begin{array}{r}       3,650 & 00 \\       1,500 & 00 \\       1,000 & 00 \\       500 & 00 \\       250 & 00     \end{array} $	$\begin{array}{cccc} 780 & 69 \\ 277 & 65 \\ 241 & 61 \\ 39 & 00 \\ 641 & 52 \end{array}$	$\begin{array}{c} \$246 & 73\\ 2, 044 & 19\\ 719 & 31\\ 722 & 35\\ 258 & 39\\ 211 & 00\\ 858 & 48\\ 2 & 72\end{array}$	$\begin{array}{r} 2,044 & 19 \\ 719 & 31 \\ 722 & 35 \\ 258 & 39 \end{array}$
•	\$10, 146 73	\$5,083 56	\$5,063 17	\$5,063 17

PAPER E-AGRICULTURAL EXPERIMENT STATION.

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For the quarter ending December 31, 1896.	Appro- priated.	Expended.
Salaries	51 56 57 17 238 26 143 68 123 84	$\begin{array}{c} 1,540\ 20\\ 452\ 25\\ 20\ 60\\ 51\ 56\\ 143\ 68\\ 123\ 84\\ 122\ 69\\ 131\ 28\\ 309\ 49\\ 121\ 75\\ 115\ 69\\ 48\ 78\\ 224\ 54\\ \end{array}$

Farm fund	\$1,530 00	\$1,495 22	\$34
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#### PAPER F-SCHOOL OF PHARMACY.

For the quarter ending December 31, 1896.	Appro- priated.	Expended.	Balance.
Salaries for instruction . Salaries for services. Buildings and grounds. Fuel and lights	$\begin{array}{c} \$2,250 & 00\\ 750 & 00\\ 2,000 & 00\\ 403 & 54\\ 100 & 00\\ 100 & 00\\ 1,000 & 00\\ 220 & 23\\ 208 & 52\\ 1,096 & 46\\ 25 & 00\\ \hline \$8,153 & 75\\ \end{array}$	$\begin{array}{c} 750 \ 00 \\ 1, 954 \ 01 \\ 370 \ 16 \\ 96 \ 58 \\ 38 \ 16 \\ 391 \ 3^{\circ} \\ 220 \ 23 \\ 150 \ 54 \\ 1, 096 \ 46 \\ 1 \ 25 \end{array}$	45 (9 33 58 3 42 61 84 608 65 57 98 23 75

Paper G is an estimate of receipts and expenses for the six months ending June 30, 1897.

Paper H is a list of appropriations the Board is requested to make for the three months ending June 30, 1897.

Paper I is a statement of receipts for the three months ending December 31, 1896.

Paper K is a list of general University vouchers presented for audit, being 501 to 1,200, inclusive.

Paper L is a list of Laboratory of Natural History vouchers presented for audit, being 97 to 161, inclusive.

Paper M is a list of Agricultural Experiment Station vouchers presented for audit, being 78 to 200, inclusive.

 $Paper \; N$  is a list of School of Pharmacy vouchers presented for audit, being 39 to 102, inclusive.

Paper O is a bill of court expenses presented by Cunningham & Boggs.

Paper P is a statement and request in regard to the sale and purchase of several machines for the mechanical department.

Paper Q is a showing of the condition of the past due payments on land contracts January 20, 1897.

All holders of these contracts were informed that all past due interest should be paid or secured, if the contracts were to continue in force. About \$1,000.00 in interest has been collected by the Treasurer since the notification. What further action shall be taken in the matter?

Respectfully submitted.

S. W. SHATTUCK, Business Manager.

Papers K, L, M, and N, with vouchers, were referred to the Committee on Finance.

The matter of the land contracts was referred to the Finance Committee and Business Manager, with power to act.

-6 U. I.

On motion of Mr. Bullard, the appropriations asked for by the Business Manager were made, as follows:

Board expenses Salaries for instruction and President Salaries for services. Buildings and grounds. Fuel and lights Stationery, printing and postage. Catalogue and advertising Repair shop. Mechanical department. Departments Laboratories. Library and apparatus Incidentals Water supply Heating apparatus Accredited schools. Minnesota and Nebraska lands.	$\begin{array}{c} \textbf{3, 300 00} \\ \textbf{1, 000 00} \\ \textbf{1, 000 00} \\ \textbf{600 00} \\ \textbf{2, 000 00} \\ \textbf{600 00} \\ \textbf{800 00} \\ \textbf{300 00} \\ \textbf{300 00} \\ \textbf{50 00} \\ \textbf{50 00} \\ \textbf{600 00} \\ \textbf{125 00} \\ \textbf{400 00} \end{array}$	1
School of Pharmacy Salaries for services. Buildings, rents, etc. Stationery, printing and postage. Fuel and lights. Laboratories. Incidentals	$\$375 00 \\ 1,000 00 \\ 100 00 \\ 100 00 \\ 100 00 \\ 100 00 \\ 200 00 $	\$38, 875 00 \$1, 875 00
Agricultural Experiment Station— General fund Farm fund	\$3,750 00 900 00	\$4,650 00

#### APPROPRIATIONS.

On motion of Mr. Morrison, Cunningham & Boggs's bill for court fees advanced in the Bruner case, amounting to \$12.50, was ordered paid.

Upon motion of Mr. Morrison, the Dean of the College of Agriculture was directed to have all animals belonging to the University and eligible to registry in the stock books duly registered, and also to place placards over their stalls indicating their names and breeding.

Mr. Raymond, from the Committee on Agriculture, returned the report of the Director of the Experiment Station with the recommendation that it be published and that the Station work be authorized and appropriations of Station funds be made as therein recommended.

The report of the Committee was concurred in.

## AGRICULTURAL EXPERIMENT STATION,

URBANA, ILLINOIS, March 4, 1897.

Andrew S. Draper, LL. D., President University of Illinois,

DEAR SIR:—It seems well that at least once a year, and preferably at this time, the work of each department of the Station be carefully reviewed, and that general plans for the ensuing year be somewhat elaborated, to the end that the work of the Station may proceed in an orderly manner and its energies be directed along definite lines. Accordingly the head of each department has filed with the Director a detailed report of the condition of experiments assigned him, either in whole or in part, accompanied by plans for 1897.]

future work. The salient points of these reports together with recommendations of the Director and certain other matters of interest are herewith transmitted as information and to serve as a basis for action by the Trustees.

Two years ago the institution owned but one registered animal, and was breeding her and her mates to unregistered bulls belonging to the neighbors. Happily the inconsistency of this practice at an institution offering instruction in the principles and practice of successful breeding was appreciated and we now own three registered bulls of the three most prominent breeds and from the choicest herds of the United States, besides three females of the Shorthorn breed, three of the Jersey, and nine of the Holstein-Friesian. We sold one Holstein-Friesian bull calf for \$100.00, and have on hand one other Holstein, and one Shorthorn. This is a total of twenty animals, either registered or capable of registry of which the Station has purchased three and the University eleven. Of the little flock of ewes three are picked specimens from the flock of George Allen, one of the most successful breaders of Shropshires in America. These additions to the live stock not only do the institution credit, but they mark a broader policy regarding agriculture here.

The first year of the new organization with a Director will have nearly expired before the time of the next meeting. The Station staff, except for unavoidable interruptions, sustains its regular weekly meetings as heretofore and to the informal discussions of these meetings is due much of the unity and efficiency of the work. As a result the work of this Station is not that of independence and often inharmonious interests, but rather that of an organized staff whose energies are expended along prescribed and closely related lines.

#### WORK OF THE YEAR.

Animal Husbandry.—Records are kept of the amount of milk and the per cent of fat for each cow in the herd. Accurate accounts were kept of the food and water consumed by each of two cows fresh on the same day. In this way a mass of material is on hand awaiting time for a study of the variations between cows in the matter of return for feed consumed. More data and more knowledge on this subject are greatly needed. The physiological requirements of the animal body have been largely overlooked and chemistry has stood for all that is scientific in the feeding problem. A preliminary excursion into this pioneer field of experimentation was made by feeding three calves at different times on rations destitute of coarse food. The results, together with data from a similar experiment by the author elsewhere, are reported in bulletin No. 46, which is just issued. These are the first of their kind, and show some unexpected facts as to the principles of nutrition, chief among which is this, that the food should be in every way suited to the habits of the species and the idiosyncrasy of the individual.

Two or three of the best native cows have been bred successively to the different bulls, hoping to raise from the same cows heifer calves that are grades with different breeds. It may lead to valuable facts and may lead to nothing, but we already have on hand a few grade heifers of this breeding. All grade males have been disposed of as property undesirable to retain upon the premises.

The rape plant is the cheapest food for sheep, but the southern limit of its successful growth has never been determined. Accordingly it was thoroughly tested on these grounds last year, where it made a truly wonderful growth. It can be recommended without hesitation to every flock master in the northern and central portions of the State. Whether it will thrive south of the black soils is not yet determined, but our experience of last year was not at all flattering.

There were growing on the grounds a great variety of forage plants in small amounts and it was determined to try them for ensilage as compared with corn, depending upon the appearance of the product and the verdict of the cattle to decide upon their merits. Neither broom-corn, sorghum, nor any of the Kafir corns is comparable with Indian corn, but teosinte appears promising. Rape becomes, in the silo, a wet and compact mass that is not good silage, but an excellent protector to what is below. It is the best known material to exclude air, and would make excellent covering for the silo.

A quantity of oats was cut for hay, partly for the benefit of seeding, and partly to provide coarse feed for horses and cattle. It has proved more acceptable to both than the best of hay, and I have never seen a feed upon which horses thrived so well. It is so promising that I have recommended some careful experiments in the matter of oat hay for the coming year. If oat hay can be successfully cured in the average season its value for coarse feed is well nigh unprecedented. Large use has been made of cut corn stover and digestion experiments are in progress with four steers to determine accurately the digestibility of both the corn plant as it grows and the stalk after the ear has been removed. Strangely enough neither has ever been carefully determined. This investigation when worked out will be reported by the chemist, but we are expecting some valuable facts in addition to present knowledge concerning variation among animals in their process of digestion.

Dairying.—The results of experience with pasteurizing milk were written up by Mr. Powers, but have not yet been published. Further knowledge along the lines treated seems desirable. Mr. Fraser has made some preliminary studies as to the sources of contamination that are so surprising as to suggest further investigation. He has exposed more than 100 Petri plates in different places about the barn and dairy and made some sixteen bromide prints of resulting cultures. More bacteria are obtained on dishes exposed a foot below the ceiling than on those exposed at the floor level, and more from a proximity to the cattle than from the dust of the barn or of the fodder, which seems to indicate that the animals themselves are the chief source of infection. Twice as many bacteria fell on the plates exposed immediately after brushing the cows when the air appeared clear, as fell on plates exposed in the dusty air of the barn immediately after sweeping.

Mr. Fraser, under the direction of Dr. Burrill, is making experiments on the best nutrient media for culture of the bacteria that invade milk. This is all valuable work, and is the more important because almost entirely new. It ought to be continued carefully.

Some tests have been made in speed of separator and tester as affecting their efficiency, as well as temperature of milk for separation and for setting in the Cooley creamer. Substantial improvements have been made in the machinery of the dairy building and its arrangement, all of which have contributed to greater efficiency in labor and a better and more uniform product of milk.

Veterinary Science—Dr. Burrill and Dr. McIntosh made a number of examinations of supposed cases of hog cholera last fall without definite results, further than that the most of the animals examined proved to be troubled with swine plague rather than hog cholera. The whole subject is most vexatious, promising little relief except through the avenue of the bacteriological laboratory.

Agricultural Physics—Another yield of corn has been taken from the 160 tenth-acre plats, making the second series of yields. These are exceedingly valuable as affording a basis for comparing the natural productivity of the land in advance of experiments in which results will be judged by comparative yields. The variation between tenth-acre areas is from nothing to over 10 per cent in a good year, and much more in a bad year. To ascertain the personal equation of this land is the first step of a careful experimenter and a good start is made here. It may be worth stating that some of this land yielded over 96 bushels of shelled corn per acre and that the average of the field was 88 bushels.

During the winter the remainder of the fields devoted to experimental work have been accurately surveyed and definite boundaries established, so that cropping and fertilizing may be upon exact and well known areas, to the end that the history may be recorded of all the land under experiment or likely to come under experiment in future years. Language is not strong enough to condemn sufficiently the practice of staking out plats each spring without reference to the previous history of the land, and this all but universal practice has been responsible for many misleading statistics.

A new method of determining comparative yields of varieties has been tested, found successful, and fully reported in bulletin No. 46. By this means the limit of error has been greatly reduced. The plan, though simple, has never been used elsewhere, and whatever is valuable about it is original with this Station.

Attempts to grow crimson clover have again been made with the usual degree of failure. The so-called northern grown seed that was warranted hardy failed as badly as any, and the experience almost warrants the conclusion that the crop is too precarious in this region to be profitable.

Teosinte promises well as a forage crop. The yield is immense, and as it never seeds in the United States, it affords a fine mass of leafy forage very acceptable to both cattle and horses, especially the latter.

Seed of Kafir corn was obtained from Kansas, and a yield of 45 bushels was secured. The stalk is woody, and makes but indifferent feed either green, cured, or as silage. Clearly it is the crop for the arid west, but it is too expensive of cultivation where weeds abound, and the yield is too light to warrant its use in the place of Indian corn.

A number of unusual crops were grown in small amounts to note their habits of growth and to enable more intelligent answers to be made to inquiries concerning the "wonders" advertised, with a shocking disregard of truth, in the catalogues of certain seed firms. Of this class is saccaline, which appears to be as worthless as any other smart-weed, and is but a poor second to its predecessor, prickly comfrey. Another is spurry, which is a dangerous weed; and another is the *flat-pea*, which animals, with a charming unanimity, refuse to eat. Answers to inquiries concerning this class of crops call for delicate discernment in the attempt to convey to the querist a sense of their utter worthlessness, particularly when backed by flaming advertisements and numerous "testimonials." The task is not rendered easier when we remember that most of them have been seized upon as curiosities and described in the Station bulletins of certain states, thus receiving a kind of endorsement of their value.

Botany—The statements regarding the work of the botanical department are drawn chiefly from the report of Dr. Burrill, botanist of the Station.

The regular investigations that have been made during the year have been prosecuted almost solely by Mr. George P. Clinton. The work has been principally devoted to the fungous diseases of plants, especially the so-called smuts. Broom-corn smut has been studied for two years. Very little had been previously done upon this disease anywhere, so that most of the knowledge obtained during these two years is new to science. The work for the year, of which this is a report, has been devoted to ascertaining the life history of the parasite by studies in the field and in the laboratory, to the determination of the amount of injury by it, and to methods of preventing its ravages. These studies have been successful and a bulletin of some forty pages is now in press giving in detail the outcome of the investigations. From this it will be seen that the disease is destructive a one, often dimishing the value of the crop from 2 to 50 per cent. As Illinois produces more broom-corn than any other state or country, it is peculiarly appropriate that the plant should have the attention of our Station. Feasible methods of preventing almost entirely this disease by the use of hot water have been ascertained.

Investigations have been continued on the smut of Indian corn, on the stinking smut of wheat, and on the loose smut of oats. Material is accumulating for a general bulletin upon the subject which may probably be issued after another season's work.

Other studies have been made upon weeds, especially those attracting most attention in Illinois. Much remains to be done in this line. There is comparatively little knowledge of the life histories of these noxious plants, and of the real amount and kind of harm they do in the gardens and fields. The best methods of eradication have had too little attention from the standpoint of science.

Collections for the Station herbarium have been made of over 200 varieties of cultivated plants, over 100 numbers of the parasitic fungi, mostly of economic importance, and a considerable addition has been made to the preserved collection of weeds. Three hundred and thirty specimens of economic fungi have been selected from former collections and prepared for final determination and mounting and some 250 other specimens, chiefly weeds, have been mounted for the herbarium. To complete this laboratory work with the material on hand a large amount of work will still be required.

Chemistry—Owing to the fire in August the work of the chemical department for the year is practically within the current quarter. Samples of soils from the Stations at Odin and Edgewood were again taken to replace those lost by fire.

The principal work in hand has been a study of the chemical composition of corn, including

- (1) The composition of different varieties.
- (2) Variation in the composition of a single variety.
  - a. Of different samples grown in the same locality.
  - b. Of samples grown in different localities.

(3) Variation in the composition of corn grown on different parts of the ear. This work is not completed. Partial analyses have been made of seventy-three different samples.

Entomology.—The consulting entomologist, Professor Forbes, has furnished copy for two valuable bulletins during the year, viz., No. 44, "Insect Injuries to the Seed and Root of Indian Corn," and No. 48, "The San José Scale." As State Entomologist, he has been active in attempting to locate, with the hope of exterminating it, the San José scale wherever it has gained a foothold within our borders, and the Station coöperates with him. The invasion was found to be more serious and the points of infection more numerous than at first supposed, and this bulletin, No. 48, now in press, is issued to inform orchardists of the presence and the nature of this hitherto unsuspected enemy.

Publications.—Five bulletins have been issued during the current year or are now in press, viz., Nos. 44 and 48 as above; No. 45, "Varieties of Apples;" No. 46, "Experiments with Corn." "Attempts to Grow Crimson Clover," "On the Improvement of Retentive Clays," etc., "On the Importance of the Physiological Requirements of the Animal Body," etc.; No. 47, "Broom corn Smut."

Publications from this Station have not been so numerous or voluminous as from certain of the neighboring states, many of them publishing at state expense, or from a special fund, thus making extensive publications easy. The publication of a bulletin of thirty-two pages and its distribution to 16,000 people is no small task, and represents an outlay of about \$300.00. With the funds in sight it is impossible to issue four such bulletins every year.

Correspondence.—As might be supposed the correspondence of the Station is heavy and likely to increase greatly. We have held ourselves ready to give such information as might be imparted within the limits of an ordinary letter. Correspondents often ask for more, and sometimes claim the right of long dissertations on cultivations of soils, the action of fertilizers, and other matters equally complicated.

The demand for free chemical analysis of soil, fertilizers, butter, water, etc., is frequently pressing, but people usually see our reasonableness when it is pointed out that we can not undertake work of purely private interest. Occasionally, however, the most courteous explanation fails to satisfy.

#### WORK ESPECIALLY RECOMMENDED FOR THE ENSUING YEAR.

Animal Husbandry.—The productive energy of the animal body whether measured in labor, meat, or milk varies greatly as between individuals, both absolutely and in proportion to food consumed. Not only that, the same individual is a more economical consumer of food at certain periods than at others, and these variations with fairly good animals are several times as great as a reasonable profit. I recommend a further study of variations in milk yield as related to food, to the individual, and to its surroundings, and that for a time this work be considered the principal matter of experimentation along the line of live stock.

The rape plant for sheep feed should be further tested here that its use may be encouraged, if further tests show it to be as valuable as experience elsewhere and preliminary work here seem to indicate.

Dairying. (1) A study of the variations in milk, in connection with experiments in animal husbandry, to ascertain, if possible, how much is due to feed, how much to individual and how much to other circumstances.

(2) A study of the sources of contamination of milk to learn if the exclusion of unfriendly bacteria is feasible.

(3) An attempt to learn if aeration of milk is necessary to good flavor or to keeping quality.

Agricultural Physics.—The source of nitrogen for agricultural crops lies at the foundation of all rotations and of the use of leguminous plants in the economy of the farm. It needs further and persistent study. After a generation of work the problem is only recently taking on new and unexpected features.

The two great leguminous crops for Illinois are red clover, for the northern sections, and cow peas for the southern. Neither has been carefully studied. Red clover is probably capable of all the variations of wheat or oats, yet we have but one variety and do not quite know whether it is necessarily a biennial or not. I most heartily approve making these two crops a matter of special study; that their life histories and variations be studied, together with the best methods of seeding and the nature and limits of "sickness" supposed to follow always the too frequent planting of the same leguminous crop. All the experiments herein mentioned are along authorized lines of work, except this, which is in fact a study of the sources of nitrogen of agricultural crops, and I recommend its addition to the list.

Subsoiling should be carefully studied. The matter is agitating the public mind, and the nature of the practice is such as to affect the land for good or ill for a considerable time. We do not possess the data for intelligently answering whether subsoiling these prairie soils is advisable, and careful experiments on permanent plats both on high and low ground and on a scale large enough to afford an answer to the question are recommended. Some work in subsoiling has been commenced in southern Illinois.

For central Illinois for many years the greatest practical question will be that of depth, frequency, and nature of cultivation, and it is proposed to begin carefully planned experiments along this line on some of the permanent plats. Such work is not so simple of execution as might seem, and valuable results can be had by painstaking care only.

The corn experiments are well started and should be continued. A mass of data is already at hand, but time only will enable the workers to sort it and discover principles. Barrenness is becoming a prominent feature of this study, as well as acclimation and permanence of variety.

Experience would seem to make it advisable to do more with teosinte the coming season, and to endeavor to learn if it is worthy to come into the list of crops for Illinois.

The general interest aroused in the culture of the sugar beet would seem to make it advisable to expend a portion of the energies of the Station along the line of its cultivation. There was a time when public opinion almost compelled the Station to work in channels in which the popular mind happened to be running. It is less necessary to do this than formerly and still it seems wise to reflect to some extent the public pulse, though it is too fickle to serve as a basis on which to ground policies. Two years ago it was crimson clover and irrigation, and every bad season or time of depression may be relied upon to develop some new phase of agricultural industry. But the importance of the sugar beet question and the demands made by many of our people upon the Station for information on the subject lead me to say that it would be desirable to give the matter early attention.

The only obstacle to the prosecution of this work is the lack of funds, and I do not see how they can be provided without discontinuing some of the established work of the Station. However, something can be done within the limits of our funds, and it seems advisable to do what we can.

Botany.—In accordance with the recommendations of Dr. Burrill, it seems that the botanical work of the Station may for the coming year be chiefly directed along the following lines:

1. Fungous diseases of plants.

- 2. Bacterial diseases of plants.
- 3. Special histology and physiology of corn.
- 4. Fertilization of plants through pollen.

5. Weeds. (This is to include determination, germination, etc., of weed seeds).

There is always an accumulation of information outside of the definite lines of study as planned and some of this extra knowledge may from time to time be gathered up and put into available form for use otherwise. Some groups of fungi can soon be worked up in this way with comparatively little extra labor, and freedom in this particular is desired.

Horticulture.—The experiments in charge of this department were carefully gone over at a recent meeting and no further changes are recommended at this time aside from the policy of extending the plantings of varieties of small fruits likely to be successful, and that of even more careful investigations into the results of spraying.

Chemistry.—The exhaustive chemical examination of Indian corn and its digestibility, together with chemical work done for other departments, and the analysis of fertilizers for the State Board of Agriculture, will occupy fully the time of this department. The value of analytical work depends solely on its absolute accuracy. Offenses against this virtue have been all too common and we are fortunate in being able to publish work of this kind with limits of error far within the official standard. The loss of the laboratory by fire and the destruction of most of the apparatus has greatly hampered the work of the chemist. So far as the apparatus has been restored the quality is of the best. Mr. Hopkins asks to be allowed to order apparatus to the amount of \$450.00. Because most of these goods are imported, such orders must be in advance of appropriations. All this apparatus and more is needed, but I do not see how funds will warrant the placing of orders for more than \$300.00 within the next six months, and recommend that the purchase of chemical apparatus to that amount, mainly importations, be allowed, but that bills for no part of the same be incurred for the present quarter.

Southern Illinois.—I recommend the continuance unchanged of the plans in operation at Edgewood during the last year. The feasibility of drainage of these clay lands was demonstrated here last fall and its effect was shown by an increase of over twenty per cent in yield of corn. Whether this will continue must be determined.

The Odin sub-station was established primarily to test sub-irrigation on those lands. The nature of last season rendered this sort of work impractical and it may be a number of years before conditions will be right for such a test.

At Odin we have command of a good sized piece of land, and I recommend for the coming year the trial on a comparatively large scale of a few of the more important questions connected with that of successful agricultural practice there, viz., culture of cow peas, both as a crop and for green manure; use of rye as a winter protection to land and as green manure; subsoiling both spring and fall; and trials of different methods of seeding to grass, and attempts to tame and cultivate some of the wild prairie grasses.

Estimates of expenses for the ensuing quarter on the basis of recommendations herein made are:---

General Fund.		,
Salaries	\$1,940 00 570 00 20 00 25 00 150 00 150 00 125 00 170 00 125 00 170 00 35 00 166 00 75 00 66 00 15 00	\$3,750 00
Farm Fund.		
Labor	\$700 00 2 <b>09</b> 00	\$900 00
-		4,650 00

ESTIMATES FOR QUARTER ENDING JUNE 30, 1897.

#### Respectfully submitted,

## E. DAVENPORT,

#### Director.

Mr. Bullard, from the Committee on Buildings and Grounds, returned the report of the Superintendent of Buildings and Grounds with the recommendation that it be filed, and the recommendation was concurred in.

On motion of Mr. Bullard, the President and Business Manager were authorized to employ a day policeman at not to exceed \$40.00 a month, and an appropriation was made to meet the salary.

Mr. W. L. Pillsbury, as Secretary, filed the reports concerning the endowment securities maturing during the six months ending December 31, 1897, and the interest thereon for the quarter ending December 31, 1896; and as Registrar, statements of fees due from University students, Preparatory School students, and students of the School of Pharmacy for the quarter ending December 31, 1897.

The Finance Committee filed the following report:

## UNIVERSITY OF ILLINOIS, March 10, 1897.

To the Board of Irustees of the University of Illinois.

GENTLEMEN:—Your Finance Committee reports that it has examined University vouchers 1,426 to 2,350, inclusive, series 1895–1896. Also vouchers of series 1896–1897:—

General, 1 to 1,200.

Vouchers Laboratory of Natural History, 1 to 161.

Vouchers Agricultural Experiment Station, 1 to 200.

Vouchers School of Pharmacy, 1 to 102.

We find them in due form and properly receipted, with the exception of No. 2,269 for \$50.00. The warrant for this voucher was not used. We recommend that this warrant be cancelled.

The report of Charles W. Spalding, Treasurer, for the quarter ending December 31, 1896, has been examined and found correct.

Balance September 30, 1896 Receipts for the quarter	\$285,713 49 28,244 08
	\$313,957 57
Warrants paid Balance	$\begin{array}{c} 108,988 \\ 204,968 \\ 84 \end{array}$
	\$313, 957 57

Of this balance, \$37,184.58 belongs to the endowment fund. Respectfully submitted,

> THOMAS J. SMITH, ALEX MCLEAN, N. B. MORRISON,

> > Committee.

On motion of Mr. Armstrong the Board adjourned to meet at the Palmer House, Chicago, at 10 o'clock a. m., Thursday, April 22, 1897, in order to attend the thirty-seventh commencement of the School of Pharmacy.

W. L. PILLSBURY,

F. M. McKAY, President.

Secretary.

## 90

## MEETING OF APRIL 13, 1897.

The following call for a special meeting of the Board of Trustees of the University of Illinois was issued April 8, 1897:

"Upon the call of the President, Mr. F. M. McKay, there will be a special meeting of the Board of Trustees of the University of Illinois, at 10 o'clock a. m., Tuesday, April 13, 1897, at the Sherman House, Chicago, to consider the treasurship, and to conduct such other business as may be duly presented."

There were present at the meeting Messrs. Armstrong, Bullard, McKay, McLean, Morrison, Pearce, Raymond, and Smith and Mrs. Flower and Mrs. Carriel; absent, Governor Tanner and Mr. Inglis.

## ELECTION OF TREASURER.

Mr. Bullard offered the following resolution and moved its adoption:

*Resolved*, That the motion that I made, which was passed by the Board at the last March meeting (see page 74), to postpone the election of a Treasurer till the next regular meeting be now reconsidered.

After considerable discussion of this motion Mr. Smith made the point of order that a motion to reconsider action of a previous meeting which stood adjourned to a subsequent date was not in order at this intervening special meeting. Upon the President's ruling against the point of order the roll was called and the motion to reconsider prevailed by the following vote: Ayes—Armstrong, Bullard, McKay, Morrison, Pearce, and Raymond and Mrs. Carriel and Mrs. Flower; noes—McLean and Smith.

The motion reconsidered was then voted down.

Also Mr. Morrison's motion by which the Committee on Finance was instructed to present to the Trustees at the next regular meeting the name of a person suitable to be appointed Treasurer (see page 74) was reconsidered and voted down.

Mrs. Flower nominated Mr. Elbridge G. Keith, of Chicago, to be Treasurer of the University for the unexpired term ending the second Tuesday of March, 1899, or until his successor shall be appointed and qualified. Upon the nomination the ayes were—Armstrong, Bullard, McKay, McLean, Morrison, Pearce, Raymond, and Smith and Mrs. Flower and Mrs. Carriel; the noes—none.

Mr. McLean moved that the Executive Committee inform Mr. Keith of his election, and ask him to give a bond in the penal sum of \$750,000 and present the same to the Board for approval. While this motion was pending Mr. Armstrong moved that the Board adjourn until 2 o'clock p. m. The motion did not prevail. Mr. McLean's motion was then carried.

The Board adjourned to meet at 2:30 o'clock p.m.

## AFTERNOON SESSION.

When the Board met pursuant to adjournment the same members were present as in the morning.

## BUSINESS MANAGER'S REPORT.

The Business Manager presented the following reports which were referred to the Finance Committee:

S. W.	SHATT: CK,	BUSINESS	MANAGER	IN	ACCOUNT	WITH	с.	w.	SPALDING,	TREASURER.
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1897. January February March 	3 25 21 31 31	Dr. Balance Collections, School of Pharmacy Collections, University fees Collections, School of Pharmacy Balance of collections for January, February and March. Cr. Check, Globe Savings Bank	\$2,404 93 1,126 45 1,456 00 1,849 48 589 00 294 00 7,486 23 \$1,000 00	\$15,206 09
March	$     \begin{array}{r}       13 \\       25 \\       25 \\       25 \\       6 \\ $	Check, Globe Savings Bank Chicago draft, First National Bank Cashed warrants. Check, Globe Savings Bank Cashed warrants. Agricultural Experiment Station Chicago draft, First National Bank Balance.	$\begin{array}{c} 1,000 \ 00\\ 2,000 \ 00\\ 2,034 \ 55\\ 365 \ 07\\ 582 \ 45\\ 1,021 \ 00\\ 286 \ 05\\ 2,000 \ 00 \end{array}$	

1897.]

	RECEIPTS.		
1896. December 31 1897.	Balance		\$155,269 61
March 31	Treasurer's receipts Business Manager's receipts	\$6,287 51 12,801 16	19,088 67
			\$174,358 28
	EXPENDITURES.		
1897. March 31	Warrants, three months— University general. Laboratory of Natural History Agricultural Experiment Station. School of Pharmacy		
March 31	Balance— Current. State appropriations. Laboratory of Natural History Agricultural Experiment Station.	$\begin{array}{r} 80,587 & 16 \\ 2,981 & 76 \\ 1.149 & 26 \end{array}$	
	School of Pharmacy	793 50	\$92,363 64
		·. ·	174,358 28

FINANCIAL STATEMENT, MARCH 31, 1897.

## S. W. SHATTUCK, Business Manager.

The Board then adjourned to meet at 1:30 o'clock p. m., Wednesday.

## SESSION OF WEDNESDAY.

When the Board met pursuant to adjournment the same members were present as on the day before.

The following report from the Finance Committee was received and approved on motion of Mr. Armstrong:

CHICAGO, April 14, 1897.

To the Board of Trustees of the University of Illinois.

Your Finance Committee reports as follows in relation to the bond of Elbridge G. Keith, the Treasurer elect:

The Committee had the bond, which is submitted herewith, made out in legal form by Mr John P. Wilson, attorney of the Board, and presented it to the said Elbridge G. Keith, who duly signed said bond in the penal sum of \$750,000, as principal, with William J. Watson, Sidney A. Kent, Arthur Dixon, and William A. Fuller as sureties.

Your Committee believes said bond to be ample in form and security, and recommends that the same be approved and filed with the Secretary, by him to be recorded.

Respectfully submitted,

T. J. SMITH, ALEX MCLEAN, N. B. MORRISON, Finance Committee.

On motion of Mr. Smith the Secretary was instructed to provide himself with a suitable book in which to record bonds and other documents of like importance. Mr. Armstrong offered the following resolution which was adopted:

Resolved, That Mr. Smith be instructed to accompany our Treasurer and attorney to make a formal demand upon Mr. Chas. W. Spalding for all moneys, securities, books, records, and all other property belonging to the University of Illinois which he may have or should have in his possession.

Mr. Bullard offered the following resolution which was adopted:

*Resolved*, That the firm of Wilson, Moore & McIlvaine, of Chicago, be employed as attorneys of this Board in all legal matters in connection with the settlement of the account with the former Treasurer of the Board, Chas. W. Spalding.

The following resolution was adopted:

*Resolved*, That the Treasurer of the Board of Trustees of the University of Illinois is hereby authorized to receive and receipt for all moneys, and to indorse 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.

On motion of Mr. Smith, Messrs. McKay and Pearce and Mrs. Flower were appointed a Committee to prepare a financial statement which would include a statement of the condition of the Endowment Fund and present the same to the next meeting of the Board.

## EVENING SESSION.

At this session of the Board Mr. Moore was present and stated at length what steps his firm had taken to protect the interests of the University.

LAW OFFICES

WILSON, MOORE & MCILVAINE.

## CHICAGO, April 29, 1897.

#### W. L. Pillsbury, Secretary University of Illinois, Urbana, Ill.

DEAR SIR: The following is a statement of the report I made to the Trustees of the University at their meeting on April 14, 1897:

On that day we obtained from Mr. Spalding a mortgage of his interest in the property in Ford's Subdivision, in the City of Chicago, getting the description from his deed which had been filed a day or two previous, conveying the same property to Mr. Ford. Mr. Spalding and Mr. Oliver, his attorney, stated to us that at the time of the conveyance to Ford there was a declaration of trust made by Mr. Ford, which stated that that deed was made as indemnity for himself and Allison W. Harlan, as sureties on Spalding's bond. Spalding therefore retained an interest in the property notwithstanding that deed, subject to the claims of Ford and Harlan in case they should be obliged to pay as sureties on that bond.

We obtained also a mortgage from Mr. Spalding of his farm in Hillsboro County, New Hampshire, called "Nanticook." said to consist of one hundred and twenty acres. We took his description for this, and had no other means of knowing what the facts were. The mortgage covered also, in terms, the personal property, stock, etc., on the farm, but probably the conveyance of the personal property would not be good as against subsequent purchasers, or creditors, being contained in a conveyance of real estate, which the law there requires to be recorded differently. It would be practically impossible for you to handle that kind of assets any way, the property being said to be chiefly live stock. We took also a mortgage on land in Idaho. We could get no better description than "all the lands owned by Mr. Spalding in the State of Idaho." From this he excepted a body of land lying adjacent to Idaho City, stating that he had conveyed that away. We learned from other sources that it was conveyed to Miss Irvin, and we observe now that she testified yesterday before the Grand Jury that a body of land in Idaho had been conveyed to her, comprising a considerable tract. The land in Idaho was said to lie in three counties, which are named in the mortgage. We have caused the mortgage to be recorded in one of these counties, and will have to record it in the others as soon as the return of it from the first place will permit. The New Hampshire mortgage has also been recorded, and also the Illinois mortgage.

In addition to the foregoing Mr. Spalding assigned to the University property described as follows:

"Sixteen bonds, Town of Buckley (Washington), each \$500.00.

Seventeen bonds, Marshalltown Light, Power and Railway Co., each \$1,000.00.

Fifty bonds, Pocatello Power and Irrigation Co., each \$1,000.00.

Fifty-five Idaho Canal Co. bonds (new issue), numbered 79, 80, 95 to 100, both inclusive, 115 to 124, inclusive, and 237 to 248, inclusive, and 250 to 274, both inclusive, each \$1,000.00.

Two notes made by J. W. Lanehart, payable on demand, one for \$5,000.00 and one for \$6,500.00 (guaranteed by John P. Altgeld).

Seven notes of N. W. and G. W. Graham, being for \$1,000.00, \$500.00, \$1,500.00, \$2,000.00, \$2,000.00, \$2,000.00, and \$4,000.00, respectively, all secured by trust deed to Adello D. Avrill, conveying Electric Light Plant at Carbondale, Illinois. All said notes payable on demand; also secured by stock of said Electric Light Co., par value \$25,000.00.

Two thousand three hundred and ninety shares of stock of Idaho Canal Co., par value \$100.00 per share.

Five hundred shares of stock in Pocatello Power and Irrigation Co., par value \$100.00 per share.

Also all stocks, bonds, or other securities I own, or am interested in, both those which are now contained \_1 safety deposit boxes of Globe Safety Deposit Company, and any such as are in any other place."

We have filed two petitions in the Circuit Court in the Churchill case, one asking for the delivery to us of the property assigned by Spalding above mentioned. the other asking for the delivery to us of the balance of the endowment fund. The answer to the second of these petitions is due to-day. The answer to the first will not be due for five days yet. The receiver of the bank is claiming to own, for the bank, all the property assigned to us by Spalding. He also, as you know, makes some claims to a part of the endowment fund.

This, we think, complies with your request. It ought to have been done before, but we have be so pressed with other matters that it was impossible.

Yours very truly,

WILSON, MOORE & MCILVAINE.

Board adjourned. W. L. PILLSBURY, Secretary.

F. M. McKAY, President.

## MEETING OF MARCH 9, 1897.

## Adjourned Session, April 22, 1897.

The board met at the Palmer House, Chicago, at 10 o'clock a. m., Thursday, April 22d, pursuant to adjournment and adjourned to meet forthwith at the Sherman House, Chicago.

When the board met at the Sherman House, pursuant to adjournment, the following members were present: Messrs. Armstrong, Bullard, McKay, McLean, Morrison, Pearce, Raymond, Smith and Mrs. Carriel and Mrs. Flower; those absent were Governor Tanner and Mr. Inglis.

President Draper made an informal report with regard to the condition of the appropriation bills. He also stated that acting upon authority given him at the last meeting of the board, he had engaged Mr. G. E. Gardner, of Worcester, Massachusetts, at a salary of \$2,000 a year, and Mr. C. C. Pickett, of Chicago, at a salary of \$1,500 a year, as instructors in the law school, the term of service to begin September 1, 1897.

On motion of Mr. Armstrong, these appointments were made.

The matter of the appointment of Miss Katherine Sharp as librarian of the University, presented by President Draper, was referred to a special committee consisting of President Draper, Mrs. Flower, and Mr. McLean, with power to act.

It was voted that Professor S. W. Shattuck be paid \$400 a year out of the funds of the School of Medicine for his services as business manager of that department of the University.

A petition was presented from many of the students of the college of engineering desiring that Mr. Goodenough, who had received an offer of a higher salary elsewhere, be retained as instructor in the University, but no action was taken thereon.

### GRADUATES OF SCHOOL OF PHARMACY.

The secretary reported that the faculty of the University recommended that diplomas be awarded to graduates of the school of pharmacy as follows: 1897.]

GRADUATES IN PHARMACY.

Eugene Daniel Allen, Otto Balensiefer, Otto Theobalu Erhard Behmer, Frederick Francis Ferdinaud Behrens, Harry Arthur Böyce, Frederick Edward Albert Buchner. Albert Eugene Clyde, Francis Xavier Dieden. George Charles Dittmann, Elizabeth Elliott. Ewil John Fisner. Eugene Daniel Allen. Elizabeth Elliott. Emil John Fisner. Harry Raymond Friedgen, Charles Cliftord Fulghum, Carl Edward Gilbert, Micajah Anderson Harper, Charles Frederick Hoch, Peter William Jacobus,

George Gilmore Johnson, David Landau, Louis Lange, bavin Lange, Louis Lange, ehrens, Joseph Aloysius McGoey, George Andrew Mark, ner. Harry Charles Mehrlich, Harry George Menn, Leopold Ludwig Mrazek, Edward Charles Parsons, Harry James Pier, Henry Frederick Plautz, Otto Porges, Hiram Schwarz, George Irving Washington Smith, Mark Thomas Storen, Evert Van Buren, Jr., William Frederick Waldron, Mortimer Safford Wooster.

PHARMACEUTICAL CHEMISTS.

Alma Babb, Wilfrid James Bignold. John Elliott Boudinot,

Arthur Kampman, Charles Johnson Renshaw, Luba Julia Robin, Charles Walter Winne.

Authority was given to confer degrees according to the foregoing recommendation.

The Secretary reported that he had, as directed at the last meeting of the Board (see page 69), written to the Board of Trustees of Beloit College with regard to the differences between the base-ball teams of the two institutions, and that he had received the following letter in reply:

BELOIT, WISCONSIN, March 23, 1897.

W. L. Pillsbury, Esq., Secretary Board of Trustees, University of Illinois.

DEAR SIR:---I beg to acknowledge receipt of your favor enclosing the resolutions adopted by the Board of Trustees of the University of Illinois. An illness on my part has delayed an earlier acknowledgment of your communication.

Will you express to the Board of Trustees of the University of Illinois my sincere regret at the delay of the students of Beloit College to pay the sum due to the University of Illinois base-ball team under the decision of the referee? Should it be necessary I will bring the matter before the Executive Committee of the Board of Trustees of Beloit College at their next meeting in April; but I hope a settlement will have been made before that time. The seventy dollars must be paid with interest from date of the decision of the referee.

Sincerely yours,

EDWARD E. EATON,

President Board of Trustees, Beloit College.

The Secretary also stated that the amount due from the Beloit College ball team had been received.

Mr. McLean reported that, as a member of the Committee of the School of Pharmacy, he had endeavored to secure from Mr. Clough, owner of the building in which the School is held, a reduction of rent, but so far had not succeeded.

The Committee appointed at the last meeting of the Board to visit banks and ascertain what bonds belong to the endowment fund of the University of Illinois had been hypothecated by Charles W. Spalding. Treasurer, made the following report:

-7 U. I.

## ' URBANA, ILL., April 22, 1897.

## To the Board of Irustees of the University of Illinois.

GENTLEMEN: Your Committee appointed at your meeting of the 14th inst., to visit banks in which it was supposed there were to be found bonds that had formerly been in possession of Mr. Charles W. Spalding, as Treasurer of University of Illinois, attended to the business on the 15th inst.

Mr. Pearce and Mr. Pillsbury, accompanied by Mr. Moore, of the firm of Wilson, Moore & Mellvaine, attorneys, went first to the Metropolitan National Bank and were there shown bonds No. 44 for \$500 and Nos. 51 to 57 inclusive, for \$1,000 each—amount, \$7,500—issued by the school directors of Pittsfield district July 2, 1883, which had formerly been held by the Treasurer of the University, Charles W. Spalding, and had been pledged to the bank as security for a demand note of \$7,000 bearing date March 16, 1897, made to himself by A. B. Camp, and by him indorsed. The note had been negotiated with the bank by Lobdell, Farwell & Co., brokers.

with the bank by Lobdell, Farwell & Co., brokers. At the Northwestern National Bank your Committee found Cass County Union District No. 1, T. 17 N., R. 10 W. bonds Nos. 1 to 26, inclusive, for \$500 each, issued May 1, 1892; Litchfield school district bonds Nos. 1 to 8, inclusive, for \$1,000 each, issued September 1 and October 3, 1885, and January 1, 1886; Normal school district bonds Nos. 2 to 4, inclusive, for \$500 each, issued August 15, 1896; Shelby district No. 6, T. 11, R. 5, bonds Nos. 1 to 5, inclusive, \$400 each, issued July 23, 1896; Taylorville Township Board of Education bonds Nos. 3 to 20, inclusive, \$1,000 each, issued August 1, 1890; Austin Board of Education District No. 2, bonds Nos. 1 to 23, inclusive, issued July 1, 1893, for \$1,000 each; Shelby County School District No. 1, T. 14, R. 2, bonds Nos. 7 to 14, inclusive, for \$500 each, issued May 5, 1890; all of which had formerly been in possession of Charles W. Spalding, as treasurer of the University. The Committee also found that the bank had received with the bonds above named bond No. 1, issued by the Normal School District for \$500, which, with the interest thereon and interest on the rest of the Normal School District bonds, amounting to \$575 in all, the bank had collected April 7, 1897, it having matured April 1st. The bonds amounted to \$70,000. Your committee found that these bonds had been pledged as security for three notes given by Charles W. Spalding to the Northwestern National Bank; the first for \$25,000 on demand, given April 15, 1896; the second for \$20,000 on demand, given January 13, 1897. Your Committee also found that the bank claimed to hold these bonds as security for a demand note of \$20,000, given by Charles W. Spalding November 4, 1896. Said note being secured according to the pledge thereon by real estate mortgage notes amounting to \$20,000. After leaving this bank Mr. MaKay ioined the Committee and the for \$20,000.

After leaving this bank Mr. McKay joined the Committee, and Mr. Moore was obliged to leave in order to attend to other business.

Your Committee found at Illinois Trust and Savings Bank Macoupin county bonds of the issue of July 7, 1883, No. 512 for \$1,000, No. 588 for \$500, Nos. 651 to 653, inclusive. for \$1,000 each, Nos. 729 to 731, inclusive, for \$500 each; Morgan county bonds Nos. 89 to 95, inclusive. for \$1,000 each, issued June 15, 1887; Montgomery County School District No. 1, T. 8, bonds Nos. 8 to 13, inclusive, for \$1,000 each, issued September 15, 1887. Mattoon Board of Education bonds Nos. 1 to 12, inclusive, for \$500 each, issued August 1, 1892; all of which had been formerly in the possession of Charles W. Spalding as Treasurer of the University. These bonds amount to \$25,000. The bonds had been pledged to secure a demand note given by A. B. Camp to himself; and by him endorsed, bearing date February 26, 1897, amount \$21,250, payable at the office of Lobdell, Farwell & Co., brokers, and negotiated through them.

At the First National Bank your Committee found Kankakee county bonds of the issue of July 1, 1884, Nos. 1 to 48, inclusive, for \$1,000 each; Gallatin county bonds of the issue of July 1, 1885, Nos. 63 to 72, inclusive, No. 95, and Nos. 97 to 106, inclusive, for \$1,000 each; Logan county bonds of the issue of July 1, 1887, Nos. 36 to 50, inclusive, for \$1,000 each; Morgan county bonds of the issue of June 15, 1887, Nos. 61 to 83, inclusive, for \$1,000 each; Mans1897.]

field School District No. 2 bonds Nos. 1 to 7, inclusive, for \$1,000 each, and No. 8 for \$100; Macoupin county bonds of the issue of July 1, 1883, Nos. 592 to 604, 692, 691, 694 to 705, inclusive, for \$560 each, and Nos. 825 to 828, inclusive, 836, 837, 839 to 845, inclusive, and 851, for \$1,000 each; Jasper county bonds of the issue of October 1, 1887, Nos. 66 to 80, inclusive, for \$1,000 each; Crawford county bonds of the issue of January 1, 1887, Nos. 43 to 51, inclusive, and No. 57 for \$1,000 each; Sidell School District No. 5 bonds Nos. 1 to 3, for \$900 each; School District No. 1, T. 13 N., 8 W., 3d P. M., Morgan county, Nos. 5 to 10, inclusive, \$1,000 each; Sangamon County School District No. 3, T. 15, R. 5 bonds Nos. I to 5, for \$1,000 each—all formerly held by Charles W. Spalding as Treasurer of the University. The amount of these bonds is \$185,000.

These bonds had been pledged by Charles W. Spalding to secure seven notes as follows: One demand note for \$25,000 dated December 30, 1895, in terest paid at 6 per cent to March 31, 1897; one demand note for \$25,000 dated June 25, 1896, interest paid to March 31, 1897; (this note had been given as a renewal of a note given March 27, 1896, for the same amount); one demand note for \$25,000 given September 4, 1896, interest paid to March 31, 1897; one demand note for \$25,000 given September 23, 1896, interest paid to March 31, 1897; one 90 day note for \$25,000 given February 23, 1897, with interest after date; one 90 day note for \$25,000 given March 30, 1897. The face of these notes is \$175,000.

Each of these notes has endorsed upon it with Mr. Spalding's signature "Pass to the credit of Globe Savings Bank," except the renewal note named above, and your Committee was told that the original note of which the bank now holds the above renewal was similarly endorsed. Your Committee was also told that the proceeds of these notes had been passed to the credit of the Globe Savings Bank account and had been checked out by the officers of that bank.

To recapitulate-

Metropolitan Bank	oonds 	\$ 7,500 70,000 25,000 185,000	to s	secure 	\$ 7,000 65,000 21,250 175,000
		\$287,500			\$268,250

There have been found bonds in the Globe Safety Deposit Vault belonging to the University amounting to \$124,810 (see below). These, with those enumerated above, leave \$5,000 of the University bonds still unaccounted for. These are Macoupin County bonds Nos. 588 to 591, inclusive, 173, 236, 279 and 514 for \$500 each, and No. 369 for \$1,000.

Respectfully submitted,

F. M. MCKAY, J. IRVING PEARCE, .

Committee.

The report was received for record.

Mr. Moore, our attorney, presented the following:

UNIVERSITY BONDS FOUND IN THE GLOBE SAFETY DEPOSIT VAULT.

Memorandum of an examination made of the articles in boxes 556 and in the Globe Safety Deposit Vaults, Chicago, Illinois, made by the Clerk of the Circuit Court of Cook county under the direction of Judge Tuley, for the purpose of removing bonds to the vaults of the Illinois Trust and Savings Bank as directed by said Court in an order in the case of Charles E. Churchill vs. the Globe Savings Bank, et al., entered April 19, 1897. The following persons were present: Henry W. Lehmann, vice-president of the Chicago Title and Trust Company, receiver herein; Charles E. Bradley, chief deputy clerk of the Circuit Court of Cook county; John M. Oliver, representing Charles W. Spaulding; Henry W. Magee, attorney for the receiver; Nathan G. Moore, attorney for the Trustees of the University; Herbert Skinner, private secretary of said Spaulding; and a stenographer in the employ of the said Magee.

Box 556 was first opened. The box was carried into the adjoining room and placed upon the table; the papers were taken therefrom by Mr. Lehman and opened in the presence of all of the above parties There was found therein the following:

Fifty bonds of Champaign county, Illinois, dated July 1, 1882, numbered from 51 to 100, inclusive, each for \$1,000, all payable by their terms to the "Illinois Industrial University" neither endorsed nor stamped.

Also four bonds of School District No. 11, Township 19, Range 10, in said Champaign county, numbered 3, 4, 5 and 6, numbers, 3, 4 and 5 each for \$1,000, number 6 for \$650, all payable to the Board of Trustees of the University of Illinois.

Also one bond No. 1 issued by School District No. 10, township 17, range 14 west of the 2d principal meridian, and ranges 10 and 11 east of the 3d principal meridian, in Champaign county, Illinois, for \$1,000, payable to the University of Illinois.

Also one bond for \$3,000 issued by the Union School District No. 2, in said Champaign county, in township 22, range 7 and 8 east of the 3d principal meridian, dated July 1, 1894 and payable to the University of Illinois.

Also three bonds of District No. 6, township 19, ranges 8 and 9 east of the third principal meridian, in said county, numbered 1, 2 and 3, each for \$2,000, payable to the Trustees for the University of Illinois, dated January 31, 1891.

Twenty-nine Pike county funding bonds each for \$1,000, numbered 151 to 179, inclusive, all due July 1, 1899, payable to bearer; each of said bonds was stamped with a red square rubber stamp headed in large type, "Take Notice," stating in substance that the bonds belonged to the University of Illinois and were not negotiable. The stamp was signed "John W. Bunn, Treasurer," and was dated July 1, 1879.

Also one bond numbered one, issued by School District No. 2, Homer, Champaign county, township 18, range 14 west of said 2d principal meridian, for \$7,500, payable to the Trustees for the University of Illinois.

Also one bond numbered 5 for 1,000, issued by School District Township 16, Sangamon county, ranges 1 and 2 west of the 3d principal meridian, Illiopolis, payable to John H. Brinkerhoff or bearer, dated July 11, 1892, not stamped or endorsed.

Also twelve bonds each for \$500, numbered 29 to 40, issued by School District No. 1, township 19, range 8 east in said Champaign county, all dated August 1, 1889, and payable to the Board of Trustees for the University of Illinois, the first four being due August 1, 1897, the second four August 1, 1898, the third four August 1, 1899.

Also one bond numbered 13 for \$1,000, issued by School District No. 3, township 10 north, range 3 west, in Montgomery county, payable to the Trustees for the University of Illinois.

Also two bonds numbered 2 and 3, each for \$500, issued by School District No. 8, township 8, in said Montgomery county, dated August 10, 1889, payable to E. T. Oliver or bearer, not stamped or endorsed. Bond No. 2, payable August 1, 1897, No. 3 August 1, 1899.

Also three bonds of Normal School District, McLean county, numbered 5, 6 and 7, each for \$500, payable to bearer, not stamped or endorsed.

Also six bonds each for \$500, numbered from 7 to 12, inclusive, issued by School District No. 2, township 16, Sangamon county, Illinois, payable to Edward T. Oliver or bearer, not stamped or endorsed. 1897.]

Also six bonds numbered 5 to 10, inclusive, each for 1,000, issued by the Urbana School District, payable to bearer, not stamped.

Also eight bonds of Macoupin county, Illinois, numbered 559, 560, 561, 562, 585, 586, 607 and 608, each for \$100, all dated July 1, 1883, payable to bearer, not stamped.

Also one [school bond numbered 12 for \$1,000, issued by School District No. 3, township 10, range 10, Montgomery county, Illinois, payable to George M. Brinkerhoff or bearer, dated July 15, 1887, payable July 1, 1897,] not stamped or endorsed.

Also four bonds numbered 2, 3, 4, and 5, each for \$840, issued by School District No. 1, township 18, range 10, in Champaign county, all dated July 1, 1895 and all payable to Charles W. Spaulding, Treasurer, not stamped or endorsed.

The above bonds were all taken into the custody of Mr. Bradley, as a deputy clerk and removed to the Illinois Trust and Savings Bank and there deposited in box number 5.530, which box was rented in the name of the clerk, and statement being made in the rental receipt that it was to be opened only upon special order of the Circuit Court of Cook County. The clerk put a gilt seal upon the face of it and took the keys.

I. N. G. Moore, was present when the box was rented and the bonds placed in it. I did not check them into the box but had seen them taken into the custody of Mr. Bradley and saw him put them into the box in the same packages.

Mr. McKay being obliged to withdraw at this time Mr. Armstrong took the chair.

#### SCHOOL OF PHARMACY.

A committee of the Advisory Board of the School of Pharmacy then presented the following report which was received for record and referred to the Committee on the School Pharmacy:

# Minutes of the Meeting of the Advisory Board of the School of Pharmacy of the University of Illinois, Wednesday, April 21, 1897.

The meeting was called to order at 10:30 a.m. at the office of the School of Pharmacy, 465 State street. Present, Messrs. Rogers, Ebert, Biroth, Swannell. Loehr, Semphill, and Sherer.

The Faculty had been requested to meet with the board, and there were present Professors Goodman, Hallberg, Hereth, Puckner, and Day.

Dr. H. H. Rogers was elected Chairmain of the meeting, and W. B. Day, Secretary. After some informal discussion it was resolved that the Advisory Board do advise and recommend instruction in Physiology and Anatomy to be given in connection with the regular course in so far as they relate to the practice of Pharmacy.

The meeting adjourned until 2:30 p.m.

The meeting was again called to order at 2:55 p. m. by Chairman Rogers. Mr. Hereth was requested to act as Secretary during the temporary employment of Mr. Day with urgent business.

All the members were present who attended the morning meeting together with the members of the Faculty.

Discussion then took place relative to making the pharmaceutical and dispensing laboratories a separate department. Discussion was opened by Mr. Ebert, and was followed in turn by nearly all others present. It was suggested by Mr. Ebert that the pharmaceutical and dispensing laboratories should be placed under the management of one director in a department by itself, or in the event of this proposition not finding favor, that both departments be placed under the direct supervision of the professor of pharmacy. It was moved by Mr. Swannell and seconded by Mr. Ebert that further discussion of this question be left until the meeting of the Illinois Pharmaceutical Association in Champaign on June 2d, when the Advisory Board would meet again.

It was suggested by Professor Goodman that the branch of Microscopy be separated from the Department of Materia Medica, and be placed in the charge of Mr. Day as Professor of Microscopy. This suggestion was also referred to the Advisory Board for action at its next meeting in June.

Mr. Sempill suggested that the Trustees be requested to make arrangements to give students a limited course in book-keeping; no action was taken upon this subject.

Professor Puckner suggested that the title of "Professor of Physics" be dropped from his name in the announcement.

After free discussion of the several matters presented, the present requirements on admission to the School were considered, but it was thought best not to make any change at present.

At the suggestion of Mr. Day, the question of equipment of the School was discussed. On the recommendation of the Faculty the Board resolved to recommend to the Trustees that the equipment be increased as rapidly as possible up to the required needs. The question of fees also came up, but it was decided best to recommend no change. The condition of the library was also discussed. It was moved by Mr. Swannell that the attention of the Trustees be called to the unbound volumes in the library of the School of Pharmacy, many of which are very valuable, and that they be requested to make an appropriation of at least \$100.00 to bind them. The motion was seconded by Mr. Biroth and carried unanimously.

Mr. Biroth wanted a report on the financial condition of the School, but on account of the fact that the books were at Champaign, Mr. Day said he could not make the report, but stated that the School would probably pay all of its expenses for the past term.

Mr. Ebert gave it as his opinion that, if the present building be retained, a lease of at least three years be made so that a new lecture hall might be built from the balcony. The opinion was concurred in by all present, especially since the School is in very urgent need of another lecture hall.

Requirements for graduation were then brought up for discussion.

It was moved by Mr. Loehr, and seconded by Mr. Scherer, that the following clause be inserted in the announcement under the published requirements for graduation: "Candidates for the degree of graduate in pharmacy of less than the legal age may receive the degree of pharmaceutical chemist in lieu thereof."

The meeting then adjourned at 5:15 to meet on Thursday, April 22d, at 9:30 a. m.

W. B. DAY, Secretary. ALBERT E. EBERT, THEO. C. LOEHR, HENRY SWANNELL, HENRY BIROTH, H. H. ROGERS.

In the absence of the chairman of the Advisory Board the report was presented by Mr. Swannell.

The Business Manager presented two reports from Mr. Spalding, but as these were without a signature they were handed back to Professor Shattuck and he was directed to procure Mr. Spalding's signature to them.

Messrs. Going and Camp, alumni of the University, were given an opportunity to explain steps which they had taken looking towards an indictment of Charles W. Spalding for using University funds.

## Mr. McKay having resumed the chair.

#### DEMAND UPON MR. SPALDING.

CHICAGO, Illinois, April 22, 1897.

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

GENTLEMEN:—I beg leave to report that as directed by the Board, I wen't with Mr. Moore, Attorney, and Mr. Keith, Treasurer and called upon Charles W. Spalding, late Treasurer of the Board of Trustees, on April 14th. That Mr. Keith made specific demand for all moneys, notes, bonds, stocks, books of record, and other property belonging to the University of Illinois. That Mr. Spalding said in answer that he could not comply with the demand. And that he did not comply with said demand, and that directly he said again he could not comply with such demand. Respectfully submitted, Tures L. Surry

THOS. J. SMITH.

The report was received for record. The Board then adjourned to meet at 2:30 o'clock p. m.

## AFTERNOON SESSION.

The Treasurer's reports, duly signed, were received and referred to the Finance Committee.

### TREASURER'S REPORT.

CHARLES W. SPALDING, TREASURER, IN ACCOUNT WITH THE UNIVERSITY OF ILLINOIS March 31, 1897.

1896.		<i>Dr</i>		
December	31	Balance		\$204,968
1897.		Owners Another Cost country law Terror 1 1907	4F77 00	
Jaunary		Coupons, Austin, Cook county, due January 1, 1897 Principal due January 1, 1897, land contract No. 74, Ber-	<b>\$575 00</b>	
••	4	thel Pederson Interest due January 1, 1897, land contract No. 74, Ber-	70 00	
••		thel Pederson Principal due January 1, 1897, land contract No. 69, Ber-	7 35	
		Interest due January 1, 1897, land contract No. 69, Ber-	160 00	
		thel Pederson	11 20	
		Principal due January 1, 1896, land contract No. 81, F. Topka	150 00	
••	4	Interest due January 1, 1897. land contract No. 81, F. Topka	52 50	
••	4	Principal on contract No. 64, E. Lindquist Interest due January 1, 1897, contract No. 64, E. Lindquist	$     .175 00 \\     63 00 $	
••	4	Interest due January 1, 1897, contract No. 117, Joseph		
••	6	Cuta Principal due January 1, 1897. contract No. 72, Dale &	4 00	
• •	6	Royse Interest due January 1. 1897, contract No. 72, Dale &	120 00	
••		Royse U. S. Experiment Station warrant, due January 1, 1897.	50 40 3,750 00	
••		Interest on contract No. 54, B. F. Leiby	105 61	
••		Principal on contract No. 99, Nels Olsen	175 00	
	9	Interest on contract No 99, NelsOlson	33 50	
	- 9	Remmittance from S. W. Shattuck on account of	1 000 00	
	12	School of Pharmacy Principal due January 1, 1894, contract No. 66, Peter	1,000 00	
••	12	Larson Interest due January 1, 1897. contract No. 66, Peter	133 33	
••		Larson interest due January 1, 1897, contract No. 73, Olaf	74 67	
	10	Mattson	70 00	
••	30	Mattoon, Coles county, coupons, due February 1, 1897	150 00	
February		Union District No. 6, Champaign county coupons, due February 1, 1897	270 00	
••	4	Richland District No. 6, Shelby county coupons, due February 1, 1897	70 00	
•• •	6	Principal on contract No. 83. L. V. Botten	360 00	
••	6	Interest on contract No. 83, L. V. Botten	- 34 74	
		Interest due January 1, 1895, and accrued interest to January 1, 1897, contract No. 61, A. Marquandt	128 96	
	13	Interest due January 1, 1897. and accrued interest to February 13, 1895, contract No. 37, W. H. Gibler	314 00	

# Treasurer's Report-Continued.

-			
1896			
February	13 Remmittance from S. W. Shattuck, account of genera	1	
· ••	fund 13 Remittance from S. W. Shattuck, account of School o	2,000 00	
• •	Pharmacy	1.000.00	
••	<ul> <li>Mansfield, Piatt county coupons. due July 1, 1896</li> <li>Interest due January 1, 1897, and accrued interest to February 15, 1897, contract No. 58, E. Muhlhausen</li> </ul>	112 72	
**	19 Interest due January 1, 1897, and accrued interest to	00 75	
••	20 Interest due January 1, 1897, and accrued interest to	98 75	
**	<ul> <li>19 Interest due January 1, 1897, and accrued interest the February 19, 1897, contract No. 54, B. F. Leiby</li> <li>20 Interest due January 1, 1897, and accrued interest the February 20, 1897, contract No. 40, Joseph Dezort</li> <li>26 Remittances from S. W. Shattuck, account of School o</li> </ul>	. 97 23	
••	26 From S. W. Shattuck, paid warrants on account o	. 582 45 f	
	<ul> <li>26 From S. W. Shattuck, paid warrants on account of general fund.</li> <li>26 From S. W. Shattuck, paid warrants on account of farm fund, Experiment Station</li></ul>	2,034 55	
March	4 Principal on contract No. 64, E. Lindquist	55 (0	
••	6 Remittance from S. W. Shattuck, on account of genera	i) oo	
••	fund. 6 From S. W. Shattuck, paid warrants on account of	2,000 00	
、 ・・	6 From S. W. Shattuck, paid warrants on account of farm fund. Stream Station	1,021 00	
• •	29 Interest on account No. 62, E. W. Harms, assignee	286 05 100 00	
			\$18,094 99
1897.	Cr.		\$223,063 80
March	31 By amount paid out of general fund, as per list of war rants herewith	\$10,573 95	
••	31 By amount paid out of U. S. Experiment Station fund, as per list of warrants herewith	3,030 81	
4.	as per list of warrants herewith. 31 By amount paid out of farm fund, as per list of war rants herewith		
• •	<ul> <li>al By amount paid out of School of Pharmacy fund, as per list of warrants herewith.</li> <li>31 By amount paid out of U. S. fund as per list of warrants</li> </ul>	5,380 70	
* *	31 By amount paid out of U. S. fund as per list of warrants herewith	5,220 20	
••	31 By amount paid out of the following State appropria	-	
	Library building.	24,841 93 21,291 47 1,399 94	
	Library. Laboratory of Natural History.	1,30994 1,99500	
	tions, as per list of warrants herewith— Salaries, etc. Library building Library building Laboratory of Natural History. Cabinets. Engineering College Astronomical Observatory. Fitting and furnishing Engineering Hall. Biological Experiment Station Apparatus and material Shop practice. Chemical Laboratory. Fire protection Laboratory Vaccine Virus	2 85	•
	Astronomical Observatory Fitting and furnishing Engineering Hall	2,014 45	
	Biological Experiment Station.	538 55 862 59	
	Shop practice.	216 05	
	Fire protection	26 80	
	Laboratory Vaccine Virus	453 60	\$79,954 67
	Balances— General fund	7,267 $6838,602$ $91$	
	Endowment fund. School of Pharmacy. United States fund (closed out). U. S. Experiment Stalion fund. Farm fund.	$38,60291 \\ 1,05306$	
	United States fund (closed out)	1,799 23	
	Farm fund	571 30	
	State Appropriations-	34,178 04	
	Salaries Library building. Library building. Laboratory of Natural History. Cabinets.	45,014 00	
	Laboratory of Natural History	201 53 3,408 91	
	Astronomical Observatory	2,279 37	
	Fitting and furnishing Engineering Hall Biological Experiment Station	918 69 604 04	•
	Astronomical Observatory. Fitting and furnishing Engineering Hall Biological Experiment Station Apparatus and material. Shop practice	763 87 256 07	
	Chemical Laboratory	256 07 867 56	

Treasurer's Report-Concluded.

March	31	State Appropriations-Concluded.		
		Laboratory of Vegetable Physiology Fire protection. Laboratory Vaccine Virus	326 81	143, 109
				\$223,063

CHARLES W. SPALDING, Treasurer.

CHARLES W. SPALDING, TREASURER, IN ACCOUNT WITH THE UNIVERSITY OF ILLINOIS. April 12, 1897.

	Dr.		-
1897.	Balance March 31, 1897	•••••	\$143,109 13
April 	<ol> <li>Interest due January 1, 1897, and accrued interest to April 1, 1897, on contract No. 75</li> <li>Interest due January 1, 1897, and accrued interest to April 1, 1897. on contract No. 76</li> <li>From Charles W. Spalding, treasurer, interest at 4 per cent on endowment fund balances, from January 1, 1997. to April 12, 2097 induction.</li> </ol>	\$53 37 53 38 428 43	
<b>ન</b> ુન	<ul> <li>1897, 10 April 12, 1897, inclusive</li> <li>12 From Charles W. Spalding, treasurer, interest at 2<sup>1</sup>/<sub>2</sub> per cent on appropriation and general fund balances, from January 1, 1897, to April 12, 1897, inclusive</li> </ul>	879 45	1,414 63
1897.	Cr.		\$144,523 76
April   	<ul> <li>12 By amount paid out of general fund, as per list of warrants herewith.</li> <li>12 By amount paid out of U. S. Experiment Station fund, as per list of warrants herewith.</li> <li>12 By amount paid out of farm fund, as per list of warrants herewith.</li> <li>12 By amount paid out of School of Pharmacy fund, as per list of warrants herewith.</li> <li>12 By amount paid out of the following State appropriations, as per list of warrants herewith.</li> <li>12 By amount paid out of the following State appropriations, as per list of warrants herewith.</li> <li>12 By amount paid out of the following State appropriations, as per list of warrants herewith.</li> <li>12 By amount paid out of the following State appropriations, as per list of warrants herewith.</li> <li>12 By amount paid out of the following State appropriations, as per list of warrants herewith.</li> <li>12 By amount paid out of the following State appropriations, as per list of warrants herewith.</li> <li>12 By amount paid out of the following State appropriations, as per list of warrants herewith.</li> <li>12 By amount paid out of the following State appropriations, as per list of warrants herewith.</li> <li>12 By amount paid out of the following State appropriations, as per list of warrants herewith.</li> <li>13 By amount paid out of the following State appropriations, as per list of warrants herewith.</li> <li>14 By amount paid out of the following State appropriations, as per list of warrants herewith.</li> <li>15 By amount paid out of the following State appropriations, as per list of warrants herewith.</li> <li>16 By amount paid out of warrants herewith.</li> <li>17 By amount paid out of the following State appropriations, as per list of warrants herewith.</li> <li>18 By amount paid out of the following State appropriations appropriation appropriations appropriations appropriations appropriations appropriation appropriations appropriations appropriations appropriations appropriation appropriation approprises appropriations appropriations a</li></ul>	\$2, 491 56 994 68 15 39 1, 142 54 8, 147 28 210 75 5 58 304 80 31 80 77 50 120 00 2 500 3 000 72 15 6 01 52 00	\$13,727 3
	Balances-         General fund         Endowment fund         U. S. Experiment Station fund         Farm fund.         State Appropriations-         Salaries, etc         Library building         Library         Laboratory of Natural History.         Cabinets         Cabinets         Fitting and furnishing Engineering Hall.         Biological Experiment Station.         Appratus and material.         Shop practice	$\begin{array}{c} \$6, 190 \ 75\\ 38, 602 \ 91\\ 804 \ 55\\ 555 \ 91\\ 26, 030 \ 76\\ 44, 803 \ 25\\ 146 \ 15\\ 3, 104 \ 11\\ 1, 646 \ 10\\ 1, 734 \ 48\\ 2, 279 \ 37\\ 841 \ 19\\ 484 \ 04\\ 761 \ 37\\ 253 \ 07\\ \end{array}$	φ10, ( <i>4</i> ( δ

Board of Trustees-Concluded.

April	12	State Appropriations-Concluded.		
		Chemical Laboratory. Laboratory of Vegetable Pyhsiology Fire protection Laboratory of Vaccine Virus.	$59 02 \\ 320 80$	
		Less overdrafts School of Pharmacy	\$130, 885 90 89 48	130,796 52
				\$144,523 76

CHARLES W. SPALDING, Treasurer.

The Business Manager presented the following statement:

#### BUSINESS MANAGER'S REPORT.

UNIVERSITY OF ILLINOIS IN ACCOUNT WITH CHARLES W. SPALDING, TREASURER.

April 12, 1897.

1897. March April   	31       Balance (University books)         1       Interest on land contracts Nos. 62, 75, 76		\$92, 363 45 206 75 879 45 428 43 3, 332 40
1897. April	Endowment fund— 12 Invested in bonds Balance uninvested	\$97.21048 \$418.11000 38.60291	\$97,210 48 \$456,712 91

This statement was received for record and referred to the Finance Committee.

The following letter was pr sented to the Board by Mr. Armstrong:

CHICAGO, April 14, 1897.

James E. Armstrong, Esq., Trustee University of Illinois, Chicago.

My DEAR SIR:-The following telegrams have passed between President Draper and myself this day:

"I will be one of ten men to advance fifty thousand dollars or as much thereof as may be necessary to carry the University through current year, enabling Trustees to straighten out financial tangle. You can communicate this suggestion to Trustees if you desire." (Signed) JOHN FARSON.

"Your kind offer received and appreciated. The Trustees are in session at the Sherman House and I suggest that you send it to them direct."

(Signed) A. S. DRAPER, President.

Trusting that your difficulties are not so serious as the papers would indicate, f am Yours very truly,

JOHN FARSON.

The Secretary was instructed to make grateful acknowledgment of Mr. Farson's generous offer.

The following resolution offered by Mr. McLean was adopted:

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Resolved, That the President of the Board be, and is hereby, directed to instruct the firm of Wilson, Moore & McIlvaine, attorneys, to enter appearance on behalf of the Board and its officers and defend in the suit in chancery, Chas. E. Churchill vs. The Globe Savings Bank, et al., to which the members of the Board and some of its officers are made parties defendant.

A communication from Drs. Steele and Quine with reference to appointments for the ensuing year in the School of Medicine was referred to the Committee on the School of Medicine with power to act.

The President announced the standing committee of the School of Medicine as follows: Mr. Armstrong, Chairman; Mrs. Flower, Mr. McLean, President Draper, and Professor Shattuck.

The Committee was authorized to provide for issuing the usual regular announcement of the School of Medicine.

## MUSIC DEPARMENT.

President Draper stated that an appointment should be made as soon as practicable of a woman to give instruction in vocal music. In this connection Mr. Smith introduced the following resolution:

Resolved, That it is the sense of this Board that the Department of Music should be reorganized; that it should be put upon the basis of a distinct college in the University; that a dean should be employed with sufficient assistants; that no greater tuition be charged to students in music than is charged to students in other departments, and that degrees be granted to graduates in this college.

This resolution was referred to President Draper and the Committee on Instruction, who were directed to report at the next meeting of the Board.

Authority was also given to employ an instructor in vocal music.

The Board then adjourned to meet at the Great Northern Hotel, in Chicago, at 11 o'clock, Friday.

## SESSION OF FRIDAY.

When the Board met at the Great Northern Hotel, pursuant to adjournment, the same members were present as on the day preceding.

The Committee on Buildings and Grounds made the following report:

## LIBRARY BUILDING.

CHICAGO, Illinois, April 23, 1897,

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

GENTLEMEN: Your Committee on Buildings and Grounds begs leave to report that by its direction the architects of the Library Building have obtained proposals for the gas and electric fixtures for the building based upon the specifications of the architects.

The two proposals received are as follows:

From W. C. Vosburgh Manufacturing Company, Chicago, all complete for \$2,116.90.

From Twin City Electrical Company, Champaign, and guaranteed by the Chicago Gas and Electric Fixture Manufacturing Company, of Chicago, all complete for \$1,800.00.

Your Committee has examined the cuts and drawings of the fixtures submitted by the parties bidding and recommends that contracts be entered into for the work with the Twin City Electric Company for \$1,800.00 for the work complete as soon as the legislative appropriation bill is passed or money available.

We have also received a proposal from the Library Bureau for putting in two floors and shelving in the book room of the library for \$2,000.00, or all three floors for \$3,000.00, a statement being made that a charge in excess of \$1,000.00 would have to be made for the third floor and shelving, if the work were done at different times. Your Committee therefore recommends that a contract of the whole amount be entered into as soon as the legislative appropriation bill for the next two years is passed including the items for furnishing and completing the library building. Respectfully submitted,

S. A. BULLARD, LUCY L. FLOWER, J. E. ARMSTRONG, Committee.

The report of the Committee was approved and the Committee was authorized to make contracts, as proposed.

Mr. Armstrong moved that the Faculty of the School of Medicine be considered elected when approved by the President of the University and the Committee on the School of Medicine.

The motion prevailed.

On motion of Mr. Raymond the rules of the Board were so revised that the charge of the land contracts was transferred from the Treasurer to the Business Manager.

On motion of Mr. Bullard, the Finance Committee was instructed to report such changes in the rules with regard to the conduct of University business as should be necessary to separate the offices of of Treasurer and Business Manager.

The Board then adjourned to meet at 4 o'clock p. m., and at that time adjourned without date.

W. L. PILLSBURY,

F. M. McKAY, President.

Secretary.

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## MEETING OF JUNE 8, 1897.

The Board of Trustees of the University of Illinois met in the President's office at the University, in Urbana, Illinois, at 3 o'clock p. m., Tuesday June 8, 1897.

The members present were Messrs. Armstrong, Bullard, McKay, McLean, Morrison, Pearce, Raymond, and Smith, and Mrs. Flower and Mrs. Carriel; absent, Governor Tanner and Mr. Inglis.

The minutes of the meeting of March 9, 1897, and the adjourned session of that meeting held April 22, 1897, and also the minutes of the special meeting of April 13, 1897, were approved as presented by the Secretary.

Mr. Smith, from the committee appointed to make inquiries with regard to bill for legal services rendered by Mann, Hayes & Miller, reported that he had endeavored to see these gentlemen several times but had not succeeded in having an interview with them. Later during the meeting the bill was referred to Messrs. McKay and Armstrong to settle.

## DEGREES CONFERRED.

Authority was given to confer degrees upon the persons named below in accordance with the recommendation of the Faculty of the University.

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

## IN SPECIALIZED COURSES.

George Andrew Barr.

Herbert Milford Wallace.

IN GENERAL COURSES-NO THESES.

James Ellis Armstrong, John Frederick Garber, Shirley Kendric Kerns, William Henry Kiler, Wesley Edward King, Harold H. Kirkpatrick, Laura Kratz, Martha Jackson Kyle, Margaret Henrietta Johanne Lampe.

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Belle Lorraine McFadden, Marinda Ice Middleton, Walter Montgomery Morgan. Grace May Munhal, Horace (hamberlain Porter, Susan Elizabeth Thompson, Julia Flora Winter, Mabel Helen Zilly. 110

## COLLEGE OF ENGINEERING.—DEGREE OF BACHELOR OF SCIENCE.

## IN ARCHITECTURE.

Eugene Herman Brandt, Frank Read Capron, Elmer Edgar Dunlap, Carl John Horn, Charles Howison, Meldora Ice. Theodore Charles Kistner, Carl Oscar Kuehne.

Norman Foote Marsh, Norman Foote Marsh, John Louis Parr, Francis John Plym, Ralph Steele Shepardson, Wallace Douglas Teeple, Walter Cheney Vail, Hubert Anthony Webber,

## IN ARCHITECTURAL ENGINEERING.

Fred Wilcox Spencer.

IN CIVIL ENGINEERING.

George Forbes Anderson. Ralph Plumb Brower, Harry Hugh Hadsall, Albert Claude Hobart,

Orval Lee Gearhart, George J. Jobst,

Frank Alexis Hughes, Theodore Julius Klossowski, John Edward Pohlman.

#### IN ELECTRICAL ENGINEERING.

Hubert Vinton Carpenter. Manley Earle Chester, Octave Besançon Clark, Charles Virgil Crellin, Oliver David Havard, 'Charles Sigurd Larsen, Loren William Marsh,

William Allen Pepper, Edward Warren Poole, Francis William Henry Postlethwaite, George Otto Steinwedell, Stephen George de Vries, George Mighell Wakefield, Floyd Whittemore.

## IN MECHANICAL ENGINEERING.

Charles David Beebe, William Raymond Dull, Bert A. Gayman. George Lyman Grimes, Arthur Richard Mann, Fred Irwin Nelson.

Dwight T. Randall, William Wesley Sayers, Joel Reynols Sayler, William Daniel States, Charles Dutton Terry, Walter Zimmerman.

#### IN MUNICIPAL AND SANITARY ENGINEERING.

Carl Merriman Nye.

## COLLEGE OF SCIENCE.-DEGREE OF BACHELOR OF SCIENCE.

#### IN CHEMISTRY.

Walter Burrows Brown, Arthur Ernest Paul.

John Langley Sammis, Louie Henrie Smith.

## IN NATURAL SCIENCE.

James Ansel Dewey, Louise Sarah Dewey, Ernest Browning Forbes,

Clyde Denny Gulick, Frederick William Schacht, Charles Whittier Young.

#### IN MATHEMATICS AND ASTRONOMY.

William Charles Brenke. Charles Wilbur Leigh,

Adam Vause Miller. Charles Edwin Van Orstrand.

#### IN GENERAL COURSES-NO THESES.

Luella Eugenia Buck, Thomas B. Beadle, Fred Hugh Manny,

Francis Joseph Murphy. Clarence Orville Pitney, Charles Clyde Rayburn.

COLLEGE OF AGRICULTURE-DEGREE OF BACHELOR OF SCIENCE.

Alvin Casey Beal.

Ralph Waldo Braucher.

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GRADUATE SCHOOL-MASTERS' DEGREES.

DEGREE OF MASTER OF ARTS.

Charles Ammerman, Charles Nelson Cole, Mary Maude Cole, Charles Hunter Garnett, Edward Barker Scoggan, John Nathaniel Spangler.

#### DEGREE OF MASTER OF LITERATURE.

John Ralph Neely,

Stephen Avery Reynolds.

## DEGREE OF ARCHITECTURAL ENGINEER.

John Calvart Sample.

#### DEGREE OF CIVIL ENGINEER.

#### Almon Daniel Thompson.

#### DEGREE OF ELECTRICAL ENGINEER.

#### Walter Gilbert Campbell.

#### DEGREE OF MASTER OF SCIENCE.

#### Robert Humphrey Forbes.

Upon recommendation of the Faculty Governor Tanner has given the following named graduates commissions as brevet captains in the Illinois National Guard:

Ralph Plumb Brower, Alvin Casey Beal, Albert Claude Hobart, Horace Chamberlain Porter, George Forbes Anderson, Charles Wilbur Leigh.

## RECOMMENDATIONS BY PRESIDENT DRAPER.

## To the Board of Trustees.

I respectfully recommend the following changes in the instructional force:

#### NEW APPOINTMENTS.

1. That Miss Katharine L. Sharp be appointed Professor of Library Economy, Head Librarian, and Director of the Library School, at a salary of \$2,000.00 per annum.

2. That Miss Mary L. Jones be appointed Assistant Professor of Library Economy, and Librarian, at a Salary of \$1,200.00 for the first year, \$1,300.00 for the second year, and \$1,400.00 for the third year.

3. That Miss Margaret Mann be appointed Cataloguer, and Instructor in Library Economy, at a salary of \$900.00 per annum.

4. That Miss Alison Marion Fernie be appointed Instructor in Vocal Music at a salary of \$1,200.00 per annum, and an addition of fifty per cent. of the receipts for tuition, in her department, in excess of that sum.

5. That Miss Agnes S. Cook be appointed instructor in Rhetoric for ten months at \$70.00 per month.

6. That Mr. Arthur C. Howland be appointed instructor in Ancient and Mediæval History for ten months at a salary of \$80.00 per month.

7. That Mr. Chester H Rowell be appointed instructor in German for ten months at a salary of \$70.00 per month.

8. That Mr. George H. Meyer be appointed instructor in German for ten months at a salary of 70.00 per month.

9. That Charles Brewster Randolph be appointed Instructor in Greek and Latin in the Preparatory School, for ten months at a salary of \$70.00 per month.

10. That William H. Kavanaugh be appointed Instructor in Mechanical Engineering for ten months at a salary of \$80.00 per month.

#### PROMOTIONS.

1. That Evarts B. Greene, Associate Professor of History, be appointed Professor of History, at present salary.

2. That Lewis A. Rhoades, Assistant Professor of the German Language and Literature, be appointed Associate Professor of the German Language and Literature, at a salary of \$1.700.00 per annum.

3. That Seth J. Temple, Instructor in Architecture, be appointed Assistant Professor of Architecture, at a salary of \$1,200.00 per annum.

4. That James D. Phillips, Instructor in General Engineering Drawing, be appointed Assistant Professor of General Engineering Drawing, at a salary of \$1,000.00 per annum.

5. That Henry H. Everett, Assistant Professor of Physical Training and Directer of the Gymnasium, be appointed Associate Professor of Physical Training and Director of the Gymnasium, at a salary \$1,600.00 per annum.

## REAPPOINTMENTS.

1. That George A. Huff be reappointed Assistant Director of the Gymnasium and Coach of Athletic teams for ten months at \$120.00 per month.

2. That Ella H. Morrison be reappointed Director of Physical Training for Women for ten months, at a salary of \$100.00 per month.

3. That Joseph C. Blair be reappointed Instructor in Horticulture and Assistant Horticulturist at the Agricultural Experiment Station at a salary of \$1,100.00 per annum, to be equally divided between the University and the Station.

4. That Wilber J. Fraser be reappointed Instructor in Dairying and Assistant in Charge of Dairy Experiments at the Agricultural Experiment Station, at a salary of \$75.00 per month, to be divided equally between the University and the Station.

5. That the following named foremen in the shops be reappointed for ten months, at the monthly salary set opposite their names, viz.:

(a)	Cyril B. Clark, machine shop\$95	00
(b)	Albert R. Curtiss, wood shop	00
(c)	Henry Jones, smith shop	00
(d)	Albert R. Curtiss, wood shop	00

6. That the following instructors be reappointed for ten months at the monthly salaries set opposite their names:

(a)	Oscar Quick, physics	 \$80	00 (
(b)	Edward J. Lake, free hand drawing	 70	00 (
(c)	Carlton B. Rose chemistry Alton U. Burnham, mathematics	 80	00
(d)	Alton U. Burnham, mathematics	 90	00
(e)	William C. Brenke, mathematics and astronomy	 75	- 00
	Lillie A. Clendenin, English in preparatory school		
(g)	Reuben S Douglass, mathematics in preparatory sclool	 75	00
(h)	Charles F. Hottes, botany	 70	00

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## PHYSIOLOGY AND PSYCHOLOGY.

For widely different reasons the relations which the Assistant Professor of Psychology and the Associate Professor of Physiology and Vertebrate Anatomy have sustained to the University have not been altogether satisfactory. I have endeavored to improve matters until I have lost hope of accomplishing that end. Aside from personal characteristics which stand in the way of the success which is desired in these departments, the two should be so organized that they will supplement each other, and that is altogether impossible under present conditions. Moreover, I have the feeling that a strong man in physi-ology, with a good, young instructor in experimental psychology, or a strong man in the laboratory psychology, with a good instructor in physiology, and preferably the latter arrangement, would answer every call upon the Uni-versity and produce better results than are now obtained. I have had considerable correspondence with men who are available, but am not yet prepared to recommend an appointment, and probably it is not best to recommend an appointment until it is settled that the Board of Trustees would be willing to adopt my view as to the general course which it is advisable to pursue. For the purpose of determining the latter question, I respectfully recommend that the services of the two professors referred to be discontinued from and after the close of the present year, and that in the meantime I be authorized to engage the services of such person or persons to carry on the work of these departments as may seem most advantageous to the University.

The recommendations of the four foregoing papers were severally approved as read.

The Board adjourned to meet at 8 o'clock p. m.

## EVENING SESSION, JUNE 8, 1897.

When the Board met pursuant to adjournment the same members were present as in the afternoon.

Mr. Smith, having asked the consent of the Board therefor, introduced Mrs. Wilder, Mrs. Cushing, Mrs. Ray, and Mrs. Stewart, ladies of Champaign, who addressed the Board with regard to the establishment of a College of Music in the University.

#### CHANGES IN SALARIES OF PROFESSORS.

1. That the salary of Lester P. Breckenridge, Professor of Mechanical Engineering, be \$2,250 per annum, and that his duties cover the supervision of the heating plant.

2. That the salary of Ira O. Baker, Professor of Civil Engineering, be \$2,250 per annum.

3. That the salary of Herbert J. Barton, Professor of the Latin Language and Literature, be \$2,100 per annum.

4. That the salary of Arnold Tompkins, Professor of Pedagogy, be \$2,000 per annum.

5. That the salary of George W. Myers, Associate Professor of Astronomy and Mathematics, be \$1,800 per annum.

6. That the salary of James M. White, Associate Professor of Architecture, be \$1,600 per annum.

7. That the salary of William D. Pence, Assistant Professor of Civil Engineering, be \$1,600 per annum.

8. That the salary of Harry S. Grindley, Assistant Professor of Chemistry, be \$1,300 per annum.

9. That the salary of Thomas A. Clark, Assistant Professor of Rhetoric, be \$1.600 per annum.

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10. That the salary of Bernard V. Swenson, Assistant Professor of Electrical Engineering, be \$1,300 per annum.

11. That the salary of William Esty, Assistant Professor of Electrical Engineering, be \$1,300 per annum.

12. That the salary of Arthur H. Daniels, Assistant Professor of Philosophy, be \$1,300 per annum.

13. That the salary of Charles W. Tooke, Assistant Professor of Public Law and Administration, be \$1,300 per annum.

14. That the salary of Walter Howe Jones, Professor of Music, be \$1,200 per annum, and one-half of the fees received from his instruction in excess of that amount.

15. That the salary of Fred A. Sager, Assistant Professor of Physics, be \$1,200 per annum.

16. That the salary of Cyrus D. McLane, Assistant Professor of Architectural Construction, be \$1,200 per annum.

17. That the salary of Perry G. Holden, Assistant Professor of Agricultural Physics and Assistant Agriculturist at the Agricultural Experiment Station, be \$1,300 per annum, to be divided equally between the University and the Station.

18. That the salary of John E. McGilvrey, Assistant Professor of Pedagogy and High School Visitor, be \$1,300 per annum.

19. That the salary of Herman S. Piatt, Assistant Professor of Romance Languages, be \$1,200 per annum.

20. That the salary of Mr. W. L. Pillsbury, Registrar, be \$2,250 per annum.

## LABORATORY AND OFFICE ASSISTANTS.

The custom of appointing laboratory and other assistants and continuing them indefinitely, with frequent efforts to increase their salaries, has grown up with the University. In my judgment such places should be filled at not more than \$500 the first year, and \$600 the second year of incumbency; that such compensation should not be increased beyond that amount; and that the incumbent should go elsewhere as soon as the end of the second year and make room for bright graduates who are coming on. I recommend that, after eonsultation with the heads of departments named, the President be authorized to appoint laboratory assistants in the following departments, at the compensation named above, viz.

1, Chemistry; 2, Geology; 3, Physics; 4, Civil Engineering; 5, Mechanical Engineering; 6, Theoretical and Applied Mechanics; 7, Economics; and 8, General Engineering Drawing.

#### WATER SURVEY.

I recommend that Mr. C. V. Miller be reappointed as chief assistant for the next year in the water survey, at \$75.00 per month, and that Professor Palmer be authorized to appoint a second assistant for the year at \$50.00 per month.

#### RE-ELECTION OF DEANS.

I recommend that the present deans of the general Faculty and the Colleges be re elected.

#### WHEN TO TAKE EFFECT.

It is recommended that all terms of employment, and other changes in the instructional force, go into effect at the first day of September next, unless otherwise specifically directed.

## VACANCIES.

There are vacancies in the instructorship of instrumental music and in the Preparatory School in the position formerly occupied by Nathan A. Weston, for which I am not yet ready to make recommendations. Each should be filled for from \$70.00 to \$80.00 per month, and I would be glad if you would confer upon me authority to fill them after the meeting of the Board, at salaries not larger than amounts named.

The recommendations of the foregoing papers were severally approved as read.

## OTHER EMPLOYES.

1 make the following recommendations touching other employés of the University:

## HEATING PLANT.

That the employés in the heating station be reappointed as follows:

- Joseph Morrow at \$900.00 per annum.
- 2. E. W. Justus at \$50.00 per month.
- John Doughty at \$50.00 per month. 3.

4.

Charles B. Ewalt, helper, at \$25.00 per month. That three other helpers be authorized for such time as may be deemed necessary at not to exceed \$240.00 per annum each.

#### JANITORS AND WATCHMEN.

1. That the appointment of all janitors and watchmen terminate at the first of July, unless specifically continued by the Superintendent of Buildings and Grounds.

That a night watchman and day watchman be authorized at \$40.00 per 2.month.

3. That janitors be authorized for the different buildings as follows:

4. That three scrub women (as may be necessary) be employed at the rate of \$1.00 per day, and that \$900.00, or so much as may be needed, be appropriated for that purpose.

All help authorized in this section shall be employed as provided by the rules, and may be employed from the first of July in cases where it seems necessary.

## GARDENERS.

1. That Richard Uttenweiler be reappointed gardener at \$60.00 per month. That Fred Atkinson be reappointed assistant gardner at \$35.00 per month.

## ELECTRICIANS AND STOREKEEPERS.

1. That F. J. Foote be reappointed electrician in the electrical laboratory for ten months at \$75.00 per month.

2. That M. T. Lindsay be reappointed storekeeper in the chemical laboratory at \$40.00 per month for ten months.

3. That I. H. Allen be reappointed storekeeper in the electrical laboratory for ten months at \$40.00 per month.

#### STUDENT ASSISTANTS.

I recommend that \$400.00 be appropriated for student assistants, who may be appointed from time to time by the President.

#### CLERICAL ASSISTANTS.

The question of providing needed stenographic and type-writing help to the leading officers in the University, in the most economical way, is one that should be met now by adopting some plan capable of general application. Such assistance is now provided for the President, Business Manager, Registrar, Director of the State Laboratory of Natural History, Director of the Agricultural Experiment Station, and Dean of the College of Engineering. The Dean of the College of Literature and Arts, the Dean of the Woman's Department, the School of Law, the Library and Library School, and the office of the chemical survey of potable waters, may all lay reasonable claim to some help of this character. At odd times others connected with the University might be aided in this way to our common advantage. It is not practicable, however, and I do not think it is desirable, to extend such assistance to all connected with the University who may have occasion to write a letter. None of the great institutions do it and it is certainly impracticable for them or for us to undertake it. On the other hand, it is not to the advantage of the University that prominent officers should devote their energies to clerical work that can be done better and in less time by another who is very glad to do it at much less compensation.

The administrative work of the University, on the faculty side, is not running as smoothly as it should, nor as it easily might, if clerical help were provided for keeping the records and carrying out the directions of the Council of Administration and the General Faculty. Professor Kinley has heretofore rendered this service for the Council of Administration, but his other duties overtax him and he should be relieved of this one. Again, the work in the President's office has multiplied many times in recent years, and there is an infinite amount of additional work which ought to be taken up. Miss Heath, secretary to the President, is taxed beyond her strength. Of excellent attainments, she has grown into familiarity with University affairs, and in steadiness and efficiency of execution. She is worthy of larger compensation and can easily be made more profitable to the University than by keeping her so constantly at work upon the typewriter.

I have given the subject such thought as I could and have advised with the prominent officers of the University about it, and have finally reached the conclusion to make the following recommendations:

1. That the present arrangement for typewriting and clerical assistance, in the offices of the Business Manager, Registrar, Director of the State Laboratory, and Director of the Experiment Station, be not disturbed.

2. That there be established, near the President's office, a typewriting bureau which shall be under the supervision of that office, which shall perform such university work of a clerical character as the President shall approve; that Miss Ford, stenographer for the College of Engineering, be transferred to such bureau, and that another, if not two more stenographers, be employed in the same service; that the stenographers so employed shall render to the deans, and such other officers of the University as the President may approve, such services as to him may seem proper. 3. That messenger boys be provided for the offices of the President, the dean of the College of Engineering, the dean of the College of Literature and arts, and the dean of the Woman's Department jointly, and the Chemical Laboratory, at a compensation of \$3.00 per week, whose duties it shall be to take care of the offices, answer the telephone, copy letters, run errands, and attend to such other work as they may be directed to perform.

That Miss Heath be reappointed secretary to the President at a salary of \$900 per annum, that Mr. L. A. Boice be reappointed clerk in the Registrar's office at \$55.00 a month; that Mr. W. F. Marker be reappointed clerk in the office of the Business Manager at \$55.00 per month; that Miss Sue W. Ford be appointed stenographer for the typewriting bureau, at \$55.00 per month; and that \$250.00 or so much as may be necessary be appropriated for typewriters and other equipment.

6. That the salary of Miss McIntyre, in the Agricultural Experiment Station, be \$55.00 per month.

The recommendations of all the foregoing papers presented by President Draper were approved as read.

## RÉPAIRS AND CHANGES IN BUILDINGS.

There will be an unusual number of changes to be made in buildings this year because of the occupancy of the Library building and because of new departments which are to open in the fall. The details have hardly yet been considered, for lack of time, but the whole subject is highly important, and it will be necessary to commence operations as soon as may be after the annual commencement. I suggest that the Committee on Buildings and Grounds, together with the President and the Business Manager, be authorized to determine what shall be done in the way of changes and repairs and to carry them out.

The Board ordered that needed changes and repairs be made as suggested.

With regard to the use of the legislative appropriations, President Draper made the following recommendations, which were approved:

## LEGISLATIVE APPROPRIATIONS.

It is recommended that all appropriations made by the last General Assembly for specific University purposes be appropriated for such purposes and that they be expended as provided in the rules, but that the following specific directions be given as to the ones named:

1. That the appropriation for materials for shop practice be made available as follows: One-half July 1st, one-fourth December 1st, and the remaining one-fourth February 1st, for each of the two years.

2. That Professor Ira O. Baker be directed to make plans for the bridge provided for on Burrill avenue; and, with the approval of the Committee on Buildings and Grounds, to let contracts for and superintend the erection of the same.

That the appropriation for extending the engineering equipment be divided as follows:

To the College of Engineering, in general Architecture Civil engineering. Theoretical and applied mechanics, and municipal and sanitary engineering Physics and electrical engineering	500 00 500 00 1,000 00 3,750 00
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for each of the two years.

4. That the appropriation for completing and decorating the Library building be expended by the Committee on Buildings and Grounds.

5. That the appropriation for furnishing the Library building be expended ander the direction of the President and the Business Manager.

6. That the Committee on Buildings and Grounds proceed with the erection of the Central Heating Plant; that they make provision for heating and lighting the University building, for lighting the campus, and for supplying power where needed; that Professor Breckenridge be put in immediate charge of plans and construction, and that he have the co-operation of Professor Carman so far as electric interests are involved, and of Professors McLane and Temple as to architectural matters; that the Finance Committee of the Board be directed to make arrangements for securing needed amounts in anticipation of the one-half of the appropriation which is not available until July 1, 1898, on the best terms practicable, and that the Committee on Buildings and Grounds be authorized to enter into contracts and proceed with the work as early as possible, having in mind the arrangements for money completed by the Finance Committee.

The following appropriations were made, as recommended by President Draper:

## MISCELLANEOUS 'EXPENSES.

It is recommended that the following appropriations be made for miscellaneous expenses:

1.	Administrative offices	
2.	College of Literature and Arts	
3.	College of Agriculture and improvements at the Experiment Station Farm.	1.000 00
4.	Art and Design	
5.	Physical Training	500 00
6	School of Music.	500 00
7	Preparatory School.	250 00
8.	Overtowiesi aontosta	200 00
9.	Oratorical contests	
	Illini	
10.	<i>Illio</i>	
11.	Technograph	100 00
12.	Agricultural Publication (last year, \$50.00; next year, \$50.00)	100 00
13.	Expenses of High School Visitor	500 00
14.	Astronomical Observatory	200 00
15.	Botany and Horticulture	300 00
16.	Zoölogy	200 00
17.	Geology	200 00
18.	Library	
18.	Dean of the Woman's Department	300 00
20.	Steam Heating Department.	500 00
40.	Socan Heading Department.	000 00

The publication of the essay, Banking in Illinois, written by Chas. H. Garnett, was authorized, and \$75.00, or so much thereof as was necessary was appropriated for this purpose.

It was ordered that Professor Palmer should receive for two years from September 1, 1897, \$100 a year from the water survey fund in addition to his present salary of \$2,100.

## SCHOOL OF MEDICINE.

The Committee on School of Medicine made the following report:

URBANA, June 8, 1897.

## Board of Irustees of the University of Illinois.

GENTLEMEN: Your Committee recommends the appointment by the Board of Trustees the following employés of the School of Medicine for the ensuing year at salaries named:

D. A. K. Steele, actuary without salary for 12 months.

Joseph S. Tomlinson, superintendent, \$75 a month for 12 months.

Miss E. M. Heelan, college clerk and stenographer, 60 a month for 12 months.

Theodore Teken, curator of museum, \$36 a month for 12 months.

George Johnson, engineer, \$40 a month for 12 months.

Janitor, \$25 a month from October to May.

Janitor, \$25 a month for 12 months.

Druggist, \$30 a month for 12 months.

We also recommend that the following members of the Faculty be paid the salaries appended to their respective names:

C. A. Wesener, professor of chemistry, \$75 a month.

W. A. Evans, professor of pathology, and superintendent of Laboratories, \$50 a month.

E. G. Earle, professor of histology, \$25 a month.

A. Gehrmann, professor of bacteriology, \$25 a month.

W. F. Eckley, professor and demonstrator of anatomy, \$50 a month.

It being understood that these salaries are for the entire year of 12 months. We would also recommend that Professor Pusey be paid a salary of \$500 a year as Corresponding Secretary, payment being made in monthly checks.

We also recommend that the following students be granted the following remissions in their fees, in accordance with contracts previously made with them for work done in the College, or to be done during the session of 1897-98:

Olin McCormick, General Lecture Ticket, \$105; C. B. Carr, General Lecture Ticket, \$105.

F. H. Blayney, on General Lecture Ticket, \$100, on account of assistance in chemical laboratory.

W. E. Hart, on General Lecture ticket, \$50, as house surgeon.

M. A. Reasoner \$25, on account of assistant house surgeon.

W. T. Dowdall, assistant house surgeon, \$25.

L. H. Turner, \$25 as curator of museum.

T. C. West, \$100 as librarian.

F. E. Wynekoop, \$105 on account of assistant in chemical laboratory.

We would also recommend the awarding of scholarships of the value of \$100 each to the following students, who have sustained the highest general average in their respective classes during the session of 1896-97:

## FRESHMAN YEAR.

S. Jakubowski,

#### . . . .

Jas. D. Brooks.

## SOPHOMORE YEAR.

Theodore Teken,

. . .

J. R. Yanz,

B. Fantus.

Jas. M. Neff,

F. G. Harris.

JUNIOR YEAR.

Wm. Belitz,

Wm. H. Stayner.

Respectfully submitted, A. S. DRAPER, JAMES E. ARMSTRONG, LUCY L. FLOWLER, ALEXANDER MCLEAN, S. W. SHATTUCK, Committie on School of Medicine.

## MILITARY UNIFORMS.

Mr. Pillsbury, to whom with Professor Shattock, the matter of obtaining new bids for furnishing uniforms for the cadets of the Military Department of the University was referred (see page 73), reported that the committee had asked Capt. Brush to call for bids and that he had done so, and that the bids were ready for examination by the Board. The Board then referred this business to Messrs. Bullard, Brush, and Shattuck with power to act, and with instructions to report their action to the Board at its next meeting.

## FELLOWS.

Upon recommendation of the Faculty of the University the following persons were appointed follows for the coming year:

David Hobart Carnahan, in French.

Albert Claude Hobart, in Civil Engineering.

Edward Warren Poole, in Electrical Engineering.

Don Sweeney, in Mechanical Engineering.

Frederick William Schacht, in Zoölogy.

Arthur Ernest Paul, in Chemistry.

The Board then adjourned to meet at 2 o'clock p. m.

Session of Wednesday, June 9, 1897.

The Board met pursuant to adjournment, the same members being present as on Tuesday.

President Draper's bill for traveling expenses from December 29, 1896, to date, amounting to \$149.09, was ordered paid upon recommendation of the Finance Committee.

On motion of Mr. Smith the Business Manager was instructed to have a Bell telephone put into the President's house.

The Secretary was instructed to answer a communication received from Capt. Wm. R. Courtney, of the Illinois National Guard, that as the South Farm, on which the University rifle range is situated is rented, and that as the tenant on the farm objects to the use of the range by others than members of the University Battalion, his request that his company may use the range can not be granted.

The recommendations of Professor Forbes, Director of State Laboratory Natural History, were presented by President Draper with his approval.

## STATE LABORATORY OF NATURAL HISTORY.

## To the Trustees of the University of Illinois.

GENTLEMEN: I have the honor to report that the appropriation bill for the expenses of the State Laboratory of Natural History, the Biological Station, and the State Entomologist's office has passed the Leg'sla ure as introduced, containing the following items:

For the field work and the office and incidental expenses, the sum of fifteen hundred (1.500) dollars per annum.

For the improvement of the Library, the sum of fifteen hundred (1,500.00) dollars per annum.

For salaries and assistance the sum of four thousand (4.000.00) dollars per annum.

For the publication of bulletins, the sum of seven hundred and fifty (750.00) dollars per annum.

For the illustriation of the biennial report of the State Entomologist, the sum of two hundred and fifty (250.00) dollars per annum.

For the expenses of the Illinois Biological Station, the sum of three thousand (3,000.00) dollars per annum.

I respectfully request that the necessary assignments may be made to make these sums available for the purposes indicated.

For the better organization of the staff of the State Laboratory of Natural History, I respectfully make the following recommendations:

1. That the Assistants of this Laboratory be classified as office assistants, laboratory assistants, and laboratory investigators.

2. That the Director of the Laboratory be empowered to engage ordinary employés; that office and laboratory assistants be appointed by the Trustees, on the nomination of the Director, for one calendar year, beginning July 1st; and that laboratory investigators be appointed without term, subject to removal by the Trustees only on recommendation of the Director of the Laboratory.

3. That the Director be empowered to suspend assistants for cause unt the next meeting of the Board following upon such suspension, reporting the facts forthwith to the Executive Committee of the Board, this Committee to have power to sustain or to disapprove such suspension.

4. That all salaries be paid in twelve monthly installments, and that every assistant be entitled to a vacation of one calendar month in each year, at a time to be determined by arrangement with the Director.

5. That members of the staff be subject to detail by the Director, at any time, for service at the Biological Station or in the State Entomologist's office, where such service does not involve change in the amount or origin of their pay.

6. That laboratory assistants and investigators be authorized to give instruction in the Biological Departments of the University, under the responsible supervision of the heads of such departments, by agreement of all concerned and with the approval of the President of the University; and that such teaching ssistants be classed as active members of the University Corps of Instruction, laboratory assistants to rank as assistants or instructors, as the President may determine, and investigators to rank as assistant professors; *Provided*, that no change shall be made in any case either in amount or origin of the salaries of such assistants without authorization by the Trustees. It is the purpose of this section to provide for such exchange of services between the biological departments of the University and the corresponding departments of the State Laboratory as shall be clearly to the advantage of both.

I further recommend that Mr. Charles A. Hart and Dr. Charles A. Kofoid be appointed as laboratory investigators, the former to serve as Entomologist of the State Laboratory and curator of the collections, and the latter as Zoölogist of the Laboratory and Superintendent of the Biological Station; that Miss Lydia M. Hart be continued as artist of the laboratory, and classed as a laboratory assistant; and that Miss Mary J. Snyder and Mr. Henry C. Forbes be classed as office assistants, the first to serve as secretary, and the second as business agent and librarian. The assistant in entomology should class as a laboratory assistant, but I ask that this appointment be left to the Executive Committee, as I am not yet prepared to make a choice among several persons available for this place.

I also recommend the following scale of salaries for the ensuing year, commencing July 1, 1897: Mr. C. A. Hart, \$1,000.00; Dr. C. A. Kofoid, \$1,300.00; Miss M. J. Snyder, \$900.00; Mr. H. C. Forbes, \$1,100.00.

According to my present arrangement with Miss Hart she receives a minimum salary of \$20 a month, with pay at the rate of thirty-five cents an hour when (as is usually the case) the amount of work given her amounts at this rate to more than the above salary. I ask that this arrangement be authorized and continued.

Concerning the work of the State Laboratory for the coming year I have to report that embarrassments resulting from the financial situation have prevented the carrying out of our plans for a summer school of biology at Havana, but that the Station will open July 1st, under the new appropriations, with Dr. Kofoid in immediate charge, and with a small party of visiting investigators in attendance. I hope that full and early provision may be made for a summer school next year on substantially the same plan as that contemplated this summer. In the absence of any building or building fund, we shall probably be obliged to avail ourselves of the courtesy of the school board of Havana, which by a unanimous vote placed the village high school building at our disposal. The regular word of the Station will go on much as last year, with the addition of some indispensable items of equipment which will greatly increase the value of the so-called plankton work. Three papers, mainly the product of station investigations, are now ready for the press and will be sent to the printer without delay, and a fourth, nearly complete, will follow presently. As an illustration of the stimulating influence of the operations of the Station upon the corresponding departments of the University, I may call attention to the fact that two of the above papers are undergraduate theses by students who worked at the Station, and whose papers are thoroughly creditable contributions to a knowledge of North American aquatic zoölogy. They are, in fact, the first undergraduate theses ever published from any of the University biological courses. The Laboratory bulletins and reports already printed, embodying the finished results of our Station work, amount to three hundred pages of print and sixty pages of plates.

An important new departure in our Biological Station work will be the systematic studies of the fishes of our field. It is my intention to have ready by the next session of the Legislature a volume on the fishes of the State, to make the third of our series of zoölogical reports, and to be published in a uniform style with the two volumes of the ornithological report. This work will probably be done mainly by Professor Frank Smith and myself.

The entomological work is at present chiefly directed to the insect injuries to Indian corn, with a view to the preparation of the second part of the monograph on that subject for publication in my next report as State Entomologist. Orchard and nursery insects. including the San José scale, are also receiving special attention, the work on the latter species being especially provided for by an appropriation of \$3,000.00, made direct to the State Entomologist's office in the general appropriation for the expenses of the State government. By the terms in which this appropriation is made the State Entomologist is charged with duties additional to those for which he has been heretofore responsible, being now required to provide for the inspection of orchards and nurseries, and for special personal instruction to fruit growers any nurserymen with respect to the methods for the destruction of the San José scale.

Respectfully submitted,

S. A. FORBES, Director.

June 5, 1897.

The report was approved, appointments and appropriations being made as therein recommended.

1897.7

## AGRICULTURAL EXPERIMENT STATION.

President Draper presented the report of the Director of the Agricultural Experiment Station, Professor Davenport, and the report was accepted for filing.

These recommendations of the report were approved, namely:

That new experiments be undertaken as follows:

1. Upon the Effects of Subsoiling.

2. The Influence of Nitragin Upon the Growth of Leguminous Plants. .

3. Suitability of the Soil and Climate of Illinois for the Culture of the Sugar Beet.

That Mr. C. G. Hopkins, Chemist of the Station, be granted leave of absence for five months, dating from January, 1898, three months as vacation with pay and two months to be without pay.

And that appropriations of Experiment Station funds be made to meet estimates for the coming quarter detailed below.

ESTIMATES-QUARTER ENDING SEPTEMBER 30, 1897.

General Fund.	
Salaries. Labor Publications. Postage and stationery. Freight and express. Chemical supplies. Tools implements, and machinery. Seeds, plants, and sundry supplies. Buildings and repairs. Feeding stuffs. Scientific apparatus. Traveling expenses. Contingent.	$\begin{array}{c} 948\ 00\\ 25\ 00\\ 25\ 00\\ 25\ 00\\ 25\ 00\\ 20\ 00\\ 70\ 00\\ 100\ 00\\ 58\ 00\\ 44\ 00\\ 330\ 00\\ 65\ 00\\ 60\ 00\\ \end{array}$
Total	\$3,750 00
From Farm Fund.	
Labor Seeds, plants, and sundry supplies	\$400 00 197 00
Total	\$597.00

## SCHOOL OF PHARMACY.

The Committee on the School of Pharmacy made the following report:

URBANA, ILL., June 9, 1897.

## To the Board of Irustees of the University of Illinois.

Gentlemen:—Your Committee on the School of Pharmacy begs leave to report that on the 14th of April it met with Mr. J. H. Clough, owner of the building occupied by the school, and agreed with him on a rental of \$2,400.00 a year (a reduction of \$1,200.00 a year) for three years from May 1, 1897, rent to be paid monthly, but with no payment until November 1, 1897. Your committee also reports that Mr. Clough has agreed to fit up a new lecture hall and will also himself carry the insurance on the building.

April 22, 1897, the regular graduating exercises of the School of Pharmacy were held (for the list of graduates see page 97). Your Committee also states, with pleasure, that the School of Pharmacy has had a successful year, and that, from all appearances, it will be a valuable auxiliary department of the University, Your Committee recommends that in the matter of salaries the sum of \$4,500.00 be appropriated to be distributed among the several members of the faculty of the School of Pharmacy as may be agreed upon between them and the Business Manager.

Respectfully submitted,

ALEX. MCLEAN, JAS. E. ARMSTRONG, S. W. SHATTUCK,

## Committee on the School of Pharmacy.

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

WHEREAS. During the recent financial troubles of the University, the friends of this institution have rendered it valuable assistance for which we are very grateful, therefore be it

*Resolved*, That the hearty and sincere thanks of this Board be and are hereby tendered to the Metropolitan National bank, of Chicago, the First National bank, of Champaign, and the First National bank, of Urbana.

*Resolved*, That the Secretary of this Board forward a copy of these resolutions to the banks named.

## TRANSFER OF ENDOWMENT FUND.

## The following resolution, offered by Mr Bullard, was adopted:

WHEREAS, The Fortieth General Assembly of the State of Illinois has passed an act requiring the University of Illinois to turn over to the State officers named in the act the bonds of the endowment fund of the university, and all bonds, stocks, securities, and other property, except books and papers of account and land contracts, which the late Treasurer of the University, Charles W. Spalding, yielded to the University in final settlement of his account with the University, therefore be it

*Resolved*, That the Finance Committee take charge of this matter and that the President and Secretary of the Board be authorized and instructed to make all transfers, sign all papers and bonds, and do such other acts as may be necessary to carry out in full the purpose and intent of said act.

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

Resolved, That the Committee on Buildings and Grounds be directed to secure the approval by some practical expert in heating and electrical lighting, whose standing is well known, of the plans for the heating plant, before contracts for same are let.

#### MUSIC DEPARTMENT.

The Committee on Instruction made the following report, which was adopted:

## URBANA, ILL., June 9, 1897.

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

Gentlemen:—Your Committee on Instruction, to which was referred the resolution regarding the School of Music, having carefully considered the matter, recommends that first-class courses in musical instruction should be arranged, to be taken in connection with other University work, by graduates or by others whose preparation shall be satisfactory to the President and heads of the music department; and that for such courses, successfully pursued and completed, diplomas and appropriate degrees should be conferred. The Committee believes that to offer such courses without extra compensation 1897]

would be unwise and detrimental to the best interests of the University, but recommends that class instruction in vocal music, to students of the University, should be continued free, as at present, and that the School of Music should be conducted on the same basis as the Schools of Law, Medicine, etc., and be as nearly self-supporting as circumstances may permit.

Respectfully submitted,

LUCY L. FLOWER, J. E. ARMSTRONG, I. S. RAYMOND,

Committee on Instruction.

The same Committee made further report as follows:

URBANA, June 9, 1897.

## Board of Trustees of the University of Illinois.

Gentlemen: Your Committee on Instruction recommends that Professors Burrill, Shattuck, and Ricker, having served for twenty five years, be given a year's leave of absence, upon half salary, to be taken consecutively in such order as may be arranged between themselves and the President of the University.

Respectfully submitted,

LUCY L. FLOWER, J. E. ARMSTRONG, I. S. RAYMOND, Committee on Instruction.

Committee on Instruction

This report of the Committee was adopted.

## DEGREES IN SCHOOL OF PHARMACY.

## The following resolution was adopted:

*Resolved*, That the Committee on the School of Pharmacy be requested to report to the Board as to degrees and certificates to be conferred by that School, with such recommendations as they think proper in relation to the matter.

After listening to a statement by Mr. Roberts, president of the H. M. R. Construction Company, the Committee on Buildings and Grounds was authorized to waive the giving of a new bond by said company after June 12th, if in the opinion of the Committee the interests of the University would be amply protected without such bond.

On motion of Mr. Raymond \$100.00 was appropriated for repairs of barn and corn cribs at south farm.

## BUSINESS MANAGER'S REPORT.

Professor Shattuck, Business Manager, presented the following report:

UNIVERSITY OF ILLINOIS, June 8, 1897.

F. M. McKay, Esq., President Board of Trustees, University of Illinois:

Sir:-I have the honor to hand you herewith the following report:

Paper A is a statement of the current appropriations for the time ending March 31, 1897.

Paper B is that of the State appropriations for the same time.

Paper C is that of the U. S. fund.

Paper D is that of the Laboratory of Natural History.

Paper E is that of the Agricultural Experiment Station.

Paper F is that of the School of Pharmacy.

Paper G is an estimate of receipts and expenses for the twelve months ending June 30, 1898.

Paper H is a list of appropriations the Board is requested to make for the three months ending September 30, 1897.

Paper I is a statement of receipts for the three months ending March 31, 1897.

Paper K is a list of general University vouchers presented for audit, being 1,201 to 1,881, inclusive.

Paper L is a list of Laboratory of Natural History vouchers presented for audit, being 162 to 246, inclusive.

Paper M is a list of Agricultural Experiment Station vouchers presented for audit, being 201 to 279, inclusive.

Paper N is a list of School of Pharmacy vouchers presented for audit, being 103 to 159, inclusive.

March 31, 1897.	Appropri- ated,	Expended.	Balance.
Board expenses. Salaries for instruction {U.S. Fund} and for President {State} Salaries for services {Current} Buildings and grounds. Fuel and lights Stationery and printing. Preparatory School. Repair shop. Mechanical department Departments Library and apparatus Incidental expenses	\$1,246 88 75,353 38 9,815 48 1,084 90 6,955 01 1,643 42 3,585 00 1,161 31 1,331 42 943 04 3,445 35 147 64 1,371 60	$\left\{\begin{array}{c} \$950 \ 18\\ \$, 083 \ 98\\ 22, 000 \ 00\\ 45, 269 \ 40\\ 7, 815 \ 48\\ 2, 000 \ 00\\ 4, 7, 815 \ 48\\ 2, 000 \ 00\\ 1, 024 \ 74\\ 5, 552 \ 46\\ 1, 421 \ 39\\ 3, 537 \ 27\\ 1, 161 \ 31\\ 1, 167 \ 76\\ 283 \ 69\\ 2, 508 \ 34\\ 68 \ 33\\ 1, 023 \ 27\\ \end{array}\right.$	\$296 70 60 16 1, 372 55 122 03 47 73 163 66 659 35 937 01 79 31 348 33
Sundries.         Closed out.         Furniture and fixtures.         Heating apparatus.         Water supply.         Minnesota lands.         Greenhouse         Commencement.         Stone posts.         Tenant farming, etc., in Illinois.         Watehman's registers.         South farm.         Accredited high schools.         Court expenses.         State Fair exhibit.         Summer School.         Garvin Machine Co.         Catalogues.	$\begin{array}{c} 1, 399 \ 69\\ 496 \ 48\\ 482 \ 65\\ 375 \ 00\\ 100 \ 00\\ 140 \ 67\\ 100 \ 00\\ 75 \ 00\\ 100 \ 00\\ 25 \ 00\\ 30 \ 00\\ 22 \ 40\\ 500 \ 00\\ 500 \ 00\\ 82 \ 46\\ 8 \ 01 \end{array}$	$\begin{array}{c} 1, 399 \ 69 \\ 380 \ 93 \\ 174 \ 34 \\ 375 \ 00 \\ 77 \ 28 \\ 140 \ 67 \\ 68 \ 50 \\ \hline \\ 67 \ 35 \\ 100 \ 00 \\ 22 \ 85 \\ \hline \\ 12 \ 50 \\ \hline \\ 82 \ 46 \\ 8 \ 01 \\ \end{array}$	$\begin{array}{c} 115 \ 55 \\ 308 \ 31 \\ 22 \ 72 \\ 31 \ 50 \\ 160 \ 00 \\ 7 \ 65 \\ 30 \ 00 \\ 500 \ 00 \\ 500 \ 00 \\ \end{array}$

PAPER A-CURRENT APPROPRIATIONS.

PAPER B-STATE A	APPROPRIAT	FIONS.	<u> </u>	<u></u>
March 31, 1897.	Received.	Expended	Balance.	Assigned.
Salaries, etc.— Closed out Salaries for instruction	\$17,951 81 108,370 95	\$17,951 81 108,370 95 2,000 00		
Salaries for services Heating apparatus Buildings and grounds	2,000 00 1,200 00 3,800 00	1,076 42	\$123 58 738 54	\$123 58
Toilet rooms. Art and design . Physical training.	$3,800\ 00$ $375\ 00$ $250\ 00$ $1,222\ 00$	$\begin{array}{r} 3,061 \ 46 \\ 294 \ 22 \\ 182 \ 85 \\ 956 \ 38 \end{array}$	$ \begin{array}{r} 756 54 \\ 80 78 \\ 67 15 \\ 265 62 \\ \end{array} $	$\begin{array}{c} 738 & 54 \\ 80 & 78 \\ 67 & 15 \\ 265 & 62 \end{array}$
School of Music	$2,250\ 00$ $1,000\ 00$	2,199 20	50 80 1,000 00	50 80
Agriculture. Preparatory School. Advertising and catalogue.	$3,750\ 00\ 190\ 00\ 3,900\ 00$	$3,661 40 \\ 129 75 \\ 3,044 37$	88 60 60 25 855 63	88 60 60 23 855 63
College of Literature and Arts, books Athletic fund	$\begin{array}{c} 100 & 00 \\ 200 & 00 \\ 500 & 00 \end{array}$	166 31 500 00	33 69	33 69
Illini Illio Accredited schools Technograph	500 00 100 00 500 00	330 00 100 00 310 76	170 00 189 24	170 00 189 24
Technograph Signal bells. Botany (herbarium, etc.). Mechanical Engineering Laboratory	100 00 100 00 150 00		$100 \ 00 \ 17 \ 08 \ 148 \ 25$	$100 \ 00 \ 17 \ 08 \ 148 \ 25$
Mechanical Engineering Laboratory Chemical Laboratory (repairs). Furniture and fixtures	420 00 9,180 00 400 00	353 61 8,765 50	66 39 414 50 349 06	66 39 414 50
Furnishing Astronomical Observatory Zoölogical department Bronze tablet	555 00 95 00 175 00	287 83     6 45	267 17 88 55 175 00	267 17
Electric lighting Physics. Unassigned	$\begin{array}{r} 200 & 00 \\ 600 & 00 \\ 19,865 & 24 \end{array}$	200 00	$\begin{array}{r} 491 53 \\ 19,865 24 \end{array}$	491 55
C 1400-5 10 4	\$180,000 00	\$154,293 35	\$25,706 65	\$5.841 41
Apparatus and materials—         Closed out.         Applied chemistry.         Chemistry.         Psychology.         Zoölogy.         Physiology and hygiene.         Botany and horticulture.         Geology.	$\begin{array}{c} \$1,700 \ 00\\ 100 \ 00\\ 700 \ 00\\ 800 \ 00\\ 800 \ 00\\ 800 \ 00\\ 680 \ 00\\ 400 \ 00 \end{array}$	$\$1,700\ 00\ 11\ 95\ 588\ 66\ 698\ 75\ 602\ 78\ 661\ 02\ 78\ 661\ 02\ 328\ 51$	\$88 05 111 34 41 34 101 25 197 22 18 98 71 40	$\begin{array}{c} & \$88 & 05 \\ & 111 & 34 \\ & 41 & 34 \\ & 101 & 25 \\ & 197 & 22 \\ & 18 & 98 \\ & 71 & 49 \end{array}$
Astronomy Unassigned	$500 00 \\ 20 00$	323 51 388 30	$\begin{array}{c} 71 \ 49 \\ 111 \ 70 \\ 20 \ 00 \end{array}$	111 70
	\$6,000 00	\$5,238 63	\$761 37	\$741 37
Operating Biological Experiment Station Biological Experiment Station equipment	\$3.000 00 \$2.500 00	\$2,517 96 \$2,500 00	\$482_04	\$482 04
Paving street, etc	\$9,300 00	\$9.300 00		
Laboratory of Vegetable Physiolog Astronomical Observatory	\$2.000 00	\$1,947 43	\$52 57	\$52 57
Library Hall	\$15,000 00 \$150,000 00	\$12,742 43 \$105.196 75	\$2.257 57 \$44.803 25	\$2,257 57 \$44,803 25
Fire protection	\$2,000 00	\$1,679 20	\$320 80	\$320 80
Library	\$6.000 00	\$5,956 95	\$43 05	\$43 05
Shop practice Chemical Laboratory	<u>\$3,000_00</u> \$5,000_00	\$2.798 59 \$4.236 59	\$201 41 \$763 41	\$201 41 \$763 41
Taxes on Minnesota land	\$3,200 00	\$3,200 00	\$763 41	
Vaccine Laboratory	\$3,000 00	\$1,536 94	\$1,463 06	\$1 463 06

·	Received.	Expended	Balance.	Assigned.
Cabinets-		1		
Geology General Unassigned	$ \begin{array}{c} \$400 & 00\\ 600 & 00\\ 1,000 & 00 \end{array} $	\$353 90	600 00	
ц.	\$2.000 00	\$353 90	\$1.646 10	\$646 10
College of Engineering— Machine shops Mechanical engineering Electrical engineering and physics Civil engineering Laboratory of applied mechanics and mu- nicipal and sanitary engineering	$\$17,008\ 05$ 3,104 85 3,829 85 1,852 42 1,852 42	2,997 79 3.456 62 1,785 90	373 23 66 52	\$107 06 373 23 66 52 428 02
Architecture. College of Engineering.	1,752 42 600 00	$\begin{smallmatrix} 1.523 & 50 \\ 370 & 12 \end{smallmatrix}$	228 92 229 88	228 92 229 88
Furnishing and fitting Engineering Hall-	\$30,000 00		<u>\$1,433_63</u>	<u>\$1,433_63</u>
Electric wiring. Civil engineering. Architecture Municipal and sanitary engineering Mecnanical department.	478 43 770 38 401 30 563 78	448 07 631 03 375 92	\$30 36 139 35 25 38 142 65	$     \begin{array}{r}       139 & 35 \\       25 & 38     \end{array} $
Electrical engineering and physics College, library, parlor, etc	1, 193 39 400 95	1,007 06	186 33 127 99	
	\$5,000 00	\$4,347 94	<b>\$652 0</b> 6	\$652 06

# Paper B-State Appropriations-Concluded.

## PAPER C-UNITED STATES FUND.

March 31, 1897—Year ending June 30, 1897.	Received.	Expended.	Balance.	Assigned.
Salaries for instruction	\$22,000 00	\$22,000 00		

## PAPER D-LABORATORY OF NATURAL HISTORY.

March 31, 1897.	Received.	Expended,	Balance.	Assigned.
General balance July 1, 1897 Salaries Field, office, etc Library Bulletins Report of Entomologist Contagious diseases of inserts Biological Experiment Station	$\begin{array}{c} 3,650 \\ 1,500 \\ 00 \\ 1,000 \\ 500 \\ 250 \\ 00 \end{array}$	$\begin{array}{c} 1,286 \ 58 \\ 526 \ 02 \\ 495 \ 77 \\ 67 \ 00 \\ 721 \ 17 \end{array}$	$\begin{array}{c} \$246 & 73\\ 1,078 & 85\\ 213 & 42\\ 473 & 98\\ 4 & 23\\ 183 & 00\\ 778 & 83\\ 2 & 72\end{array}$	$\begin{array}{c} 1,078 \\ 213 \\ 473 \\ 473 \\ 4 \\ 23 \\ 183 \\ 00 \end{array}$
	\$10, 146 73	\$7, 164 97	\$2,981 76	\$2,981 76

March 31, 1897	Appro- pr ated.	Expended.	Balance.
General Fund. Salaries. Labor. Publications. Postage and stationery. Freight and expr ss. Heat, light, and water Chemical supplies. Seeds, plants, and sundries. Feeding stuffs Library. Tools, implements, and machinery. Furniture and fixtures. Scientific apparatus. Live stock. Traveling expenses. Contingent expenses. Buildings and repairs.	$\begin{array}{c} 60 \ 00\\ 61 \ 17\\ 438 \ 87\\ 270 \ 58\\ 304 \ 18\\ 247 \ 69\\ 141 \ 28\\ 584 \ 49\\ 121 \ 75\\ 145 \ 69\end{array}$	$\begin{array}{c} 1,909\ 31\\ 672\ 59\\ 45\ 60\\ 67\ 20\\ \hline \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & $	79 66 60 00 100 95 60 13 1 15 179 75 5 15 23 75
Farm Fund	\$11,249 96 \$2,278 00		

## PAPER E-AGRICULTURAL EXPERIMENT STATION.

## PAPER F-SCHOOL OF PHARMACY.

March 31, 1897.	Appro- priated.	Expended.	Balanc <b>e.</b>
Salaries for instruction Salaries for services. Buildings and grounds. Fuel and lights. Furniture and fixtures Laboratories Incidentals. Sundries. Advertising. Museum	\$4,500 00 1,125 00 703 54 200 00 1,160 00 420 23 1,753 52 1,096 46 25 00 \$14,123 75	$\begin{array}{c} 1,125\ 00\\ 2,859\ 16\\ 372\ 66\\ 183\ 81\\ 40\ 76\\ 1,160\ 0\\ 279\ 33\\ 1,695\ 54\\ 1,096\ 46\\ 2\ 25\\ \end{array}$	330 8 16 10 159 2 140 9 57 9

## PAPER I-RECEIPTS BY THE BUSINESS MANAGER.

	1 • 1	
Three months ending March 31, 1897.		
University fees	$\begin{array}{c} 431\ 50\\ 274\ 39\\ 34\ 66\\ 12\ 21\\ 31\ 10\\ 16\ 00\\ 38\ 70\\ 12\ 50\\ 20\ 00\\ 2\ 85\\ 5\ 75\\ 6\ 15\\ 37\ 62\\ 334\ 88\\ 20\ 00\\ 411\ 27\\ 310\ 61\\ 743\ 37\\ 3,465\ 45\\ \hline \end{array}$	\$12, 801 16 \$10, 289 12 2, 512 04
		\$12,801 16

The Board is requested to appropriate for immediate use for Military Scholarships \$237.50; for Band Scholarships \$247.50.

After consultation with President Draper and others, I recommend the following changes in assignment of salaries. That Mr. Pillsbury's salary be charged, general, \$1,950.00; Agricultural Experiment Station, \$300.00.

That Professor McIntosh's salary be charged, general, \$600.00; Vaccine Laboratory, \$900.00; Agricultural Experiment Station, \$300.00.

That \$600.00 of Professor Burrill's salary be charged to Agricultural Experiment Station, and that \$200.00 of Professor Shattuck's salary as Business Manager, be charged to Agricultural Experiment Station. These changes to take effect July 1, 1897.

The Board is requested to continue in force all present appropriations till September 30, 1897.

Paper O is a receipt for \$106,150.00 endowment bonds. The Board is requested to take the necessary action to cash these bonds under Senate bill 451. Respectfully submitted,

> S. W. SHATTUCK, Business Manager.

The appropriations of \$347.50 for military scholarships and \$247.50 for band scholarship were made as recommended by the Business Manager.

The adjustment of salaries recommended by the Business Manager was also approved to take effect July 1, 1897.

It was ordered that the Treasurer's report as to bonds be received for filing and printed in the records of the Board.

## BONDS RECEIVED.

## CHICAGO, ILL., May 28, 1897.

This certifies that the undersigned, Elbridge G. Keith, as Treasurer of the University of Illinois, has received from John A. Cook, Clerk of the Circuit Court of Cook county, Ill., the bonds hereinafter mentioned, which have been delivered to the said Treasurer pursuant to an order of court entered on this day in the case of Charles E. Churchill against the Globe Savings Bank, et al., pending in said court.

The said bonds are as follows:

Union School District bond No. 1, District No. 2, Town 22, Range 7 and 8 East of the Third Principal Meridian, for \$3,000.00, payable to the Board of Trustees of the University of Illinois or order.

Also twenty-nine bonds of Pike county, Illinois, each for \$1,000.00 payable to bearer, Nos. 151 to 179, inclusive.

Also three bonds of District No. 6, Town 19, Champaign county, Illinois, each for \$2,000.00 numbered 1, 2, and 3, payable to the Board of Trustees of the University of Illinois.

Also one bond District No. 10, Town 17, Range 14 for \$1,000.00, numbered 1, payable to the Board of Trustees of the University of Illinois or order.

Also four bonds of School District No. 11, Champaign county, Illinois, Town 19, Range 10 East, numbered 3, 4, 5 and 6, number 6 being for \$650.00 and the remainder for \$1,000.00 each, payable to the Board of Trustees of the University of Illinois.

Also fifty bonds from Champaign county, Illinois, each for \$1.000.00, numbered 51 to 100, inclusive, payable to the Illinois Industrial University or order.

Also twelve bonds, numbered 29 to 40, inclusive, each for \$500.00 of District No. 1, Town No. 19, Range 8, Champaign county, Illinois, payable to the Board of Trustees of the University of Illinois.

Also one bond of District No. 2, Township 18, Range 14, county of Champaign, Illinois, for \$7,500.00, numbered 1, payable to the Board of Trustees of the University of Illinois or order.

E. G. KEITH, Treasurer.

Advertising for bids for coal for the next year's supply, and awarding contracts for same on satisfactory bid were referred to the Finance Committee and the Business Manager with power, and with instructions to report to the next meeting of the Board.

Warrants issued against Charles W. Spalding, Treasurer, and paid by S. W. Shattuck, Business Manager, were submitted by the Business Manager and referred to the Finance Committee.

All present appropriations were continued in force to September 30, 1897, and the following appropriations were made, as recommended by the Business Manager.

Board expenses. Salaries for instruction and President Salaries for services. Buildings and grounds. Fuel, lights, and electric power. Stationery, printing, etc. Advertising and postage. Repair shop. Mechanical department. Departments. Laboratories. Library and apparatus. Incidentals. Furniture and fixtures. Heating apparatus. Water suppy. School of Pharmacy. School of Pharmacy. School of Pharmaty. School of Medicine. Agricultural Experiment Station Laboratory of Natural History. Water survey of State.	$\begin{array}{c} 30,000 (\\ 4,000 (\\ 2,000 (\\ 3,000 (\\ 1,000 (\\ 2,000 (\\ 1,000 (\\ 2,000 (\\ 500 (\\ 300 (\\ 500 (\\ 500 (\\ 125 (\\ 1,500 (\\ 4,000 (\\ 4,347 (\\ 3,000 (\\ 3,000 (\\ 3,000 (\\ 3,000 (\\ 1,500 (\\ 3,000$	00 00 00 00 00 00 00 00 00 00	00
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The Business Manager's report was referred to the Finance Committee.

## GREENHOUSE.

The matter of repairing the greenhouse being brought up for consideration, the whole subject was referred to the President with power to act, meaning thereby to authorize the building of a new greenhouse on such location as might be found desirable.

The following resolution was adopted:

## REMOVING TREES.

Resolved, That President Draper and Dr. Burrill shall constitute a committee to designate for removal from the campus such trees as in their judgment should be removed, and further to have the remaining trees properly pruned and trimmed.

There was appropriated the sum of \$50.00 for experiments with regard to lockjaw, said experiments to be conducted by Dr. McIntosh, who is directed to advise with Dr. Burrill.

The Secretary submitted his statement of student's fees, etc., for the quarter ending March 31, 1897, and also a statement of interest receipts from the endowment fund. These papers having been referred to the Finance Committee, the Committee reported informally that they had examined the same and found them correct.

The Board adjourned to meet at 7:30 p.m.

## EVENING SESSION, JUNE 9, 1897.

The same members were present as in the afternoon, when the Board met pursuant to adjournment, with the exception of Messrs. McLean and Smith.

## HEATING AND LIGHTING PLANT.

The Committee on Buildings and Grounds was instructed to proceed forthwith to make plans and contract for the construction of the heating and lighting plant, keeping within the amount of the appropriation, \$80,000.00.

## DECORATION OF LIBRARY BUILDING.

The question of the adoption of plans for the interior decoration of the new library building being under consideration, it was ordered that all plans submitted by artists be rejected and that the entire matter of decorating be referred to the Committee on Buildings and Grounds and the architects with power to act; and that they be authorized to expend not to exceed the sum of \$3,500.00 for such decoration; and said sum was appropriated for that purpose.

The Board adjourned to meet at the call of the President.

W. L. PILLSRURY,

Secretary.

F. M. McKay, President. MEETING OF JUNE 29, 1897.

The following call for a special meeting of the Board of Trustees of the University of Illinois was issued June 23, 1897:

"Upon the call of the President, Mr. F. M. McKay, there will be a special meeting of the Board of Trustees of the University of Illinois at 9:00 o'clock a. m., Tuesday, June 29, 1897, at the office of President Draper, in Urbana, Illinois, to consider financial and legal matters pertaining to the defalcation of the late Treasurer, and such other business as may be presented to the Board."

There were present at the meeting held pursuant to the above call Messrs. Armstrong, Bullard, McKay, McLean, Morrison, Raymond, Smith and Mrs. Flower; absent, Governor Tanner and Messrs. Pearce and Inglis and Mrs. Carriel.

## WOMEN ADMITTED TO THE SCHOOL OF MEDICINE.

Upon motion of Mrs. Flower, it was voted that women be admitted to the School of Medicine of the University of Illinois at the beginning of the fall term in 1898, and that notice of this be given in the Announcement of the School of Medicine for this year.

Upon the recommendation of President Draper, it was voted, on motion of Mr. Smith, to appoint George T. Kemp, PH.D., Professessor of Physiology in the University with a salary of \$2,000 a year.

The appointment of an instructor in Psychology was referred to President Draper, with power to act.

Upon the recommendation of President Draper, Miss Jessie Younge Fox was appointed an assistant piano teacher for the ten months beginning September 1, 1897, with a salary of \$30 a month, and fifty per cent of the fees received in excess of \$300 for instruction given by her; and it was also voted that the fees for Miss Fox's students should be as follows:

	First	Second	Third
	Term,	Term.	Term.
Matriculated students. Two lessons a week One lesson a week	\$12 00 7 00	\$9 00 5 00	\$9 00 5 00
Non-matriculated students.			
Two lessons a week	\$15 00	\$12 00	\$12 00
One lesson a week	8 00	7 00	7 00

1897]

On motion of Mr. Bullard, it was voted that the next regular meeting of the Board be held on Tuesday, September 21, 1897:

President Draper submitted the following communication from Professor Davenport:

#### MORGAN HORSES.

## URBANA, Illinois, June 28, 1897.

## A. S. Draper, LL.D., President University of Illinois,

DEAR SIR: We are obliged to keep a number of horses for their labor, and I raise the question whether they should not be made to do the institution credit rather than not contribute at all to the value and the influence of our agricultural surroundings.

We breed at our colleges of agriculture not only cattle and sheep, but hogs and often chickens of the best strains; but no college has yet shown enterprise enough to breed the horse, which is the noblest of them all. The reason commonly given for neglecting the horse is the expense involved. I am satisfied that this is over estimated; and, while no stock breeding can be advocated on the ground of profit to the institution, still there is an income from such enterprise and the net expenditure need not be large. This is particularly true when we consider that horses of some kind must be kept for labor and that from such as we now have there is no income. If our horses were good enough to produce valuable offspring we could well afford to breed them, in which case our equine interests would mean something, and the animals themselves would stand as the expression of some idea as to type and purpose. In this I have always believed, and have felt strongly that some institution would yet win credit by horse breeding.

This is a matter that I had not intended to mention until some of our more pressing interests were firmly established, but I learned by accident not many days since that the Ohio University is contemplating the same move. I regard that institution, with its progressive ideas and with its agricultural interests in the hands of that indefatigable worker Professor Hunt, as our greatest competitor for honors along agricultural lines, and am frank in saying that these are my reasons for bringing forward this question at this time.

The greatest call today is for horses of high intelligence, good action, great endurance, and extreme longevity, for the gentleman driver and for the light delivery. That the call is great, witness the prices paid for matched spans of roadsters and the fact that such a concern as Marshall Field & Co. keeps no less than 175 of the best carriage horses that can be found lor light delivery. No one is producing these horses. Our trotting and running horses are not drivers, and we are getting farther and farther away from what is wanted. Neither are their grades valuable; for as individuals they possess neither sense nor longevity, and it is next to impossible to match them.

The Morgan horse has all the qualities that are needed. He is essentially an American horse; and, besides, we in northern Illinois possess the bulk of the Morgan blood of the world. He is now essentially an Illinois horse. Moreover the Morgan has always been bred on his merits and though he has never been in gamblers' or speculators' hands to bring fabulous prices, yet it is all the better for the strain, and we have to-day, preserved through all the vicissitudes of 100 years, the essential qualities of old Justin Morgan, the most wonderfully prepotent horse that the world has ever known.

In order to lay the facts before you, I have visited Mr. A. F. Moore, of Polo, who has the largest stud of Morgans in the world. He is getting on in years and is interested in the perpetuation of the Morgan blood. In order to get prices, I told him what I would like to do. He will sell us Morgan mares of the best breeding, matched, and young, at \$250.00 a span. He quoted his beautiful seven year of stallion, Colonel, at \$350.00, and a choice stallion colt at \$100.00.

These quotations are much below his usual prices, but they are made to us because he desires to see the enterprise go forward. It would not take much money to start us. If we could buy one or two spans of mares and a stallion it would give the start. Then if we were allowed to close out our present stock at the first good opportunity, the proceeds would be sufficient to effect the entire change. This would not only make our horses mean something, but would put us clearly in advance of any institution of the country in the great business of breeding. I would breed these animals and sell the offspring for drivers, and in the meantime I would take strong ground as to the production of high class carriage horses.

Is not the project feasible and within our means?

Very respectfully submitted,

ÉUGENE DANENPORT,

Dean College of Agriculture.

On motion of Mr. Smith \$500.00 was appropriated for the purchase of horses.

The following report with regard to uniforms was filed for record:

## CADET UNIFORMS.

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

GENTLEMEN:—Your committee, appointed June 8, 1897, to examine the bids received for furnishing cadet uniforms to students of the University requiring the same, begs leave to report that, after carefully examining samples submitted by Ottenheimer & Co., and Gulick & Co., of Champaign, Illinois, and considering the prices given by these firms, it has awarded the contract to the firm of Ottenheimer & Co.

The uniforms are to conform to the specifications adopted at your meeting of March 13, 1894.

The uniform consisting of coat, trowsers, cap, and gloves, as described for privates, is to be furnished students at fifteen dollars.

For officers, consisting of coat with shoulder straps of gold lace according to rank, trowsers, cap, and gloves, at eighteen dollars and fifty cents.

For band musicians, consisting of coat, trowsers, cap, and gloves, at sixteen dollars.

Each article of the uniform must strictly conform to the specifications as approved by the Board of Trustees. The firm of Ottenheimer & Co. is to file with the Business Manager a bond in the sum of two thousand dollars for the faithful performance of their part of the contract.

The committee also requires the firm receiving the contract to deposit with the Business Manager samples of all cloth to be used in the manufacture of cadet uniforms.

The committee has made the following changes in the officers coat, viz.: that the five double rows of braid on each side of breast with crow's feet at outer ends, the braid trimming consisting of an Austrian knot, on each sleeve, and the braid trimming on each back seam be omitted, and that the following be added, cross rifles or cross cannon, as may be required by the cadet officer, and that the monogram U. of I. be embroidered in gold lace on coat eollar one and one-half inches from the edge and one-eighth inch from the top of the collar, making the distance between monograms three inches in the clear. Height of monogram three-quarters of an inch and proportionate width. Cross rifles or cross cannon same height and width.

S. A. BULLARD,

DANIEL H. BRUSH, Capt. 17th Inf., S. W. SHATTUCK,

Committee.

1897.1

## SCHOOL OF PHARMACY.

The following gentlemen were appointed members of the Advisory Board of the School of Pharmacy:

H. H. Rogers, of Kankakee, term of office to expire in 1898.
T. C. Loehr, of Carlinville, term of office to expire in 1899.
Henry Swannell, of Champaign, term of office to expire in 1900.
Wm. Sempill, of Chicago, term of office to expire in 1901.
A. E. Ebert, of Chicago, term of office to expire in 1902.

Mr. Armstrong presented the following resolution from the Committee on the School of Pharmacy, and it was adopted.

*Resolved*, That it is the desire of the Board of Trustees of the University of Illinois, that the degree of Pharmaceutical Chemist should not be given hereafter upon the present requirements, and be it further

Resolved, That the President of the University and the Faculty of the School of Pharmacy be directed to raise the standard for graduation as rapidly as possible to that of the best Schools of Pharmacy of the United States, and that additional instructors be employed, if additional instruction is needed to carry out this action.

Professor Forbes's bill of expenses incurred on his trip to Baltimore, amounting to \$57.80, was ordered paid.

The Executive Committee made the following report:

URBANA, ILLINOIS, June, 18, 1897.

To the Board of Trustees of the University of Illinois.

GENTLEMEN: Your Executive Committee begs leave to report that at a meeting held this day in the President's office, Urbana, Ill., it appropriated \$1,000.00 towards repairs on Natural History Hall.

Respectfully submitted,

S. A. BULLARD, T. J. SMITH, Executive Committee.

This action of the Executive Committee was confirmed.

Upon recommendation of Professor Shattuck, Business Manager, the following appropriations were made:

For repairs on Natural History Hall	\$2,000 00 500 00 1,000 00 500 00

President Draper stated that it was very desirable to put in 100 lockers in University Hall for the use of young women, and 200 for use of young men. For this purpose \$600.00 was appropriated.

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

Resolved, That the thanks of the Board of Trustees of the University of Illinois be tendered to Professors Ricker and White, architects of the new library building, which demonstrates in the strongest manner possible the appreciation of the commonwealth which gave us the money to build it, the genius of the architects who planned and superintended its construction and the strength and ability which controls and directs the Department of Architecture in this University.

And further, that a copy of this resolution be handed to Governor Tanner, and also to each of the professors, Ricker and White.

On motion of Mr. Morrison, it was ordered that the paper<sup>\*</sup> read by Professor J. M. White at the dedication of Library Hall, should be printed in the minutes of the Board.

## ADDRESS DELIVERED ON BEHALF OF THE ARCHITECTS AT THE DEDICATION OF THE LIBRARY BUILDING.

#### By James M. White.

One year ago today the first sod was turned for the building we are now about to dedicate.

Words appropriate to the occasion were then spoken by representatives of the Trustees, the University, and the Alumni, and each and all predicted for our Alma Mater a leap forward when the gift of our great commonwealth should be transmuted into stone.

Though a brief space of time will yet be necessary for the completion of our building, in essentials it is completed and ready for your inspection.

My place on this program is to be the guide book of this interested audience, but I shall be no more statistical than the occasion demands.

The extreme dimensions of the building are 113 by 167 feet and the height of the tower is 132 feet.

The appropriation for the building by the 39th General Assembly was \$150,-000.00. The present legislature has made an additional appropriation of \$10,000.00 for finishing, decorating, and furnishing. The cost of construction will be within one hundred dollars of the original appropriation. The style is Modern Romanesque and is an adaptation of that which was employed for ecclesiastical architecture over much of Europe during the middle ages. The walls are built of a very hard pink sandstone from Minnesota, which we believe to be as solid and enduring as any stone, granite only, excepted. The foundations under the tower are of steel imbedded in concrete; elsewhere they are of huge blocks of stone. The roof is of clay tiles, which neither heat, cold, nor moisture can destroy; and, in addition to their great utility, their color and form add much to the beauty of the whole.

The entire building is fire-proof; by which I mean that the structural parts are so protected that the burning of all the inflammable material which may have accumulated therein will not endanger its stability. Of course, it may damage its interior, which has some wood floors and finish.

A monolithic slab of concrete extends over the entire area of each floor. The partitions are of solid masonry, or of plaster on metal lath, while the studding is of steel, so that it is impossible for fire to spread from floor to floor or from room to room.

The books will be stored in steel stacks twenty-one feet high which are divided into three stories of seven feet each. The shelves already provided will accommodate 90,000 volumes, but it will be possible in the future to extend them through two more stories and so make a total capacity of 150,000 volumes.

Though the main purpose of the building is for library uses, those favoring the appropriation urged that space be provided for the museums of the University, which are too valuable to be entrusted to a non-fireproof building. The two large rooms in the wings of the ground floor will therefore be devoted to this purpose. In the south room on the second floor the art collection will find a home until the space is required for an extension of the book stacks.

A building of such permanence as this must be planned to meet the demands of the years to come; the room provided for that future development will for the present be used for the administrative offices of the University. There are two entrances to the building but the principal one is on the north front through a massive archway which is enriched with carved effects. This leads into an entrance hall with tunnel vaulted ceiling, marble arcaded walls, and a marble mosaic floor. At the top of a short flight of marble stairs, two other flights of electro-bronzed iron and marble sweep upwards on the right and left to the second story.

Between them is the entrance to the delivery room, or rotunda, as we have termed it. This is the central feature of the building and at a time not distant we hope its walls will be decorated in a style of art befitting its position. It extends through the first and second stories and is walled by arcades on both floors and roofed by a domed opalescent glass ceiling of great beauty. Opening from this chamber are the main reading rooms, which have been kept free from columns by hanging the second floor to the roof trusses.

In addition to the administrative offices on the second floor the seminars are there located, to which reference books may readily be transferred.

While convenience has been closely studied in planning the building no less attention has been paid to the heating and ventilation, on which comfort and health depend. The system adopted is the one generally known as the Plenum or Fan System. An eight-foot fan, centrally located on the ground floor, continuously impels a quantity of air sufficient to provide adequate ventilation to all the occupants of the building. The temperature of this air is automatically regulated so as to preserve a constant temperature in the rooms.

Amovg the many who will examine the buildings to day are, doubtless, mechanics capable to judge the workmanship. I hope they will examine it critically, for it will bear it.

We, who have watched the building, from day to day, from beginning to end, take pleasure in assuring our friends that it is thoroughly built, that it is just as solid and substantial as it looks, and that the State has received a full equivalent for every dollar put into it.

URBANA, June 8, 1897.

On motion of Mr. Armstrong, it was voted that a resolution concerning the action of the legislature in assuming on behalf the State the liability imposed upon it through the stealing of the endowment fund by Charles W. Spalding, was adopted.

Resolved, That the board communicates an expression of the sincere gratitude of its members and of all friends of the University to Governor Tanner and to the Senate and Representatives of the 40th General Assembly for the admirable course taken by the State in relation to the misappropriation of more than \$450,000 of University moneys by the former treasurer of the Board. Special credit is due to the members of the Senate Investigating Committee for the patience and thoroughness with which they performed their duty, and particularly for the wise and courageous provisions of the bill which they proposed for the relief of the University, and which has become a law.

The act of the Legislature making appropriations sufficient to repair all losses, charging the State with liability for the endowment and providing for the regular and continuous payments of interest thereon, and relieving the Board from the care of the numerous actions and proceedings at law resulting from the defalcation may fairly be taken as indicating a strong purpose on the part of the people of the State to make the best possible provision for higher learning, and to adopt the State University more closely and completely as their own.

The outcome of the whole unhappy affair reflects the greatest credit upon the State and secures to those who have contributed thereto the warmest thanks of all interested in higher education. Beyond that, it inspires the friends of the University, and particularly all charged with responsibility for its management, to leave nothing undone that they can do to build up a great State University, which in the breadth and thoroughness of its work shall be second to none in the country and in every way worthy of the great State which is behind it and for which it seems destined to do so much.

URBANA, ILLINOIS, June 26, 1897.

The Secretary was directed to send a copy of the resolution to each member of the 40th General Assembly.

The bill of Mann, Hayes & Miller for legal services, amounting to \$835.00, was ordered paid on the following vote: Ayes-Messrs. Armstrong. Raymond, Bullard, Smith, and McKay. Noes-Morrison and Mrs. Flower.

The finance committee filed the following report:

URBANA, ILLINOIS, June 29, 1897.

## 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 Business Manager on which University warrants Nos. 1,201 to 1,881, inclusive; Agricultural Experiment Station warrants Nos. 201 to 279, inclusive; Laboratory of Natural History warrants Nos. 162 to 246, inclusive; and School of Pharmacy warrants Nos. 103 to 159, inclusive, have been issued, and has found the same correct and duly receipted.

Respectfully submitted,

THOMAS J. SMITH, ALEX. MCLEAN, N. B. MORRISON, Finance Committee.

The board adjourned.

W. L. PILLSBURY,

Secretary.

F. M. McKay, President.

# Financial Statement of the University of Illinois for the twelve months ending June 30, 1898.

RECEIPTS, JULY 1, 1897-JUNE 30, 1898.			
Balance Interest on endowment and land contracts Fees from students Departments and laboratories. Miscellaneous State appropriations. State appropriations. Laboratory Natural History U. S. Government U. S. Agricultural Experiment Station. School of Pharmacy.	$\begin{array}{c} 26.\ 630\ 95\\ 5.\ 162\ 55\\ 5.\ 494\ 68\\ 199,\ 000\ 00\\ 11,\ 000\ 00\\ 23,\ 000\ 00\\ 18,\ 419\ 92 \end{array}$	\$51, 640 <sup>-</sup>	70
School of Medicine.	41,390 25	354, 982	24
	·	\$406,622	94
EXPENDITURES, JULY 1, 1897-JUNE 30, 1898.			
Salaries for instruction Salaries for services. Departments and laboratories. Miscellaneous State appropriation ( ther than for salaries Laboratory of Natural History. Agricultural Experiment Station. School of Pharmacy. School of Medicine.	$\begin{array}{c} 19,699 \ 69\\ 6,360 \ 31\\ 34,384 \ 10\\ 143,221 \ 01\\ 10,864 \ 57\\ 18,140 \ 59\\ 13,493 \ 64\end{array}$	397, 482	28
Balance		\$9,140	69
		\$406,622	0

# WARRANTS FOR YEAR ENDING AUGUST 31, 1897.

No.	Date.	To whom.	For what.	Amount
	1896.			
1	July 1	5 The H. M. R. Construction Co	On contract library building	\$3,106 00
<b>2</b>		Richard P. Morgan	Expenses	36 86
234 56 78 9		G. P. Clinton	Salary, June, 1896	83 33
4		F. L. Bills	Postage Balance on contract	76 00
.5		Chicago Orchestra	Balance on contract	118 51
6		Henry E. Alvord	Bust of Senator Morrill	45 00
7		Union Manufacturing Co	Water, July 1-October 1, 1896	125 00
ğ		J. D. Phillips	Lettering H. C cuts	12 60
10	••	Forl Romog	Books	126 53 1 00
11	• •	Champaign Co. Printing Co.	Printing, etc	21 25
12	••	Thes Naughton	Photographs	10 75
13	••	I Hemilton & Son	Lumber	33 42
14	• •	Boyig & Co	Windows, etc.	9 60
15	••	Champaign Co. Herald	Printing, etc	106 00
16	• •	The Engineering Magazine	. Advertising	22 50
17	• •	Richard Kny & Co	Bell jars etc	7 00
18	••	Fairbanks Morse & Co	Scales. Subscription Printing.	102 40
19	••	The Inland Publishing Co	. Subscription	8 75
20	••	The Gazette	. Printing	25 99
$\overline{21}$	• •	W. N. Gartside	. Brass castings	2 36
22	• •	Champaign Supply Co	. Engine fittings	8 32
23	• •	Chas. A. Strelinger & Co	. Copper tubing, etc Labor on launch	7 88
<b>24</b>		W. G. Stocker	. Labor on launch	51 64
25		[C. J. Root	On account engine Services to September 15, 1896	50 00
22 23 24 25 26 27 28 29		C. & U. Phœnix Telephone Co	Services to September 15, 1896	45 00
27		Western Union Telegraph	. Telegrams	5 91
28	• •	E. Henry	Janitor supplies, etc	25 31
29 30		D. H. Lloyd & Son	Repairing apparatus	18 45
31	• •	Wittendorf and Vilor	. Picture frames, etc	$   \begin{array}{ccc}     10 & 00 \\     20 & 30   \end{array} $
32		Joho B. Bonnott	Repairs on piers	20 30 3 20
33		I C Vaughan	Gross and flower goods	16 60
34	• •	Hubbard & Song	Plumbing, etc. Stationery. Hardware.	26 11
35		Wm Price	Painting etc	41 35
36	* *	A. P. Cunningham & Son.	Stationery	1 90
37	••	Henry Trevett	. Hardware	35 30
- 38	• •	□C. C. C. & St. L. R'▼ Co	, Freightage	33 72
39		Richards & Co	Chemical supplies	36 09
40	**	American Express Co	. Expressage.	57 35
41		Twin City Ice & Cold St'ge Co	Expressage.	3 00
42		Pacific Express Co	. Expressage	27 22
43	••	<u>I. C. R. R. Co</u>	Freightage Toilet paper, etc Tape splices	19 24
44		H. Swannell	. Toilet paper, etc	4 30
45		Robinson & Burr	. Tape splices	3 50
46		Knowlton & Bennett	Field book shellac, etc	1 55
47	4.4	Champaign Supply Co	Pipe fittings, etc. Gas, June 23, 1896; power, July 1, 1896	60 36
48 49	4.4	Driele Duildon Bub Co	. Gas. June 23, 1896; power, July 1, 1896 Subscription	528 14
49 50		Biekov & White	Subscription Arichitect's commission Wire Surface plates. Cable binding posts, etc. Balance on contract. Castings. Military scholarship.	375 7765
$50 \\ 51$		Electric Appliance Co	Wine	31 80
51 52		Brown & Shanno Mfg. Co.	Surface plates	31 80 5 00
53		General Electric Co.	Cable hinding posts ate	5 UU 6 47
54	÷ +	Bavis & Co	Balance on contract	50 00
55	**	Medert Petent Pulley Co	Castings	1 75
56		Income a canone canoy OU	NUBULIED	15 00

# . . GENERAL UNIVERSITY WARRANTS.

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1896. July   	15			
7 July	15		•	
	19	Western Banknote and Eng Co.	Warrant books	. \$15
		F W Plotobford & Co	Plack tin	
		E. W. Blatchford & Co A. C. McClurg & Co	Books etc	:  5
		C A Besore	Lumber	. 17
		Central Union Telephone Co	Books, etc. Lumber. Services, July 1 to September 30, 1890 Brick. Tap for athletic park.	3 3
3 **		Sheldon Brick Co	Brick	. 3
		Union Manufacturing Co	Tan for athletic nark	4
		T R Leal	Grading etc	51
5 **		Ira O. Baker	Tap for athletic park Grading, etc. Expenses. Pipe and fittings. Card index. Photo mounting boards. Hay carrier. Books Expenses. Freight and expressage	
		Robinson & Burr	Pipe and fittings	
,		Library Bureau	Card index.	6
3 **		J. W. Butler Paper Co	Photo mounting boards	49
••		Henry B. Newhall & Co	Hav carrier	10
••		Gustav E. Stechert.	Books	7
• •		S. W. Shattuck, Business M'g'r	Expenses Freight and expressage	84
			Freight and expressage	46
		4.4 <sup>1</sup> .4.4	Sundry items, Pay-roll of men, June, 1896 students, June, 1896	26
••		** **	Pay-roll of men. June, 1896.	479
••		** **	students, June, 1896	. 92
July	31	A. S. Draper	Salary, july, 1896	583
		A. S. Draper. T. J. Burrill		22
••		S. W. Sbattuck. Edward Snyder N. C. Ricker. Ira O. Baker.	••	160
••		Edward Snyder	4.4	16
		N. C. Ricker		19
••		Ira O. Baker.	4.6	18
••	Ì	Ira O. Baker. S. A. Forbes. C. W. Rolfe. D. McIntosh. A. N. Talbot. A. N. Talbot. A. W. Palmer. F. F. Frederick. S. W. Parr. H. J. Barton.	••	
• •		C. W. Rolfe	••	
••	- 1	D. McIntosh	••	15
		A. N. Talbot	••	
		A. W. Palmer	4.4	
••		F. F. Frederick	•• ·	
••		S. W Parr	<b>66</b>	
**		H. J. Barton	44	16
••		C. M. Moss	· ·	17
		D K Dodge	**	
		L P Breckenridge	4 4	16
		S. W. Farr. H. J. Barton. C. M. Moss. D. K. Dodge. L. P. Breckenridge. David Kinlev. Eugene Davenport. Arnold Thompkins. E. J. Townsend. H. E. Summars	• •	18
		Eugene Davenport	44 	8
••		Arnold Thompkins	· · · · · · · · · · · · · · · · · · ·	
••		E [ Townsend	4.4	
••		H. E. Summers	**	
• •		E B. Greene	6 6 · · · · · · · · · · · · · · · · · ·	
••		Katharine Merrill	• •	108
••		H. E. Summers. E. B. Greene. Katharine Merrill. V. O. Krohn. James M. White. W. H. Van Dervoort W. D. Pence. A. H. Daniels. H. S. Grindley. T. A. Glark	••	
••		James M. White		
••		W. H. Van Dervoort	4 <b></b>	
••		W. D. Pence	••	
••		A. H. Daniels	**	
••		H. S. Grindley	**	
••		T. A. Clark.		
••		H. S. Piatt	••	8
••		B. V. Swinson	**	9
••	- 1	Geo. D. Fairfield		8
••		Chas. W. Tooke	••	8
		Percy F. Bicknell	••	
		Henry H. Everett	• • • • • • • • • • • • • • • • • • • •	
••	1	Walter H. Jones.	<i>" </i>	
		H. S. Grindley T. A. Clark, H. S. Piatt. B. V. Swinson Geo, D. Fairfield Chas, W. Tooke. Percy F. Bicknell Henry H. Everett Walter H. Jones. Wm. Esty. Fred A. Sager. G. D. Hammond G. W. McClure G. P. Clinton Edward G. Howe Geo, W. Graham	••	. 91
		Fred A. Sager	4.4	. ` 91
		G. D Hammond	• •	8
		G. W. McClure	••• •••	
		G. P. Clinton	44	8
••	j	Edward G. Howe	**	150
• •		Geo. W. Graham	÷ 4	
••		Sue W. Ford L. A. Boice. W. F. Marker.	· · · · · · · · · · · · · · · · · · ·	
••		Sue W. Ford	• •	
••		L A. Boice	••	
••		W. F. Marker	••	45
••	•	Albert R. Lee.	**	20
		W. L. Pillsbury	••	
••		C V. Millar	• •	1 .60
• •		W. F. Marker Albert R. Lee. W. L. Pillsbury. C V. Millar. Keuffel & Esser Co. The Globe Co. Buff & Borgon	Transit, etc	204
••		The Globe Co	Book case.	36
••		Ruff & Berger.	Transit, etc Book case. Eng'g leveling instruments. Salary, July, 1896	237
		Richard Uttenweiler	Salary, July, 1896	50

## UNIVERSITY OF ILLINOIS.

[July 31

# Warrants-Continued.

o.	Date.		To whom.	For what.	Amou
	1896.		· ·	Salary, July, 1896	
33	July	31	J. J. Johnson	Salary, July, 1896	\$30
84			L. G. Lathrop.		30
34 35	• •		Champaign Supply Co	Pipe, fittings, etc	21
36			Agricultural Exp't. Station	Tearning	18
37			The Gazette	Printing	18
38			K. S. Wilber		2
39 40	••		J. Hamilton & Sons	Reveluing book asso ata	47 71
41			W & I. F. (Jurley	Transit leveling rode etc	225
12			Riehle Bros. Test'g Mach. Co	Nest cement sieve	9
13	• •		John Chadwick & Co	Art supplies	37
14	••		Robinson & Burr	Magnolia babbit, etc	3
15			T. R. Leal	Grading	20
16	••	1	Isaac Fielding	Postage	19
17	••		F. L. Bills	**	30
18			General Elect. Co	Electric supplies, etc	6
19			Fauth & Co	Transit and chronograph	333
50	Tulu	91	N B Morrison	Samples of water	2 67
52	July	01	Τ R. Logi	Grading hanling dist	21
3	Aug.	10	Library Burean	File cases.	30
4			Peoria Evening Times.	Advertising	30 1
5			Chas. T. Wilder	Mounting photographs	13
6	••		C. A. Besore.	Lumber	27
7	••		Champaign Supply Co	Plumbers' supplies	10
0	**		John T. Beem	Advertising	
9	••		The Free Press	······································	1
U			A. C. McClurg & Co	Stationery	13
1			The Kariner Grocery Co	Jars, matches, etc	4
2	• •	ĺ	Douglass & Snury Co	Photographic material	43
$\frac{3}{4}$			Powig & Co	On contract Astronomical Obs'yt'r	1,246
5			The H M R Construction Co	On contract, Astronomical Obs very	10, 925
6	* *		Eimer & Amend	Chemical supplies	1, 144
7	* *		Ricker & White.	Architect's commission	1,144
8	• •		The Gazette	Printing	88
9	• •		The Carborundum	Carbons	3
0			S. W. Shattuck, business m'g'r	Expressage	41
1	**			Sundry items	16 373
2				Pay roll of men, July, 1896	373
3			at an and a Trankla	Pay roll of students, July, 1896	49 25
14 15	• •		L C Sodowiak	Contract Vaccino Laboratory	425
6	1 11 02	20	S A Bullard	Expenses to hoard meeting	35
7	Aug.	20	N W Graham	Expenses to beard meeting	13
8	* *		Champaign Co. Herald J. C. Sedgwick S. A. Bullard N. W. Graham W. L. Pillsbury. S. W. Shattuck, business m'g'r J. G. Keller Engineering News Pub. Co A. N. Talbot.	Expenses	
ğ	* *		S. W. Shattuck, business m'g'r	Expressage and freightage	23
8Õ			J. G. Keller	Advertising	9
31	**		Engineering News Pub. Co	••• •••	6
32	•••		A. N. Talbot.	Expenses	14
33			Champaign Co. Printing Co	Printing	31
34			R. S. W110er	Advertising	15
35 36	••		DuQuoin Union Coal Co	Expenses to board meeting. Expenses . Expressage and freightage. Advertising Expenses. Printing Drayage . Advertising Coal . Steel ribbons. Valve nipples, etc. Stationery. Tile Printing and advertising Postage . Index cards, etc. Photographs. Spring balances, etc. Flag poles. Locks Acids and bottles. Printing programs. Salary for August 1896	49
7	* *		Gardner Sash Relence Co	Steel ribbons	40
38	* *		Champaign Supply Co	Valve nipples, etc	19
39	• •		A. C. McClurg & Co	Stationery	18 12
õ	• •		Champaign Tile Factory	Tile	4
)1	4 6,		The Champaign Times	Printing and advertising	
92	••		Isaac Fielding	Postage	20
3			F. L. Bills		31
4			Library Bureau	Photographs	4
)5 10	•		Thos. Naughton	Photographs	
96	••		Goo W Porker & Son	Flag poles	4
97 98			Vale & Towne M'f o Co	Locks	
90 99	••		Baker & Adamson	Acids and bottles	111
)0	* *		The Gazette	Printing programs	i iii
)ĩ	Aug.	31	The Gazette. A. S. Draper. T. J. Burrill S. W. Shattuck.	Printing programs. Salary for August, 1896	58
)2			T. J. Burrill		225
)3	••		S. W. Shattuck	•• ••	166
)4	••		S. W. Shattuck Edward Snyder N. Clifford Ricker Ira O. Baker S. A. Forbes. C. W. Rolfe D. McIntosh.		166
05	••		N. Clifford Ricker		191
06			Ira O. Baker		188
07 08			S. A. Forbes		81 171
					1 178

0.	Date.	To whom.	For what.	Amoun
	1896.			
10	Aug.	31 A. N. Talbot	. Salary for August, 1896	175
$\frac{11}{12}$		A. W. Palmer	· · · · · · · · · · · · · · · · · · ·	175 158
$12 \\ 13$	• •	S W Parr	• • • • • • • • • • • • • • • • • • • •	175
14	••	H. J. Barton.	44 44 44 44 44 44	166
15	••	<ul> <li>81 A. N. Talbot.</li> <li>A. W. Palmer.</li> <li>F. F. Frederick.</li> <li>S. W. Parr</li> <li>H. J. Barton</li> <li>C. M. Moss.</li> <li>D. K. Dodge.</li> <li>L. P. Breckenridge.</li> <li>David' Kinley.</li> <li>Eugene Davenport.</li> <li>Arnold Tompkins.</li> <li>E. J. Townsend.</li> </ul>	· · · · · · · · · · · · · · · · · · ·	175
16	••	D. K. Dodge		
17	••	L. P. Breckenridge		166
18 19	••	Eugono Devopport		187 87
20	••	Arnold Tompkins	•••••••••••••••••••••••••••••••••••••••	150
$\overline{21}$	••	E. J. Townsend		
22	••	H. E. Summers	• • • • • • • • • • • • • • • • • • • •	137
23		E. J. Townsend. H. E. Summers. E. B. Greene. Katharine Merrill. W. O. Krohn.		133
$\frac{24}{25}$	• •	Katharine Merrill		108 150
261	••	Jas M White		125
27	••	W. H. VanDervoort.		137
28	••	W. D. Pence		116
29	••	W. O. Krohn. Jas M White. W. H. VanDervoort. W. D. Pence. A. H. Daniels. H. S. Grindley T. A. Clark. H. S. Piatt. B. V. Swenson		100
30		H. S. Grindley		87
31 32	••	H S Piatt		
32 33	••	H. S. Flatt B. V. Swenson. G. D. Fairfield . Chas. W. Tooke. Perry F. Bicknell . Henry H. Everett. Waltar H. Longs		91
34	• •	G. D. Fairfield		
35	••	Chas. W. Tooke		83
36	• •	Perry F. Bicknell		
37		Henry H. Everett		100
$\frac{8}{9}$				
0		William Esty Fred A. Sager	• • • •	
1	* *	G. D. Hammond.		
2	••	G. D. Hammond. G. W. McCluer		
3	••	G. P. Clinton		
4		Edward G. Howe		150
15 16		G. P. Clinton Edward G. Howe Geo. W. Graham Lillie Heath		
17		Linie Heath Sue W. Ford. L. A. Boice W. F. Marker. Albert R Lee. Richard Uttenweiler.		
18	• •	L. A. Boice.	· · · · · · · · · · · · · · · · · · ·	
19	••	W. F. Marker	· · · · · · · · · · · · · · · · · · ·	
50	••	Albert R Lee		
51		Richard Uttenweiler		50
$\frac{2}{3}$		J. J. Johnson	• • • • • • • • • • • • • • • • • • • •	35
4	• •	L. G. Lathrop		30
5	• •	W. L. Pillsbury.		116
6)	••	L. P. Breckenridge	. Salary, 3 months, to August, 1896	62
7		S. W. Shattuck	Salary, 3 months, to August, 18%6 Salary for August, 18%6 Balance on contract. Scales Expenses	150
$\frac{8}{9}$	••	C. V. Millar	Balang for Angust, 1896	60 100
50	••	Fairbanks Morse & Co	Scales	100
51	••	N. C. Ricker	Expenses	1
2	••	Arthur W. Palmer		9
3		S. W. Shattuck, business m'g'	Freight and express, etc	77
4		Champaign Co. Printing Co	Printing	9
5 6		Western Union Telegraph Co	Tolograms	28
7	• •	E. Henry	Brooms, soap, etc.	18
88	• •	Yale & Towne M'f'g Co	Repairing locks and keys	5
59	**	J. Hamilton & Son	Lumber	111
0		Cayuga Press Brick Co	Brick	24
12	••	Office Specialty Milig Co	Uases	. 77
$\frac{2}{3}$		Bertha Pillshury	Work	$\frac{6}{28}$
4	• •	Library Bureau	Index cards.	16
5	• •	City of Urbana	Police service and gravel.	33
6	Sept.	15 The H. M. R. Construction Co.	. Contract, library building	22,099
[7]	••	Ricker & White	Architect's commission .	552
78 79		Womor & Sween	Part neumont on contrast	1,597
9 30		J. E. Armstrong	Expenses	3,000
31	• •	N. W. Graham	44 CHOOM	18
$\tilde{2}$	••	Alex, McLean S. A. Bullard N. B. Morrison Richard P. Morgan	Cases. Hardware. Work Landware. Work Hardware. Broite cards. Broite cards. Broite cards. Brick Cases. Hardware. Work Index cards. Police service and gravel. Contract, library building Architect's commission Final payment, astronomical obs. Part payment on contract. Expenses.	25
33		S. A. Bullard	•	11 27

—10 U. I.

lo.	Date.		To whom.	For what.	Amount
	1896.		•	Expenses. Moulding clay Chemic. I supplies Lumber. Expenses. Stationery. File cases Balances, etc. Expenses, premiums, etc. Legal services Professional services and expenses Insurance. Locks, etc. On contract, chemical laboratory. Subscription Sash cord. Lumber Desks and chairs Flower pots. Hydrants, etc. Photographic material. Hauling and grading. Platium wire. Chemical supplies. Supplies. Supplies. Supplies. Cocean freight, etc. Barometer. Wire, etc. Work on instruments, etc. Scales. Piano. Locks and hooks. Coke and pig iron. Services to December 15, 1896. Pay oll of students, August, 1896. Pay oll of students, August, 1896. Pay oll of students, August, 1896. Manney September, 1896. Subary, September, 1896.	.
286	Sept.	15	Isaac S. Raymond	Expenses	\$10 8
287 285			C. Hemmeke & Co	Moulding clay	7 (
285 289			Chas H Moars & Co	Unemical supplies	309 0 18 0
290	••		Wilter H. Jones	Expanses	10 1
291	••		Morgan Stationery Co	Stationery	5 0
292	* *		A. C. McClurg & Co		10 0
293	••		Library Bureau	File cases	30 0
294	**		Henry Troemuer	Balances, etc	856 2
295			Chas. W. Spalding, Treas	Expenses, premiums, etc	310 9
$\frac{296}{297}$	• •		Cunningnam & Bogg	Degal services	202 8 445 5
298	4.6		H T Sparry & Son	Insurance	42 4
299	٠.		Bevis & Co	Locks etc	23 6
300	••		J. C. Sedgwick	On contract, chemical laboratory	2,663 0
301	• •		Maltby & Wallace Co	Fittings	1 2
302			The Western News Co	Subscription	22 5
303	• •		Hodge & Homer Co	Sash cord ,	18 8
301	••		Jas. H. Rice & Co	Lumper	50 3
805	••	- 1	Unas. H. Mears & Co	Docks and abuing	119 8 81 5
306 307			Detroit Flower Pot Mfg Co	Flower nots	14 0
307			National Tube Works Co	Hydrants etc	60 7
109			Rochester Optical Co	Photographic material	16 1
310	* *		T. R. Leal	Hauling and grading	23 1
311	••		Pittsburgh Reduction Co	Platium wire	93
312			Fuller & Fuller Co	Chemical supplies	60 9
313	44. 44		Henry Heil Chemical Co	Supplies	74 3
314	••		Whitall, Tatum & Co	Chemical supplies	60 9
315			F. B. Vandegrift & Co	Ocean freight, etc	11 6
316			Henry J. Green	Barometer	41 7
117			Lohn Magnino	Wire, etc	35 1 8 7
18 19			Fairbanky Moreo Co	Seeles	87
320	••		Clayton F. Summy Co	Piano	850 0
21	••	- [	Orr & Lockett Hardware Co	Locks and hooks	7 2
22			Chesapeake & Ohio Co	Coke and pig iron	39 0
23	* *		C. & U. Phoenix Telephone Co.	Services to December 15, 1896	41 5
24	••	1	S. W. Shattuck, Business Mgr.	Pay roll of students, August, 1896	47 6
25	••			Salary, September, 1896	1,086 3
<b>26</b>	Sept.	30	A. S. Draper.	Salary, September, 1896	583 3
$\frac{27}{28}$			T. J. Burrill		$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
29			E Snyder		166 6
30		- 1	N. C. Ricker		191 6
31	• •	1	Ira O. Baker		183 3
$3\overline{2}$	• •		S. A. Forbes		83 3
33	••		S. W. Shattuck, Business Mgr. A. S. Draper. T. J. Burrill S. W. Shattuck. E. Snyder N. C. Ricker hra O. Baker S. A. Forbes. C. W. Rolfe. D. McIntosh A. N. Talbot. A. N. Talbot. A. W. Palmer. F. F. Frederick. S. W. Parr. H. J. Barton Chas. M. Moss. D. K. Dodge. L. P. Breckenridge David Kinley. Eugene Davenport. A. R. Carman George W. Myers H. E. Summers'. Edg. G. Teownsend. Edg. G. Teowns		175 0
34	••		D. Mcintosh		50 0
35	••	1	A. N. Talbot.		175 0
36	••		A. w. Faimer	•• ••	175 0 158 3
$\frac{37}{38}$			S W Parr		158 3
39	* *		H. J. Barton	··· ··· ····	166 6
40			Chas. M. Moss.		175 0
41			D. K. Dodge		83 3
42			L. P. Breckenridge		166 6
43	••		David Kinley	** **	187 5
44	**		Eugene Davenport		87 5
45	**		Arnold Tompkins		150 0
46	••		A. F. Uarman		187 5
47	4.4	1	G E Summore'	•• ••	145 8
48 49			Edger I Townsond	•• ••	137 5
49 50			E. B. Greene		141 6
51			James M. Whit.e	•••••••••••••••••••••••••••••••••••••••	125 0
52	**	ľ	Katharine Merrill		108 3
53	• •	- 1	Wm. O. Krohn	** ** ***	150 0
54		- 1	Wm. H. VanDervoort	· · · · · · · · · · · · · · · · · · ·	137 5
55	**		W. D. Pence	44 44	125 0
56	••	- Î.	H. S. Grindley	•• ••	100 0
57	••	- [	r. A. Clark		125 0
58	••		R. S. Grindiey T. A. Clark B. V. Swenson A. H. Daniels. Percy F. Bicknell. Geo. D. Fairfield	** ** ***	100 0 100 0
				•• •• ••	100.0
59 60		l'	Donay F. Dialynall	<b>66 68</b>	129 1

о.	Date.		To whom.		For what		Amou
	1896.	i	Chas. W. Tooke . Walter H. Jones . Henry H. Everett . Fred A. Sager . William Esty . Lewis A. Rhoades . Frank Smith . C. D. McLane . P G. Holden J. E. McGilvery . J. D. Phillips . Ralph P. Smith . Helen E. Butterfield . Robert A. Wood Geo. A. Goodenough . Oscar Quick . E. J. Lake . Ella H. Morrison . Geo. A. Huff . W. J. Fraser Carlton R. Rose . Edwin H. Pierce Joseph C. Blair . Adeline W. Rowley . S. J. Temple . Geo. H. Alden J. G. Mosier Robert C. Vial . C. F. Hottes . M. S. Ketchum . Paul Chipman . A. S. Patterson . D. H. Carnahan Harry Keeler . W. C. Brenke . C, B. Clark . A. R. Curtiss Henry Jones Formy Jones Cornb H. Willow .				
62	Sept.	30	Chas. W. Tooke	Salary,	September,	1896	\$10
$\begin{array}{c} 63\\ 64 \end{array}$			Walter H. Jones				7
64 65			Fred A Segar	:	**	••••••••	11
56	• •		William Esty	••		••••••••	9 10
57	• •		Lewis A. Rhoades	••	**		12
58	••		Frank Smith		••		10
9			C. D. McLane				.9
0			P G. Holden		• •	•••••••	5 10
$\frac{1}{2}$			I D Philling		••		10
3			Ralph P. Smith	••	* *		12
4	••		Helen E. Butterfield	••	••		7
5			Robert A. Wood		••		8
6			Geo. A. Goodenough				8
7 8	4, 4		Uscar Quick		••	•••••	7
9	••		Ella H Morrison	4 <b>4</b>	• •	••••••••••	10
Ď	••		Geo. A. Huff		• •		12
1	• •		W. J. Fraser	• •	••		4
2	••		Carlton R. Rose	**	••		7
3	• •		Edwin H. Pierce		••	• • • • • • • • • • • • • •	8
1			Joseph C. Blair	4.4	••	•••••••	4
6	••		S. I. Temple		**	• • • • • • • • • • • • • •	12
7	• •		Geo. H. Alden		**	••••••••	12
ŝ			J. G. Mosier	• •	**		7
9	••		Robert C. Vial	••	**		7
9	••		C. F. Hottes		• •		6
$\frac{1}{2}$			M. S. Ketchum				7
3			A S Pottorson	· • •	• •	•••••••	7 5
1			D. H. Carnahan	••	• •		. 4
5	••	i	Harry Keeler	••	**		5
6	**		W. C. Brenke	••	**		· 7 8
7			C, B. Clark			····	8
8			A. R. Curtiss				8
)	••		Henry Jones Joseph H. Wilson Mary Maude Cole Chas. H. Garnett		**	•••••	6
í			Mary Maude Cole	••		••••••	5 4
2	**		Chas. H. Garnett	• • •			4
3			Walter G. Campbell Geo, D. Hubbard Edward L. Milne	••	**		4
4			Walter G. Campbell				4
5 6	••		Geo. D. Hubbard			·····	. 4
7	••		Geo F Anderson	••	••		1
8	••		Edward G. Howe	**	* *		15
9	••		Geo. F Anderson Edward G. Howe N. A. Weston L. A. Clendenin	••	••		90
0			L. A. Clendenin		**		6
1		1	Chas. N. Cole				7
$\frac{2}{3}$			R. S. Douglass				7
4			D Melntosh	: 44	٠, ٠		5
5			L. A. Clendenin Chas. N. Cole. R. S. Douglass Geo. W. Schmidt. D. McIntosn. Geo. W. Graham M. T. Lindsey I. H. Allen. F. J. Foote Lillie Heath Sue W. Ford	* *	• •		10
6			M. T. Lindsey	• •	••		3
7	••		I. H. Allen	••	••		3
8			F. J. Foote			•••••	7
9 0	••		Sue W. Ford				6 5
1			L. A. Boice	••	**	· · · · · · · · · · · · · · · · · · ·	5
2	* *		Wm. F. Marker	••	••		5
3			Sue W. Ford L. A. Boice Wm. F. Marker Albert R. Lee	• •	••		2
4	••		Joe Morrow	4.	4.4		7.
5			E. W. Justus				5
67			U. B. EWalt				2
5	••	i	W B Hoffman	••	**		5 3
9			L. G. Lathrop		• •	•••••	3
0	••	1	J. J. Johnson	**	**		3
1			A. S. Golden	••	4.4		33
2			Elbert E. Pound	• •			3
3			Jas. I, Shaw				33 21
14			Albert R. Lee Joe Morrow E. W. Justus C. B. Ewalt Richward Uttenweiler W. R. Hoffman L. G. Lathrop J. J. Johnson A. S. Golden Elbert E. Pound Jas. T, Shaw Philip Schwehm C. V. Millar W. L. Pillsbury C. A. Kofold B. Zelle			••••••	2
6	••	į	W. L. Pillsbury		••		116
							27

·	Date.		To whom.	For what.         Photographs         Copper box         Printing         Moving piano         Lead, oil, etc         Lumber         etc         Caees, drawers, etc.         Lumber         Palleys         Kecord book and index         Plastering         Contract on plumbing         Belting, etc.         Brick and mason.         Hardware         Labor.         Motor.         Towel racks, etc         Rings for surveying Insts         Paper.         Oil         Advertising         Battery cells         Brass rods, etc.         Subschigton         Apparatus         Expenses         Hardware supplies         Postage         Lumber               Dosks         Stationery and books         Galigraph         Printing         Typewriter         Music         Locks, Keys. etc         Advertisement         Brass rols, etc         Pointing barn, etc	Amou
1	1896.				
9 8	Sept.	30	Thos. Naughton	Photographs	\$13
0			Golden & Kimball	Copper box	2
1			Champaign Co. Herold	Printing	73
2			D. H. Lloyde & Son	Moving piano	28
3			Watson Faulkner	Lead, oil, etc	7 162
1			W. W. Walls & Co	Lumper	162
5			J. C. Seugwick	Cooor dramore ate	93
6			Champaign Cabinot Co	Lumbor	94 68
8	• •		Norris Sash Pulley Co.	Pullove	11
9	* *		G E Marshall & Co	Record book and index	5
ŏ	• •		J. H. Bainum	Plastering	84
í l			Hubbard & Sons	Contract on plumbing	127
2	* *		Champaign Supply Co	Belting, etc.	6
3	4.4		Sheldon Brick Co	Brick and mason	. 6 66
4	44		Henry Trevett	Hardware	45
5	••		H. Swannell	Oils, etc	27
3	••		A. M. & L. A. Terwelliger	Hardware	27
7	••		M. T. Lindsey	Labor	19
3	* *		Jenny Electric Motor Co	Motor	162
	••		Robinson & Burr	Towel racks, etc	13
	••		Eugene Dietzgen & Co	Rings for surveying Insts	4
1			Albany Perfor'd Wpg. Paper Co	Paper	24
	••		Standard Oil Co	011	11
			Public School Publishing Co	Advertising	12
L)			Ohio Storage Battery Co	Battery cells	25
		- 1	Machinist Supply Co	Brass rods, etc	22
		- 1	E. H. Sargent & Co	Bottles, platinum wire, etc	5 1
			Pranklin Institute of Fa		19
	• •		A W Palmar	Exponence	19
			Francka & Schindler	Handware enphice	32
Ί.			F 1. Billo	Postago	46
	6.6		Isaac Fielding	1 Ustage	33
1		- 1	J Hemilton & Son	Lumber	54
	\$ 6	1	C A Besore		50
	• •	- 1	Jas M White	Expenses as architect.	86
	4.4		Eimer & Amend	Laboratory apparatus	35
			Gustav E. Stechert	Books.	187
			A. C. McClurg & Co	Stationery and books	84
	• •		Baker & Turnell	Caligraph	50
	••	- 1	The Gazette	Printing	10 100
		- 1	Wyckoff, Seamans & Benedict.	Typewriter	100
			Lyon & Healy	Music	8 10
			Yale & Towne Mfg. Co	Locks, Keys. etc	10
			Champaign Co. Ptg' Co	Advertisement	. 1
			Chas. H. Besly & Co	Brass rols, etc	6
		1	wm. Price	Painting barn, etc	162
1			A. G. Spaluing Dros	Pons, nests, etc	26 303
			Snon & Chamberlin	DUUR3	303
			Cleveland Twist and Drill Co	Drills	1
			Champoign Co. Herald	Printing, etc.	9
			Marine Iron Works	Blade for propeller	8
			Champaign Supply Co.	Fittings	15
1	• •		C & U. Electric St. Ry. Co	Motor, lights, gas	397
	* *		Odin Coal Co	Coal	· 369
	4.4		C. D. McLane	Services as architect	100
		ļ	S. W. Shattuck, Business Mgr.	Sundry items	49
	4.4		44 · · · · · · · · · · · · · · · · · ·	Expenses	63 147
	• •			Freight	147
	· · ·		Chem. Laboraty, Univ. of Ill	Supplies furnished departments	68
)(	Oct.	15	H. M. R. Construction Co	Contract for library building	12,529
			Library Bureau	Library stacks, floors, etc.	3,400
			vanauken Steam Specialty Co	Pressure regulators	20
	**	1	E. H. Freidricks	Silding easei	13
			Jones & Laugniin	steel	26
		1	Unas. A. Besore	Lumper	127
			Western Electric Co	Water to Jam 1 1907	11 125
			Datta & Sawara	Water to Jan. 1, 1897	125
			Chump Juan Co Hanald	Dinting Ooxes	11
1			Eimor & Amond	Chemical supplies	26
			Bigkor & White	A rehitest's commission	398
			I C Sodowick	Final navment on contract	1,267
			Q W Down	Mieroscopo	1,207

Date.		To whom.	For what.	Amo	
1896.					
Oct.	15	Electric Engineering Dent	Switches wire etc	\$1	
000	10	Chas H. Mears & Co	Lumber	18	
••	i	Robinson & Burr	Switches, wire, etc Lumber Plumbing, etc	18	
	i	N. W. Graham.	Expenses to Board meeting	1 5	
		J. E. Armstrong		1 2	
		Richard P. Morgan	•• ••	5	
		W, L. Pillsbury		1	
		E. Dayenport	Expenses	_	
		T. R. Leal	Hauling rubbish, etc	7	
		Champaign Co. Herald	Printing	2	
		Reunel & Esser Co	Drawing paper, etc		
	1	Fugene Distagen & Co	Dopon oloth	1	
••		Frank Burger	Considentia		
••		Righards & Co	Tubes		
••		Miles Newherry	Wages Sentember 1896	2	
••		W. H. Van Dervoort	Expenses. Hauling rubbish, etc. Printing Drawing paper, etc. Filters. Paper cloth. Corydalis. Wages, September, 1896. Expenses. Cuts. Coal. Poles Wire Level.		
••		Franklin Eng'g Electric Co	Cuts	1	
• •		M. M. Clark	Čoal.		
••		U. & C. Electric Street Rv. Co	Poles	1	
• •		Central Electric Co	Wire		
* *		Fauth & Co	Level	6	
••		Library Bureau	Oak case		
**		Fauth & Co. Library Bureau T. H. Trevett. Bausch & Lamb Optical Co.	level Oak case Scoops, hammers, etc Microscopes, etc	1	
		Bausch & Lamb Optical Co	Microscopes, etc. Subscription Stencil paper, etc. Telegrams Chemicals Basket ball outfit Art studies. Cut of building Quicksilver, etc. Thread screws. Iron pipe, etc. Books Setting trees. Books and stationery. Underpinning Vet'n'r'n Bldg., etc. Books	28	
		Western News Co	Subscription	I .	
		A. P. Cunningham & Son	Stencil paper, etc	1	
••		Western Union Telegraph Co	Telegrams		
		Norma Sanatora,			
		Drang & Co	A at atadiaa		
		Ponting Eng & Pub Co	Cut of building		
		Fuller & Fuller Co	Ouidesilver ate	4	
• •		E G Smith	Thread scrows		
••		Jas. B. Clowe & Son	Iron pine etc	3	
		A. W. French	Books	1	
• •		R. J. Price	. Setting trees		
••		A. C. McClurg & Co	Books and stationery	Ē	
6'6 6 9		Douglas Osborne	Underpinning Vet'n'ri'n Bldg., etc.	2	
		G. E. Stechert	Books		
		Ward Bros	•••	12	
		Fred Medart.	Dumb bells	1	
		Henry R. Worthington	Plugs and brass rings		
		Champaign Supply ()	Ningles mains of	i i	
• •		Luon & Potton Co		i	
		I Manz & Co	Zine plato		
		Chicago Carnet Co	Linoloum metting ate		
6.6		Smith Premier Typewriter C	Card holder	Ş	
		George B. Grant.	Calculating machine	1	
		Chapman Valve M'f'g Co	Valve	ė	
		James G. Biddle	Books Books Plugs and brass rings Hose Nipples, unions, etc Repairing plano. Zinc plate Card holder Calculating machine Valve Models Water samples Salary. September, 1896 Postage	3	
		Clarence Decker	Water samples		
**		John Doughty	Salary. September, 1896	1 8	
••		F. L. Bills	Postage.		
••		S. W. Shattuck, business m'g	"r Freight and express	4	
				1 3	
			Expenses. Pay roll of men, September, 1896 Pay roll of students, September, 1896		
			Pay roll of men, September, 1896	5	
Oat	91		Pay roll of students, September, 1896	1	
Oct.	31	A. S. Draper T. J. Burrill	Salary, October, 1896	1 5	
		S W Shottnak		29	
		Edward Snyder	•• •• ••		
		N C Ricker		10	
		Ira O Baker	··· ·· ······		
· • •		S. A. Forbes	••• •• •••		
		C. W. Bolfe	•• •• ••	1	
* *		D. McIntosh			
••		T. J. Burrill. S. W. Shattuck. Edward Snvder. N. C. Ricker. Ira O. Baker. C. W. Rolfe. D. McIntosh. A. N. Talbot. A. W. Palmer. F. F. Frederick. S. W. Parr.	•••	1	
• •		A. W. Palmer.	** **	1	
**		F. F. Frederick		1 1	
**		S. W. Parr. H. J. Barton Chas. M. Moss	•• ••		
		H. J. Barton	•• ••		
1 1.				1	

lo.	Date.		To whom.		For v	vhåt.	Amou
	1896.				:		
591	Oct. 8	31	D. K. Dodge L. P. Breckenridge David Kinley	Salary, Octobe	r. 1896		\$8
194			L. P. Breckenridge				160
93			David Kinley		••		: 18
94			Eugene Davenport Arnold Tompkins				8
95			Arnold Tompkins				150
96			A. P. Carman George W. Myers				18
97 98			George W. Myers		• •		14/ 13
$\frac{30}{99}$			H. E. Summers Edgar J. Townsend	••			13
ŏŏ	••		James M. White. Katharine Merrill W. O. Krohn. W. H. Van Dervoort. W. D. Pence.	• •	• •		14
Ōi	••		James M. White		٠.		125
02	••		Katharine Merrill	• •	••		108
03			W. O. Krohn	**	••		150
			W. H. Van Dervoort				13
05 06	••		W. D. Pence		• •		12) 100
00 07	••		T A Clerk		• •		100
08	••	- 1	B V Swenson	••	••		10
09	••		A H Daniels	• •	÷ •		100
10	• •		Percy F. Bicknell	• •	• •		12
11	• •		George D. Fairfield	••	• •		108
12	••		W. D. Pence. H. S. Grindley. T. A. Clark. B. V. Swenson. A. H. Daniels. Percy F. Bicknell. George D. Fairfield. Charles W. Tooke. Walter H. Jones. Henry H. Everett. Fred A. Sager.	• •	**		100
13			Walter H. Jones	• •	••		78
14			Henry H. Everett				110
15	• •		Fred A. Sager				91
16 17	۰.		William Esty	••	* *		100 125
18			Fred A. Sager. William Esty. Lewis A. Rhoades Frank Smith.		* *		100
19	**		C. D. McLane	••	÷ •		91
20	• •		C. D. McLane. P. G. Holden. J. E. McGilvrey. George H. Alden. J. D. Phillips. R. P. Smith. Helen E. Buttesfield	••	••		50
21	••		J. E. McGilvrey	••	••		100
22	**		George H. Alden		••		70
23			J. D. Phillips				90
24			R. P. Smith.				120
$\frac{25}{26}$			Helen E. Butterfield		• •		78 80
$\frac{20}{27}$	٠.		Robert A. Wood George A. Goodenough Oscar Quick Edward J. Lake. Ella H. Morrison George A. Huff.	• •	• •		80
28	• •		Oscar Quick	••	• •		75
$\overline{29}$	••		Edward J. Lake	••	• •		60
30	••		Ella H. Morrison	••	••		100
31	••		George A. Huff	**	• •		120
32			W. J. Fraser		•••		26
33		- P	Carlton K. Rose.	• •			70
34 35		1	Logonh C. Plein		• •	·····	80 41
35 36			S I Temple	• •	٠.		120
37			George A. Huff. W. J. Fraser Edwin H. Pierce Joseph C. Blair. S. J. Temple Adeline W. Rowley. George W. Schmidt. J. G. Mosier Robert C. Vial. C. F. Hottes.		• •		70
88	• •		George W. Schmidt.	* *	• •		70
39	••	,	J. G. Mosier	٠.	••		70
LO	••		Robert C. Vial	**	••		70
1		-1	C. F. Hottes	••	••		60
2			M. S. Ketchum	••			70
13			C. F. Hottes. M. S. Ketchum Paul Chipman. A. S. Patterson. D. H. Carnaham	••			70
14 15	• •		A. O. Fallersoll	4.4	••		$50 \\ 40$
6	••	1	D. H. Carnaham Harry Keeler W. C. Brenke C. B. Clark. A. R. Curtiss Henry Jones. J. H. Wilson Mary Maude Cole. Charles H. Garnett. James H. McKee Walter G. Campbell. George D. Hubbard. E. L. Milne S. F. Anderson.	· ••	• •		40 50
17	• •	ļ	W. C. Brenke	* *	• •		70
18	••		C. B. Clark	* *	• •		85
19	• •		A. R. Curtiss	• • •	• •		85
50	••		Henry Jones	• •	••		60
1	••	1	J. H. Wilson	* *	••		70
23		Ŀ	Mary Maude Cole	•••	••		40
34			James H. McKee	**	• •		40
5	• •	1	Walter G. Campbell	* *	" "		40
6	۰۰ .	1	Feorge D. Hubbard	* *	÷ •		40
7	••	lì	E. L. Milne	* <u>*</u>			40
81	• •	1	G. F. Anderson	••			10
91		1	S. L. anne S. F. Anderson. E. G. Howe N. A. Weston Lillie A. Clendenin Charles N. Cole.	••	* *		150
0	••		N. A. Weston	••	**		90
1		Ц	Lillie A. Clendenin	••	••		65
$\frac{2}{3}$		19	naries N. Cole	••			75
ið 14	••		W L. Pilleburg		••		75 116
5	••	1	R. S. Douglass W. L. Pillsbury. Jeorge W. Graham M. T. Lindsey				100
6	• •	li	M. T. Lindsev	• •	••		35
7	**	11	. H. Ailen	••			35

Date.		To whom.			For what.		
1896.			·····	1			
Oct.	1	F J. Foote.	r	Salary	October, i	1896	\$7
	-	Lillie Heate.			••••••••••••••••••••••••••••••••••••••		ě
••		Sue W. Ford			• •	•	8
••		L. A. Boice .			• •	• • • • • • • • • • • • • • • • • • • •	5
••		W. F. Marke	r	• • •	• •	• • • • • • • • • • • • •	5
••		Albert R. Le	e	'	• •	•	2
• • •		Joe Morrow.			• •		7
		E. W. Justus	• • • • • • • • • • • • • • • • • • • •				5
		C. B. Ewalt.	enweiler				
		D. McIntosh	• • • • • • • • • • • • • • • • • • • •				
		A. V. Millar.					
		Kichard Utte	enweller	••••			5
			an	••••			
		L. G. Launro	P	•••  •			
• •		Inmog T Sh	1	• •	• •		
٠.		A. S. Golden		•			
* *		Elbert E. Po	nweiler an p. aw aw aw aw st. st. arty	•	• •		
• •		Philip Schwe	ehm	•			2
٠٠		Heniy J. Eas	st	•	• •		4
••		John Doughe	erty	•	• • •		5
• •		C. A. Kafoid		•	• •	· · · · · · · · · · · · · · · · · · ·	10
**		Miles Newbe	rry	•	• • •	· · · · · · · · · · · · · · · · · · ·	2
••		Jeo. Gord <u>o</u> n	& Co	Bottles.			
••		Syracuse Tw	ist Drill Co	Measuri	ng machi	ne	3
••		Eimer & Am	end	Sulphid	e of iron,	etc	3
••		Baker & Ada	st erty rry & Co ist Drill Co mson 	Filters		ne etc	
		rne Gazette	<b></b>	Portion	o, etc	••••••	2
		J. C. Vaugna	ishing Co ler Publishing Č se & Co ifacturing Co Dunn n & Bros.	Flants, e		•••••••••••	2
* *		Senders Pub	liching Co	Advortio	s	• • • • • • • • • • • • • • • • • • • •	2
••		Prairie Farm	or Publishing (		,	•••••	
• •		Iames H Rid		Lumber	••	••••••	6
Nov.	14	D. McIntosh		Stove			1
	1.1	Rogers Manu	facturing Co	Ivory la	ncet		î
		Haussman &	Dunn	Veterina	ry instru	ments	
		C. J. Sabin	n & Bros	Hauling	coal, hay	, etc	
		F. K. Robeso	n & Bros	Matting,	etc		1
		Jhas. A. Bes	ore	Lumber.	• • • • • • • • • • • • •		6
		Mary A. Woo		Charts	. <b></b>	etc	
		Jydia M. Hai	rt	Drawing	s	• • • • • • • • • • • • • • • • • • • •	1
••		L. R. Leal	• • • • • • • • • • • • • • • • • • • •	Hauling	cinders,	et <b>c</b>	4
• •		Town Follo	· · · · · · · · · · · · · · · · · · ·	DOORS	• • • • • • • • • • • •		5
• •		Larry Faike	n & Bros ore				1 9
• •		Justav L. St Forrig Manuf	facturing Co	Flueser	anar	3	·····   "
• •		Jenry Heil (	hemical Co	Platinun	n wire, etc	•••••••••••••••••	4
		Cimer & Am	end	Apparat			3
••		Electric App	liance Co	Wire, et	G		4
••		Francke & S	chindler	Hardway	re		2
••	1	I. T. Wolcott	• • • • • • • • • • • • • • • • • • •	Stenogra	aphic wor	·k	4
••		W. A. Olmste	end liance Co chindler ed ler Co zgen & Co tt Hardware Co & Son,	Slated p	aper	·k	
••		fuller & Full	ler Co	Window	glass, ac	ids, etc	2
••		Lugene Diet:	zgen & Co	Repairir			
		Jrr & Locke	tt Hardware Co	Hardwa	re		4
		2. H. Lloyde	& Son,	Statione	ry, etc	• • • • • • • • • • • • • • • • • •	4
		C. H. Lander	mh Ontigal Co	Miarozza	mas	· · · · · · · · · · · · · · · · · · ·	6
		Diagta & Soll	lav Co	Return t	ran end w	eceiver	59
••		Library Rure	mb Optical Co. ley Co County Herald County Ptg. Co.	Century	stand		1
• •		The Globe Co	au	Oak case	Scand	••••••	2
••		Champaian	County Herald	Envelop	es		3
44 <sup>'</sup>		The Gazette		Printing	circulars	s, etc	43
4.4		Champaign (	County Ptg. Co.		special h	lanks	1
••		I. W. Rokke	r	Dating of	eirculars.		
••		Odin Coal Co	o	[Coal			50
••		Lice Machine	ery Co	Pulley			
••		watson Faul	kner	Hard oil	nnish	<b></b>	1
		nichoison Fi	ie Co	Files			4
4.4		L. H. Trevet	lalla Collegator	Hardwa	re, sash, c	orc	
		Srunswick-B	aike-Conender (	Dunliant	unge, etc	•••••••	5
* *		Lawron & Co	an Broodone' A	n Book		•••••••••••••••••••••••••••••••••••••••	
• •		Revis & Co	County Ptg. Co. Pery Co	Stakee	••••••	•••••	1
		ale-Townel	Manufacturing (	o. Kevs hl	anks etc		
4.6		The Toledo F	Bridge Co	Blue pri	nts		
• •		H. F. Watsor	1 & Co	Mill boa	rd		1
		111	C 13	- Annual	nonont		

о.	Date.	To whom.	For what.	Amour
	1896.	1	Thermometers         Expenses.         Contract on book stacks.         Contract on library building         Architects' commission.         Flanges, valves, plugs, etc.         Gate valves, etc.         Stone and limestone         Bolts, washers, etc.         Thermometers         Glazed paper         Apparatus         Base burner         Desk and mercury table         Inclined rope         Music supplies         Lamp, cord, wire, etc.         Aluminum         Subscription for 1896         Book.         Graduated level.         Advertisement.         Books, etc.         Brooms, soap, etc.         Fees, etc.         Repairing thermometers.         Subscription and advertisement.         Postage.         Printing catalogue         Expenses.         Expenses.	
46	Nov. 1	H Swannell	Thermometers	\$4
47	101. 1	A N Talbot	Expenses	13
48	••	Library Bureau	Contract on book stacks	1,800
49	••	H M R Construction Co	Contract on library building	11,049
50	••	Ricker & White	Architects' commission	321
51		James B Clow & Sons	Flanges valves plugs etc	52
$\tilde{52}$	••	Lunkenheimer Co.	Gate valves, etc	50
53	••	C. N. Clark & Co	Stone and limestone	23
54	••	Maltby & Wallace Co	Bolts. washers. etc	9
'ა5	••	Standard Therm. & Elec. Co.	Thermometers	6
56		Crane Co	Glazed paper	39
57		John D. Bangs & Co	Apparatus	7
58	••	V. W. Shuck	Base burner	30
59		Geo. W. Parker & Son	Desk and mercury table	76
<u>60</u>		Narragansett Machine Co	Inclined rope	9
61		Walter H. Jones	Music supplies	15
<u>62</u>	••	Central Electric Co	Lamp, cord, wire, etc	34
63		Pittsburg Reduction Co	Aluminum	6
34 35		Mational Geographic Society.	Subscription for 1896	1
65 66	••	A. W. French	Considerated laws	
50 57	••	Fauth & UU	Adventisement	
54 58	••	Whitell Tetur & Co	(homicals	16
59		W D Hoard & Co	Advertisement	10 7
10	••	A C McClnrg & Co	Rooks etc	318
11	••	E Henry	Brooms soan etc	53
$\overline{2}$	••	Robinson & Burr	Roos of	58
13	••	Schäffer & Budenberg	Renairing thermometers	58 2
4	••	The Illini	Subscription and advertisement	1
5	5.6	F. L. Bills	Postage	85
6	••	The Werner Co	Printing catalogue	619
7	Nov. 1	W. L. Pillsbury	Expenses.	8
8		J. E. McGilvrev	Expense, visiting high schools	8 35
9		Lydia M. Hart	Chart drawings	9
0	••	Richard P. Morgan	Expenses	16
1	••	S. A. Bullard		30
<b>2</b>		B. V. Swenson	Labor and material	7
33		T. R. Leal	Hauling cinders, etc	43
4		Jessie C. Grinnell	Assistant in art department	34
5		F. L. Bills	Postage	40
6		Wm. Price	Calcimining, hanging shades	254
7		Sheldon Brick Co	Brick, labor, etc	50
8		Hubbard & Sons	Pipe fittings, etc	38 113
9 0		Champaign Supply Co	Aspnaltum, pipe, etc	
ĭ		The Constant	Disting mote book of	88
ŝ	•••	D D Convoni Prog	Art atridiag	29
š	**	P. P. Caproni Bros Machinists' Supply Co Central Electric Co Frankford Steel Co S W Shattuck Business Mg	Wronahog bragg rodg ota	6
ă		Control Electric Co	Lown wire soakets etc	· 64
$\overline{5}$	••	Chasanaska & Objo Co	Pig iron	155
ĕ	* *	Frankford Steel Co	Forgings etc	19
7	**	S. W. Shattuck, Business Mg	r. Sundry items	108
8	:•	i i i i i i i i i i i i i i i i i i i	Freight	134
9	••		Rheostadt Printing, note book, etc. Art studies. Wrenches, brass rods, etc. Pig iron Forgings, etc. Tsundry items Freight. Pay roll, men, October, 1896 Stalary, November, 1896	549
0	••	•• •• ••	" students, October, 1896	246
1	Nov. 3	A. S. Draper. T. J. Burrill S. W. Shattuck Edward Snyder N. C. Ricker Ira O. Baker. S. A. Furbas	Salary, November, 1896	583
2		T. J. Burrill		225
3		S. W. Shattuck		
1		Edward Snyder		166
5		N. U. Kicker		191
6		Ira O. Baker.		183
3		D. A. Fordes.		83
5		D. W. Golfe		175
9	••	N Talbot		50
0	••	A W Palmar		175 175
2		Ira O. Baker. S. A. Forbes. U. W. Kolfe. D. McIntosh. A. N. Talbot. A. W. Palmer. N. F. Frederick. S. W. Parr. H. J. Barton. C. M. Moss. D. K. Dodge.		175
2	••	S W Pam		175
4	••	H J Barton	••• •• •••	166
5	••	C M Moss	•• ••	175
6	••	D K Dodge	•• •• ••	83
7	••	L P Breckenridge	•• •• ••	166
8	••	David Kinley		187
$\tilde{9}$	••	Eugene Davenport		87
ŏ		Arnold Tompkins		150
ĭ	••	C. M. Moss. D. K. Dodge. L. P. Breckenridge David Kinley. Eugene Davenport. Arnold Tompkins. A. P. Carman. G. W. Myers. H. E. Summers.		187
2	••	G. W. Myers		145
3		1		137

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。	1896.		1			
324	Nov. 30	E J. Townsend	Salary,	November,	1896	\$137
40		E. B. Greene Jas. M. White Katharing Merrill		••		141
26		Jas. M. White			· · · · · · · · · · · · · · · ·	125
27		Katharine Merrill				108
28		Katharine Merrill. Wm. O. Krohn. W. D. Pence. H. S. Grindley . T. A. Clark. B. V Swenson. A. H. Daniels Percy F. Bicknell Geo. D. Fairfield Chas. W. Tooke. Walter H. Jones. Henry H. Everett Fred A. Sager.				150
29		Wm. H. VanDervoort.			•••••	137
30		W. D. Pence			••••	125
31 32		T A Clark		••		100
92 33		B V Swongon	1	••		125 100
34 34		A H Daniele				100
35		Percy F Ricknell		4 1		129
36		Geo. D. Fairfield	••	• •		108
37	••	Chas. W. Tooke	· · ·	* *		100
8	••	Walter H. Jones	••	• •		75
39		Henry H. Everett	••	••		116
lΟ	••	Fred A. Sager	••	••		91
1	••	Wm. Esty. Lewis A. Rhoades Frank Smith	•••	• •		100
<b>2</b>		Lewis A. Rhoades				125
3		Frank Smith				100
4		C. D. McLane. P. G. Holden				91
15		C. D. McLane. P. G. Holden J. E. McGilvrey. Geo. H. Alden. J. D. Phillips. R. P. Smith. Helen E. Butterfield. Robt. A. Wood Geo. A. Goodenough Oscar Quick. Edward J. Lake. Ella H. Morrison Geo. A. Huff. W. J. Fraser. Carlton R. Rose. Edwin H. Pierce Joseph C. Blair S. J. Temple. Adeline W. Rowley. Geo. W. Schmidt. J. G. Moster. Robt. C. Vial. Chas. F. Hottes. M. S. Ketchum Paul Chimman.				50
16		J. E. McGilvrey			••••••••	100
17		Geo. H. Alden				70
18 19		P P Smith		• •		90
19 50	• •	Holon F. Buttonfold	· · ·	• •		
51	••	Robt A Wood		••		8
$\mathbf{\tilde{2}}$		Geo. A. Goodenough		• •		8
53	••	Oscar Quick		• •		7
54	4.4	Edward J. Lake		**		60
55		Ella H. Morrison		••		60 100
56	••	Geo. A. Huff		••		120
57	••	W. J. Fraser		••		3
58	••	Carlton R. Rose	••	**		70
59	••	Edwin H. Pierce	••			80
30		Joseph C. Blair		• •		41
51		S. J. Temple				120
32		Adeline W. Rowley				70
33		Geo. W. Schmidt				70
4		J. G. Mosier				70
55	••	Chan E Hattan				70
36 37	• ••	M S Kotehum			·····	70
8	••	Paul Chinmon		• •		70
;9	••	A S Pattorson		• •		50
10		D H Carnahan		**		
ĭ	••	Harry Keeler				
<b>2</b>	••	W. C. Brenke		••		70
73	••	C. B. Clark	••			8
4	••	A. R. Curtiss				8
15	••	Henry Jones		••		60
6	•••	Chas. F. Hottes M. S. Ketchum Paul Chipman. A. S. Patterson. D. H. Carnahan Harry Keeler. W. C. Brenke. C. B. Clark A. R. Curtiss Henry Jones J. H. Wilson. Mary Maude Cole. Chas. H. Garnett. Jas. H. McKee Walter G. Campbell Geo. D. Hubbard Edward L. Milne.		* *		60
7		Mary Maude Cole	••			
8		Chas. H. Garnett				4(
19		Jas. H. McKee				40
30		walter G. Campbell			· · · · · · · · · · · · · · · · · · ·	4(
31		Geo. D. Hubbard				4(
$\frac{32}{32}$		Edward L. Milne				4(
33 34		Geo. F. Anderson Edward G. Howe				10
4 5		N A Westen				150
6		N. A. Weston Lillie A. Clendenin Chas. N. Cole.		• •		68
7	••	Chas N Cole				7
8		R. S. Donglass		• •		7
9	••	W. L. Pillsbury		••		110
ŏ	••	Geo. W. Graham	••			
1	••	M. T. Lindsev	••	••		
$\hat{2}$	••	I. H. Allen	••	**		3
3	••	F. J. Foote		••		7
4	••	Lillie Heath				6
5	••	Sue W. Ford	••	••		50
)6	••	L. A. Boice	••	••		50
97	••	Chas. N. Cole. R. S. Douglass. W. L. Pillsbury. Geo. W. Graham M. T. Lindsey I. H. Allen F. J. Foote. Lillie Heath Sue W. Ford L. A. Boice. Wm. F. Marker. Albert R. Lee. 'oe Morrow.	••	• •		50
98	••	Albert R. Lee	••	• •		20
<del>)</del> 9	••	oe Morrow		• •		1 7

Date.		To whom.	For what.	Amou
1000	1896. 1896. 1896. 1897. 19			1
Nov.	30	E W Instus	Salary November 1896	\$50
	00	C. B. Ewalt		20
••		D. McIntosh	66 66 F	
• •		C. V. Millar	66 e.6	60
•••		Richard Uttenweiler		50
		Henry J. East		40
		W. R. Hoffman	·····	37
		L. G. Lathrop	** ** ***	32
• •		Jas T Show	6.6 6.6 ·····	
		A. S. Golden	** **	
* *		E. E. Pound	** **	32
••		Philip Schwehm	66 66	27
••		John Doughty		50
••		S. W. Shattuck	Salary, 3 months, to Dec. 1, 1896	150
		L. P. Breckenridge	"ton Norrombon 1906	62
		Miles Newborry	tor November, 1896	20
• •		Orange Judd Co	Advertisement	
••		J. T. Wolcott	Typewriter	
		Chas. A. Cox	Bird's eye view of University bld	gs = 20
••		W. H. Lowdermilk & Co	Book	8
••		Jerome, Thebouville, Lama & Co	Advertisement	28
		Golden & Kimball	Tin, galvanized iron and labor	71
**		Dwight Populal	Drills	57
Dee	15	The H M R Construction Co	Contract library building	8 585
Dec:	ro	The B. F. Sturtevant Co	Contract heating library building	
• •		Ricker & White	Architects' commission	277
• •		Chicago Bridge and Iron Co	Contract, stand pipe	519
••		Charles T. Wilder	Blue prints, etc	72
		Western News Co	Subscriptions	288
		George W. Myers.	Books	111
		Laward J. Nolan, treasurer	Card angon ate	
٠.		Brunswick Balke-Collender Co.	Oak tables	32
٠.	1	Orr & Lockett Hardware Co	Door checks, etc	15
••		Mittendorf & Kiler	Waste baskets, tables, etc	
• •		Price & Sandford.	Hot-water bottles	.: 2
		Charles A. Besore	Lumber	45
		A. P. Cunningham & Son	Labels, bottles, etc	14
••		Walker & Mulliken	Rug	5
••		T B Lool	Grading ata	58 78
• •		J. D. Green	Cornice and material for standpi	pe 21
••		G. C. Willis	Silk. etc.	7
• •		W. A. Olmsted	Slated paper	1
••	1	F. K. Robeson & Bros,	Canvas, etc	2
		H. P. Harris.	Mimeograph work	20
••	(	O. H. Lyon	Heller	50 c. 41
		J E Armstrong	Expenses	C. 41 17
• •		N. W. Graham.	HAPOHOUS	
• •		Alex. McLean.	**	. 49
••		S. A. Bullard	<b>44</b>	88
••		N. B. Morrison	······································	46
		Isaac S. Raymond	• •	40
••		S. M. Inglis.		·· 41 ·· 110
• •		A S Draper	" 6 months to Nov 20 19	96 130
• •		Helen E. Butterfield	(1 0 11011(115, 60 1101, 30, 10	
<b>* *</b>		H. H. Everett	**	
• •		Edward G. Howe	4.4	11
••		J. E. McGilvrey.	···	16
••		D. H. Lloyde & Son	Piano scarf	4
• •		Hubbard & Sons	Nails, keys, etc	6
		J. U. Vaugnan.	Seeas, etc.	
		I ale & Iowne Manufacting Co.	neutiling keys	•• ] ] ]
		The Karicher Grocery Co	Jars. etc.	
• •		A. B. Dick & Co.	Mineograph	15
••		Alex. Nielsen	Necturies	
• •		Liquid Carbonic Acid Mfg Co	Acid	
••		Riley Jewelry Co	Piano scarf. Nails, keys, etc. Seeds, etc. Refitting keys. Typewriter ribbons Jars, etc. Mineograph Necturies. Acid. Glass cutter. Brass cutter. Brass cutter. Brass cutter. Goal. Floor brushes, etc.	3
••		Diamond Flask and Clamp Co.	Brass castings	3
· · · ·		W. H. Kemp Co.	Aluminum	
	- 1	Oam Coal Co	<u>U</u> 081	1,161 12

0.	Date.		To whom.	For what.	Amou
1	1896.	i			1
179 <sup>i</sup>	Dec.	15	Montgomery Ward & Co	Apparatus	\$3
079	Dec: .	Ļ,	Adolph Hempel	Work	8
80			Potty & Sayong	Sholwog of	92
81	• •		Brown & Sharpa Mfg Co	(Frinding fixtures eta	43
82			Charles F Harlow & Co	A rhor press	43
83	4.4		C H Groop & Co	Spon flooks	12
84			Weston Floatricel Inst. Co.	Voltmotor	25
85			F F Logof Mfg Co	Flogh elemnu	20
86			Creashy Steem Gauge and V. Co.	Indicator and fittings	8 35
87	• •		Crosby Steam Gauge and V. Co	Closta arriteboa ete	13
88	٠.		John Corner	Glass invo	10
89	* *		MaIntoch Pottory and Ont'l Co	Tubos oto	6
90			Iones & Longhling	Stool	2
91			Jones & Laughlins Thomas Wright & Son	Fittings for stand nine	31
92			Ino () Balzar	Book	3
93			Wugono Diotrgon & Co	Transing aloth	15
94			Powhoster Optical Co	Tracing cloth	15
95		1	Runlington Vanation Dlind ()	Dlinda	10
			Burlington venetian bind Co.	Diffius	16
96	• •		Chicago Compet Co	Linoloum	10
97			Houghton & Miggin On	Tubes, etc Steel Fittings for stand pipe Book Tracing cloth Trays, frames, etc Blinds Dark lanterns Linoleum	2
28			A (1 Methung & Co	Pools and station	25
99			A. O. MCClurg & Co	books and stationery	421
20		- 1	G. L. Stechert.	D . 1	116
)1	••		Am. Society of Mech. Engin'rs	Steel	5
)2			Grand & Whitney Co	Flugs and pulley	ğ
)3			Grane & Co.	blue print paper	36
)4		1	Medart Patent Pulley Co	Apparatus	0
05			Guilek Tailoring Co	Cloths, etc	6
06			M. Lowenstern & Son	Linoleum, mats, etc.	34
)7			Scovill Mig Co	vaccine boxes	7
8			E. R. GIDDS	Guinea pigs	6
)9		1	Miller Harness Co	Straps	5
10			Henry Trevett	Hardware, etc	224
11			Electric Appliance Co	wire	5
12			Medart Patent Pulley Co	Sharting, etc	9 8
13			Charles A. Schleren & Co	Belting	8
4	••	- 1	Central Electric Co	Lamp cord, etc	3
5		- 1	School News and Prac. Educ't'r	Advertisement	25
6			Columbia Eng. and Electro. Co	Half-tone of buildings	16 20
7		- 1	J. W. Butler Paper Co	Paper	20
8			whitall. Tatum & Co	Jars	5
19			mayme Hill	Playing plano, November, 1896	14
20		}:	L. P. Breckenridge	Expenses	62
1	••		Isaac Fielding	Postage	20
2			$\mathbf{F}$ , $\mathbf{L}$ , Bills,,	Labor and material to Sept. 30, 1896.	30
3		- 1	Mechanical department	Labor and material	159
4		- 1	Repair shop	to Sept. 30, 1896.	193
5			Repair snop		331
6			w. O. Kronn	Expenses	37
7	**		A, n. Andrews & Co	nyioplate	6
8	**		1 WILL UITY Electric Co	Electric wiring, etc.	191 6
9			D. Appleton & Co	Subscription	6
0			Bevis & Co	Lumper, etc	3
1	• •		Luward Bush	Underling samples	2
$\frac{2}{2}$	**		Charles A Base Co	naru oli, etc	19
3	• •	- ]!	Unaries A. Besore	Cement, etc	11
4	• •	]:	runer & ruller Co	Acius, corks, etc	95
5	• • •		Lenyon News and Post'l Sub.Co	luking pads	2
6			nampaign Supply Co	ripe and nittings, etc	41 11
7	•• •		D. n. Lloyae & Son	Chamical annualise	11
8	••	H	Price & Sandford	Onemical supplies	.7
9	• •		Rounson & Burr	Dange boller, etc	31
0	• •	1	a. S. Wilder	Drayage	· 39
1		1	Unampaign Uo. Heraia	Frinting programs, etc	57
2		3	D. D. Phillips	writing applemas	1
3		1	Limer & Amena	rubes, etc	48
4		٩	J. M. White	Architect's services and expenses.	100
5			w. n. Meeks.	reed for Guinea pigs	4
6			5. w. Shatluck, business mgr.	Lxpeuses	22
7		- 13	5. W. Snattuck, business mgr.	Sunary items	<b>9</b> 6
8			o. w. Snattuck, business mgr.	rreight and expressage	86
9	••		5. w. Shattuck, business mgr.	ray-roll of men, November, 1896	448
0		1	5. w. Shattuck, business mgr.	Labor and material Labor and material to Sept. 30, 1896. Expenses. Hyloplate. Electric wiring, etc. Subscription Lumber, etc. Collecting samples Hard oil, etc. Acids, corks, etc. Inking pads. Pipe and fittings, etc. Eng'g index, etc. Chemical supplies. Range boiler, etc Drayage Printing programs, etc. Writing diplemas Tubes, etc. Architecr's services and expenses. Freed for Guinea pigs. Expenses. Sundry items. Freight and expressage Pay-roll of students, November, 1896 Salary. December, 1896	217
лL	Dec.	31 2	A. S. Draper	Salary, December, 1896	$\frac{583}{225}$
al -		- [1	L. J. Burrill		225
2	··				
2 3 4	·· · ·		S. W. Shattuck Edward Snyder	** **	$\begin{array}{c} 166 \\ 166 \end{array}$

o. Date.		To whom.		Amoun		
1896		Ira O. Baker				
6 Dec	31	Ira O. Baker	Salary,	December,	1896	\$183
8		C W Bolfo			•••••	83 175
9		D MeIntosh		* *	•••••	50
0 **		A. N. Talbot				175
1 ''		A. W. Palmer	••	••		175
2		F. F. Frederick	••	••		158
3		S. W. Parr				175
4		H.J Barton			•••••••••	166
5		D Z Dodgo			·····	175
7		L P Breekenridge		• •		166
8 **		David Kinley	••	••		187
9 **		Eugene Davenport	••	• •		187 87
0		Arnold Tompkins	• •	••		150
1		A. P. Carman		••	· · · · · · · · · · · · · · · · · · ·	187
2		Geo. W. Mvers			·····	145
$\begin{array}{ccc} 3 & \ddots \\ 4 & \ddots \end{array}$		H. E. Summers			•••••	137
5 **		E B Groopo			•••••	137
6 **		Jas. M. White	••			141 125
7 **		Katharine Merrill		• •		108
81 **		Jas. M. White Katharine Merrill. Wm. O. Krohn W. D. Pence H. S. Grindley T. A. Clark B: V. Swensen A. H. Daniels Percy F. Bicknell Geo. D. Fairfield Chas. W. Tooke Walter H. Jones. Henry H. Everett. Fred A. Sager. Wm. Esty Lewis A. Rhoades. Frank Smith C. D. McLane P. G. Holden J. E. McGilvrey Geo. H. Alden. J. D. Phillips. R. P. Smith. Helen E. Butterfield. Robt. A. Wood. Geo. A. Goodenough. Oscar Quick. Edward J. Lake.	••	• •		150
9		Wm. H. Van Dervoort		**		
0		W. D. Pence		••	• • • • • • • • • • • • • • • • • • • •	120 100
1		H. S. Grindley				100
2		T. A. Clark			· · · · · · · · · · · · · · · · · · ·	12
3		A H Duniels		• •		100
5 **		Perev F Bicknell		* *		100 129
6 ''		Geo. D. Fairfield	• •	• •		108
7		Chas. W. Tooke	••	• •		100
8		Walter H. Jones	••			71
9		Henry H. Everett				110
		Fred A. Sager				9
$\frac{1}{2}$		Wm. Esty				100
3		Frenk Smith			·····	12 10
4		C. D. McLane		• •		9
5 ''		P. G. Holden		• •		50
6 **		J. E. McGilvrey		••		100
1		Geo. H. Alden		••		70
NI I		J. D. Phillips				90
9		R. P. Smith			••••••••••	120
1		Robt A Wood		• •		7
2		Geo. A. Goodenough		" "		8
$\frac{2}{3}$		Oscar Quick. Edward J. Lake. Ells H. Morrison.		٠٠		7
4		Edward J. Lake		••		60
D)		Elle H. Morrison				100
0		Geo. A. Huff				120
1		W. J. Fraser.		••		3
8		Edwin H Pierce		••		70
0 **		Edward J. Lake. Ells H. Morrison Geo. A. Huff Carlton R. Rose. Edwin H. Pierce Josoph C. Blair. S. J. Temple. Adeline W. Rowley Geo. W. Schmidt. J. G. Mosier Robert C. Vial. Chas. F. Hottes M. S. Ketchum Paul Chipman. A. S. Patterson D. H. Carnaham Harry Keeler. W. C. Brenke. C. B. Clark A. R. Curtiss Henry Jones J. H. Wilson Mary Maude Cole. Chas H. Garnett. Jas. H. McKee Walter G. Campbell Geo. D. Hubbard. Edward L Milne. Geo. F. Anderson	••	• • •		4
1 **		S. J. Temple	••	**		120
2		Adeline W. Rowley		••		70
3		Geo. W. Schmidt		••		70
4		J. G. Mosier				70
0		Robert C. Vial				. 7
6		M S Kotchum				60
2 . * *		Paul Chipman		••		7
91 **		A. S. Patterson	••	· · ·	·········	5
0		D. H. Carnaham	••	• •		4
1 **		Harry Keeler		••		5
2		W. C. Brenke		**		70
3		U. B. Clark				8
4		A. R. Curtiss				8
6 · ·		I H Wilson		••	•••••••	60 2 61
7 **		Mary Maude Cole		••		4
8		Chas H. Garnett.	••	•		. 40
9		Jas. H. McKee	••	• •		: 40 40
0		Walter G. Campbell		• •		40
1		Geo. D. Hubbard		••		40 40 10
2						

No.	Date.		To whom.	For what.	Amoun
	1896.			Salary, December, 1896 Salary, December, 1896 Salary, December, 1896 Salary, December, 1896 Lantern slides Tees Copies of proceedings Heating collections Copies of proceedings Copies of proceedings Copies of proceedings Class material furnished Chemicals, etc. Subscription Books and stationery. Class material furnished Chemicals, etc. Services to March 15. 1897. Toilet paper. Chain tapes Chemical apparatus, Observer s chair. Objectives Screen, etc. Latches, etc. Subscriptions Blue prints of bridges Copies of transactions. Copies of trans	
134	Dec:	31	Edward G. Howe	Salary, December, 1896	\$150
L135 L136			N. A. Weston. Lillie A. Clendenin	· · · · · · · · · · · · · · · · · · ·	90 (
137	• •		Chas. N. Cole	•• ••	75 (
138	**		R S Douglass	••• •••	75 (
139			W. L. Pillsbury	** **	116 (
140		•	Geo. W. Graham		100 (
141 142			M. T. Lindsey	** **	35 ( 35 (
142	••		F I Foote	•• ••	75
144	••		Lillie Heath	•• ••	60 0
145	• •	i	Sue W. Ford	•• ••	50 0
146	• •		L. A. Boice	• • • • • • • • • • • • • • • • • • • •	50 (
147			W. F. Marker		50 (
.148 .149			Albert R. Lee	Ne	20 0
150	••		E W Justus	** ** ***	75 (
151	••		C. B. Ewalt	· · · · · · · · · · · · · · · · · · ·	20 0
15 :	••		D. McIntosh	·· ·· ··	50 0
153	••		C. V. Millar	•• ••	60 (
154			John Doughty	•• ••	50 (
$155 \\ 156$			U. A. KOIOIG		100 (
157	••		Lydia M Hart	Drawings	13
158	••		Richard Uttenweiler	Salary, December, 1896	50
159	• •		Henry J. East		40 (
160	••		W. R. Hoffman		. 37 (
161			L. G. Lathrop		32 (
$\frac{162}{163}$	••		J. J. Johnson	** **	32 ( 32 (
$163 \\ 161$			A S Golden	•• • ••, ••••	32
165			Elbert E. Pound	** **	32
166	••		Philip Schwehm	•• ••	27
167			J. Carbutt	Lantern slides	27 (
168			Champaign Supply Co	Tees	1 1
169 170			J. B. Dickson	Copies of proceedings	
171	• •		Control Floatria Co	Wire and real	
172	••		Champaign County Herald	Letter heads, etc.	7 (
173	••		Wm. W. Payne	Subscription	2 0
174			A. C. McClurg & Co	Books and stationery	241
175			Gustav E. Stechert		156
176			Frank Smith	Class material furnished	5
$177 \\ 178$			Rohingon & Burr	Repairing blast torches	16 5
179	••		Fuller & Fuller Co	Chemicals, etc.	3
180	••		Price & Sandford	Boxes	30 0
181			C. & U. Phoenix Tel. Co	Services to March 15, 1897	45 (
182			A. P. Wp'g Paper Co	Toilet paper	24 (
183		į	W & L. E. Gurley	Chain tapes	21
$     184 \\     185   $	••		Bimer & Amena	Observer a abair	102
186	••		Bausch & Lomb Ontical Co	Objectives	<b>5</b> 9
187			Mittendorf & Kiler	Screen. etc	5
188	••		V. W. Shuck	Latches, etc	4
189			T. A. Clark	Expenses	14 8
190			The Western News Co	Subscriptions	13
$\frac{191}{192}$			Shuitz Bridge and Iron Co	Blue prints of bridges	11
$192 \\ 193$			S F Patterson secretary	Copies of proceedings	4
$193 \\ 194$	• •		Chas. T. Wilder	Blue prints,	41
195	••		Public School Publishing Co	Advertisement to December 31. 1896	12
196	••		J. H. Cook	Apparatus	5
197			E. H. Renner Bros	Hauling coal	32
198			Chas. A. Schieren & Co	Belting, etc	9
199 200			5. W. Shattuck, business mgr	Freight and express	64 11
	1897.		TAOLOH EHELY WHEELCO	minerà ancers	1 11
201	Jan.	15	H. M. R. Construction Co	Contract library building	7,782
402		20	B. F. Sturtevant Co	Heating contract library building	$7,782 \\ 417$
203			Ricker & White	Architects' commission	204
204			U. & C. Electric St. Ry Co	Gas to Dec. 24, 1896: motor, Jan. 1	717
205			Women & Swass	Control tulogeon's str	637
206 207			Clemens Riefler	Contract library building Heating contract library building. Architects' commission Gas to Dec. 24, 1896: motor, Jan. 1 Coal Uontract telescope, etc Astronomical clock. Hardware, etc. Slate.	2,000
208	••		Bullard & Gormley Co.	Hardware. etc	260 11
209	1		TTT A Ola da l	01-4-	1 1

No.	Date.	To whom.	For what.	Amount
	1897.		For what. Oak tables, etc. Chemicals. Advertisement. Glass. Bunting. Printing, etc. Apparatus for cement test, etc Plugs copper wire, etc. Expenses. Half-tones, etc. Wall tent and fixtures Books and stationery. Books and stationery. Blanks. Printing. Wrenches, tubing, etc. Machine cotton waste. Brass castings. Services of ram. Creamer. Lumber. Playing piano, December, 1896. Rubber tubing, chemicals, etc Photographs. Hay, etc. Pipe, and fittings, etc. Grading, hauling, etc. Pipe, etc. Paints, lead, etc. Towleling, cheese cloth, etc. Expenses. Services to December 15, 1896. Mats and dusters. Water there months to April 1, 1897. Expenses. Matriculation certificates. Section of boiler. Hardware. Paints, oils, putty, etc. Books and supplies. Reading telescope, etc. Silver tube. Thermometer, etc. Pipe, etc. Postage Sundry items. Pay-rolls of men, December, 1896 Sundry items. Pay-rolls of men, December, 1896 Pay-rolls of men, Decembe	
1210	Jan. 15	Geo. W. Parker & Son	Oak tables, etc	\$111 2
411		Neperia Chemical Co	Chemicals	4 2 6 0
$1212 \\ 1213$		R. I. Morrison	Advertisement	60
1213	••	F K Robeson & Bros	Bunting	3 (
1215		Champaign County Printing Co	Printing etc	54 2
1216	••	Oscar A. Richter	Apparatus for cement test, etc	54 2 9 (
1217	**	Chas. H. Besly Co	Plugs copper wire, etc	9 2 26 6
1218	••	E. Davenport	Expenses	26 6
1219		J. Manz & Co	Half-tones, etc	74 5
$1220 \\ 1221$	• •	A C McClurg & Co	Rooks and stationery	17 8 95 8
222	••	G E Stechert	Books	198 6
1223	" "	T. H. Castor & Co	Encyclopedia	4 6
(224)	••	Henry Trevett	Hardware, etc	93 0
225	••	C. V. Millar	Petty expenses	37
1226		L. P. Breckenridge	Blue prints	8 3
227		M. M. Buck Mfg Co	Wheelbarrow	10 8
1228 1229	••	I H Cook	Motorials	15 7 2 5
1230		J W Butler Paper Co	Paner	48
231	••	Am. Archt & Build'g News Co	Subscription to December 31, 1897.	25 (
332	••	A. P. Cunningham & Son	Drugs, etc	2 3
233	* *	Champaign County Herald	Blanks	35
234		The Gazette	Printing	35 1
235	4.4	Machinist Supply Co,	Wrenches, tubing, etc	7 6
$\frac{236}{237}$	••	Frank E. Fitts Mig & Supply Co	Machine cotton waste	16
238		E O Vailo	School directory	10
239	••	J. E. McGilvrev	Expenses visiting schools	32 2
240	* *	George Allen	Services of ram	32 2 15 0
241	**	Vermont Farm Machine Co	Creamer	22 9
242		C. A. Besore	Lumber	101 7
243		The Champaign Times	Printing	87
244		Rayme A. Hill	Playing plano, December, 1896	14 (
$\begin{array}{c} 245 \\ 246 \end{array}$		Thes Neughton	Photographs	16 6 15 0
247		H. McFadden & Bro	Hav etc	2 2
248		Hubbard & Sons	Hardware, etc	$7\bar{6}$ 1
249	**	J. H. Coolidge	Cows and heifers	300 0
$\frac{250}{251}$	••	Robinson & Burr	Pipe and fittings, etc	$     38 1 \\     37 1 $
$251 \\ 252$		T. R. Leal	Grading, hauling, etc	37 1
253		L Hamilton & Son	Pipe, etc	72
254		Dellenbech & Boyle	Moet	4 7 5 2
9cel		Knowlton & Bennett	Paint, lead, etc.	1 3
256	• •	G. C. Willis	Towleling, cheese cloth, etc	$\overline{9}$ $\overline{2}$
257	••	A. N. Talbot	Expenses	69
258		C. & U. Phoenix Tel. Co	Services to December 15, 1896	3 5
$259 \\ 260$		Eichberg & Baer	Mats and dusters	17 5
$\frac{260}{261}$		L O Baker	Water three months to April 1, 1897.	$125 \\ 2 \\ 6$
262		Pantagraph P & S Co	Matriculation certificates	19 5
263		J. D. Carmondy	Section of boiler.	27 0
264	* *	T. H. Trevett.	Hardware	38
$265 \\ 266$	••	William Price	Paints, oils, putty, etc	50 8
266	•••	D. H. Lloyde & Son	Books and supplies	10 2
267		Kandler & Gaertner	Reading telescope, etc	67 8
$\frac{268}{269}$	• •	Eimer & Amend	Silver tube	34
$\frac{269}{270}$	• •	James B. Clow & Son	Pipe etc	$   \begin{array}{c}     20 \\     45 \\     7   \end{array} $
271	**	F I Bills	Postage	54
272	••	Isaac Fielding	10300000	87 0
273	••	S. W. Shattuck, business mgr.	Sundry items	63 0
$274^{\circ}$	* *	S. W. Shattuck, business mgr.	Pay-rolls of men, December, 1896	387 8
275	· · ·	S. W. Shattuck, business mgr.	students, "	172 1
276	Jan. 30	A. S. Draper	Postage Sundry items Pay-rolls of men, December, 1896 Salary for January, 1897	583 8
$\frac{277}{278}$		T. J. Burrill		225 (
$\frac{278}{279}$	•••	N C Ricker		$   \begin{array}{c}     166 \\     191 \\     6   \end{array} $
280	••	I. O. Baker		183 8
	* *	S. A. Forbes.		83 3
281				
281 282	••	C. W. Rolfe	•• •• ••	175 0
281 282 283 284		A. O. Daker C. W. Rolfe. D. McIntosh A. N. Talbot A. W. Palmer.		175 0 50 0 175 0 175 0

•	Date.		To whom.		For wha	ıt.	A
1	1897.					·	
:L	Jan.	30	F. F. Frederick. S. W. Parr. H. J. Barton Chas. M. Moss. D. K. Dodge L. P. Breekenridge David Kinley	Salary for	Tannary	1897	
1	, ап.	90	S W Parr	Salary, 101	January,	1001	
			H I Barton	••	* *		
í.			Chas M Moss	••	• •	•••••••••••	
	••	•	D K Dodge	••	* *		1
1			L P Breekenridge				
			L. P. Breckenridge David Kinley Eugene Davenport. Arnold Tompkins A. P. Carman. Geo. W. Myers H. E. Summers. Edgar J. Townsend. E. B. Green. James M. White Katharine Merrill W. O. Krohn.	••			
			Fugene Devennert		* *		
			Amold Tempking		• •		
			Arnola Tompkins	••			
			Coo W Myong				1
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	4.4		Edgen I Wompgond			•••••	
		1	E B Chart			•••••	
			L. D. Green				Į.
1			James M. White				
			Katharine Merrill			·····	
			W. O. Krohn		••		1
			<ul> <li>N. O. Krohn.</li> <li>W. O. Krohn.</li> <li>W. D. Pence,</li> <li>H. S. Grindley.</li> <li>T. A. Clark</li> <li>B. V. Swenson.</li> <li>A. H. Daniels.</li> <li>Percy F. Bicknell.</li> <li>Geo. D. Fairfield</li> <li>Chas. W. Tooke</li> <li>Walter H. Jones.</li> <li>H. H. Everett.</li> <li>Fred A. Sager</li> <li>William Esty.</li> <li>Lewis A. Rhoades.</li> <li>Frank Smith</li> <li>C. D. McLane.</li> <li>P. G. Holden</li> <li>J. E. McGilvrey.</li> <li>Geo. H. Alden</li> <li>J. D. Phillips.</li> <li>R. P. Smith.</li> <li>Helen E. Butterfield.</li> <li>Rood. A. Goodenough.</li> <li>Oscar Quick.</li> <li>Edla H. Morrison</li> <li>Geo. A. Huff.</li> <li>W. J. Fraser.</li> <li>Carlton R. Rose.</li> <li>Edward J. Lake.</li> <li>Edwind J. Lake.</li> <li>Edwind J. Lake.</li> <li>Edwind J. Lake.</li> <li>Edwind J. Lake.</li> <li>Ella H. Morrison</li> <li>Geo. M. Huff.</li> <li>W. J. Fraser.</li> <li>Carlton R. Rose.</li> <li>Chas. F. Hottes.</li> <li>M. S. Ketchum</li> <li>Paul Chipman</li> <li>A. S. Patterson.</li> <li>D. H. Carnaham</li> <li>Harry Keeler.</li> <li>W. G. Brenke.</li> <li>C. B. Clark.</li> <li>A. R. Gurtiss</li> <li>Henry Jones.</li> <li>J. H. Wilson</li> <li>Mary Maude Cole</li> <li>Chas. F. Gampbell.</li> <li>Geo. D. Hubbard.</li> <li>Edward L. Milne</li> <li>Geo. D. Hubbard.</li> <li>Edward G. Howe.</li> <li>N. Weston</li> </ul>		• •		
			W. D. Pence,		••		
4	••		H. S. Grindley		••		1
			T. A. Clark	••	••		11
	• •		B. V. Swenson.		• •		1
			A. H. Daniels	<u>+</u> +	••		1
	6.6		Percy F. Bicknell	• •	* *		
	4.4		Geo. D. Fairfield	••	• •		1
			Chas. W. Tooke	••	4.6		1
	6 4		Walter H. Jones	• •	• •		
	6.6		H H Everett	• •			
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			William Esty				
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			J. E. McGilvrey			•••••	
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			J. D. Phillips	••	••		1
			<b>R.</b> P. Smith		••	· · · · · · · · · · · · · · · · · · ·	
			Helen E. Butterfield	••	••		
	•		Robt. A. Wood	••	••	<b></b> .	
			Geo. A Goodenough	••	••	· · · · · · · · · · · · · · · · · · ·	
	•	1	Oscar Quick	••	••		
	••		Edward J. Lake	••	••	· · · · · · · · · · · · · · · · · · ·	
	••		Ella H. Morrison	••	• •		
	• •		Geo. A. Huff	••	••		
	• •		W. J. Fraser	• •	•		
	• •		Carlton R. Rose	••	• •		
			Edwin H. Pierce	••	••		1
	6.4		Joseph C. Blair		• •	••••••••	l I
			S.J. Temple	• •	••		1
	• •		Adeline W Rowley	• •	••		1
		1	Geo W Schmidt		٠.		
			I G Magiar		٠.	•••••	
			Poht O Vial				
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			M. S. Zatabarra		••		1
			M. S. Aetchum			· · · · · · · · · · · · · · · · · · ·	1
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1			A. S. Patterson		••		
L			D. H. Carnaham	••	• •		1
	••		Harry Keeler	••	٠.		
			W. C. Brenke	•• 、	••		1
	• •		C. B. Clark	••	• •		1
[			A. R. Curtiss	•• •	••		1
			Henry Jones	* *	• •		1
			J. H. Wilson		• •		1
			Mary Maude Cole				1
	••		Chag H Garnatt				1
			Ine H Makao			· · · · · · · · · · · · · · · ·	
			Walter G. Comphell			·····	
			Goo D Hubband		• •	·····	
Ł			Teo. D. Huppard				
1		1	Lawara L. Miline				
			Geo. F. Anderson		••		1
1			Edward G. Howe	4.4			
			N A. Weston Lillie A. Clendenin Chas. N. Cole		• •		
	* *						

- 1	Date.		To whom.		For wha	.t.	Amou
	1897.						1
32	Jan.	30	R. S. Douglass W. L. Pillsbury Geo. W. Graham M. T. Lindsey	Salary for	January,	1897	\$75
JOL			W. L. Pillsbury				116
54			Geo. W. Granam			· · · · · · · · · · · · · · · ·	100
35 56			M. F. Lindsey		• •		35
					••	· · · · · · · · · · · · · · · · · · ·	35
37 38			F. J. Foote. Lillie H: ath Sue W. Ford.				75 60
39	* *		Sue W Ford	• •			50
70	• •		L A Boice		••		50
71	٠٠		L. A. Boice W. F. Marker	• •	• •		50
<b>2</b>	• •	- 1	Albert R Lee	••	••		20
3	••		Joe Morrow	• •	••		75
4	••		Joe Morrow. E. W. Justus Ç. B. Ewalt.	••			30
5	• •	1	C. B. Ewalt	••			20
6	••.		John Doughty	••	• •	<b></b>	50
7	••		Richard Uttenweiler	••			50
8	••	- 1	Henry J. East		••		40
9	••		C. B. Ewalt. John Doughty Richard Uttenweiler. Henry J. East. W. R. Hoffman. L. G. Lathrop J. J. Johnson Jas, T. Shaw A. S. Golden. E. E. Pond. Philin Schwehm				37
0			L. G. Lathrop				32
1			1. 1. Johnson				32
źŀ			Jas. T. Shaw	••		· · · · · · · · · · · · · · ·	32
3			A. S. Golden				32
4			E. E. Pond			•••••	32
5	••		Philip Schwehm D. McIntosh		••		27
6 7	• •		O V Millon	••	••	•••••	50
8			C. V. Millar Chas, A. Kofoid Miles Newberry		••		60
9	••		Miles Newboww	••		····	100 20
ő	••		Ludin M. Hont	Drowings			43
1	••		Bausch & Lumb Ontical Co	Bottles filt	are ata	· · · · · · · · · · · · · · · · · · ·	63
2	• •		D H Lloyde & Co	Whatman's	naner	•••••••••••••	6
3	• •		Whitall Tatum & Co	Vials	paper	••••••	7
4	••		LaFavette Lumber Mfg Co	Oak tables			112
5	• •		S. N. Wright	Heifer calv	es		50
6	••		J N. Craig	Calf			2
7	••	- [	Miles Newberry Lydia M. Hart Bausch & Lomb Optical Co D. H. Lloyde & Co LaFayette Lumber Mfg Co S. N. Wright J. N. Craig. Fred W. Honens Geo. W. P rker & Son J. T. Wolcott J. T. Wolcott J. E. McGilvrey. Brunswick-Balke Collender Co Electric Appliance Co	Concrete cu	ibes. etc		12
8	٠.	1	Geo. W. P rker & Son	Cases and o	lrawers		149
9	••		J. T. Wolcott	Typewritin	g		20
0	• •		J. E. McGilvrey	Expenses v	lisiting scl	hools	16
1	••		Brunswick-Balke Collender Co	Letter pres	s stand ar	d table	13
<b>2</b>	••		Electric Appliance Co	Wire, etc			
3			Fairbanks, Morse & Co	Scales			12
4			Engineering Magizine	Subscriptio	on		3
5			V. W. Shuck.	Exchange of	of stove	••••••	5
6	• •		Dallenbach & Boyle	Using calv	es	•••••	22
3			Maintach Battony and Ont'l Co	Deads, ons	, etc		42 4
8 9	••		Brunswick-Balke Collender Co Electric Appliance Co Engineering Magizine. V. W. Shuck Dalleubach & Boyle E. Henry McIntosh Battery and Opt'l Co Chicago Calcium Light Co Richards & Co Detroit Flower Pot Mfg Co Clayton F. Summy. Mittendorf & Kiler Sheldon Brick Co C. F. Hottes Kenyon News and Post'l Sub.Co	L THCH COCK	s and tubi	ug	4 5
ő			Richards & Co	Filtore tub	ing ote		18
1	• •		Detroit Flower Pot Mfg Co	Flower not	иц <u>а</u> , сю.,		13
$\frac{1}{2}$	• •		Clayton F. Summy	Tuning nia	nos		13 22
3	• •		Mittendorf & Kiler	Cleaning n	lates. etc.		3
4	• •		Sheldon Brick Co	Sand			: 1
5	**		C. F. Hottes	Book			1
6			C. F. Hottes Kenyon News and Post'l Sub.Co Dennison Mfg Co Standard Oil Co Engineering Record Maltby & Wallace Co F. B. Stevens Carl Fischer. The Ulivi	Subscriptio	ons		$2\bar{0}$
7	* *		Dennison Mfg Co.	Tags and la	abels		7
8	••		T. Draper	Valves			8
9	· · ·		Standard Oil Co	Qil			11
0	**		Engineering Record	Subscriptio	on, 1897		5
1	••		Maltby & Wallace Co	Iron, steel,	etc		58
2			F. B. Stevens	Coke baske	et, etc		8
3			Carl Fischer.	Music			8
4	• •		The Illini	copies of t	ne Illini	···· ··· <u>·</u> ······	20
5	Feb ·	15	Eimer & Amena	mercury tu	ibes	1.44	3
g¦.	Feb. :	IJ)	The H. M. R. Construction Co.	Contract, li	orary bui	101ng	6,044
78			D. F. Sturievant U0	nearing co	LITACE, IID	rary building.	638
$\frac{8}{9}$			Odin Coal Co	Architects'	commissi	011	170
9	• •		Nobreake Exportment Station	Baromotor	and ango	••••••	708
1		ļ	G C Willis	Creek mar	anu case.	••••••••••••••••	
2	• •		Champaign County Hangle	Printing of	, etc	•••••••	32 51
$\frac{4}{3}$	••	ļ	D H Lloyde & Son	Note book	et <i>c</i>	••••••	16
4	÷ •		Carl Fischer.         The Illini         Eimer & Amend         The H. M. R. Construction Co.         B. F. Sturtevant Co.         Ricker & White         Odin Coal Co.         Nebraska Experiment Station.         G. C. Willis.         Chimpaign County Heraid.         D. H. Lloyde & Son         Robinson & Burr         Empire Steam Laundry.         Central Union Telephone Co.         A. P. Cunningham & Son	Riggt torob	, CIU	•••••	01 01
	• •	·	Empire Steem Loundry	Laundrying	r towele	•••••	23
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o. Da	ite.	To whom.	For what.	Amo
10	97.		·	1
38 Feb.	91. 15	Petty & Savers	Cases. Services. Curtains, etc. Music. Wands. Advertisement. Book. Oak desk. Mounting slides. Hauling coal, etc. Salary for January, 1897. Expenses visiting schools. Expenses. Hauling and moving trees. Pipe hangers, etc. Advertisement. Half tones. Photographs.	\$
39		J. T Wolcott.	Services	1
40 ''	•	William Sim Drug Co	Curtains, etc.	
11 ''	•	R. S Shepardson	Music	1
12 '	•	Fred Medart	Wands	1
13	•	School News and Prac. Educat'r	Advertisement	
4		L, B. Lippincott Co	Book	1
15		Robert Mitchell Furniture Co	Oak desk	
10		Grace Briggs	Mounting slides	
7		E. H. Renner & Bro	Hauling coal, etc	1
18		L E MaCilmon	Salary for January, 1897	
50 .		Authun W. Dolmon	Expenses visiting schools	
1 .		T P L col	Hawling and moving troop	
2		James B. Clow & Son	Pine hangers etc	
3	•	Engineering News Publish'gCo	Advertisement	1
54 .		J Mang & Co	Half tones	
5 .		E R Curties	Photographs	
6	•	Gutta Percha and Ruh'r Mfg Co	Photographs Hose. Fencing masks, etc. Advertisement. Galvanometer, etc. Blast gate, etc. Subscription.	
7 *		A. G. Snalding & Bros	Fencing masks, etc.	1
8 .		Illinois State Journal Co	Advertisement	
9 .	•	W. A. Olmsted Scientific Co	Galvanometer, etc	
10	•	Buffalo Forge Co	Blast gate. etc	
1 .	•	Cleveland Public School	Subscription	1
2 .	•	G. E. Stechert.	Subscription Tubing plate, taps, etc. Lamp sockets, etc. Leveling jacks, etc. Scrap iron Wire belt lacing Label holders Refinishing furniture, etc. Dials, etc. Chart	2
3 .	•	Charles H. Besly & Co.	Tubing plate, taps, etc	1 1
4 .	•	Central Electric Co	Lamp sockets, etc.	1
5 .	•	The Newark Machine Too lW'ks	Leveling jacks, etc	1
6	•	Abe Sebewitz	Scrap iron	
57 ·	•	George W. Southwick	Wire belt lacing	
8 .		Office Specialty Mfg Co	Label holders	
59 ·	•	Mittendorf & Kiler	Refinishing furniture. etc	
'al '	•	Brown & Sharpe Mfg Co	Dials. etc.	
ıı ·	•	Spon & Chamberlain	Chart	1
121 1	•	Bausch & Lomb Optical Co	Microscopes, covers, etc	i
'3 '		Warner & Swasey	Fitting for telescope, etc	-
4 .	•	Charles Mann.	Dials, etc. Chart Microscopes, covers, etc. Fitting for telescope, etc. Photographs Expenses Condenser. Pipe and fittings, etc. Tags, etc. Pulleys, steel, etc. Silk towels. Castings, etc. Icc. Books.	
75 *	•	F. F. Frederick	Expenses	
76 ·	•	T. H. Trevett	Condenser	1
77 '	•	Champaign Supply Co	Pipe and fittings, etc	
18 .		Dennison Mfg Co	Tags, etc	
9		Maltby & Wallace Co	Pulley's, steel, etc	
30 <b>·</b>		Frank E. Fitts Mfg and Sup. Co	Silk towels.	1
1 .		Robinson & Burr	Castings, etc	1
2 '	•	Twin City Ice and Cold St'ge Co	Lee	
3	•	Ward Bros	Books	1
34		Ward Bros. Lyon & Healey	Drum head, etc	1
55		Diamond Clamp and Flask Co.	Brass castings	
56		Bullard & Gormley Co	Repairing door spring, etc	
37		Detroit Flower Pot Manufact'y	Flower pots	
58		Diamond Clamp and Flask Co. Bullard & Gormley Co Detroit Flower Pot Manufact'y Phoenix Carbon Mfg Co Western Bank Note and Eng.Co	Uarbon plates	1
39 '	•	western Bank Note and Eng.Co	Dipiomas.	1
10		Newman Clock Co Samuel Bartley. A. M. Woodward Isaac Fielding. Frank L. Bills.	Ice Books Drum head, etc Brass castings. Repairing door spring, etc Flower pots Carbon plates Diplomas. Watchman's clocks. Rent of land. Postage. Expenses. Petty expenses	1
11 .		Samuel Bartley	Kent of land	
2		A. M. Woodward	Dente	
13		Isaac Fielding	rostage	
14		Frank L. Bills	Emponence	
10			Datta emperance	
10		S. A. Forbes.	Perty expenses	
97	•	S. W. Shattuck, business mgr. S. W. Shattuck, business mgr. S. W. Shattuck, business mgr. S. W. Shattuck, business mgr.	Petty expenses. Pay-rolls of men, January, 1897 Freight and express Sundry items Pay-roll of students, January, 1897. Salary for February, 1897.	5
8		S. W. Shattuck, business mgr.	Preight and express	1
99	i	S. W. Shattuck, business mgr.	Bor roll of students Tenners 4007	
0 '		A S Dropor	F ay-roll of students, January, 1897.	1
1 Feb;	, z	A. S. Draper. T. J. Burrill. S. W. Shattuck. N. C. Ricker.	Salary for February, 1897	5
2		g W Shottwak		
3	•	S. W. Shattuck		1
4 .	•	I. O. Baker		
)5		I. O. Baker.		
JD	•	S. A. FOTDES.		
27	•	U. W. Kolle		1
181		D. McIntosh		
09 '		A. N. Talbot.		
	•	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.		
11 '		F. F. Frederick		1
		IN W HOMM		1
		<b>9. W</b> . <b>1</b> all		

-11 U. I.

).	Date.	To whom.		For what		Amo
	1897.		1			 
4	Feb. 27	Charles M. Moss D. K. Dodge L. P. Breckenridge David Kinley.	Salary for	February, 1	897	\$1'
5		D. K. Dodge	.101			\$1 16
.6	**	L. P. Breckenridge		••		16
7		David Kinley		• •		18
8		Arnold Tompkins A. P. Carman				(
9		Arnold Tompkins				15
0		A. P. Carman.		٤.		18
$\frac{1}{2}$	••	A. F. Carman George W. Myers. H. E. Summers. E. J. Townsend. E. B. Greene. James M. White. Katherine Merrill.	••			14
3		E J Townsend				18
4	• •	E B Greene	• •	• •		14
5	• •	James M. White	• •			12
6	• •	Katherine Merrill	••	• •		10
1		W. O. Krohn W. H. VanDervoort W. D. Pence.	••	••		15
8	• •	W. H. VanDervoort	••	• •		· 15
9	••	W. D. Pence				· 18 12
0		H. S. Grindley				10
1	••	T. A. Clark		• •		12
2		B. V. Swenson				10
3		A. H. Danlels				10
4	• •	W. D. Pence. H. S. Grindley. T. A. Clark B. V. Swenson. A. H. Daniels. Percy F. Bicknell George D. Fairfield Charles W. Tooke. Walter H. Jones. Henry H. Everett. Fred A. Sager. William Esty.			· • • • • • • • • • • • • • • • • • • •	12
5		Charles W Teaks		••	•••••	10
6		Walter H. Jones				10
$\frac{7}{8}$	••	Henry H Everett	••	٠.	•••••	11
9		Fred A Sager		••	•••••••••	11
ŏ	• •	William Esty		••		10
ĭ		Lewis A Rhoades.	••	••		12
$\overline{2}$	••	William Esty Lewis A. Rhoades. Frank Smith C. D. McLane. P. G. Holden.	••	••		10
3	••	C. D. McLane		٠٠		Ē
4	• •	P. G. Holden	••	• •		6
<b>5</b>	••	J. E. McGilvrey		••		10
6	••	George H. Alden		••		7
7	••	J. E. McGilvrey. George H. Alden J. D. Phillips R. P. Smith. Helen E. Butterfield				9
8		R. P. Smith				12
9		Helen E. Butterfield			<b></b> .	7
0		Robert A. Wood				' 8
1	••	George A. Goodenough		• •	· • • • • • • • • • • • • • • •	2
$\frac{2}{3}$	••	Oscar Quick. Edward J. Lake				7
$\frac{3}{4}$	••	File H Monvison	••	• •		6 10
$\frac{1}{5}$	* *	George A Huff	**	••		12
6		W . Fraser	••	٠.		12
7	••	Carlton R. Bose	••	••		7
8	٠.	Edwin H. Pierce	•• .	• •		7
9	••	Joseph C. Blair	••	٠٠		ŭ,
0	••	S. J. Temple	• •	••		12
1	••	Adeline W. Rowley.	•••			7
2	••	George W. Schmidt				7
3	••	J. G. Mosier			. <b></b>	7
4		Edward J. Lake. Ella H. Morrison. George A. Huff. W. J. Fraser. Edwin H. Pierce Joseph C. Blair. S. J. Temple. Adeline W. Bowley. George W. Schmidt. J. G. Mosier Robert C. Vial. Charles F. Hottes.				7
5	••	Unaries F. Hottes				6
$\frac{6}{7}$	• •	Charles F. Hottes M. S. Ketchum Paul Chipman. A. S. Patterson. D. H. Carnaham. Harry Keeler. W. C. Brenke. C. B. Clark. A. R. Curtiss. Henry. Lones.	••		· • • • • • • • • • • • • • • • • • • •	7
$\frac{7}{8}$	••	A S Pattoneon	4.4		• • • • • • • • • • • • • • •	7
9	••	D H Cornsham		• •		5 4
0	••	Harry Kooler		* *		
11	4 i	W C Brenke	* *	**		5 7
2	• •	C. B. Clark	••	••		8
3	••	A. B. Curtiss	• •	• •		8
1	• •	Henry Jones	• •	• •		6
5	••	J. H. Wilson	• •	• •		Ğ
6	••	Henry Jones. J. H. Wilson Mary Maude Cole Charles H. Garnett.	••	••		4
7	••	Charles H. Garnett	4.4	• •		4
3	••		••	••		
9	••	Walter G. Campbell George D. Hubbard	" "	• •		4
0	•••	George D. Hubbard	• •	•• •		4
1	••	Edward L. Milne		••		4
2	••	George D. Hubbard George F. Anderson George F. Anderson Edward G. Howe N. A. Weston Lillie Clendenin Charles N. Cole R. S. Douglass W L. Pillsbury S. W. Shattuck	••	••		1
3		Edward G. Howe	• •	••		15
4		N. A. Weston	••			9
5		Lillie Clendenin	••	••		6
6 7		Unaries N. Uole				7
3		W I. Pillahum				7
		W LL FILLSOURY		months, Fe		11 15

	Date.		To whom		For wha	at.	$\mathbf{Amou}$
1	1897.		:				
ο'	Feb.	27	L. P. Breckenridge George W. Graham M. T. Lindsey.	Salary for	3 mon hs.	February, 1897	\$62
ĭ			George W. Graham	ourus, cor	February.	1897	\$62 100
$\tilde{2}$	• •		M. T. Lindsev.	• •			35
3	• •	1	I. H. Allen. F. J. Foote.				35
1			F. J. Foote	••	**		75
5	••		Lillie Heath Sue W. Ford				60
5	••		Sue W. Ford				50
7			L. A. Boice W. F. Marker Albert R. Lee				50
3			W. F. Marker				50
į			Albert K. Lee				$\frac{20}{75}$
			Joe Morrow C. B. Ewalt	• •			20
	• •		ohn Donghty	••	••		50
ŝ	• •		ohn Doughty. Charles A. Kofoid. Miles Newberry.	• •	••		100
1			Miles Newherry	••	4.5		20
	• •			••	••		<b>6</b> 0
5	••		D. McIntosh	••	• •		50
			Richard Uttenweiler	••	••		50
3	**		D. McIntosh Richard Uttenweiler. Henry J. East W. R. Hoffman L. G. Lathrop.	••	••		40
)			W. R. Hoffman	••	••		37
1	••		L. G. Lathrop			<b></b>	32
IJ	••		J. J. Johnson James T. Shaw				32
			James T. Shaw				32
3			A. S. Golden. E. E. Pond Philip Schwehm		·		32
	• •		E. E. Pond		• •		32 27
	• •			Grading o	to		26
1	• •		B V Swenson	Signaling, e	device	• • • • • • • • • • • • • • • • • • • •	22
8	• •		Charles A Besore	Lumber e	te	••••••	37
۱I	* *		Philip Schwehm r. R. Leal. B. V. Swenson Charles A. Besore. H. Swannell Pittsburg Reduction Co Creamery Package Mfg Co C. A. Kofold	Drugs.			5
j	• •		H. Swannell Pittsburg Reduction Co Creamery Package Mfg Co C. A. Kofoid	Sheet alur	ninum		5
Ú	• •		Creamery Package Mfg Co	Bottles, et	C		Ē
2			C. A. Kofoid	Petty expe	nses		36
3	• •		Henry Trevett	Expanded	metal		25
1			Charles T. Wilder	Blue print	s		70
5			Henry Trevett. Charles T. Wilder. Eimer & Amend Henry J. Greene Burlington Venetian Blind Co.	Chemicals	, etc		990
3			Henry J. Greene	Thermome	eters		11
7			Burlington Venetian Blind Co.	Blinds	•••••	• • • • • • • • • • • • • • • • • • • •	9
3	••		Volo & Marina Marina	Seeas	• • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	
) )			Hubbard & Song	LOCKS		• • • • • • • • • • • • • • • • • • •	10
1			J. C. Vaughan. Yale & Towne Mfg Co Hubbard & Sons Walker & Mulliken Twin City Electric Co Thomas Franks Buffalo Scale Co Watson Fealbnor	Stools abo	iware, etc.	•••••••	30
	• •		Twin City Electric Co	Pullove of	ars, etc	••••••	4
3	• •		Thomas Franks	Flower not	···········	• • • • • • • • • • • • • • • • • • • •	1
í	• •		Buffalo Scale Co	Scales.		• • • • • • • • • • • • • • • • • • • •	48
5	••		Watson Faulkner	Hard oil			6
3	• •		Robinson & Burr	Öven			12
7	••		Watson Faulkner Robinson & Burr. C. H. Baddeley. George W. Parker & Son. William Price.	Sauce dish	es		2
3	• •		George W. Parker & Son	Cases			82
)	• •		William Price	Calciminir	ng		13
	••			Bottles	• • • • • • • • • • • • •		15
IJ	••		Engineering News Publish'gCo F. P. Smith Wire and IronW'ks The Illini.	Subscripti	on		5
2			F. P. Smith Wire and IronW'ks	wire scree	ns		60
3			The Illini	Advertisir	ig six mon	ths, to Feb. 1	180
			Fauth & Co.	Lamp and	oracket	· · · · · • • · · · · · · · · · · · · ·	12
5	••		L. H. Trevett	Back	u iron, etc.	•••••	38
2			<ul> <li>T. H. Trevett.</li> <li>D. H. Lloyde &amp; Son</li> <li>S. W. Shattuck, business mgr. <i>The Gazette</i></li></ul>	DUOK	•••••••••		10 42
3			The Gagette	Printing		••••••	42 192
3	••		Gustav E. Stechert	Books		•••••	152
)			A. C. McClurg & Co	Books and	stationers	7	206
	March	15	H. M. R. Construction Co Ricker & White F. M. McKay J. E. Armstrong N. B. Morrison	On library	building	ontract	6,030
21	••		Ricker & White	Architect'	s commiss	ontract	150
3	* *		F. M. McKay	Expenses.			14
Ŀ	* *		J. E. Armstrong				38
5	••		N. B. Morrison	•••			30
3	• •		Alex McLean			•••••	50
7	• •		A b. Morrison Alex McLean. Lucy L. Flower S. A. Bullard Isaac S. Raymond. W. L. Pillsbury T. J. Burrill Cunningham & Boggs			· · · · · · · · · · · · · · · · · · ·	69
8			S. A. Bullard	••			1
9	4.4		Isaac S. Raymond	••			1
0			W. L. Pillsbury			• • • • • • • • • • • • • • • • • • • •	8
1	••		T. J. Burrill	A mm 1-4.		•••••	6
$\frac{2}{2}$	• •		Cunningham & Boggs	Appelate C	ourt tees.	on miller	12
34			Garvin Machine Co. A. D Sham 1 Wesley E. King	Prize dobo	u repairs (	on miner	82 20
			Walland M. King	Ir rize depa		••••••••••••••••••••	20

0.	Date.		To whom.	For what	Amour
1	1897.				1
66	March	15	Wallace Craig	Prize debate Collecting samples of water Samples of iron ore. Subscription, 1897 Advertising. Exchange of machine Coal Advertisement. Cases. Shades, brushes, etc.	\$50
67	maren	10	Edward Bush	Collecting semples of water	3
68	••		Sharnless & Winchell	Samples of iron ore	2
$\tilde{69}$	••		The Inland Publishing Co	Subscription, 1897	8
70	• •		Mayme Hill	Salary, February, 1897.	14
71	••		The Illio	Advertising	100
72	••		Smith Premier Typewriter Co	Exchange of machine	62
73			Sangamon Coal Co	Coal	15
74			Wm. T. Comstock	Coal Cases Shades, brushes, etc Belting, etc Pulleys. Railroad curves, etc. Scales Calipers, guages, etc. Stands Sheet music	4
75			The Globe Co	Cases	30
76			William Price	Shades, brushes, etc	17
17			Page Belting Co	Belting, etc	25
78			Medart Patent Pulley Co	Pulleys	15 12
79 30			Reuliel & Esser Co	Railroad curves, etc	12
31			Ches A Strolinger & Co	Colinera gueres ofe	44 6
32			Lyon & Hopley	Standa	3
33			Carl Fischer	Sheet music	9
34	••		Jas G Clow & Sons	Pine and fittings	57
35	••		Brainard Milling Machine Co	Fixtures for machine	3
36			Office Specialty Mfg Co	Stands. Sheet music. Pipe and fittings. Fixtures for machine. Cabinet, etc. Proceedings, 1806 Beans. Hardware, etc. Batteries, labor, fuse block, etc. Grading, hauling, etc. Stenographic work Photographs Coal. Covers. Coal.	19
37		1	Levi L. Barbour	Proceedings, 1806	1
38	••		L. V. Manspeaker	Beans	$\hat{2}$
39	••		Orr & Lockett Hardware Co	Hardware, etc	7
0			Twin City Electric Co	Batteries, labor, fuse block, etc	49
)1			T, R. Leal	Grading, hauling, etc	57
$\overline{2}$			J. T. Wolcott	Stenographic work	28
)3			Thos. Naughton	Photographs	1
)4			Illinois Cent. Coal and Salt Co.	[Coal	16
5			Bausch & Lomb Optical Co	Covers	12
6			Nalger W. Graham	Coal	485
)7  8			Mensen W. Granam	Stenographic work Photographs Coal. Covers Coal. Expenses Pay rolls of men. February, 1897 Pay roll of students, February, 1897 Salary for March, 1897	15
99			Mary Turner Carriel	Dem wells of mean Debum over 1907	12 553
)0	••		S W Shattuck, business mgr.	Pay rolls of inell, February, 1897	95
	March	91	A S Draper	Salary for Marah 1807	583
$\hat{2}$	inter ch	91	T J Burrill	Balary lot march, 1851	225
)3			S. W. Shattuck	••	166
)4			N. C. Ricker		191
)5	••		Ira O. Baker	•••	183
)6			S. A. Forbes	• •	83
)7			C. W. Rolfe		175
)8			D. McIntosh		00
)9	1		A. N. Talbott		175
0			A. W. Palmer.	•••	175
1			F. F. Frederick		158
$\frac{12}{13}$			U I Borton		175
4			Chas M Moss		166 175
5	••		D K Dodge	**	175
16	••		L. P. Breckenridge	•••	166
7	•		David Kinley.		187
8	••		Ira O. Baker S. A. Forbes. C. W. Rolfe. D. McIntosh. A. N. Talbott. A. W. Palmer. F. F. Frederick. S. W. Parr. H. J. Barton. Chas. M. Moss. D. K. Dodge. L. P. Breekenridge. David Kinley. Eugene Davenport. Arnold Tompkins. A. P. Carman.		91
9	••		Arnold Tompkins		150
0	• •		A. P. Carman		187
21	••		Geo. W. Myers	•• •• •••	145
2	**		H. E. Summers	••	137
3			Augene Davenport. Arnold Tompkins. A. P. Carman. Geo. W. Myers. H. E. Summers. Edgar J. Townsend. E. B. Greene James M. White. Katherine Merrill. Wm. O. Krohn Wm. H. VanDervoort. W. D. Pence. H. S. Grindley T. A. Clark B. V. Swenson A. H. Daniels Percy F. Bicknell. Geo. D. Fairfield Chas. W. Tooke Walter H. Jones. Henry H. Everett. Fred A. Sager. William Estey Lewis A. Rhoades	•••	137
4			E. B. Greene	**	141
5	1		James M. White		125
6			Katherine Merrill		108
7			wm. U. Krohn		150
8			Wm. H. VanDervoort		137
29			W. D. Pence.		125
0			n. S. Grindley		100
31 32	••		B V Swongon	•••	125
52 33			A H Daniels		100 100
53 34	• •		Porez F Bieknell		100
35	••		Geo D Fairfield		129 108
36	• •		Chas. W. Tooke	•••	108
37	••		Walter H. Jones		75
38	••		Henry H. Everett		116
<i>3</i> 9	••		Fred A. Sager	•••	91
			William Estev		100
ŧ0					

•	Date.	To whom.	For what.	Amour
	1897.			
2	March 3	Frank Smith	Salary for March, 1897	\$100
3		C. D. McLane. P. G. Holden J. E. McGilvrey. Geo. H. Alden		91
4	••	P. G. Holden	••	
5	••	J. E. McGilvrey	••	100
6	••	Geo. H. Alden	4.4	70
7	••	J. D. Phillips. R. P. Smith	··	
8	••	R. P. Smith	···	120
9	••	Helen E. Butterfield	**	
D	••	Robert A. Wood	**	80
L	••	Geo. A. Goodenough	· · ·	80
2	••	Oscar Quick		
3		Helen E. Butterfield. Robert A. Wood. Geo. A. Goodenough Osear Quick. Edward J. Lake.	**	60
L		Ella H. Morrison Geo. A. Huff W. J. Fraser		
5		Geo. A. Huff		120
5		W. J. Fraser		
1		Carlton R. Rose		70
3		Edwin H. Pierce		
9		Joseph C. Blair	••	
)		S. J. Temple	••	
		Adeline W. Kowley		70
2		Geo. W. Schmidt		
3		J. G. MOSIER		
5		Robert C. Vial.		70
		Unas. F. Hottes		60
		W. J. Fraser. Carlton R. Rose. Edwin H. Pierce Joseph C. Blair. S. J. Temple. Adeline W. Rowley Geo. W. Schmidt. J. G. Mosier. Robert C. Vial. Chas. F. Hottes. M. S. Ketchum. Paul Chioman.		
	4.4			
3	••	A, 5. Patterson		
2		D. H. Carnanan		
	• •	A. S. Fatterson. D. H. Carnahan Harry Keeler. W. C. Brenke. C. B. Clark A. R. Curtis Henry Jones. J. H. Wilson. Mary Maude Cole. Chas H Garnett		
	* *	C P Clowb		
3	••	A B Curtie		
1		Honry Jones	•••	
	* *	I H Wilson	······	
		Mary Manda Cole		
	* *	Chas H Garnott	* **	
8		Geo. D. Hubbard	••	
		Wulter G Comphell	• •	
j	• •	Geo D Hubbard	••	40
	••	Edward L. Milne	•••	
	••	Geo, F. Anderson	• •	
	••	Edward C Hama		
	• •	N. A. Weston		
	• •	Lillie A. Clendenin	**	
1	••	Chas. N. Nole		
1	• •	R. S. Douglass	••	
	••	W. L. Pillsbury	••	
	••	Geo. W. Graham	**	100
	••	A. Weston. Lillie A. Clendenin Chas, N. Nole R. S. Douglass. W. L. Pillsbury Geo, W. Graham M. T. Lindsey. I. H. Allen	**	
	••	I. H. Allen	•••	
		F. J. Foote		
		Lillie Heath		60
		M. T. Lindsey. I. H. Allen. F. J. Foote. Lillie Heath. Sue W. Ford. L. A. Boice W. F. Marker. Albert R. Lee. Joe Morrow. C. B. Ewalt.		50
		L. A. Boice		50
5		W. F. Marker		
		Albert R. Lee		20
		Joe Morrow		) 75
		[Ų. в. Ewalt	••• ••	20
1		Jonn Doughty		
		Richard Uttenwiler		
		Henry J. East.		40
	4.4	w. r. norman	•••	
	4.4	L. G. Lathrop	••	
		J. J. J. Jonnson		32
		A S Coldon		
		E E Bond		32
	• •	Philip Sahwahm		32 27
		Chas A Kofoid		100
		Milos Nowhonny		100
		Joe Morrow C. B. Ewalt. John Doughty Richard Uttenwiler Henry J. East. W. R. Hoffman L. G. Lathrop J. J. Johnson. James T. Shaw. A. S. Golden. E. E. Pond. Philip Schwehm. Chas. A. Kofoid. Miles Newberry. D. McIntosh.		
3		C V Miller	••	50
	* *	H M B Construction Co	Recutting inscription	60
5	• •	Kny-Scheerer Co	Recutting inscription Apparatus	60
3		G N Carman treasurer	Apparatus. Membership fee, 1897 Easel	3
		Ta Carman, treasurer	Membership fee, 1897 Easel	2

[March 31,

0.	Date.		To whom.	For what.	Amou
	1897.	1			
10		, i	Festman Kedel Co	Kodak and supplies	\$18
19	March 3	3	P Moreil	Shafting	14
19			B. Mercil	Shafting Work on plankton net Directory. Encyclopedia Postage. Expenses visiting schools	14
$\frac{20}{21}$			Ober W Green	Work on plankton net	5
22 22	••		L II Dollard	Energlandia	10
22 23			J. H. Pollard	Encyclopedia	15
23 24			F. L. BIIIS	Postage	20 100
$\frac{24}{25}$	••		Isaac Fielding	Tomono a ministra a sel sela	100
20 26	·		J. E. McGilvery	Expenses visiting schools	8
26			Buff & Berger	Adjusting transit	10
27			Eimer & Amend	Tubing	
28			Unicago Laboratory & Scale Co	Table clamps, etc	14
29	••		Electric Appliance Co	Magnetic wire, etc.	27
30			Walter H. Jones	Music Platinum wire, balances, etc Circulars Services to June 15 Printing programs	12
31			Henry Hell Chemical Co	Platinum wire, balances, etc	24
32			Champaign Times C. & U. Phoenix Telephone Co. Champaign County Herald Champaign County Print. Co	Circulars	2
33			C. & U. Phoenix Telephone Co.	Services to June 15	45
34		1	Champaign County Herald	Printing programs	54
35	••		Champaign County Print. Co	Envelopes, circulars, etc	20
36	••		Phillips Bros	Copies of cut	10
37			School News & Prac. Educator	Advertisement	4
38	**		A. G. Spalding & Bros	Fencing belts	4
39	••		G. W. Sheldon & Co	Freight and custom fees	12
40	••		C. A. Hunt	Glass	1 8
11	••		Singbusch & Stoltev	Carrotts	2
2	••		Urbana Brick Co	Brick	4
13	••	1	Price & Sandford	Polishine, etc	2
14	• •		W. F. Marker	Paper fasteners	10
15	• •		Mittendorf & Kiler	Repairing chairs, etc	15
16			C. N. Clark & Co	Stone	1 8
17			The Gazette	Printing circulars, etc	34
18			Buffalo Forge Co	Motor and disc wheel	177
19	4 4		A. C. McClurg & Co	Books and stationery	86
50			E H Renner & Bro	Hauling coal etc	145
51	3 6		Chas A Besore	Coal	143
52	• •		Standard Oil Co	Oil	10
53			Richards & Co	Beakers tubes etc	6
54		- i	Weston Electrical In'st Co	Renairing v Itmater	25
55			Glasson & Bailey Mfr Co	Rushings plugs ota	
56	* *		Williamá White & Co	Stool and iron	18
57		1	Champaign County Honald	Pemphlets	20
58			Andrea & Church	Pamphlot appendent	
59			Crosby St'm Gauge & Valve Co	Moranzy guago ota	19
50	•		W P Bushanan	Photographa	2
51	••	- [	Kondlon & Goortnon	Cinenlan glass digas	Ê
51 52	••		Lange & Laughling	Steel and beams	12
16	• •		Jones & Llaughins		
3			Pohingon & Dum	Supplies of	11
4			Hubbord & Song	Supplies, etc	. 1
5	••		D D Pombon	Litorowy Indox	11
6	• •	ļ	Astronomical Soa of Deside	Subsemintion	5
78		1	A Stronomical Soc. of Pacific	Subscription	
8		٠l	Knowlton & Dormatt	Dewer computer	
		1	Puildong Inon Dennedar	Drusnes, etc	75
0	• •		W A Olymptod Scientife C	Concerno convor reimente de	29
1		J	w. A. Oimstea Scientine Co	Concave, convex mirrors, etc	28
2			Central Electric Co	Lamp Sockets	2
3			J. W. Butler Paper Co	raper	3
4			Unicago Briage & Iron Co	DOITS	1
5			Edward G. Howe	rxpenses	10
0 į			B. T. Batsford	Воока	.111
7			Bernn Liebsich		82
8			ы. U. Valle	Advertising	10
9 0		-1	ruciic School Publishing Co	Advertising to March 31, 1897	12
0		-1	Fuller & Fuller Co	Alkalı	8
1			Library Bureau	BOOK case card index, etc	65
2	April 1	6	H. M. R. Construction Co	Contract and extras library bldg	6,130 165
21		_1	Kicker & White	Arcnitects' commission	165
4	May 1	5	H. M. R. Construction Co	Contract library building, etc	6,264
5	May 1	-1	Chicago Arch'l Iron Works	Ornamental iron work	2,720
6	• •	-1	Ricker & White	Architects' commission	214
37	••		W. H. Van Dervoort	Expenses	9
88	••	ľ	W. H. Jones	<b>44 </b>	10
	• •		Eugene Davenport	4.4	13
0	••		W. L. Pillsbury	<b>44</b>	47
90 00 01	••	1	S. W. Shattuck	Circulars Services to June 15 Printing programs Envelopes, circulars, etc. Copies of cut. Advertisement. Freight and custom fees Glass Carrotts Brick Polishine, etc Paper fasteners. Repairing chairs, etc. Stone Printing circulars, etc Motor and disc wheel Books and stationery. Hauling coal, etc Coal Coal Beakers, tubes, etc Repairing v itmeter Bushings, plugs, etc. Steel and iron. Pamphlets Pamphlet cases, etc. Mercury guage, etc. Photographs Circular glass discs. Steel and beams Taps Steel and beams Taps Supplies, etc. Hose, etc. Literary, Index. Subscription Sewer computer. Brushes, etc. Tube Concave, convex mirrors, etc. Lamp sockets. Paper. Books 'Advertising Advertising March 31, 1897 Alkali. Book case card index, etc. Ornamental iron work Architects' commission Expenses.	85
2	6 6 ·		F. L. Bills	Postage	120
3					53

	Date.		To whom.	$\mathbf{F}_{\mathbf{C}}$	Amou	
4 N	1897. Iay	15	E. H. Renner & Bro T. R. Leal	Hauling coal, ca	arriage hire	\$50
5			T. R. Leal S. W. Shattuck, business mgr.	Hauling, etc		48 135
7	• •		S. W. Shattuck, business mgr.	Sundry items.	•••••••	148
8	••	1	S. W. Shattuck, business mgr.	Evproggage		163
ğ	••		S. W. Shattuck, business mgr.	Pay-rolls of me	m. March. 1897	695
0	• •		S. W. Shattuck, business mgr.	sti	dents.	141
1 M	lay	31	A. S. Draper	Salary, April,	18.7	583
4	••		S. W. Shattuck, business mgr. S. W. Shattuck, business mgr. S. W. Shattuck, business mgr. S. W. Shattuck, business mgr. A. S. Draper. T. J. Burrill S. W. Shattuck. N. C. Ricker. Lra O. Baker		•••••	225
3 4			S. W. Shattuck		•••••	166
5			Ira O. Baker			191 185
6	* *		S. A. Forbes	••		85
7	4.6		A. S. A. Forbes. C. W. Rolfe. D. McIntosh A. N. Talbot. A. W. Palmer. F. F. Frademick			175
8	••		D. McIntosh	• •		50
9	••		A. N. Talbot		•••••	175
D 1			A. W. Palmer		· - ·····	175
2	٠.		S W Parr	• •		158 175
3	6,6		H. J. Barton	• •		166
4	٠.		A. W. Falmer. F. F. Frederick. S. W. Parr H. J. Barton Chas. M. Moss. D. K. Dodge I. P. Breekenridge	••		175
5	••	- 1	D. K. Dodge	••		166
6	•••		L. P. Breckenridge	••	•••••	16
3	••		David Kinley		•••••	187
			D. R. Breckenridge David Kinley. E. Davenport. Arnold Tompkins		•••••	91 150
j	* *		Arnold Tompkins A. P. Carman. G. W. Myers Edgar J. Townsend. E. B. Greene Jas. M. White Katharine Merrill. W. O. Krohn W. H. Van Dervoort. W. H. Van Dervoort. W. D. Pence. H. S. Grindlev	••		187
í	÷ •		G. W. Myers			14
2	٠.		H. E. Summers	÷ +		137
3	••		Edgar J. Townsend	••		137
1	••		E. B. Greene	••		141
5			Jas. M. White		•••••	125
7			W O Krohn		••••••	108 150
3	4 <b>4</b>		W H Van Dervoort	••	••••••	137
5	• •		W. D. Pence	• •		135
0	••		W. D. Pence H. S. Grindley T. A. Clark P. V. Swenson A. H. Daniels Percy F. Bicknell Geo. D. Fairfield Chas. W. Tooke Walter H. Jones Henry H. Everett	i 4		100
1	••		T. A. Clark	**		125
2			B. V. Swenson	••	•••••	100
	••		A. H. Daniels		•••••	100 129
5	• •		Geo. D. Fairfield	• •		108
3	٠.		Chas. W. Tooke	••		100
1	••		Walter H. Jones	6 F - 1		75
3			Henry H. Everett	• •		116
	• •		Fred A. Sager		•••••	91
í	• •		William Esty Lewis A. Rhoades Frank Smith		•••••	$100 \\ 125$
	••		Frank Smith		•••••	100
3	••		C. D. McLane	• •		91
L.	••		P. G. Holden	••		50
5	••		J. E. McGilvrey	• •		100
<u>S</u>			Geo. H. Alden	• •		70
3	••		J. D. Phillips		••••••	90
	۰.		Holon E. Buttorfold	••		$120 \\ 75$
)	••		Roht, A. Wood	••		ŝŏ
LI.	••		(J. A. Goodenough	••		80
2	••		Oscar Quick	••		75
3	••		C. D. McLane P. G. Holden J. E. McGilvrey. Geo. H. Alden J. D. Phillips. R. P. Smith. Helen E. Butterfield. Robt. A. Wood G. A. Goodenough Oscar Quick. Edward J. Lake Ella H. Morrison	••	·····	60
	••		Goo A Huff			100 120
ŝ	• •	1	W J Fraser	• •		33
í	۰.		Edward J. Lake Ella H. Morrison Geo. A. Huff. W. J. Fraser. Carlton R. Rose. Edwin H. Pierce I C. Bleire	••		70
31	••		Edwin H. Pierce			80
)	••		J. C. Blair	· · ·		41
			Adeline W. Rowley	**		70
	••		Geo. W. Schmidt	••		70
			Boht (! Vial			70 70
í	••		Edwin H. Pierce J. C. Blar. Adeline W. Rowley Geo. W. Schmidt J. G. Mosier Robt. C. Vial Chas. F. Hottes. M. S. Ketchum Paul Chipman. A. S. Patterson. D. H. Carnaham Harry Keeler.			60
5	٠.		M. S. Ketchum			70
3	••	- [	Paul Chipman	••		70
7			A. S. Patterson	••		50
3	4.4					40

∫May 31,

0.	Date.	To whom.	For what.	Amour
	1897.		Salary, April, 1897	
70	May a	1 W. C. Brenke	Salary, April, 1897	\$70
71 72		C. B. Clark		85 85
73		Honry Jones	• • • • • • • • • • • • • • • • • • • •	60
74		J H Wilson	• • • • • • • • • • • • • • • • • • • •	60
75	٠ ،	Mary M. Cole	••	40
76	• •	Chas. H. Garnett		40
67		Jas. H. McKee		40
78	**	Walter G. Campbell		40
79	••	Geo. D. Hubbard		40
80		Edward L. Milne		40
81		Geo. F. Anderson		
82		Edward G. Howe		150
53 84	• •	Lillio A. Clondonin		
85		Chue N. Colo	•••	00
86		R S Douglass		
87	• •	W. L. Pillsbury		116
38	5 6	Geo. W. Graham		100
89	* *	M. T. Lindsey		35
10	s 6	I. H. Allen		) 35
91	\$ 4	F. J. Foote		75
92	* *	Edward L. Milne Geo. F. Anderson Edward G. Howe N. A. Weston Lillie A. Clendenin Chas. N. Cole. R. S. Douglass. W. L. Pillsbury Geo. W. Graham M. T. Lindsey I. H. Allen F. J. Foote. Lillie Heath Sue W. Ford L. A. Boice W. F. Marker Albert R. Lee		
93	••	Sue W. Ford		50
94		L. A. Boice		
95		W. F. Marker		
3o		Albert R. Lee		
37		O D E Frank		75
38 39		Joe Morrow. C. B. Ewalt. John Doughty. D. McIntosh. C. V. Millar.		
00		D Maintosh	··· ·······	
50	• •	C V Millar		
02	" "	Richard Uttenweiler		
03	* *	Henry J. East		
04	••	W. R. Hoffman		
05	**	C. V. Millar. Richard Uttenweiler. Henry J. East. W. R. Hoffman. J. G. Lathrop. J. J. Johnson. Jas. T. Shaw. A. S. Golden. E. E. Pound. Philin.Schwehm		32
60	5.0.	J. J. Johnson		32
07	••	Jas. T. Shaw		32
08		A. S. Golden		32
09		E. E. Pound		32
10		Philip Schwehm		27
11	••	U. A. Korold	•••••••••••••••••••••••••••••••••••••••	100
12 13	••	C A Kofoid	Class motorials	. 20
10	• •	Frank Smith	Expanses	3
15	•	W J Fraser	Freight	4
16		Lillie M. Hart	Drawings	2 32
17	• •	J. M. Chase	Labor and material	7
18	••	C. H. Baddley	Dishes	3
19	••	L. H. House & Co	Class materials Expenses. Freight Drawings. Labor and material. Dishes. Apples. etc. Comb, etc. Printing library slips. Pipe tees, etc. Indexes, blanks, etc. Plumb and level, etc Subscriptions. Night latch and wire, etc. Cuts. Knives and forks. Coal. Wheelbarrows. Materials. Gas. Brushes, etc.	2
20	• •	Price & Sandford	. Comb, etc	1
21	5.6 2.5	Champaign County Ptg Co	. Printing library slips	3
22	26	Champaign Supply Co	. Pipe tees, etc	2
23		Knowlton & Bennett	Indexes, blanks, etc	8
24		W. W. Shuck.	Subscriptions	3
$25_{00}$		T H Twowott	Night lateh and wine ate	··· 4 11
$\frac{26}{27}$	••	The Illio	Cuts	25
$\frac{21}{28}$	••	A. E. Wuesteman	Knives and forks	44
29	• •	Consolidated Coal Co.	Coal	45
30	••	M. M. Buck Mfg Co.	Wheelbarrows	7
31	**	N. M. Glatfelter	Materials	4
32		Chicago Calcium Light Co	. Gas	5
33	**	Creamery Package Mfg Co	Brushes, etc.	6
34	••	Berkefeld Filter Co	Filters	4
35		Eimer & Amend	. Filters, etc	9
36	**	John F. Tenney Co	Materials Gas Brushes, etc. Filters, etc. Filters, etc. Tubes, microtones. Lenses and rods Iron wire, etc. Grass seed, etc. Toilet paper Meter sticks. Subscription. Bottles, chemicals, etc.	2
37	••	E. O. Vaile	Directories.	3
38		William J. Boehm.	. Tubes, microtones	17
39		W. A. Uimsted Scientific Co.	Lenses and roas	3
10		L C Vaughar	Grass sood ate	9
41		Goorge T Johnson	Toilet naner	18
42		Maintoch Pottown and Ontil C	Motor stiels	12 2
43				

0.	Date.		To whom.	For what.	Amou
	1897.				1
16	May.	91	The Smith Prom'r Typewy't'r Co	Hard platen. Meter. Books. Expenses visiting schools Grading, hauling, etc Expenses to board meeting.  Expenses to May 18, 1897. Commencement orator. Expenses of trip. Postage.	. \$2
17	may	91	National Meter Co	Motor	• •
18			Harry Falkenan	Rooks	:  :
19	÷ +		J. E. McGilvrev	Expenses visiting schools	:  ê
50	June	15	T. R. Leal	Grading, hauling, etc	200
51	• • • • •		S. A. Bullard	Expenses to board meeting	200
2	••		F. M. McKay		. 18
3	••		Alex. McLean	••• •••	. 27
4			Lucy L. Flower		. 58
5			A. S. Draper.	Expenses to May 18, 1897	. 149
$\frac{6}{7}$	• •		John S. Switzon	Commencement orator	. 100
8	* *		Austin H Brown	Commencement orator Expenses of trip Postage Contract and extras on building	
9			F L Bills	Postage	: i
ŏ	••		Isaac Fielding	1 05 00 00 00 00 00 00 00 00 00 00 00 00	8
1	••		H. M. R. Construction Co	Contract and extras on building	80 5,622 178
2	••		Ricker & White	Architects' commission	. 178
3	••		Richards & Co	Apparatus for gas analysis	. 8
4			Frankford Steel Co	Steel spindle, etc	. 30
$\frac{5}{6}$			Phillips Bros.	Printing report.	. 5
			Edward Bush	Collecting samples of water	38
7 8	• •		T I Burrill	Frinding report of water survey	. 1
9	••		Arthur W Palmer	Postage Contract and extras on building Architects' commission Steel spindle, etc. Printing report. Collecting samples of water Printing report of water survey Expenses Freight'and express. Sundry items Pay-rolls of students, April and May men, Salary, May and June, 1897	
ŏ	••		W. L. Pillsbury	**	. 6
1	4.4		S. W. Shattuck, business mgr.	· · · · · · · · · · · · · · · · · · ·	. 6
2	• •		S. W. Shattuck, business mgr.	Freight'and express	. 58
3	••		S. W. Shattuck, business mgr.	Sundry items	. 8
4			S. W. Shattuck, business mgr.	Pay-rolls of students, April and May	7 20
56			S. W. Shattuck, business mgr.	men,	86
7			A. S. Draper	Salary, May and June, 1897	. 1,16
8	• •		S W Shottuck		
$\frac{3}{9}$	• •		N C Ricker	** ** **	38
ŏ	• •		Ira O. Baker		36
ĭ			S. A. Forbes	** **	. 16
2	• •		S. A. FOTDES C. W. Rolfe. D. McIntosh A. N. Talbot. A. W. Palmer. F. F. Frederick. S. W. Parr. H. J. Barton. C. M. Moss. D. K. Dodge. L. P. Breckenridze.	· · · · · · · · · · · · · · · · · · ·	. 350
3	••		D. McIntosh		
4	••		A. N. Talbot	64 65 ·····	. 35
5	••		A. W. Palmer		. 350
6  7			F. F. Frederick		
6			J. W. Farr.		. 35
3			C. M. Moss		
Ď			D. K. Dodge	• • • • •	
1			L. P. Breckenridge David Kinley E. Davenport Arnold Tompkins	** **	33
2	••		David Kinley	** **	. 378
3			E. Davenport	** **	. 18
1			Arnold Tompkins		. 30
5					
6  7			George W. Myers		29
8			Edger I Townsond		
3			A. F. Carman George W. Myers H. E. Summers Edgar J. Townsend E. B. Greene. J. M. White Katharine Merrill W. O. Krohn	•• ••	
3	"		J. M. White	** **	
Ĺ			Katharine Merrill	· · · · · · · · · · · · · · · · · · ·	
21			W. O. Krohn.	** **	300
3	• •		W. H. VanDervoort	4.4 4.4 · · · · · · · · · · · · · · · ·	275
ŧ	• •		W. D. Pence	** **	250
5			H. S. Grindley		. 200
3			T. A. Clark		250
3			A H Deniels		200
)	• •		Parey F Bicknell	· · · · · · · · · · · · · · · · · · ·	
)	• •		George D. Fairfield	· · · · · · · · · · · · · · · · · · ·	
1	• •		Charles W. Tooke	** **	200
21	• •		Walter H. Jones.	** **	150
3			Henry H. Everett		233
1)		1	Fred A. Sager.	** **	18
5			William Esty	44	200
6	••		Lewis A. Rhoades	**	250
7	••		Frank Smith	** **	200
3	••;		<ul> <li>M. Wille Merrill.</li> <li>W. O. Krohn.</li> <li>W. H. Van Dervoort.</li> <li>W. H. Van Dervoort.</li> <li>W. H. Van Dervoort.</li> <li>W. H. Van Dervoort.</li> <li>T. A. Clark.</li> <li>B. V. Swenson.</li> <li>A. H. Daniels.</li> <li>Percy F. Bicknell.</li> <li>George D. Fairfield.</li> <li>Charles W. Tooke.</li> <li>Walter H. Jones.</li> <li>Henry H. Everett.</li> <li>Fred A. Sager.</li> <li>William Esty.</li> <li>Lewis A. Rhoades.</li> <li>Frank Smith.</li> <li>C. D. McLane.</li> <li>P. G. Holden.</li> <li>J. E. McGilvrey.</li> </ul>	** ** **	185
9			P. G. Holden. J. E. McGilvrey. George H. Alden		100
0!		)	J. P. MICUTIIVPEV.		1 ZUU

## 170

. Date.		To whom.		For what.		Amou
1897.						
2 Jnne	30	J. D. Phillips. R. P. Smith Helen E. Butterfield R. A. Wood	Salary, May	and June, 18	397	\$180
D		R. P. Smith				240
1		Helen E. Butterfield				150
D		R. A. Wood Oscar Quick E. J. Lake. Ella H. Morrison George A. Huff. W. J. Fraser Carlton R. Rose. Edwin H. Pierce J. C. Blair	••		•••••	160
6 7 ···		Oscar Quick			•••••••	150 120
8		Ello H Morrison		•• .	· · · · · · · · · · · · · · · · · · ·	200
9		George A Huff	••	• •		240
nl 😬		W. J. Fraser.	••	••		66
1		Carlton R. Rose	÷ •	• •		14(
2		Edwin H. Pierce	••	••		160
3 **		J. C. Blair.	••			8
1		Adeline W. Rowley	••	••		140
5		George W. Schmidt	• •	••	· · · · · · · · · · · · · · ·	14( 14(
j .		J. G. Mosier		••	· · · · · · · · · · · · · · · · · · ·	14
(		Robert C. Vial	1		· · · · · · · · · · · · · · · · · · ·	140
5		Charles F. Hottes			· · · · · · · · · · · · · · · ·	120
		M. S. Ketchum	••		•••••••••	14
		A S Bettorgen				140 100
		A. S. ratterson			•••••••••	80
		Horry Koolor	••	••	•••••	100
1 **		W C Brenke	••	••	••••••••••	14
si ••		W. J. Fraser. Carlton R. Rose. Edwin H. Pierce J. C. Blair. Adeline W. Rowley. George W. Schmidt. Charles F. Hottes. M. S. Ketchum Paul Chipman. A. S. Patterson. D. H. Carnaham. Harry Keeler. W. C. Brenke. C. B. Clark. A. R. Curtiss. Henry Jones. J. H. Wilson. Mary M. Cole. Charles H. Garnett. James H. McKee. Walter G. Campbell. G. D. Hubbard. Edward L. Minne. George F. Anderson. Edw. G. Howe. N. A. Weston. Lillie A. Clendenin. Charles N. Cole. Charles N. Cole. Charles N. Cole. Edw. G. Howe. N. A. Weston. Lillie A. Clendenin. Charles N. Cole. R. S. Douglass. W. L. Pillsbury. G. W. Graham. M. T. Lindsey. I. H. Allen. F. J. Foote. Lillie Heath. Sue W. Ford. L. A. Boice. W. F. Marker. Albert R. Lee. Joe Morrow. C. B. Ewalt	••	••		170
3		Ă. R. Curtiss	••	••		17
71		Henry Jones	••	••		12
		J. H. Wilson	••	••		12
) ··		Mary M. Cole	••	••		8
		Charles H. Garnett		•		8
		James H McKee	••		· · · · · · · · · · · · · · ·	8
5		Walter G. Campbell		••	· · · · · · · · · · · · · · ·	8
5		G. D. Hubbard			· · · · · · · · • • •	8
L		Edward L. Milne			· · · · · · · · · · · · · · · · · · ·	8
		George F. Anderson			•••••	1 20
		Eaw. G. Howe			•••••••	30
		IN. A. Weston		۰.	••••••	13
		Charles N. Colo				15
<u></u>		R S Donglass	• •	• • .		15 15
1		W. L. Pillsbury	• •	••		23
		G. W. Graham	••	••		200
3		M. T. Lindsev	••	••		7(
1/		I. H. Allen		• •		1 70
5		F. J. Foote	••	• •		15
3		Lillie Heath	••	••	· · · · · · · · · · · · · · · ·	12
(		Sue W. Ford				10
5		L. A. Boice				10
1		W. F. Marker				10
		Albert R. Lee	• •			4
		C B Ewalt	·		•••••	4
		John Doughty		۰.		10
1		C V Miller	• • •	••		12
5		Albert R. Lee. Joe Morrow. C. B. Ewalt. John Doughty C. V. Millar. D. McIntosh. L. P. Breckenridge. S. W. Shattuck Richard Uttenweiler. Henry J. East. W. R. Hoffman L. G. Lathron.		••		100
3 • •		L. P. Breckenridge.	Salary 3 m	onths to May	7 31. 1897	6
<i></i>		S. W. Shattuck	Canar 9, 0	· · ·		15
3		Richard Uttenweiler	••	••		10
		Henry J. East	••			8
j		W. R. Hoffman		••		74
		W. R. Hoffman L. G. Lathrop. J. J. Johnson A. S. Golden E. E. Pound <i>The Illio</i> . James P. Biddle Eimer & Amend. Davis & Egan Machine Tool Co. Western News Co. Baker & Adamson Chem. Co. Medart Patent Pulley Co. <i>Technograph</i> <i>The Illini</i> . J. A. Kincaid E. G. Saltman. Mrs. Dora S. Smith. B. N. Rethry.		••	••••	6
5		J. J. Johnson				6
		A. S. Golden				6
E		E. E. Pound				6
		The Illio	Advertisen	lent		1
2		James P. Bladle	Engine and	i catnetomet	er, etc	44
8		Eillier & Amend	Chemicals.	••••••	••••••	15
S		Wostown Nows Co	Stand drill.	<b></b>	•••••••••••	10
9		Bakar & Adamean Cham Co	Filtore etc	л		
1		Modert Petent Pulley Co	Pullove		••••••	
5		Technogranh	Advertising	· · · · · · · · · · · · · · · · · · ·	•••••	10
3		The Illini	Subscriptio	n and adver	tising	17
4 **		J. A. Kincaid	Coal			18
		E.G. Saltman	Blue prints			
5						1

No.

2198 June 2199 2200

Date.	To whom.	For what.	Amount.
1897. une	30 C. A. Shamel Ellwanger & Barry T. R. Leal.	Printing circulars Seeds, etc Hauling and grading, etc	25 00 <sup>,</sup> 22 53 54 79

#### Warrants-Continued.

#### STATE LABORATORY OF NATURAL HISTORY WARRANTS.

0.	Date.		To whom.	For what.	Amou
	1896.			·	1
1	July	15	S W Shattuck Business M'w'r	Expressage. Office rent, April to June, 1896 Steam launch	\$4
$\hat{2}$	ours.	10	B. Zelle	Office rent, April to June, 1896	26
$\overline{3}$	••		W. H. Van Dervoort	Steam launch	28
4	• •		Geo. B. Carpenter & Co.	Dip nets	-3
5 6	• •		Richard Kny & Co	Chemical supplies. Grocer's supplies. Labor on launch	12
6	••		J. M. Schilling.	Grocer's supplies	27
7	••		W. G. Stocker	Labor on launch	5
	• •		F. D. FORDES	Expenses at Havana.	15
)	••		American Express Co.	Expressage for June, 1896	3
)	••		Thaver & Jackson	Reporter's note books Telegrams for June, 1896 Chemical supplies	1
l	• •		Western Union Telegraph Co	Telegrams for June, 1896	1
Ż	••		E. H. Sargent & Co	Chemical supplies	5
3	* *		$\mathbf{R} = \mathbf{W} = \mathbf{D} \mathbf{a} \nabla \mathbf{I} \mathbf{s}$	Photographic material	1
Ļ	•• ,		H. Swannell	Chemical supplies	2
5	••		Henry Trevett.	Hardware	41
ŝ	••		Lydia M. Hart	Drawings. Services in laboratory Expenses	10
7	344		Charles T. Wilder	Services in laboratory	13
3	••		W. A. Snow	Expenses	12
1	••		H. O. Woodworth	Services and expenses	102
)	••		Central Union Telephone Co	Services and expenses to September 30, 1896	4
	July	21	W. G. Johnson	to September 30, 1896 Salary for June, 1896 and July, 1896	100
1	•		H. C. Forbes	and July, 1896	166
	• •		Mary J. Snyder		125
	÷ •		Ernest B. Forbes	** ** **	80
	• •		Charles A. Hart		125
	July  Aug.	31	C. A. Kofoid	•• •• ••	200
Į	• • • •	-	Adolph Hempel	44 44 44	120
	• •		Frank Smith		100
1	. • •		Miles Newberry		91
)			Harlen Scott		22
	••		W A Snow	** ** **	75
	Aug.	4	Lemcke & Buechner	Books Subscription Corks	2
8	-••		National Railway Pub. Co	Subscription	5
			E. H. Sargent & Co	Corks.	3
	* *		W H Allen	Roaf gunnling	11
ļ		•	H. W. Rokker	Printing bulletin	23
-			Science	Printing bulletin. Subscription Salary for year ending May 31, 1896. Expenses	5
5			S. A. Forbes	Salary for year ending May 31, 1896.	62
l			**	Expenses	53
1			western Union Telegraph Co	l telegrams	1
			S. A. Forbes	Books	103
			American Express Co	Expressage	7
l			Frank L. Bills	Books Expressage Postage Subscription Ribbons	20
I	••		The Harris Publishing Co	Subscription	6
l			National Typewriter Exchange	Kibbons	2
			VISX WED	BOOKS	13
			E. T. Gresson	Subscription Books	4
1			L.S. Foster	Books	14
1			<u>ва длп</u>	Wood, coal, etc	9
١		ارد	J. M. Schilling.	Supplies Work	6
	Aug.	15	Charles T. Wilder	Work	33
			Lydia M. Hart	Drawings	7
1			H. C. Forbes	Expenses	1
	Aug.	31	U. A. Kofoid	Salary, August, 1896	100
ł			Prank Smith	•••	100
			H. C. Forbes		83
1			Charles A. Hart		62
3			W. A. Snow		75
)			Adolph Hempel	•••••••••	60
)	••		Mary J. Snyder		62
			Harlen Scott	**	12

## 172

#### UNIVERSITY OF ILLINOIS.

[Aug. 31,

<b>b.</b>	Date.		To whom.	For what.	Amou
1	1896.	1	· ·	Salary, August, 1896 Work in laboratory Salary, 3 months to date. Ocal. Hardware. Expenses. Labor and material, making net Work and material. Work and material. Work Drawings. Expenses. Slides, test tubes, etc. Telegrams	1
32 A	1090.	91	Ernest B. Forbes	Salery Anomat 1806	\$40
53	Aug.	91	Miles Newberry	Salary, August, 1830	51
34			Bertha V. H. Forbes	Work in laboratory	10
35	••		S. A. Forbes	Salary, 3 months to date	62
56	••		Ed Gill	Coal	3
57	**		O. H. Harpham	Hardware	5
38	**		H. C. Forbes.	Expenses	10
39			Mechanical Department	Lavor and material, making net	31
0			E. E. Kessler	Work and material	9 11
1			Sarah E. Webster.	Work	11
23			Lydia M. Hart.	Drawings	22
			S. A. Fordes	Expenses	
4	• •		W. A Show	**	2 29
567			Benech & Lomb Ont'l Co	Slides test types etc.	29
7	• •		Bausch & Lomb Opt'l Co Western Union Telegraph Co	Slides, test tubes, etc Telegrams	1
8			American Express Co	Expressore	1
ğ	Sepț.	30	B Zelle	Office rent Sentember 1896	22
ŏ۱^		50	R. S. Wilber	Slides, test tubes, etc. Telegrams Expressage. Office rent, September, 1896. Drayage. Care of boat and repairs. Cloth. Hard coal. Drawings. Supplies. Books. Printing. Books. Bulletin board frame. Plates. Salary, September, 1896. 	20
0 1	••		Geo. E. M. Hose	Care of boat and repairs	Ğ
$\hat{2}$			B. F. Gump	Cloth.	) ž
3	••		M. M. Clark	Hard coal	4
4	• •		Lydia M. Hart	Drawings	13
5	••		J. M. Schilling	Supplies	5
6	**		C. A. Kofoid	Book	1
7			H. W. Rokker	Printing.	57
8			E. F. Bigelow	Books	2
9			Geo. W. Parker & Son	Bulletin board frame	4
0			A. A. Beal & Co	Plates	35
$\frac{1}{2}$			H. C. Fordes	Salary, September, 1890	83
ź			Mary J. Snyder	** ** ***	62 62
4	• •		C A Kofoid	Part of colory Sontombor 1996	72
5			W A Spow	Salary September 1896	75
6			Harlan Scott	Salai y, September, 1880	12
7 c	Det.	15	S A Forbes	Exnenses	48
8		10	Lydia M Hart	Drawings	12
ğ			Macmillan & Co.	Books	13
ŏ	* *		A. A. Beal & Co.	Plates	12
1	* *		F. K. Robeson & Bro	Linoleum. etc	25
2			Champaign County Herald	Books, labels, etc	- 9
3			Franklin Engr'v'g & Electo, Co	Halftone	6
4	••		A. C. McClurg & Co	Book supports	1
5			S. Raymond Roberts	Conchology	6
6			Chas. A. Hart	Expenses	39
7			H. C. Forbes.	~	4
8	• •		D. H. Lloyde & Son	Stationery	4
9 0		1	Lawton & Co	Duplicator, etc	79
			T W Polston	Subscription	82
$\frac{1}{2}$	• •		Geo E Koehler	Binding	37
š r	Det.	31	H C Forhes	Salary October 1906	83
4		01	W. A. Snow	130101 J. OCLODEL, 1000	75
5			C. A. Hart.		62
3	6.6		Mary J. Snyder	· · · · · · · · · · · · · · · · · · ·	62
7	••		Harlen Scott	Part of salary, September, 1896 Salary, September, 1896 Drawings. Books. Plates Linoleum, etc Books, labels, etc. Halftone Book supports. Conchology. Expenses. Stationery. Duplicator, etc. Subscription Printing and binding. Binding. Salary, October, 1896 insect cases. Bottles.corks	12
R	4.4		O. D. Spatts	Insect cases. Bottles, corks Laboratory work Jumber Postal guide. Views. Drayage Salary, 3 mos. to Nov. 30, 1896. Nov., 1896.	26
ΞN	lov.	14	E, H. Sargent & Co	Bottles, corks	27
	4 4		Chas, T. Wilder	Laboratory work	20
i	4.6		Geo. W. Parker & Son	Lumber	16
2i -			Geo. F. Lasher	Postal guide	2
3			J. Manz & Co	Views	30
4			R. S. Wilber	Drayage	7
ΔĮΔ	lov.	30	S. A. Forbes	Salary, 3 mos. to Nov. 30, 1896	62
0			H. C. Forbes.	NOV., 1896	83
7			Unas. A. Hart		62
8			W. A. Snow	Halftone. Subscription Expenses. Postage. Expressage, etc. Copies.	50
9	• •		Hary J. Shyder	· · · · · · · · · · · · · · · · · · ·	62 12
1	• •		I Manz & Co	Halftono	12
$\frac{1}{2}$			Microscopical Publiching Co	Subscription	22
3	• •		H C Forbes	Expenses	
4	• •		C. A. Hart.	14 CH CONST	15
5			F. L. Bills	Postage	15 40
6		1	S. W. Shattuck, Business M'o'r	Expressage, etc.	17
	Dec.	10	mi a Tillini	Coning	10

о.	Date.	To whom.	. For what.	Amount
1	1896.			
38	1630.	Bevis & Co	Shipping boxes, etc	24 (
39	••	Bevis & Co Keen & DeLang Hanson Bros. Geo. E. Koehler.	Shipping boxes, etc Copy book Cuts Expenses Camera repaired, etc Zinc Plates Subscription Fly paper Drawings Work and expenses Books Expressage, etc Expressage	2
40	••	Hanson Bros.	Cuts	<b>4</b>
41	••	Geo. E. Koehler	Binding	34
42	• •	S. A. Forbes	Expenses	54 '
13	• •	Bausch & Lomb Optical Co	Camera repaired, etc	3 (
14	••	J. Manz & Co	Zinc Plates	4 (
15		Cambridge Entomological Club	Subscription.	5
16		A. P. Cunningham & Son	Fly paper	1
7	••	Lydia M, Hart	Drawings	13
8	• •	Chas. C. Adams	Work and expenses	21
9 0	••	R. Friedlander & Son	BOOKS	59
1	Dec. 19	S. W. Shattuck, Dusiness M'g'r	Expressage, etc	9 84
ż	Dec. 19	H C Forbes	Expenses	5
3	••	Frank Smith	**	
4	* *	Bansch & Lomb Ontical Co	Hustings triplet	5
5	••	Chas T Wilder	Negative and print	1
6	••	Entomological News	Subscription for 1897	1
ž	Dec. 31	H. C. Forbes.	Salary for Dec., 1896	83
$\dot{8}$		Mary J. Snyder		62
9	••	Chas. T. Wilder. Entomological News. H. C. Forbes. Mary J. Snyder. Chas. A. Hart. Chas. C. Adams. Harlen Scott.	Hustings triplet. Negative and print. Subscription for 1897. Salary for Dec., 1896.	62
Ō	* •	Chas. C. Adams	** **	40
1	••	Harlen Scott	44 44 44 • • • • • • • • • • • • • • • •	12
<b>2</b>	Jan. 15	S. A. Forbes. J. P. Webster	Expenses Drawing material	56
0	••	J. P. Webster	Drawing material	3
4	•••	D. H. Lloyde & Son Bausch & Lomb Optical 'Jo C. B. & Q. R. R. Co Geo. W. Parker & Son	Printing Stationery. Hustings triplet. Freight Bottle racks.	82
5		D. H. Lloyde & Son	Stationery	2
<u>6</u>		Bausch & Lomb Optical Co	Hustings triplet	5
7		C. B. & Q. R. R. Co	Freight	2
8		Geo. W. Parker & Son	Bottle racks	12
39	••	American Express Co	Expressage	3
0		J. W. Franks & Son	Index to bulletins, etc	81
1	••	D. S. Foster	Bottle racks Expressage	3
$\frac{12}{3}$		Z E Kochloria Antiquarium	Books	25 3
4	• •	Lohn U Knowles	Bookg	18
5	••	R. Freidlander & Son	D00x8	92
6	Jan. 30	S A Forbes	Evnenses	67
7	ouni, 00	Lydia M Hart	Drawings	3
8	••	E. W. Mitchell	Traveling expenses	7
9	••	F. W. Prickett	Trailer B out of Bost and Strail	3
0	••	John A. Latzer	•• ••	2
1		Fred G. Miner		5
32	••	A. D. Shamel	44 44	13
3	••	F. D. Linn	** **	6
4		E. B. Forbes	Expenses Drawings Traveling expenses	36
5		Library Bureau	Labels	2
6		K. W. Braucher	Labels Binding books. Bottles, corks, etc Plates. Labor. Petty expenses. Postage Freight, telegrams. Salary for Jan., 1897.	4
7		Geo. E. Koehler	Binding books	26
8	••	A A Bool & Co	Dotties, corks, etc	4
9 0		H O Woodwowth	Labor	24
1		H C Forbog	Dabor.	57
$\mathbf{\bar{2}}$		Frank L. Bille	Poetago	23
3	••	S W Shattuck Business Misin	Freight telegrams	23
4	••	Mary J. Snyder	Salary for Jan 1807	62
5	••	H. C. Forbes	····································	
6		C. A. Hart.	••• ••	75
7	••	C. C. Adams	** **	60
8	••	Harlen Scott.	** **	15
ğ	••	Walker & Mullekin	Corduroy cushion. etc	6
n)	••	R. S. Wilber.	Drayage	4
)1	Feb. 15	Barnard Quaritch	Foreign literature	14
14	••	K. F. Koehler's Antiquarium		5
)3	••	Lea Bros. & Co	Subcription	4
)4	••	Jas. T. Hathaway	Book	1
)5	••	Wm. Wesley & Son	Corduroy cushion, etc Drayage Foreign literature Subcription Book Foreign books Subscription, 1897. Book labels Books Subscription Printing circular notes.	. 5
)6	• •	Entomological Society of Ont .	Subscription, 1897	9
)7	••	Page & Pratt		3
)8		The Library Bureau	Book labels	4
ì	• •	W. H. Lowdermilk & Co.	Books	$\frac{2}{2}$
)9 10				

). Date	••	To whom.	For what.	Amoun
1897.		· · · · · · · · · · · · · · · · · · ·	1	1
2 Feb.	15	D H. Lloyd & Son	Envelopes, files, etc	4
3		E. B. Forbes	Work Services to March 31, 1897 Letter heads	2
4		Central Union Telephone Co	Services to March 31, 1897	4
5		E. F. Hartman	Letter neads	3
7		H. C. Forbes.	Petty expenses	3
8		Bausch & Lomb Ontical Co	Ribbons, etc Repairs of microscope	5
9 **		H. W. Rokker	Printing bulletins	120
Feb.	27	H. W. Rokker S. A. Forbes.	Printing bulletins Salary, three months, to Feb. 27, '97 Salary, for February, 1897	62
11		H. C. Forbes	Salary for February, 1897	83
2		C. A. Hart		1 75
3 ·· 1 ··		Mary J. Snyder		62
5		U.U. Adams		50 15
ś · ·		Lydia M Hart	•• •• ••	27
March	15	S. A. Forbes	Expenses	29
3	~0	H. C. Forbes	Petty expenses	3
9 **		H. C. Forbes. C. A. Hart Mary J. Snyder C. C. Adams. Harlen'Scott Lydia M. Hart S. A. Forbes. H. C. Forbes. Uydia M. Hart Alice Frazey R. S. Wilber Edwards & Docker Co. J. Manz & Co.	Drawings	4
2		Alice Frazey	Work	10
L]		K. S. Wilber	Urayage	7
		J. Manz & Co	Bubscription	
		Geo. Brunder	Drawings Work Subscription Half tone Book Supplies Books Literature Bulletins Postage	11
6.6		Geo. Brunder E. H. Sargent & Co Wm. Wesley & Co Paul Klincksieck Lemcke & Buchner. H. W. Rokker	Supplies.	1
3		Wm. Wesley & Co	Books	18
		Paul Klincksieck	**	9
3		Lemcke & Buchner	Literature	3
1		H. W. Kokker	Bulletins	130
		H. W. KOKKEF F. L. Bills. S. W. Shattuck, business mgr H. C. Forbes. C. A. Hart. Mary J. Snyder. C. C. Adams	Postage.	35 19
March	21	H C Forbes	Expressage, telegrams Salary for March, 1897.	83
3		C. A. Hart.		75
••		Mary J. Snyder	· · · · · · · · · · · · · · · · · · ·	62
5		C. C. Adams	** **	' 50
		C. C. Adams. Harlen Scott. S. A. Forbes. Frank Smith Frank L. Bills. S. W. Shattuck, business mgr. H. C. Forbes. C. A. Hart Mary J. Svyder. C. C. Adams. Harlen Scott	Expenses	15
May.	15	S. A. Forbes	Expenses Postage Sundry items Salary for April, 1897	34
<u> </u>		Frank L Bills	Postage	31
) ··		S. W. Shattuck, business mgr.,	Sundry items	48
May j	31	H. C. Forbes	Salary for April, 1897	83
		C. A. Hart	· · · · · · · · · · · · · · · · · · ·	75
		Mary J. Spyder	** **	52
		Harlen Scott	** **	50 15
		Lillie M Hart		12
		Ernest B. Forbes	Subscription Book	23
••		N. Y. Entomological Society	Subscription	23 2
		Lemcke & Buchner	Book	3
/		D. H. Lloyde & Son	Ink, paper, etc Ribbons	, 2
		Lawton & Co	Klobons	1
June	15	E B Forbes	Expenses	51 13
		Lawton & Constant Lawton & Constant S. A. Forbes. E. B. Forbes. S. W. Shattuck, business mgr. Lydio M. Howt	Babolis Expenses. Work Sundry items Drawings	37
• •		Lydia M. Hart.	Drawings	43
••		John Hart. Lydia M. Hart. Fred Atkinson J. C. Winship Co. H. C. Forbes	Praintings, etc. Printing bulletins, etc. Petty expenses. Repairs on insectary Subscription Foreign publications. Subscription	1
		J. C. Winship Co	Printing bulletins, etc	127
••		H. C. Forbes	Petty expenses	3
••		(i. W. Parker & Son	Repairs on insectary	7
		Dr. T. Brumahovat	Subscription	
		Maxmillan Co	Subscription	6
		Science		5
••		Wm. Wesley & Co	roleign publications	1 0
• •		L. Raymond Roberts	Publications	6
		Geo. E. Koehler	Pool hinding	32
June	30	S. A. Forbes	Salary, three months, to May 31, 1897	62
	- [	H. U. FORDES	Salary, May and June, 1897	166 10
		Science Wm. Wesley & Co L. Raymond Roberts Geo. E. Koehler. S. A. Forbes. H. C. Forbes. C. A. Kofoid. C. A. Hart.	Salary May and June 1807	166
		C C. Adams	Salary, three months, to May 31, 1897 Salary. May and June, 1897 Part salary, June, 1897 Salary, May and June, 1897	100
••		Mary J. Snyder	•• • • • • • • • • • • • • • • • • • • •	140
		Harlen Scott	• • • • • • • • • • • • • • • • • • • •	30
		J. C. Winship Co	Work on corrections	10
		S. W. Snattuck, business mgr	Pay roll of men, May, 1897	4 149
5		R. Friedlander & Son	Work on corrections. Pay roll of men, May, 1897 Foreign literature	1

#### AGRICULTURAL EXPERIMENT STATION WARRANTS.

о,	Date.		To whom.	For what.	Amou
	1896.				
1	July	15	S. W. Shattuck, business mgr	Freight and express. Stamp Mason jars, etc Lumber, etc. Gummed labels. Ewes. Material for barometer case Microscopes. Salary for July, 1896.	\$5
$\frac{2}{3}$			A. C. McClurg & Co	Stamp	3
3			Creamery Package Mfg Co	Mason jars, etc	12
4 5 6 7			C. A. Besore	Lumber, etc	1
5			Library Bureau.	Gummed labels	21
6			E. E. Chester	Ewes,	50
7			Repair shop. Univ. of Illinois	Material for barometer case	2
8			Bausch & Lomb Optical Co	Microscopes	33
9	T 1	0.1	T. J. Burrill	Salary for July, 1896	25
	July	31	G. M. McCluer		110
2			W. L. Fillsbury		66 125
3	• •		E Deven port	** ** **********	87
4	• •		W A Poworg		60
5			W I Freger	•• ••	66
6	••		Koto MaInturo		50
7	* *		C F Hottes		60
8	* *		C L Beach		60
9	Angust	14	W. Pilcher.	Milk	54
ŏ		* <b>*</b>	S. B. Hedges	**	46
01234	• •		S. W. Shattuck, business mor	Pay rolls for July 1996	438
<b>2</b>	Angust	20	The Gazette	Advertising	2
3			S. W. Shattuck, business mgr	Freight, express, etc	16
4	August	31	T. J. Burrill	Salary for August, 1896	25
5			G. W. McCluer	1, 2, ,	110
6	• •		W. L. Pillsbury	** **	66
5678901	••		C. G. Hopkins	** **	66 125
8	••		E. Davenport	•• •• ••	87
9	••		W. A. Powers		60
0	••		W. J. Fraser		66
1	••		Kate McIntyre	•••••••••••••••••••••••••••••••••••••••	50
<b>32</b>	••		H. N. Woodward	Labor	15
34	••		J. C. Winship Co	Bulletins	225
34	••		C. G. Hopkins	Sundry items	11
35			Champaign Supply Co	Packing, etc	1
6			D. A. Burwash	Qats	4
17			E. Henry.	Supplies	10
8			Twin City Ice & Cold Stor ge Co		39
9			Maiby & Wanace Co	Fittings	1
0	• •		John F. Miller	marness	26
12			Childh Brick & The Co	The	65
3	• •		W Bilehow	Mill*	66
4	••		S B Hodges	MIIK	59
4	Sept.	15	N B Morrison	Fynongog	59
6	Sept.	10	Loope S. Roymond	my penses	3
7	• •		E A Biobl	* *	14
8		í	I C Winshin Co	Printing hulleting	157
9			Champaign County Herald	Printing	49
ŏ			S. W. Shattuck, business mor	Pay roll of men. August 1896	439
il	Sept.	30	S. W. Shattuck, business mer.	Milk Milk Pay rolls for July, 1996 Advertising Freight, express, etc Salary for August, 1896  Labor. Bulletins Sundry items Packing, etc Oats Supplies Icc Fittings Harness Tile Labor. Milk Expenses. Printing bulletins Printing Pay roll of men, August, 1896. Freight and expressage. Services to December, 1896. Freight and expressage. Services co December, 1896. Freight and expressage. Services co December, 1896. Advance on August salary Books. Expenses. Thermometer, etc. Lumber. Salary for September, 1896.       	4
<b>2</b>			C. and U. Phœnix Telephone Co	Services to December. 1896	4
3			W. A. Powers.	Advance on August salary	15
4	••		Gustav E. Stechert	Books	19
5	• •		E. Davenport	Expenses	5
6			Henry J. Green	Thermometer, etc	13
7			H. Swannell	Kerosene oil	4
8	• •		Creamery Package Mfg. Co	Jars, etc	22
9			C. H. Baddeley	Soap	3
0			C. J. Sabin	Twine, etc	2
1	••		Charles A. Besore	Lumber	51
<b>2</b>	**		T. J. Burrill	Salary for September, 1896	25
3	••		G. W. McCluer	•• ••	110
4	••		W. L. Pillsbury	•• ••	66
5	**		C. G. Hopkins	•••	125
<b>6</b>	**		E. Davenport		87
7	**		W. A. Powers	**	75
8	••		W. J. Fraser		66
9	••		P. G. Holden		50
0	••		J. U. Blair		41
$\frac{1}{2}$			Kate McIntyre		50
			G. P. Clinton		83

[Sept. 30,

## Warrants — Continued.

».	Date.		To whom.	For what.	Amou
Ī	1896.			Binding books Repairing Stationery Pay roll of men, September, 1896 Contract for laying floors Milk, September, 1896 Ice Hay Lumber Sponges, etc. Pipe, etc Trees Galvanized hood Glass, etc. Freight and express Pay roll of men, September, 1896 Baskets, salt, etc Milk Brushes, tube cleaners, etc Sulphuric acid, etc Work Plumbing, etc.	
и	Sept.	90	Pontagraph Print and Stat Co	Binding books	\$55
4 5	Sebi:	30	I antagraph i rint, and Stat. 00	Bensiring	3
6		- 1	Champaign County Hoyald	Stationowy	20
7	••		Champaign County Heraid	Bar well of mon Sontombon 1906	20
8	October ·	15	Garman & Colling	Contract for lawing floors	347
9	October :	10	P Hodges	Milly Sontombon 1906	168 53
			W Bilehen	murk' gebreunet, 1930	64
$\begin{array}{c} 0 \\ 1 \end{array}$			W. Flicher	Tee	12
$\frac{1}{2}$		1	P Hodges	Псе	50
3	••		Charles A Pegene	Lambon	45
			Drice & Senford	Spongog oto	40
1			Champaign Supply Co	Bing oto	
5	••		Anguating & Co	The, etc	4
7	i •		W W Shuek	Calvanized bood	10
ŝ			Knowlton & Bonnott	(lloss ofe	4
9			S W Shottuck Business Man	Freight and express	3
5	4 -		o. W. Shattuck, Dusiness mgr.	Pert roll of mon Sontombon 1906	40
	• •		F Honor	Paghota galt oto	40
12	• •		W Dilahow	Milt	3
	••		W. LHCHEF	Runched tube alegners of	1 1
3			Chapter and Separator Co	Brushes, tube cleaners, etc	2
1			Greamery Fackage Mig. Co	Sulphuric acia, etc	3
õ			Dehingen & Purr	WOIK	6 65
6			Robinson & Burr		00
7		91	U. J. Saulli	Pay roll of men. September, 1896 Baskets, salt, etc Milk Brushes, tube cleaners, etc Sulphuric acid, etc Work Plumbing, etc Salary for October, 1896       	21 25
9	October a	อม	W I. Dillahuwr	Sarary for October, 1890	66
			W. L. Fillsbury	•• •• ••	125
0			U. G. Hopkins	•• •• •••	120
1			E. Davenport		87
2			P. G. Holden		50
3			J. C. Blair		41
1		- 1	G. P. Clinton		83
5			D. McIntosh		50
6			Kate McIntyre		50 25
7	Nov.	14	George Besore	Feed, bran, etc	25
D			W. O. Conner	Matches	
9			Charles A. Besore	Lumber	21
0			Knowlton & Bennett	Blank book	2
1			Champaign Co. Printing Co	Advertisement	1
2			De Laval Separator Co	Repairing separator	16
3			Q. H. Swigert	Lambs, etc	71
4			Gustav E. Stechert	Books	19
5			The Gazette	Labels	1
6			John F. Miller	Feed, bran, etc Matches Lumber. Blank book Advertisement. Repairing separator Lambs, etc. Labels Harness, etc. Steel harness. Ice Ducking	3
7			Sherwood Harness Works	Steel harness	10
8		1	Twin City Ice & Cold Stor ge Co	Ice	10
9			H. C. Porter	Ducking	1
ò			William Price	Paints, oils, etc	11
1	1		Twin City Ice & Cold Stor ge Co H. C. Porter	Ice Ducking Paints, oils, etc Expenses Plowing, etc Milk Expenses Postage Freight and express Fay roll of men, October, 1896 Salary for November, 1896	6
$\overline{2}$			H. N. Woodward	Plowing, etc	35
3	Nov.	16	S. B. Hedges	Milk	46
4			E. W. Hildebrand	Expenses	17
5			F. L. Bills	Postage	10
6	1		S. W. Shattuck, Business Mgr.	Freight and express	10
7		~		Pay roll of men, October, 1896	450
g	Nov.	30	T. J. Burrill W. L. Pillsbury E. Davenport D. McIntosh.	Salary for November, 1896	25
9			W.L. Pillsbury		66
0			E. Davenport		87
1			D. McIntosh		50
$\frac{2}{2}$			P. G. Holden		50
3			G. P. Clinton		83
4			C. G. Hopkins	· · · · · · · · · · · · · · · · · · ·	125
5			J. C. Blair	· · · · · · · · · · · · · · · · · · ·	41
6			W. J. Fraser	Expenses.	33
7			Kate McIntyre	· · · · · · · · · · · · · · · · · · ·	50
8	•••		T. I. Mairs	· · · · · · · · · · · · · · · · · · ·	38
9	Dec	10	E. Davenport	Expenses	65
0	1. 11		H. B. Gurler	• •	15
1	Dec.	15	E. Davenport	**	1
$\overline{2}$	••		W. J. Frazer	**	2
3	••		Thomas Skinner	Labor	34
4	••		C. J. Sabin.	Twine.	2
5	••		George Elv	Repairing	Ē
6	••		Bevis & Co	Lumber	1
7	• •		A P. Cunningham & Sons	Camera, etc	13
8	••		William Price	Lead. oils. etc	i õ
				1	

1890           0         Dec.           1            2            34            4            5            6            9            12            4            5            6            9            1            2            3            4         Dec.           5            6	3. 15	H, Mineka S. B. Hedges J. C. Blair J. Morrow C. A. Besore George Besore Gustav E. Stechert Gustav E. Stechert Heorge F. Lasher Hall Linseed Oil Works amuel Bartley Henry Heil Chemical Co Knowlton & Bennett S. W. Shattuck, Business Mgr. T. J. Burrill W. L. Pillsbury	Repairing harness. Milk for November, 1896 Petty expenses. Repairing pipe, etc Lumber. etc Bran, grinding, etc Books. Postal guide. Lineeed cake	\$2 42 2 4 36 49
0 Dec. 1 2 · · · 2 3 · · · · · · · · · · · · · · · · · · ·	. 15	H. Mineka. S. B. Hedges J. C. Blair J. Morrow C. A. Besore. George Besore Gustav E. Stechert (Heorge F. Lasher Hall Linseed Oil Works. Namuel Bartley	Repairing harness. Milk for November, 1896 Petty expenses Repairing pipe, etc Lumber. etc Bran, grinding, etc Books Postal guide Lineeed cake	\$2 42 4 36
1 2 3 4 5 6 7 6  8 9  1  6  8     	10	S. B. Hedges J. C. Blair J. Morrow. C. A. Besore. George Besore Gustav E. Stechert George F. Lasher Hall Linseed Oil Works. Namuel Bartley	Milk for November, 1896 Petty expenses. Repairing pipe, etc Lumber. etc Bran, grinding, etc Books. Postal guide Lineeed cake	42 2 4 36
2 · · · 3 · · · 5 · · · 6 · · · 7 · · · 8 9 · · · 9 · · · 1 · · · 3 Dec. · · 6 · · ·		I. C. Blair J. Morrow. C. A. Besore. George Besore. Gustav E. Stechert. (Heorge F. Lasher. Hall Linseed Oil Works. Samuel Bartley.	Petty expenses Repairing pipe, etc Lumber. etc Bran, grinding, etc Books Postal guide Lineeed cake	2 4 36
3 4 5 5 7 7 8 9  9  9  1  3 4 Dec. 6  6  6  6  6  6  6  6  6  6  6  6  6  6  6  6  7  6  6  7  6  6  7  8  6  6  7  8  6  6  7  8  6  6  7  8  6  6  6  6  6  7  8  6  6  7  7  8  6  6  6  7    7  7   		J. Morrow. C. A. Besore. George Besore Gustav E. Stechert Heorge F. Lasher Hall Linseed Oil Works. Namuel Bartley	Repairing pipe, etc Lumber. etc Bran, grinding, etc Books Postal guide Lineeed cake	4 36
$\begin{array}{c} 4 & \cdot \cdot \\ 5 & \cdot \cdot \\ 6 & \cdot \cdot \\ 7 & \cdot \cdot \\ 9 & \cdot \cdot \\ 9 & \cdot \cdot \\ 1 & \cdot \cdot \\ 2 & \cdot \cdot \\ 3 & \cdot \\ 3 & \cdot \\ 5 & \cdot \cdot \\ 6 & \cdot \end{array}$		C. A. Besore George Besore Gustav E. Stechert Heorge F. Lasher Hall Linseed Oil Works namuel Bartley	Lumber. etc Bran, grinding, etc Books Postal guide Lineced cake	36
5 6 7 8 1 2 3 4 5 6 1 1 1 1 1 1 1 1		George Besore Gustav E. Stechert George F. Lasher Hall Linseed Oil Works amuel Bartley	Bran, grinding, etc Books Postal guide Lineeed cake	40
6 · · · · · · · · · · · · · · · · · · ·		Gustav E. Stechert (teorge F. Lasher Hall Linseed Oil Works amuel Bartley	Books Postal guide	49
8 · · · 9 · · · 1 · · · 3 Dec. 6 · · ·		(teorge F. Lasher Hall Linseed Oil Works amuel Bartley	Postal guide	5
8 9 1 1 3 4 Dec. 5 6		Hall Linseed Oil Works	Lineeed cake	2
0 1 2 3 4 5 5 6		amuel Bartley	Hinobou builo the second	.8
1 2 3 4 5 5 6			Superintending experiments	27
Dec.		Henry Hell Chemical Co	Apparatus	3
Dec.		Knowlton & Dennett	Paint, etc	6 7
Dec.		5. W. Shattuck, Dusiness Mgr.	Pay roll of mon November 1896	320
	90	TT I Burnill	Salary for December 1896	25
3	50	W I. Pillsbury	Salary for December, 1896	. 66
		E Davennort	•• ••	87
i ••		D. McIntosh		50
a ••		P. G. Holden	** **	50
j ··		G. P. Clinton	•• ••	83
)		C. G. Hopkins	**	125
		J. C. Blair		41
		T. J. Burrill W. L. Pillsbury E. Davenport D. McIntosh P. G. Holden G. P. Clinton C. G. Hopkins J. C. Blair W. J. Fraser Kate McIntyre T. L. Mairs	** **	33
Dec.	31	Kate McIntyre		50
t i i i i i i i i i i i i i i i i i i i		T. I. Mairs	Freight Chemicals Hardware etc Survices to March 15, 1897 Services of sheep. Printing Hardware Lumber Ink wells, etc Repairs, etc Sponges, etc Straps Galvanized wire, etc Cloth, etc Mason jars, etc Hardware Lumber Lumber Lumber Lumber Lumber Lard oil. etc	33
		S. W. Snattuck, Business Mgr.	Chemicala	24
		Hubbard & Song	Hardware etc	263 57
••		C & II Phoenix Telephone Co	Survices to March 15 1897	4
· ·		Henry M. Dunlan	Services of sheep	3
		The Gazette	Printing	4
••		Champaign County Herald		17
		Henry Trevett	Hardware	17 40
		Charles A. Besore	Lumber	3
L **		D. H. Lloyde & Son	Ink wells, etc	1
		Robinson & Burr	Repairs, etc	8
		Maxwell & Mollett		1
9		G. C. Willis	Crash, etc	8
5		Knowiton & Bennett	Sponges, etc	1
		John F. Miller	Colvening wine etc.	1 5
		Welker & Mulliken	Cloth etc	6
	1	Creamery Package Mfg Co.	Mason jars, etc.	20
		r. H. Trevett	Hardware	20 12
	1	Twin City Ice & Cold Stor'ge Co	Ice	5
		George Besore	Bran	14
		J. Hamilton & Son	Lumber	3
	1	C. J. Sabin. H. Swannell	Twine. Lard oil, etc. Milk for December, 1896. Freight, labor. etc.	-
6 <u>1</u>				
1		S. B. Heages	Milk for December, 1896,	38 17
1897	,	S. W. Snattuck, Business Mgr.	Freight, labor. etc	17
Jan.	. 15	S W Shattuck Business Mor	Freight express and labor	270
pan:.	. 10	Henry Tromner	Scales and weights	95
••		J. B. Ellis	N. A. fungi	95 7
••		Thomas Meehan & Sons	Subscription	ż
		F. L. Bills	Postage	5
		Hubbard & Sons	Plumbing, etc	42
		Charles A. Besore	Lumber and coal	9
		Pantagraph Print. and Stat. Co	Stationery, etc	6
	90	T. J. BURTHI	Salary for January, 1897	25
Jan:,	. 30	W. L. FIIISDURY		66 91
••		D MeIntosh		91 50
		P. G. Holden	Milk for December, 1896.         Freight, labor. etc         Freight, express and labor.         Scales and weights         N. A. fungi         Subscription         Postage.         Plumbing, etc.         Lumber and coal.         Stationery, etc         Salary for January, 1897.   <	50
		G. P. Clinton	•• ••	83
••		C. G. Hopkins	•• ••	125
<b>'</b> 8	1	J. C. Blair		41
		TT7 I T3		33
3 **		Kate McIntyre		50
		T. I. Mairs	Tile Lomber, coal Oil Fruit jars Books.	33
Feb.	15	Union Brick and Tile Co	[[111e	2
		Unaries A. Besore	Lymoer, coal	12
		E W Sampson	WII	4
		Gustav E. Stochart	Booke	$^{4}_{2}$

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## UNIVERSITY OF ILLINOIS. [Feb. 15,

Date.		To whom.	For what.	Amou
1				1
189		Citation Designed	(Mahla	@1
Feb.	19	Library Bureau	Table	\$1 17
•••		George Bosore	Bran	43
		De Level Separator Co	Grank lever	1
	•	Ottenheimer & Co	Overalls	2
		Robinson & Burr	Wrenches nulleys etc.	11
		Hubbard & Sons	Pine and fittings	11 48
••		R Herbst	Ribbons	2
•••		J. R. Greenhalgh	Lamp	5
• •		E. Henry	Washing powder, etc	5
• •		The Gazette	Paper	.  1
••		Bevis & Co	Lumber	33
		S. W. Shattuck, business mgr.	Pay roll, men. January, 1897	286
Feb.	27	T. J. Burrill	Salary for February, 1897	25
		W. L. Pillsbury		. 66
		E. Davenport		. 91
		D. McIntosh		. 50
		P. G. Holden		. 50
		G. P. Ulinton		83 125
		U. G. HOPKINS	•• •• •••	120
		W T Emagon		41
		W. J. Fraser	• • • • • • • • • • • • • • • • • • • •	50
		T I Moirs		33
		William Price	Shades, oil, etc. Pipe and iron Expenses	12
		A Selocovitz	Pine and iron	
March	15	Jesse S Reymond	Expenses	2
		N B Morrison	LIXPOIDOD	:  8
2 **		E. A. Riehl	••	13
		Hubbard & Sons	Bolts Pay roll, February, 1897, etc Salary for March, 1897	. 5
		S. W. Shattuck, business mgr.	Pay roll, February, 1897, etc	321
March	31	T. J. Burrill	Salary for March, 1897	. 25
		W. L. Pillsbury		. 66
31		E. Davenport	** **	. 91
		D. McIntosh		. 50
		P. G. Holden		. 50
		G. P. Clinton		
		C. G. Hopkins		. 125
		$\mathbf{W}$ T $\mathbf{W}$		. 41
		W. J. Fraser		- C C
		T I Moing		33
3		N. B. Morrison E. A. Riehl Hubbard & Sons S. W. Shattuck, business mgr. T. J. Burrill W. L. Pillsbury D. McIntosh O. McIntosh G. P. Olinton C. G. Hopkins. J. C. Blair. Kate McIntyre T. I. Mairs. C. A. Besore.	Lumber coal etc	16
	2	C. A. Besore, Gustav E. Stechert Library Bureau S. B. Hedges	Lumber, coal, etc Subscriptions Book Hay Bran cats etc	162
••		Library Bureau	Book	162
ś · ·		S. B. Hedges	Hav.	6
		George Besore	Bran. oats. etc	. 25
		Pantagraph Printing & Sta. Co.	Tablets	. 2
δi ••		C. & U. Phœnix Telephone Co.	Services to June 15, 1897	. 4
L · ·		Joliet Strowbridge Co	Ring	. 2
		J. C. Winship Co	Printing bulletins	. 191
3		John F. Miller	Stable blankets, repairs, etc	. 11
		H. Mineka	Stable blankets	
5		Kopinson & Burr	Hay Bran, oats, etc. Tablets. Services to June 15, 1897. Ring Printing bulletins Stable blankets, repairs, etc. Stable blankets. Repairing milk tester, etc. Postage. Pay roll of men, March, 1897. Expenses.	10
1	à	F. L. Bills	Postage	· 10
April	2.	5. W. Snattuck, business mgr.	Pay roll of men. March, 1897 Expenses. Seeds, etc. Bamboo, etc. Clock Paper. trowels, etc. Glass, paints, etc. Hardware, etc. Pulp caps. Gooseberry and grape plants Pegs	36
		E. Davenport	Soods ote	. 4
		Monrill & Monloy	Bamboo eta	. 4
1		L. C. Garwood	Clock	:  :
S **		Cambridge Botanical Supply Co	Paper trowels, etc.	:  ;
3 **		William.Price	Glass, paints, etc	:  i
2		Hubbard & Sons	Hardware. etc	21
à ••		Creamery Package Mfg. Co	Pulp caps	:  ī
ā ••		George S. Josselvn	Gooseberry and grape plants	. 10
ni **		Petty & Savers	Pegs	. 3
1		Charles A. Besore	Coal	
2		J. M. Thorburn & Co	Seeds	. 10
3		Peter Henderson & Co	· · · · · · · · · · · · · · · · · · ·	
4		W. Atlee Burpee & Co	Seed corn, oats, etc	
5 **		H. Swannell.	Glass, paints, etc. Hardware, etc. Pulp caps. Gooseberry and grape plants Pegs Coal. Seeds. Seed corn, oats, etc. Oil Spraying nozzle Zinc labels Repairing buggy, etc. Books. Services.	
6		John J. McGowen	Spraying nozzle	. 1
1		Charles L. Mann	Zinc labels	. 8
5		Frison Bros	Repairing buggy, etc	
9		U- H Stochart	1500K8	1 6

). D	ate.		To whom paid.	For what.	Amou
,	1897.				1
1 Apr	vil	21	A. A. A. Coll. and Expt. Stations	Membership fee Sapolio, etc. Glycerine Envelopes for bulletins. Salary, April, 1897	\$10
2			C. H. Baddeley	Sapolio, etc.	3
3	• •		Knowlton & Bennett	Glycerine	2
4	• •		Champaign County Herald	Envelopes for bulletins	105
5 Apr	il	30	T. J. Burrill	Salary, April, 1897	25
6	••		W. L. Pillsbury		66
14	••		E. Davenport		91
0			D. McIntosh		50
9			P. G. Holden	4 4 · · · · · · · · · · · · · · · · · ·	50
0			G. P. Clinton	··· ···	83
$\frac{1}{2}$			L C Blojn	** **	125 41
3	• •		W J Fresor	** **	33
4	4.4		Kate MeIntyre	• • • • • • • • • • • • • • • • • • • •	50
5			T. I. Mairs	** **	33
6	4 4	1	R. S. Wilber	Dravage	2
7	• •		Bausch & Lomb Optical Co	Microtome. etc	61
8	* *		J. C. Winship Co	Bulletins	424
9	**		Frison Bros	Drayage Microtome, etc. Bulletins Painting and repairing wagon Bamboo rod, etc Plow Jars. Dusters, rules. etc. Harrows Fittings, etc. Expenses. Petty expenses. Subscription Oats Petty expenses. Plants Seeds Plants Blackberry plants Expenses. Steers Hay Lumber and coal. Salary, May, 1897.	31
0	**		Morrill & Morley	Bamboo rod, etc	2
11	••		B.F. Avery & Sons	Plow	6
2	••		Gues Clough & Co	Jars	26
3			A. F. Uunningham & Sons	Dusters, rules. etc	6
4 5			U.J. Sabin.	Harrows	27
6 6		-	F Devenport	Fittings, etc	11
7	• •		W I Freser	Potty orponsos	9 5
8			G E Stechert	Subscription	5
9	• •		John Grein	Oats	31
ŏ	• •		C. G. Honkins	Petty expenses.	20
ĭ	• •		Phœnix Nursery Co	Plants	9
2	" "		Victor Koechl & Co	Seeds	8
3	• •		Greening Bros	Plants	16
4			Augustine & Co	••	24
5			T. E. Goodrich	Blackberry plants	`1
6	•••		P. G. Holden	Expenses	7
7			Otto Swigart	Steers	183
8			Bush & Campbell	Hay	3
9     Mar	-	91	Unaries A. Besore	Lumber and coal	22
0 May	·	91	W I. Dillahuw	Salary, May, 1897	25
$\frac{1}{2}$	4 4		E Davenport	** **	66 91
3	* *		D McIntosh	** **	50
4	4 4		P. G. Holden	** **	50
5			G. P. Clinton G. G. Hopkins. J. C. Blair W. J. Fraser. Kate McIntyre	** **	83
6			C. G. Hopkins	** **	125
7	•••		J. C. Blair	•••••••••••••••••••••••••	41
8	••	- 1	W. J. Fraser	** **	33
9	••		Kate McIntyre	46 66	50
0	•••		T. 1. Mairs		33
1 Jun	e	15	J. V. Cotta.	Nursery stock	4
2	**		H N Woodmord	Lehen	2
3 4	••		Thos Franks	Elawor nots	22 3
4 5	• •		Fuller & Fuller Co	Oil of witrial ate	ă
6	• •		Eimer & Amend	Chamicals	8 25
7	• •		Burrill & Davis	Oats hose etc	25
8	• •		Standard Oil Co	Empty barrels	0
9	• •		Creamery Package Mfg. Co	Bottles	2
Õ	••		C. H. Dana	Labels and punch	$ \begin{array}{c c}  & 2 \\  & 6 \\  & 13 \\ \end{array} $
i	••		T. H. Trevett	Seed germinators, etc	13
2	••		Robinson & Burr	Sharpening samplers, etc	2
3	••		Gustav E. Stechert	Books	8 16
4	••		Pantagraph Printing & Sta. Co.	Boxes for library cards	16
5	••		H. McFadden & Bro	Bran	6
6	••		George Besore	Bran, shorts, etc	58
7			Miron Prog. Direct Mills	Bran	13
8 9			Hubbard & Son	W naie on soap	3
0	• •		Samuel Bartley	Labor on experiment folds	42
1			William Darrah	Sweet notato plants	6 1
2	• •		A P. Cunningham & Sone	Plates etc	12
3			W. W. Barnard & Co.	Seeds	6
4	• •		C. A. Besore	Lumber	60
5	••		McGraw & O'Neil	Buckets. etc	3
5			G. C. Willis.	Nursery stock	•••

## UNIVERSITY OF ILLINOIS. [June 15

No.	Date.		To whom paid.	For what.	Amount.
	1897.				
	June	15	A. H. Barber	Mason jars, bottles, etc	\$21 5
378	• •		Columbian Grape Co	Plants	90
379			Champaign County Herald	Printing circulars	22 0
380	• •		A. D. Barber	Expenses	6 1
381	••		E. A. Riehl		13 0
382	••		Petty & Sayers	Screen doors	4 3
383	**	1	Peter Henderson & Co	Screen doors	81
384	••		S. W. Shattuck, business mgr.	Sundry items.	101 6
385	••			Freight and express	65 0
386	**		** ** **	Pay roll, men, April and May	859 5
	June a	2	T J Burrill	Salary, June, 1897	25 0
388	vany, e	1	W. L. Pillsbury		66 6
389			E. Davenport		91 6
390	••		D. McIntosh	** **	50 0
391	·	- 1	P. G. Holden	** **	500
392	••		C D (Winten	** **	· 83 3
	••		G. P. Clinton		
393			C. G. Hopkins		125 0
394			J. C. Blair		41 6
395			W. J. Fraser		33 3
396			Kate McIntyre		50 0
397			T. I. Mairs		33 3
398		- 1	Twin City Ice & Cold Stor'ge Co	Ice	16 5
399	• •	1	Samuel Bartley	Labor	47
400	• •		S. W. Shattuck, business mgr.	Pay rol), men, June, 1897	390 3

#### Warrants--Concluded.

#### SCHOOL OF PHARMACY WARRANTS.

No.	Date.		To whom.	For what.	A mount.
	1896.				
1		15	H. S. Cooper	Calcimining	\$83 00
$\tilde{2}$			Murray & Co	Board Sign	30 00
- 3	••		Mandel Bros	Matting, Shades, etc	27 26
4	••		E. J. Anthony	Printing	6 25
5	••		Fuller & Fuller Co	Paints, oils, etc	14 60
6	••		A. W. Palmer	Expenses	24 16
7	••		W. B. Day	Postage, wrappers, expenses	420 42
- 8	July	31	••	Salary, July, 1896	75 00
9		-	Henry Eulert	Salary, July, 1896 Rent. Envelopes.	50 00
10			J. H. Clough	Rent. ''	300 00
11	Aug.		E. J. Anthony	Envelopes	2 25
12			A. W. Palmer	Expenses	13 35
13			W. B. Day		18 26
14			Chicago Telephone Co	Services from Aug. 1 to Oct. 1, 1896.	20 83
15			The Pontiac Eng. & Pub Co	Engravings Addressing circulars	15 95
16			Jean D. Ness	Addressing circulars	9 85
17			Ada B. Quinn		9 87
18			W. B. Day	Taxes	105 54
19			W. B. Conkey Co	Printing announcement	349 05
20	Aug.	20	John McLogan & Co	Repairing closet	_3 00
21	Aug.	31	W. B, Day	Salary, August, 1896	75 00
22			Henry Eulert	Rent for August, 1899	50 00
23			J. H. Clough	Rent for August, 1899	300 00
24			W. B. Day, Actuary	Expenses	23 53
25			S. W. Snattuck, Business Mgr.	Expressage and interest	46 10
26	Sept.	30	W. B. Day, Actuary	Petty expenses	27 19
27			Deutsch-Amerikanesche	A potheker Zeitung	$15 \ 00 \\ 11 \ 25$
26 27 28 29			Meyer Bros D. O. Haynes & Co	Advertisement	58 50
30	••		Druggist Publishing Co	**	18 75
31			Mandel Bros	Shades	7 75
32				Printing	10 00
33			John Malogan & Co	Gas fittings and piping	2 00
34	••		H S Cooper	Plestering ,	2 00
35			W B Dow	Salary Sontombor 1806	75 00
36	••	- (	Honry Eulert	Sarar 3, Septemoer, 1000	50 00
37	••		J. H. Clough	Associations and population Salary, September, 1896 Rent, '' Coal. Moving furnace and repairs	300 00
38	••		Turney & Jones	Coal	297 12
	Oct.	15	S B Traub	Moving furnace and remains	44 75
40	····	~0	E. J. Anthony	Receipt books, etc.	9 00
41	• •		Orr & Lockett Hardware Co	Receipt books, etc Stamping checks, etc	3 90
42	**		Objecto Telephone Oo	Services to January 1, 1897	31 25

No.	Date.		To whom.	For what.	Amount.
43	1896. Oct.	15	Richards & Co Registered Pharmacist Amour Soap Works Merck & Co	Slides and forceps, etc	\$65 00
44			Registered Pharmacist	Advertising Toilet soap Advertising Salary, October, 1896	15 00
45 46			Amour Soap Works	Toilet soap	$     3 75 \\     35 00 $
40	••		American Druggist Pub. Co	Auverusing	42 50
48	• •		C. P. Engelhard & Co		, 35 00
-49	Oct.	31	F. M. Goodman	Salary, October, 1896	203 00
00	4.4		W A Bucknow		$ \begin{array}{c} 203 & 00 \\ 157 & 89 \\ 203 & 00 \end{array} $
51 52	* *		Frank S. Hereth	** **	78 94
-53	• •		W. B. Day		75 00
54	••		Henry Eulert		50 00
55 56	••		J. H. Clough	Kent of building, October, 1896	$   \begin{array}{r}     300 & 00 \\     44 & 24   \end{array} $
57	Nov.	14	Armstrong Cork Co.	Corks	6 78
- 58		••	Chappell Chemical Co	Nitric acid, etc	14 09
-59	••		A C. McClurg & Co	Tablets	4 70
·60			P. F. Pettibone & Co	Binders	$\begin{smallmatrix}&2&30\\&21&00\end{smallmatrix}$
$\begin{array}{c} 61 \\ 62 \end{array}$	••		Whitall Tatum & Co	Chemical annaratus	4 64
-63	••		Pictorial Printing Co	Labels	2 50
-64	••		Mandel Bros	Muslin, etc	1 85
-65 -66	••		Murray Nickell Mfg. Co	Advertising Advertising Salary, October, 1896  Rent of building. October, 1896 Expenses. Corks Nitric acid, etc Tablets Binders. Printing invitations Chemical apparatus Labels. Muslin, etc. Drugs Black board, etc Floral decorations.	6 66 4 00
67			Pharmaceutical Review Pub Co	Advertisement	25 00
68	• •		Druggist Circular		33 34
69	••		Robert W. Schenk	Floral decorations	13 00
70			John McLogan & Co	Repairing water pipe, etc	5 00 34 79
71 72	* *		Thaver & Jackson Stat'y Co	Mimeograph paper	1 60
73	Nov.	30	F. M. Goodman	Salary, November, 1896	203 00
74	* *		C. S. N. Hallberg		157 89
75	••		W. A. Puckner		203 00
76 77	••		W B Day	*	78 94 75 00
78	٠٠		Henry Eulert		50 00
79	••		J. H. Clough	Black board, etc Advertisement. Floral decorations Repairing water pipe, etc Chemicals, etc Mimeograph paper Salary, November, 1896  Rent of building, November, 1896  Bent of building, November, 1896  Brinkling, November, 1896  Sprinkling, November, 1896  Flage Flags, etc Flags, etc Flags, etc Flags, etc  Filters, supplies, etc Inks Petty expenses. Salary, December, 1896  Rent of building, December, 1896. Paper	300 00
-80 81			Fuller & Fuller Co	Drugs	79 08
82	• •		Morrison, Plummer & Co	Iodine, potassium, etc.	1 80 60 21
:83	**		W. B. Day, Actuary	Expenses	38 34
84	Dec	14	T. P. Brankin	Sprinkling, November, 1896	10 00
85 86	••		A. C. McClurg & Co	Water to November 1896	3 00 9 00
87			E. J. Anthony	Envelopes.	2 75
:88			Morrison, Plummer & Co	Supplies	5 23 1 75
89	Dec.	15	Chappell Chemical Co	Ammonia, etc	1 75
90 91			Murray & Co	Flags etc	11 25 15 00
92			Henry H. Shufeldt & Co	Alcohol	15 00 27 58
93	••		Fuller & Fuller Co	Filters, supplies, etc	16 43
94	Dec.	99	W B Dow Actuany	Inks	$     \begin{array}{r}       1 50 \\       52 35     \end{array} $
96	Dec.	31	F. M. Goodman	Salary, December, 1896	203.00
- 97	2001.	°.	C. S. N. Hallberg		157 89
98			W. A. Puckner		203 00
99 100			W B Day	** ** ***	78 94 75 00
101			Henry Eulert		50 00
102	• •		J. H. Clough	Rent of building, December, 1896	300 00
109	1897.	4.5	Develope 6 Herrichten	D	
103	Jan.	15	Theyer & Jeckson Station'y Co	Stongil naner	775 100
105	* *		Chicago Telephone Co	Services to April, 1897	31 25
106	••		American Cutlery Co	Paper Sténcil paper Services to April, 1897 Spatulus Circulars Corks Ammonia. Platinum foil, etc Drugs Chemicals Petty expenses	6 00
107	••	÷	Mercantile Printing Co	Circulars	$     \begin{array}{c}       2 25 \\       1 30     \end{array} $
108     109	••		The Channell Chemical Co	Ammonia	1 30
110	• •		Richards & Co	Platinum foil, etc	14 13
111			Morrison, Plummer & Co	Drugs	34 24
112	Jan.	20	Fuller & Fuller Co	Unemicals	
115	••	50	W. B. Day, actuary	Petty expenses	54 69
115			F. M. Goodman	Salary for January, 1897	203 00
116	••		C. S. N. Hallberg	Petty expenses. Salary for January, 1897	157 89
117		1	w. A. Fuckher	1	203 00

## Warrants—Continued.

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## UNIVERSITY OF ILLINOIS.

# Warrants-Continued.

Date.	•	To whom.	For what.	Amour
1897.				
8 Jan.	30	Frank S. Hereth	Salary for January, 1897	\$78
9	•	W. B. Day	44 44	75
		Henry Eulert		50
1 **		J. H. Clough	Rent of building. January, 1897	300
2 Feb.	15	Mrs. J. Frerksen	Payment mortgage note	1,545
5		Higgins, Todd & Co	Toilet paper	7
4 **		Thaver & Jackson Station'y Co	Stationerv. etc	6
5 **		John McLogan & Co	Repairing pipes, etc	5
6 **		J. C. Craig, superintendent	Water, December, 1897	. 15
7 **		Armstrong Cork Co	Corks	9
8 **		Goes Lithographing Co	Dinlomas	50
9 **		Pictorial Printing Co.	Labels, blanks	1
•• 0		Morrison Plummer & Co	Drugs	37
1		The Channell Chemical Co	Ammonia etc	1
2		Fuller & Fuller Co	Rent of building, January, 1897 Payment mortgage note Stationery, etc Repairing pipes, etc Water, December, 1897 Corks Diplomas. Labels, blanks Drugs Ammonia, etc Chemicals. Drugs Crash.	13
3		Lehr & Fink	Drugs	2
4		Mandel Bros	Crash	<b>4</b>
5		Richards & Co	Rookars and filtors	Ē
6 Feb.	97	F M Goodman	Solory for Fohrmony 1807	203
7	21	C S N Hallberg	Crash Beakers and filters. Salary for February, 1897	157
8		W A Puckner	· · · · · · · · · · · · · · · · · · ·	203
9		W. A. Puckner Frank S. Hereth	•• ••	78
0		W. B. Day		
1		W. D. Day		50
2		L H Olengeb	Rent of building, February, 1897 Petty expenses to:February, 1897 Chemicals, etc. Paper Cover for coal hod. Files, index, etc. Paper, etc. Chemicals Drugs	300
3		W P Dog octuony	Rent of building, February, 1897	37
		W. D. Day, actuary	Fetty expenses to February, 1697	6
4	4 P	T. J. Burrin	Expenses	0
5 March	19	Fuller & Fuller Co	Chemicais, etc	23
6		Thayer & Jackson Station y Co	Paper	1
7		S. B. Traub	Cover for coal nod	2
ð		P. F. Pettibone & Co	Files, index, etc	1
9		Dononue & Henneberry	Paper, etc	4
90		The Chappell Chemical Co	Chemicals	1
DT	~	Richards & Co	Salary for March, 1897	5
2 March	31	F. M. Goodman	Salary for March, 1897	203
3		C. S. N. Hallberg		157
4		W. A. Puckner		203
0		Frank S. Hereth		1 78
6		W. B. Day		75
7		Henry Eulert		50
8		J. H. Clough	Rent of building, March, 1897	300
9		W. B. Day, actuary	Petty expenses	66
0 May	15	W. B. Dav. actuary		67
011		S. W. Parr	Expenses	2
2		E. J. Lake	Lettering diplomas	13
00		Fuller & Fuller Co	Drugs	14
94		John McLogan & Co	Plumbing, etc	1 3
0		Haddock, Vallette & Richards	Abstract of title.	1 11
		J. C. Craig	Water to March, 1897 Paper, etc	15
57		Donohue & Heneberry	Paner etc	11
8		Pictorial Printing Co	Labels	1
9		Thayer & Jackson Station'y Co	Ruled paper	1
ňo ··		Morrison, Plummer & Co	Labels Ruled paper Drugs	2
May	31	F. M. Goodman	Salary, April, 1897	203
14		C.S.N. Hallberg		157
73 **		W. A. Puckner	**	203
74 ''		W. A. Puckner Frank S. Hereth	••	78
75 **		W. B. Day	••	75
		Henry Eulert		50

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Date	e.	To whom.	For what.	Amo
1897	,			1
May	. 31	J. S. Tomlinson	Salary, April and May, 1897	\$11
may.	01	J. S. Tomlinson Miss E. M. Heelan	Salar J. Horn and May, 1807	. \$10
••				
••		John McClain		
		Gus Schneider	Salary, April, 1897 Salary, April and May, 1897	
•••		W S Rovce	Salary April and May 1897	. 4
••		Theo Tieken	Sulary, upin and may, issi	. 4
• •		I A Wasener		1
• •		J. A. Wasener W. A. Evans W. T. Eckley A. Gehrmann E. G. Earle W. A. Pusey Mary J. Calkins	•• •• ••	: i
• •		W T Eckley	•• •• ••	. 6
• •		A (Jehrmann		
* *		E G Earle		
		W A Pusev	• • • • • • • • • • • • • • • • • • • •	
• •		Mary J Calkins	• • • • • • • • • • • • • • • • • • • •	. 1
**		Mary J. Calkins Blakeley Printing Co	Printing circulars	
••		Fantus & Son	Printing	:  '
* *		Cameron Amberg & Co	Ledger and receipt blanks	. 8
* *		P F Pettibone & Co	Schedules	
		Chicago Clinical Review P. Co.	Advertisement	·  ·
		Richards & Co	Copper plates	.1
• •		Searle & Hereth Co	Printing circulars Ledger and receipt blanks Schedules	.1
* *		Marshall Field & Co	Cloth	. 4
		P. & S. Plerus	Cloth Advertisement Lettering sign Labor and materials Coal. Advertising Chemicals. Petty expenses. Advertising 	. 2
		Thos. Cusack & Co	Lettering sign	:  6
• •		(4 D Evens	Labor and metorials	
		Brazil & Chiango Cool Co	Conl	:  (
		Chiango Horold Co	Advortiging	
		Fuller & Fuller Co	Chomicale	
		W A Phear	Potty ornongog	
		Obanlin Ranian	Advertising	·  11
		Woostun Voice	Advertising	•
		College Palladium	**	•
		College Fatulation The Knox Student. De Panw Weekly. Collegian Forense The Penn Chronicle College Days. The Student The Archaean Union The Alimi	**	•
		Do Davien Woolder	**	
		Collogian Forence		•
		The Dawn Chuonicle	**	
		College Dave	**	
		College Days	···	•
		The Student		
• •		The Archaean Union		
		The Illini		
		The Wabash The Wabash The Kenyon Collegian		
		The Aenyon Collegian		•
		Collegian Herald	••	•
T	40	Blackburnian Pub. Co	Culai, a culà a ciutin a cian	•
June	10	Thos. Cusack & Co	Gilding and painting sign	·   ;
		Demonstrators Assin of III	Assessment Petty expenses Salary, June, 1897.	
τ.	00	D. A. K. Steele	Petty expenses	. 9
June	30	J.A. wesener	Salary, June, 1897	·   _ ;
		W. A. Evans,	······································	•
		Collegiau Herald Blackburnian Pub. Co Thos. Cusack & Co Demonstrators' Ass'n of 111 D. A. K. Steele W. A. Evans, W. T. Eckley. A. Gehrmann. E. G. Earle W. A. Pusey.	**	
		A. Genrmann		
		E. U. Earle		
		W. A. Pusey		
		W. A. Pusey J. S. Tomlason Miss E. M. Heelan		
		Miss E. M. Heelan		
		Geo. Johnston	······································	
		Theo. Tieken		
		Geo. Johnston Theo. Tieken Chas. Truax, Greene & Cc W. S. Royce John McClain Fantus & Son. Biobards & Co	Silk and cat gut, etc Salary, June, 1897	•
		W. S. Royce	Salary, June, 1897	
		John McClain	· · · · · · · · · · · · · · · · ·	
		Fantus & Son	Envelopes	•
••		Richards & Co	Grinding knives	•
		Cher Trijev Greene & Co	Sprays, etc	
••		Cameron, Amberg & Co	Postals, etc	.  :
••		Cameron, Amberg & Co James Clancy & Sons H. Ahrens	Envelopes Grinding knives. Sprays, etc. Postals, etc. Plumbing, etc. Sapolio. etc. Drugs. Advertisement	
••		H. Ahrens	Sapolio. etc	
		H. Ahrens Fuller & Fuller Co Voice Pub. Co	Drugs	:
••		Voice Pub. Co	Advertisement	.1
••		Wollege Ono		
••		The Adelbert		.1
• •		The Cornellian	**	.
••		Egis Association		.
		Chicago Telephone Co	Rent of instrument, October, 1897.	
••		W. A. Pusey	Petty expenses	
		S W Shottmak huginous num	Que a dura in amo a	

## SCHOOL OF MEDICINE WARRANTS.

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# PROCEEDINGS

OF THE

BOARD OF TRUSTEES

#### OF THE

# UNIVERSITY OF ILLINOIS

FOR THE

# Year Ending August 31, 1898.

MEETING OF SEPTEMBER 21, 1897.

The Board of Trustees of the University of Illinois met in the Trustees' room, Library hall, in Urbana, Illinois, at 3 o'clock p. m., Tuesday, September 21, 1897.

The members present were Messrs. Armstrong, Bullard, McKay, McLean, Morrison, Raymond and Smith and Mrs. Flower and Mrs. Carriel; those absent were Governor Tanner and Messrs. Inglis and Pearce.

The minutes of the meeting of June 8th were approved as presented by the Secretary, on motion of Mrs. Flower.

COMMUNICATIONS FROM PRESIDENT DRAPER.

PHYSICAL TRAINING FOR MEN.

### Io the Board of Trustees.

I have had more anxiety about better provisions for physical training work among the men than touching any other one matter, during the summer vacation. It is not too much to say that under all conditions which have grown up there is practically no opportunity at all for general work of this character among the entire body of students. The military work has come to monopolize Military Hall; and not only so, the structure has never had any adaption whatever to gymnasium purposes. I was disappointed at the failure to construct the addition planned by the Professor of Architecture, but since I have come to know all of the facts I do not see how it was possible without either incurring obligations considerably in excess of all previous understandings about the matter, or contracting the structure so as to make it insufficient for our needs. Since my return I have many times carefully in1897.]

vestigated the subject and have come to the conclusion that the wisest course to take will be to remove the wood shop from the upper floor of the old mechanical building and place it in conjunction with the repair shop on the south side of the lower floor of that building, extending it into the room at present occupied by the engines and boilers of the mechanical engineering department, which can be removed by the time the new central heating plant is completed. It would be necessary to contract the space used for the testing laboratory, but this again would be to some extent made good by removing the wide stairway which extends from the outer north side of the building to the second story. Then we would have the entire second floor for a gymnasium. It is spacious and not badly adapted to such use. Lockers and bathing accommodations could be installed in the tower rooms, of which there are four, and also in the space between them on the north side.

In this way we would secure the best provision for athletic work that I believe can be secured within the limits of our special appropriation. I am advised by our architectual department that the changes I have suggested can be carried out, and machinery re-installed as may be necessary, within the limits fixed by the appropriation. It is in my judgment of the highest importance that this matter have early and decisive action, as it is of more consequence that the entire number of students shall have accomodations for physical exercise than that a few shall be trained for team work and intercollegiate games.

A. S. DRAPER, President.

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

Resolved, That the recommendations of President Draper with reference to using the old Military Hall as a gymnasium be adopted, and that the Committee on Buildings and Grounds be, and hereby is, instructed to make the necessary improvements, using therefor the \$3,000.00 appropriated for this purpose by the General Assembly at its last session.

This appropriation was subsequently increased by an assignment of \$1,000.00 from the general fund.

#### ILLINOIS FIELD.

To the Board of Trustees.

Matters at Illinois Field are in an unsatisfactory situation. The fence is unsightly and so far decayed as to be practically beyond repair. It is insisted by the athletic authorities that the grounds are not large enough. They are especially anxious to secure a running track a third of a mile in length and wider than the present one. The needs of our own students in this connection are continuous and urgent in the fall and spring terms, and the unfortunate conditions have prevented the use of these grounds for the annual Interscholastic Athletic Meet, which is an occurrence of considerable moment to the University. It seems to me advisable, moreover, that the open ground which we own north of Illinois Field should be enclosed with it, and be better cared for than it has been.

Under all the circumstances, I recommend that the Committee on Buildings and Grounds be requested to make such changes and improvements at Illinois Field in the directions indicated as may seem desirable, and that the sum of \$2,500.00 be appropriated for the purpose.

> A. S. DRAPER, President.

After some discussion, further consideration of improvements at Illinois Field was postponed to the March meeting of the Board.

#### GREENHOUSE.

#### To the Board of Trustees.

Pursuant to your instructions, given at the June meeting, I have investigated the matter of a new greenhouse and herewith submit plans and estimates therefor. I recommend the plan prepared by Messrs. Lord & Burnham, of New York City, which they agree to execute for the sum of \$3,587.68, exclusive of mason work, cement walks, outside connections with the central heating station, and outside plumbing connections; provided we determine to heat the same from the central heating plant, as it seems to me advisable to do. I have made such general inquiry as was possible touching the cost of mason work and heating and plumbing connections outside the structure, and am confident that these can all be constructed so that the entire cost of the building would not exceed \$5,000.00.

The necessity for a new greenhouse is certainly urgent. The present one is, I am told, twenty years old, was never very substantial, and appears to be utterly incapable of use another winter.

> A. S. DRAPER, President.

On motion of Mrs. Flower, the recommendations were referred to the Finance Committee with instructions to report the next day.

#### AGRICULTURAL EXPERIMENT STATION.

President Draper submitted a report from Professor Davenport, Director of the Station, including a financial statement; and, in compliance with the recommendations of his report, approved by the Advisory Board, appropriations of Experiment Station funds for the quarter ending December 31, 1897, were made as below:

Receipts, Appropriated by Congress Balance, other funds From State Board of Agriculture for analyses of fertilizers From Station farm, etc Expenditures.	\$166 28 140 00 2,878 67	\$15,000 00 3,184 95 \$18,184 95
Salaries Labor Publications. Postage and stationery. Freight and express Chemical supplies. Seeds, plants, and sundry supplies. Feeding stuffs. Library. Tools, implements, and machinery. Furniture and fixtures. Scientific apparatus Live stock. Traveling expenses. Contingent expenses. Buildings and repairs.	$\begin{array}{c} 625 \ 94\\ 385 \ 95\\ 336 \ 44\\ 347 \ 98\\ 140 \ 13\\ 487 \ 67\\ 304 \ 99\\ 166 \ 69\\ 83 \ 30\\ 255 \ 07\\ \end{array}$	\$15,000 00
Other funds Balance other funds	\$3, 107 75 77 20	\$3, 184 95 \$18, 184 95

FINANCIAL STATEMENT FOR THE YEAR ENDING JUNE 30, 1897.

APPROPRIATIONS	FOR	QUARTER	ENDING	DECEMBER	31,	1897.
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From general fund—	at 050 00	
Salaries Labor	\$1,950 00	
Labor	750 00	
Publications	4 300 00	
Postage and stationery	25 00	
Postage and stationery Freight and express	40 00	
Heat. light. and water	40 00	
Heat, light, and water Chemical supplies	5 00	J
Reeding stuffs	100 00	
Tools, implements, and machinery	125 00	
Scientific apparatus	150 00	
Traveling expenses		
Traveling expenses Buildings and repairs	90 00	
Contingent	40 00	i i i i i i i i i i i i i i i i i i i
Contingent		\$3,750 00
From farm fund—		\$0,100 00
Labor	0599.00	
Caster and and and an analysis	\$222 00	•
Seeds, plants, and sundry supplies	210 00	0710 00
		\$743 00

President Draper also presented a communication from Professor Davenport with regard to the Winter School of Agriculture, and also recommending the erection of a building for the shelter of carriages, wagons, and machinery on the farm.

This communication was referred to the Farm Committee for report.

## PAVING ROMINE STREET AND UNIVERSITY AVENUE.

President Draper presented an agreement in duplicate between John W. Stipes and the Board of Trustees of the University of Illinois for paving the west half of Romine street from the north line of West Main street to University avenue, and the south half of University avenue from the west line of Romine street to the east line of Wright street, all in Urbana; and the President and Secretary of the Board were instructed to sign the contract on behalf of the University.

#### TELEPHONES.

President Draper presented communications from the telephone companies with regard to telephone service.

On motion of Mr. Smith it was voted to accept, for two years, the proposition of the Champaign and Urbana Phœnix Telephone Company to furnish ten or more telephones for the term of one or more years at \$12.00 each per year.

A request that a scholarship be conferred upon Mr. Ralph O. Edwards, of Belleflower, McLean county, was denied by the following vote:

Yeas—Messrs. McKay and Smith; nays—Messrs. Armstrong, Raymond, McLean, and Bullard, and Mrs. Flower and Mrs. Carriel.

President Draper presented a recommendation from Professor Jones to the effect that the charge for Harmony be reduced from \$10.00 to \$6.00 a term, and it was so ordered.

At the request of the President of the Board, Mr. McLean took the chair for the rest of the session.

## The following resolution, offered by Mr. McKay, was adopted:

Resolved, That George F. Barrett, of Chicago, a son of a soldier in the late war, be granted an honorary scholarship from Cook county.

On recommendation of Professor Jones, presented by President Draper, it was voted on motion of Mrs. Flower that there should be paid Mr. A. M. Applegate in consideration of services to be rendered as a singer, each term, a sum equal to the amount of his music fees.

#### SCHOOL OF PHARMACY.

The Committee on the School of Pharmacy, complying with an order of the Board passed at its meeting of June 8th, presented the following:

### URBANA, ILLINOIS, September 21, 1897.

#### To the Board of Irustees of the University of Illinois.

GENTLEMEN:—The Committee on the School of Pharmacy met with the Faculty of the School at 465 State street, Chicago, on Thursday, September 2, 1897. The meeting was called to order at 10:30 a. m., the Chairman, Mr. McLean, presiding. There were present Messrs. McLean and Bullard, Professor Palmer, representing President Draper and Professor Shattuck, and Professors Goodman, Hallberg, Puckner, and Hereth, and Secretary Day, of the School of Pharmacy.

There were read the following recommendations from the Faculty of the School with regard to the course for the degree of Pharmaceutical Chemist:

"The candidate for this degree first to complete the course for the degree Graduate in Pharmacy, this latter course consisting of two annual terms of not less than twenty-eight weeks each and requiring an attendance of three days a week and about seven hours daily.

"In addition to this course the candidate to take a third term also of twenty-eight weeks or of the same length as each of the Ph. G. terms and extending simultaneously with these. The attendance required during this third term to be five days a week and seven or eight hours daily. The course for this third term to consist of lectures, recitations and laboratory practice in advanced chemistry and bacteriology."

Mr. Bullard moved that these recommendations be adopted. Discussion brought out the following points: That the expense for providing suitable additional equipment for this course would be from eight hundred to one thousand dollars; that the annual expense for maintaining such a course would be, approximately, for supplies two hundred dollars, for instruction eight hundred dollars.

It was suggested that the fee for this course be seventy-five dollars.

In the case of students who matriculated last year with the intention of competing for the Ph. C. degree under the conditions then in force, it was suggested that such students be allowed to choose between taking a third term or receiving a certificate of having finished the course and, upon obtaining the required drug store experience, receiving the degree of Graduate in Pharmacy. It was also suggested that the Faculty of the School furnish a statement regarding the number of hours of instruction included in this three years course both in total and in each study. [See p. 189.]

#### HOURS OF INSTRUCTION.

	Pharmacy.				Materia medica-botany.				Cher	nistry	• ]	Bacteriology.			Total.				
	Lec.	Rec.	Lab.	Total.	Lec.	Rec.	Lab.	Total.	Lec.	Rec.	Lab	Total.	Lec.	Lab.	Total.	Lec	Rec.	Lab.	Total.
U. of I. School of Pharmacy, Ph. G. Course	104	. 52	, 208	364	104	52	156	312	104	52	208	364			- 	312	*156	572	1,040
Additional work, three years of Ph. C. Course			· • • • • •		····	·····		· · · · · · · · · · · · · · · · · · ·	••••			<del>†</del> 900	30	120	\$150				1,040
U. of M. School of Pharmacy			360	504	L. &		72	270	$\sim$	ž R.	1,092	1,602				L. 8	-	1, 524	2, 370

\* Recitations are not at present obligatory. † Estimated. ‡ Present course at Medical School.

If two weeks were added to each of our Ph. G, terms, making them thirty weeks in length or twenty-eight weeks, excluding vacations, there would be 160 hours added to the above totals, making each Ph. G. term 560 hours; total 1,120 hours; third term of Ph. C. course, 1,120 hours; total, 2,240 hours. The motion to adopt the recommendation of the faculty was then carried unanimously.

Respectfully submitted,

ALEX. MCLEAN, J. E. ARMSTRONG, S. A. BULLARD, A. S. DRAPER, S. W. SHATTUCK,

Committee on School of Pharmacy.

THIRD YEAR'S WORK FOR THE DEGREE OF PHARMACEUTICAL CHEMIST.

CHEMISTRY.—The course to consist of laboratory work, lectures, assigned reading and recitations, and to embrace:

Quantitative Analysis (gravimetric), including water anlysis.

*Plant Analysis.*—Isolation and determination of proximate principles—such as sugars, starch, alkaloids, etc.

Drug Assaying.

Physiological Chemistry.

Food Analysis, such as of milk, butter, etc.

BACTERIOLOGY.—Course to be mapped out by the instructor. (It is suggested that the work in this branch be done at the Medical School.)

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

*Resolved*, That in accordance with a recommendation made by the State Pharmaceutical Association, at its meeting recently held in Springfield, Hon. William J. Frisbie, of Bushnell, Ill., be appointed a member of the Advisory Board of the School of Pharmacy for term ending in June, 1903.

The Secretary was directed to notify Mr. Frisbie of this appointment and also the Faculty of the School of Pharmacy.

A request from Professor Myers that provision be made for heating the Observatory was not granted.

Upon recomendation of President Draper \$175.00 was appropriated for the department of applied chemistry.

Also upon recommendation of President Draper, \$500.00 was appropriated for the department of physiology.

President Draper presented a request from Professor Breckenridge for an appropriation of \$150.00 a term for the year to be used for operating expenses for the Mechanical Laboratory.

It was moved by Mr. McKay that this appropriation be granted, and during the consideration of this motion the Board adjourned to meet at 9:30 o'clock Wednesday morning.

## WEDNESDAY MORNING SESSION.

When the Board met pursuant to adjournment the same members were present as at the preceding session on Tuesday.

The motion which was under consideration when the Board adjourned was lost.

It was moved by Mr. Armstrong that \$60.00 be appropriated for this term to pay for student labor in the mechanical engineering PROCEEDINGS OF BOARD OF TRUSTEES.

shops. This motion prevailed by the following vote: Yeas—Messrs. Armstrong, Raymond, McLean, and McKay and Mrs. Flower; nays—Messrs. Morrison, Bullard, and Smith and Mrs. Carriel.

The request presented by Professor Breckenridge that commercial work be done in the shops by students employed for that purpose was not granted.

Mr. W. H. Zimmerman was appointed engineer in the shops in place of John Doughty, resigned.

The Business Manager was authorized to make, together with Professor Breckenridge, a sale of such boilers as were not needed in the new heating plant.

The following communication was received from Professor Ricker, and his acceptance of the appointment therein referred to was approved:

URBANA, ILLINOIS, September 20, 1897.

#### To the President and Board of Trustees of the University of Illinois.

GENTLEMEN:—I beg leave to inform you that, with the consent and approval of the President of the University, I have accepted the Governor's appointment and commission as a member of the State Board of Examiners of Architects, as the law requires a member of the Faculty of this University to serve on this Board. My work will be so arranged that none of my classes will be omitted or postponed, and I sincerely believe that the advantages resulting to the University and to the architectural department will abundantly compensate the institution for the time that I shall necessarily be absent in attendance on the meetings of the Board. Had I thought otherwise, I should have declined the appointment.

Very respectfully submitted,

N. C. RICKER, Professor of Architecture.

Upon the request of Miss Sharp, approved by President Draper, the following appointments were made: Mr. H. A. Grossberg, to assist in care of the law library, his compensation to be determined by the Business Manager; Miss Annie Fossler, assistant in class and reference work, for ten months at \$50.00 a month; Miss Georgia E. Hopper, assistant in the library, for ten months at \$30.00 a month; Miss Adelaide M. Chase, assistant in the library, at \$25.00 a month for ten months; Mr. Leo Smith, assistant in the library, at \$30.00 a month for ten months.

The following resolution, offered by Mrs. Flower, was adopted:

*Resolved*, That it is the sense of this Board that student labor should be employed so far as practicable, and that the President of the University be directed to prepare a scheme for the same to present to the Board at the December meeting.

Mr. Morrison moved that a committee of three be appointed to consult with the Fair Association of Champaign county and ascertain whether or not satisfactory arrangements could be made by which the Athletic Association of the University might use the grounds of the Fair Association, and to report at the next meeting of the Board. This motion was lost on the following vote: Yeas— Messrs. Morrison, McLean, Smith, and McKay; nays—Messrs Armstrong, Raymond, and Bullard and Mrs. Flower and Mrs. Carriel.

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The Finance Committee reported back the recommendation with regard to a greenhouse (see page 186) and advised its adoption.

Mr. Smith moved that the plans for a greenhouse made by Messrs. Lord and Burnham and their proposition for the erection of the same be accepted; that the sum of \$5,000.00 be appropriated for the construction of the building, heating apparatus, lighting, and walks, and that the Committee on Buildings and Grounds, President Draper being associated with the committee in this matter, be instructed to proceed at once with the work. This motion was adopted.

Mr. Raymond reported from the Farm Committee recommending the appropriation of \$100.00 for the Winter School in Agriculture, and \$800.00 for the erection of a suitable building for a wagon-house and the shelter of farm machinery, etc. The recommendation of the committee was adopted and money was appropriated in accordance therewith.

#### REPORT OF COMMITTEE ON BUILDINGS AND GROUNDS.

The following report from the Committee on Buildings and Grounds was received and ordered printed:

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

GENTLEMEN:—Your Committee on Buildings and Grounds begs leave to make the following report of its actions on the matters in its hands. The Committee has had charge of the improvements ordered by the Board, which have been more extensive than usual. The committee has had several meetings from time to time during the summer at which most of the members were present.

Library Hall—The library building was completed and accepted the first part of August, and settlement made with the contractors. Mr. Gleason, the sub-contractor for the brick and stone masonry, filed a claim for about \$5,000.00 for extra work and damages for delays caused by the general contractor. It seemed very probable that the settlement of this dispute would go into the courts and delay our settlement with the contractors unless we could make other arrangements. Your committee, therefore, ordered the payment of all the bills of sub-contractors in full, except that of Mr. Gleason, and the taking of a bond from the contractors to the amount of \$10,000.00 to make good any losses that might fall to the University in the settlement of the disputed claim. The final settlement on the library building can not be made until the dispute between the general contractor and Mr. Gleason has been adjudicated.

The building itself seems very well built and your Committee and the architects are well pleased with the work done by the contractors, The H. M. R. Construction Company.

Decoration of Library Hall—Early in the summer the Committee took up the subject of decorating the library building. The architects laid before the Committee several designs in competition from prominent decorative artists, which the Committee considered very carefully. As a result of the competition Professor N. M. Wells, of New York, was engaged to do the decorative work for the sum of \$3,500. The members of the Committee were very much pleased with Mr. Wells's designs and have no doubt that when the work is completed it will be admired by all who visit the library building. This work is going on now, the more elaborative decorative features to be finished later in the year.

Apportionment of Rooms in Library Hall-It was decided by the Committee that the new Library School should be given the room above the book stacks and that an iron stairway be put in that story to the book room below. The west basement wing was set apart for the Art Gallery, the east basement 1897.]

wing was unassigned but will be used temporarily for lockers for men. The two toilet rooms of the basement, a part of the hall, and a part of the east basement wing will be provided with lockers in which students may place wraps during school hours. The provisions for the library and for the administration offices occupy the remainder of the building.

Removal of Art Gallery and Library to Library Hall—The Committee ordered that the art gallery and library be removed into the new building as soon as the work of building was completed, and the work of removal was put into the charge of Professors Burrill, Shattuck, and Bicknell. The work has been done during the summer, and now the building is in good condition and the art gallery and library are ready for the year's work.

Re-arrangement of Rooms in University Hall—The vacating of the library, administrative offices, and art gallery in University Hall left a large part of the building unassigned. The Committee ordered the rooms vacated by the library changed into rooms for the use of the Law School to be opened this year, and the rooms vacated by the art gallery divided up into rooms to be used for the musical department. The ladies' parlor was to be the room occupied by the President, and the Dean of the literary department was to have the room occupied by the Business Manager and Registrar as his recitation room, and the office occupied by the sceretary to the President as his office. Other minor changes were ordered in the building, and the duty of looking after the making of all these changes was put in charge of Dr. Burrill, Professors Ricker and White to have charge of the construction part of work.

Chemical Laboratory, Temporary Quarters—The failure of the legislature to make an appropriation for an enlargement of the Chemical Laboratory necessitated doing a part of the laboratory work in the University Hall. As soon as the heating apparatus buildings are completed, the electrical department will be taken to those buildings and the space now occupied by the electrical department can easily be utilized for the chemical laboratory. The buildings, however, not being completed before school commenced this fall, it became necessary to make such temporary arrangements for the laboratory as were absolutely necessary, which has been done in using some of the basement rooms.

Natural History Hall—The natural history building, which was damaged by lightning and fire during the summer, has been repaired and is now ready for use again. It has been the aim of the committee to put the building into the same condition as it was before, as nearly as possible, and this has been done at an expense of about \$3,600.

Central Heating, Lighting, and Power Plant—Immediately after the adjournment of the Board in June the committee took up the consideration of the central heating, lighting, and power plant. A general plan for this plant had been worked out by Professor Breckenridge prior to the meeting of the committee. The location of the plant was fixed on the north side of Silver Creek between Burrill avenue and the east line of the University property.

A large boiler house was to be placed near the east line with sufficient room for our present need and for an enlargement of half the present capacity, and for the storage of five hundred tons of coal. Just west of the boiler house and between it and Burrill avenue was to be a large and handsome building for the location of engines and dynamos, and also having capacity for experimental laboratories for the mechanical and electrical engineering departments. Some rooms for offices, recitations or lectures, and for computing were provided. From these buildings a tunnel, large enough for a person to walk in, was to be constructed south and north to the different University buildings. In this tunnel were to be placed steam pipes for the heating of the buildings, water pipes for the supply of water if necessary, and electric wires for lighting and power purposes for the different buildings. The committee placed the architectural work in charge of C. D. McLane and S. J. Temple, the engineering features under the charge of Professor Breckenridge, and the electrical features under the charge of Professor Carman. Under the order of the Board the committee also employed Mr. Charles E. Armstrong, of Chicago, as an engineering and electrical expert to examine and approve the general and detail features of the heating plant. The amount of compensation was not agreed upon with these individuals but your committee expects to keep this —13 U. I. within the customary fee of five per cent. of cost. As soon as it was possible to have plans and specifications made for the different parts of the work bids for the construction of the same were called for. Different parts of the work were contracted for and the work is now in process of construction with the expectation of having it entirely completed by the first of December, 1897. Your committee is very much pleased with the general plan of the plant and believes that when it is completed it will be the best and finest plant of the kind in the United States. It has been the constant effort of the committee to keep within the amount of appropriation, \$80,000.00, as made by the legislature, and we believe that we shall be able to do so very nearly, if not entirely. The committee has felt some embarrassment, however, in making different contracts for the different parts of the work, in that only one-half of the Board and of the Finance Committee that arrangements can be made for the latter half of the appropriation, your committee has made contracts exceeding the amount of money now on hand and will continue to do so unless otherwise ordered. We trust that there will be no further embarrassment on that account.

*Tunnels*—Bids for the construction of the south side tunnels were received on June 29th and opened

The following were the bids:

§ H. Garrison, Urbana	\$8,875	00
John B. Bennett, Urbana	7,937	30
Horace Irwin, Springfield	8,839	60
Flick & Johnson Construction Co., Davenport, Iowa	9,600	00
Caleb & Couture, Bridgeport. Ohio	13, 990	00
•		

The contract was awarded to John B. Bennett, of Urbana, after reducing his bid a small amount by substituting for the brand of cement specified a different brand, which, in the opinion of Professor Talbot, after experiment, was equally as good. Mr. Bennett undertook the work at once and has finished it very satisfactorily. The work was generally completed in the time stipulated in the contract. A part was left undone in order that the piping might more easily be placed in the tunnels. This has been done and the work is now fully completed.

*Piping in the South Tunnels*—As as possible after the tunnel contract was under way bids were called for for the steam piping to be placed in the tunnels. Five bids were received for that work as follows:

Robinson & Burr, Champaign, Ill	$\begin{array}{c} 1,914 \ 00 \\ 1,590 \ 00 \\ 2,390 \ 00 \end{array}$
Samuel I. Pope. Chicago, III	2,179 00

The work was given to Robinson & Burr at their proposal, \$1,450.00, and the work was pushed forward to completion as rapidly as possible. There was a delay for a short time on account of the difficulty under which the iron piping was obtained, but the work is now done and ready for service.

Pipe Covering in Tunnels—Two bids were received for pipe coverings in tunnels, one from H. W. Johns Manufacturing Co., of Chicago, for asbestos covering, varying from \$1,200.00 to \$1,600.00, according to quality, and one from Walch and Wyeth Co., Chicago, for magnesia coverings, varying from \$1,250.00 to \$1,730.00, according to quality. After looking into the merits of different materials it was thought best to award the contract to Walch & Wyeth, putting a first grade covering on the supply steam pipes and a second grade covering on the return pipes. This we succeeded in doing for \$1,500.00 and entered into contract for that amount. The dampness that is unavoidable in tunnels of this character makes the magnesia covering very superior on that account to asbestos.

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Heating Plant Buildings—The specifications and drawings were completed for the heating plant buildings consisting of an engine and dynamo house, a boiler house, and a chimney stack 150 feet high, and bids called for to be opened July 9th. The bids for the construction of these buildings were as follows:

J. C. Robinson, Chicago, Ill. Valentine Jobst, Peoria, Ill. W. M. Crilly, Chicago, Ill. John Cox & H. K. McDonald, Chicago, Ill. J. W. Evans Sons Co., Bloomington, Ill. M. Yeager & Son, Danville, Ill. Warron R. Boharts (Dhicago, Ill.	39,500 36,827 49,909 39,613 40,839	00 00 00 00
J. W. Evans Sons Co., Bloomington, Ill	39,613	00
Richard Mohn, Chicago, Ill.	42,500	00
Edward D. Gleason, Chicago, Ill. Angus J. C. Ledgerwood, Chicago, Ill	39.500	00
W. Morava, Chicago, Ill.	40, 927	00

The committee, not having positive information of getting the latter half of our appropriation by the time of the completion of the buildings, offered the work to Mr. Grilly, who was the lowest bidder, on the condition that he agree to take \$25,000 in part payment as the work proceeded, the balance not to be paid until the first of July, 1898. This he refused to do and the committee thought best to reject all the proposals and call for proposals for the buildings separate instead of in one contract. This the committee did, opening the bids on July 23rd, with the following result:

It was left optional with the contractor as to whether he bid on the buildings separate or all in one bid.

The following were the bids received for all the buildings together and not separate:—

M. Yeager & Son, of Danville, being the lowest bidders, either combined or separate, the contract was awarded to them. They immediately commenced work and now have a large part of their work done. They are under contract to have it done by the first of December, 1897, and we have little doubt but that the work will be completed on time.

Boilers—It became necessary to increase our boiler capacity 250 horse power. It was thought best to use a water tube boiler and to employ a patent Murphy furnace in connection with it, one boiler of that capacity being better and cheaper than several of smaller sizes. On a call for proposals for this work, one boiler equipped with Murphy furnace, we received the following bids:

Standard Boiler Co., Chicago, Ill.	\$3,700	00
Abernathy & Root, Chicago, Ill.	3.900	ŬŎ
Heine Safety Boiler Co., St. Louis, Mo., for down draft furnace but without Mur-	9 500	00
phy furnace. National Water Tube Boiler Co., New Brunswick, N. Y	3,500	00
Babeock & Wilcox Co., N. Y.	4,297	00 <sup>,</sup>

The contract was given to the National Water Tube Boiler Co., the boiler to be put in as soon as the new boiler house is ready to receive it.

Coal and Ashes Handling Machinery and Storage for Coal-It was the purpose to make preparations for the storage of 500 tons of coal. Plans were prepared and bids were asked for the putting in of bins for this storage and for machinery for handling coal and ashes.

Bids were received as follows:

The contract was awarded to the Link Belt Machinery Co., at its bid, after duly considering the quality of the machinery proposed to be put in. This will be put in at a time suitable, so that it will be ready for use by the first of December.

*Heating the Engine and Dynamo House*—Bids were received for putting in heating apparatus for this building, as follows:

Robinson & Burr, Champaign, Ill	\$668 <sup>/</sup> 00 640 00
0	

The contract was awarded to Hubbard & Sons.

Laying Water Main—The committee ordered the laying of a 6 inch water main from the connection on Springfield avenue south on Burrill avenue to Green street, and a fire hydrant placed on this line south of the creek. From this 6 inch line a 4-inch pipe is to be laid east into the boiler house to furnish water to the heating apparatus. This work is to be done under the direction of Professor Talbot and as cheaply as the work can be secured.

Cement Walks—The committee laid out plans for hew and additional concrete walks necessary for our grounds and contracted with Mr. P. E. Taintor, of Springfield, who did work for us last year. Contracts were made at 15 cents per square foot. These walks are down and are very satisfactory.

Gymnasium—Soon after the adjournment of the June meeting of the Board the committee took up the question of making suitable accommodations in bath rooms and lockers for the athletic and gymnasium department for which an appropriation of \$3,000 was obtained from the legislature. After having several plans and schemes for enlarging and adding to the present military building, providing for bath rooms, lockers, waiting rooms, etc., prepared by Professor Ricker and estimates made thereon, your committee could not get what would be at all adequate to the necessities of the case for the amount of money at command. The matter was brought to the attention of the Executive Committee and that committee asked to enlarge the appropriation. This, however, was deemed unwise by the Executive Committee, and the additional money, some \$2,200.00, was not provided for. It was, therefore, thought best by the committee to lay the improvement aside till the matter could be discussed by the board.

Paving University Avenue and around the Campus—Your Committee asked Professor Talbot to look after the interests of the University in paving University Avenue and the street east of our campus in conjunction with the city of Urbana, and in accordance with an ordinance passed by the Urbana city council. It was thought best to have our contract made directly with the contractor, to have stone curbing put in instead of wood as contemplated by the city ordinance, and to have the work put in satisfactorily in every way. This arrangement, has been made, and contracts will be submitted to the Board at this meeting for this work.

Bridge across Silver Creek—Your Committee asked Professor Baker to submit a plan or design for a bridge across Silver Creek at Burrill Avenue. The bridge was to be of the width necessary for a pavement on Burrill Avenue, should the paving of Burrill Avenue be consummated. The amount of money to be used in the construction of this bridge was \$500.00, appropriated by the Legislature. The preliminary estimates went to show that such a bridge as we thought desirable for the place, together with abutments for the same, could not be built for the money appropriated. Therefore your Committee asked Professor Baker to get further bids on the work and see if it were possible to reduce the cost to the amount of money we have for this improvement. This matter has not seemed urgent and your Committee may not complete the bridge before next year.

Protection of Water Fixtures—It was reported to your Committee by Professor Talbot that it would be desirable to protect the water fixtures in the engineering building from damage by high pressure, which is considerable during the time of a fire, by putting in valves whereby the plumbing fixtures can be cut off from the water supply pipes and yet admit the water to the standpipes in the building. Your Committee, therefore, ordered that change to be made at an estimated cost of \$30.00 to \$35.00. This we feel was necessary to protect the fixtures and give the best water service to the building.

Ventilators for the Basement of Military Hall—It was reported to your Committee by Professors Ricker and White that the floor of Military Hall is rapidly decaying and in some places already injured beyond repair. The cause of this rapid decay is the insufficient ventilation of the space beneath the floor. We, therefore, asked Professor Ricker to obtain proposals for putting in ventilators large enough and sufficient in number for that purpose. It was ascertained that eight ventilators could be put in, two on each of the four sides, for \$64.00 and your Committee ordered the word done. This we believe will have the effect of stopping any further rapid decay in the floor of that building. It should have been done years ago. The oversight was made in the construction of the building, Professor Ricker says, by setting the floor down lower than originally contemplated and practically closing the openings that were originally intended for ventilating purposes. We are thus now tardily doing what the first plans for the building called for.

Respectfully submitted,

S. A. BULLARD, J. E. ARMSTRONG, L. L. FLOWER, I. S. RAYMOND,

Committee on Buildings and Grounds.

On motion of Mrs. Carriel it was voted that it is the sense of this Board that a building costing \$10,000,00, or more, to be used as a home for young women of the University, would be of great benefit to the University, and that the Board would approve the erection of such a building by private enterprise.

Mrs. Flower moved that the new greenhouse be placed on the west side of Burrill avenue, fronting the heating plant.

The motion prevailed by the following vote: Yeas--Messrs. Morrison, Armstrong, Raymond, McLean, and Smith and Mrs. Flower and Mrs. Carriell; nays--Messrs. Bullard and McKay.

The Business Manager presented his report, which was referred to the Finance Committee.

#### BUSINESS MANAGER'S REPORT.

UNIVERSITY OF ILLINOIS, September 21, 1896.

F. M. McKay, Esq., President of the Board of Trustees, University of Illinois. SIR:--I have the honor to present to you herewith the following report:

Paper A is a statement of the current appropriations for the year ending June 30, 1897.

Paper B is a statement of the State appropriations for the same time.

 $Paper\ D$  is a statement of the Laboratory of Natural History appropriations for the same time.

Paper E is a statement of the Agricultural Experiment Station appropriations for the same time.

Paper F is a statement of the School of Pharmacv appropriations for the same time.

Paper G is a statement of the School of Medicine appropriations for the same time.

Paper H is an estimate of receipts and expenses for the twelve months ending June 30, 1898.

Paper I is a list of appropriations for the three months ending December 31, 1897.

Paper L is a statement of moneys received by me for the three months ending June 30, 1897.

Paper M is a list of the general University vouchers presented for audit, being 1,882 to 2,200, inclusive.

Paper N is a list of the Laboratory of Natural History vouchers presented for audit, being 247 to 286, inclusive.

Paper O is a list of the Agricultural Experiment Station vouchers presented for audit, being 280 to 400, inclusive.

Paper P is a list of the School of Pharmacy vouchers presented for audit, being 160 to 176, inclusive.

Paper Q is a list of the School of Medicine vouchers presented for audit, being 1 to 75, inclusive.

June 30, 1897.	Appro- priated.	Expended.	Balance.
Board expenses	\$1,746 88	\$1,154 62 (10,183 98)	\$592 26
Salaries for instruction and for President U.S. Fund State.	101,545 56	$\left\{\begin{array}{c} 22,000 \ 00\\ 69,361 \ 58 \end{array}\right\}$	
Salaries for services {Current}	13, 511 70	$\{\begin{array}{c}9,315\ 88\\4,195\ 82\}$	
Buildings and grounds. Fuel and lights	2,084 40	1,802 82	281 58
Fuel and lights	7,955 01		2,199 67
Stationery and printing Preparatory School	2,143 42		609 11
Preparatory School	4,950 00	4,909 79	40 21
Repair shop	1,539 23	1,539 23	
Mechanical Department Departments	2,131 42	1,480 89	650 53
Departments	1,233 04	322 29	920 75
Laboratories	3,745 35	2,80772	937 63
Library and apparatus	197 64	$94 \ 46$	103 18
Incidential expenses	1,971 60	1,548 83	422 77

PAPER A-CURRENT APPPOPRIATIONS.

<b>J</b> une 30, 1897.	Appro- priated.	Expended.	Balance.
Sundries.			
Closed out Furniture and fixtures Heating apparatus Water supply Minnesota lands. Greenhouse Commencement Stone posts Tenant farming, etc. in Illinois South farm Accredited high schools Court expenses State Fair exhibit. Catalogue Publication of essay.	$\begin{array}{c} 496 \ 48\\ 882 \ 65\\ 500 \ 00\\ 100 \ 00\\ 141 \ 17\\ 600 \ 00\\ 160 \ 00\\ 75 \ 00\\ 125 \ 00\\ 30 \ 00\\ 22 \ 40\\ 500 \ 00\\ \end{array}$	77 28 140 92 212 50 212 50 22 85 30 00 22 40 8 41	$\begin{array}{c} & 106 & 98 \\ 690 & 55 \\ 125 & 00 \\ 22 & 72 \\ 25 \\ 387 & 50 \\ 160 & 00 \\ 4 & 60 \\ 102 & 15 \\ \hline \\ 500 & 00 \\ 991 & 59 \\ 991 & 59 \\ 75 & 00 \\ \hline \\ \$9, 924 & 03 \\ \end{array}$

## Paper A-Current Appropriations-Concluded.

## PAPER B--STATE APPROPRIATIONS.

June 30, 1897.	Received.	Expended.	Balance.	Assigned.
Salaries, etc.— Closed out. Salaries for instruction. Salaries for services. Heating apparatus. Buildings and grounds. Toilet rooms. Art and design. Physical training. School of Music. Lectures. Agriculture Preparatory School. Advertising. College of Literature and Arts, books. Illimi Accredited schools. Technograph. Signal bells Botany (herbarium, etc.) Mechanical engineering'laboratory. Chemical laboratory (repairs.) Furnishing Astronomical Observatory. Zoölogical department. Bronze tablet. Physics. Law school.	$\begin{array}{c} {\color{red}{\$18,851\ 81}}\\ {\color{red}{\$132,463\ 13}}\\ {\color{red}{132,463\ 13}}\\ {\color{red}{132,463\ 13}}\\ {\color{red}{132,463\ 13}}\\ {\color{red}{132,400\ 00}}\\ {\color{red}{33,800\ 00}}\\ {\color{red}{375\ 00}}\\ {\color{red}{25,000}}\\ {\color{red}{12,200\ 00}}\\ {\color{red}{519\ 17}}\\ {\color{red}{375\ 00}}\\ {\color{red}{300\ 00}}\\ {\color{red}{519\ 17}}\\ {\color{red}{375\ 00}}\\ {\color{red}{500\ 00}}\\ {\color{red}{550\ 00}}\\ {\color{red}{95\ 00}}\\ {\color{red}{550\ 00}}\\ {\color{red}{50\ 00}}\ {\color{red}{50\ 00}}\ {\color{red}{50\ 00$	$\begin{array}{c} 132, 463 \\ 132, 463 \\ 14, 195 \\ 82 \\ 1, 076 \\ 42 \\ 3, 255 \\ 32 \\ 224 \\ 22 \\ 184 \\ 45 \\ 959 \\ 06 \\ 2, 217 \\ 10 \\ 325 \\ 3, 251 \\ 91 \\ 166 \\ 31 \\ 500 \\ 10 \\ 319 \\ 51 \\ 100 \\ 00 \\ 319 \\ 51 \\ 100 \\ 00 \\ 32 \\ 92 \\ 21 \\ 35 \\ 416 \\ 89 \\ 92 \\ 21 \\ 35 \\ 416 \\ 89 \\ 902 \\ 12 \\ 85 \\ 902 \\ 12 \\ 85 \\ 902 \\ 12 \\ 85 \\ 902 \\ 12 \\ 85 \\ 85 \\ 85 \\ 85 \\ 85 \\ 85 \\ 85 \\ 8$	\$123 58 544 68 80 78 65 55 260 94 32 90 519 17 46 02 60 25 648 09 33 69 	$\begin{array}{c} & & & \\ & & & \\ & & & \\ & & 544 & 68 \\ & & 545 & \\ & & & 6555 \\ & & & 6094 \\ & & & 3290 \\ & & & & 3290 \\ & & & & 6025 \\ & & & 60425 \\ & & & 60425 \\ & & & 60425 \\ & & & 60425 \\ & & & 60425 \\ & & & & 60425 \\ & & & & 60425 \\ & & & & 60425 \\ & & & & & 60425 \\ & & & & & & 60425 \\ & & & & & & & & & \\ & & & & & & & & $
Apparatus and materials— Closed out Applied chemistry Chemistry Psychology Zoölogy Physiology and hygiene. Botany and horticulture Geology Astronomy	\$189, 714 93           \$1, 700 00           100 00           700 00           300 00           800 00           800 00           630 00           400 00           400 00           520 00           \$66,000 00	$\begin{array}{c} & \\ \$1,700 & 00 \\ 12 & 70 \\ 588 & 66 \\ 258 & 66 \\ 698 & 75 \\ 605 & 86 \\ 661 & 02 \\ 328 & 51 \end{array}$	\$7, 726 26 \$57 30 111 34 41 34 101 25 194 14 18 98 71 49 129 35 \$755 19	\$7,726         26           \$87,30         111           111         34           41         34           101         25           194         14           18         98           71         49           129         35           \$755         19

·				
June 30, 1897.	Received.	Expended.	Balance	Assigned.
<b>Operating Biological Experiment Station</b>	\$3,000 00	\$2,731 09	\$268 91	\$268 91
$m{B}$ ological Experiment Station, equipment	\$2,500 00	\$2,500 00		
Paring streets, 'etc	\$9,300 00	\$9,300 00		·····
Laboratory of Vegetable Physiology	\$2,000.00	* \$1,949 14	\$50 86	\$50 86
Astronomical Observatory	\$15,000 00	\$12,764 88	\$2,235 12	\$2,235 12
Library Halt	\$150,000 00	\$126, 495 87	\$23, 504 13	\$23,504 13
Firs protection	\$2,000 00	\$1,679 95	\$320 05	\$ <b>3</b> 20 05
Library	\$6,000 00	\$5,959_05	\$40 95	\$40 95
Shop practice	\$3,000 00	\$2,854 41	\$145 59	\$145 59
Chemiess Laboratory	\$5,000 00	\$4,899 12	\$100 88	\$100 88
Taxes on Minnesota lands	\$3,200 00	\$3,200 00		
Vaceöne Laboratory	\$3,000 00	\$1,718 14	\$1,281 86	\$1,281 86
Cabine#s- Geology Botany. Zoölogy	\$666 67 666 66 666 67	<u></u>		635 66 666 67
College of Engineering— Machine shop. Mechanical engineering and physics Electrical engineering and physics Civil engineering Laboratory of Applied Mechanics and Municipal and Sanitary Engineering Architecture College of Engineering.	\$2,000 00 \$17,008 04 3,104 85 3,829 85 1,852 42 1,852 42 1,752 42 600 00 \$30,000 00	\$17,008 04 3,104 85 3,457 02 1,786 30 1,429 47 1,538 83 370 12	\$1,615 10 \$372 83 66 12 422 95 213 59 229 88 \$1,305 37	\$372 83 66 12 422 95 213 59 229 88
Furnishing and Fitting Engineering Hall- Electric wiring. Civil engineering. Architecture. Municipal and Sanitary Engineering. Mechanical department. Electrical engineering and physics. College library, parlor, etc.	$\begin{array}{c} \$1, 191 & 77 \\ 478 & 43 \\ 770 & 38 \\ 401 & 30 \\ 563 & 78 \\ 1, 193 & 39 \\ 400 & 96 \\ \hline \\ \$5, 000 & 00 \end{array}$	448 07 631 03 375 92 421 13 1,007 06 274 76	\$30 36 139 35 25 38 142 65 186 33	139 35 25 39 142 65 186 33 126 19

## Paper B-State Appropriations-Concluded.

#### PAPER I-LABORATORY OF NATURAL HISTORY.

June 30, 1897.	Appro- priated.	Expend⊬d.	Balance.
General balance July 1, 1896 Salaries Field, office, etc Library Bulletins Report of Entomclogi4t. Contagious diseases of insects Biological Experiment Stat on.	$\begin{array}{c} 3,650 \\ 0,500 \\ 1,500 \\ 0,000 \\ 500 \\ 000 \\ 250 \\ 000 \\ 1,500 \\ 000 \end{array}$	$\begin{array}{c} 1,500 \ 00 \\ 816 \ 58 \\ 495 \ 77 \\ 67 \ 00 \\ 850 \ 58 \\ 1,497 \ 28 \end{array}$	$ \begin{array}{c} 183 \ 42 \\ 4 \ 23 \\ 183 \ 00 \\ 649 \ 42 \\ 2 \ 72 \\ \hline \end{array} $

## PAPER E-AGRICULTURAL EXPERIMENT STATION.

June 30, 1897.	Appro- priated.	Expended
eneral Fund- Salaries Labor. Publications Postage and stationery. Freight and express. Chemical supplies. Seeds, plants, sundries. Feeding stuffs Library. Tools, implements, and machinery. Furniture and fixtures. Scientific apparatus. Live stock Traveling expenses. / Contingent expenses. Buildings and repairs.	$\begin{array}{cccc} 625 & 94 \\ 385 & 95 \\ 336 & 44 \end{array}$	$\begin{array}{c} 2, 634 \\ 0, 1, 224 \\ 4\\ 71 \\ 5\\ 93 \\ 1\\ 625 \\ 9\\ 336 \\ 4\\ 347 \\ 9\\ 140 \\ 1\\ 487 \\ 6\\ 304 \\ 9\\ 166 \\ 83 \\ 3\\ 255 \\ 9\end{array}$

	·	
Farm fund	\$3, 107 75	\$3, 107 75

#### PAPER F-SCHOOL OF PHARMACY.

June 30, 1897.	Appro- priated.	Expended.	Balance.
Salaries for instruction Salaries for services. Buildings and grounds. Fuel and lights Stationery and printing. Furniture and fixtures Laboratories Incidentals Sundries. Advertising. Museum	$\begin{array}{c} 578 & 54 \\ 200 & 09 \\ 100 & 00 \\ 1,260 & 00 \\ 420 & 23 \\ 1,753 & 52 \\ 1,096 & 46 \end{array}$	$\begin{array}{c} 1,250\ 00\\ 2,862\ 96\\ 372\ 66\\ 198\ 46\\ 40\ 76\\ 1,230\ 29\\ 336\ 17\\ 1,695\ 54\\ 1,096\ 46\\ 2\ 25\end{array}$	\$0 19 77 04 205 88 1 54 59 24 29 71 84 06 57 98 22 75 \$538 39

#### PAPER G-SCHOOL OF MEDICINE.

-4		1
<b>J</b> une 30, 1897.	Appro- priated.	Expended.
Salaries for instruction. Salaries for services. Buildings and grounds. Fuel and lights. Stationery and printing Laboratories. Apparatus and materials. Incidental. Advertising.	\$525 02 819 21 181 50 138 62 81 13 6 00 236 64 44 60 1,055 71 \$3,088 43	$\begin{array}{c} 819 \ 21 \\ 181 \ 50 \\ 138 \ 62 \\ 81 \ 13 \\ 6 \ 00 \\ 236 \ 64 \\ 44 \ 60 \\ 1,055 \ 71 \end{array}$

Term fees, etc., (University students) Diploma fees. Music Term fees, etc., Preparatory School	\$4,542 50 520 00 195 00 1,343 75	
Rent of south farm Minnesota lands, rent Buildings and grounds	\$1,235 93 10 00 15 00	\$6,601 25
Greenhouse. sales. Fuel and lights Agricultural Experiment Station Repair Shop Mechanical department and laboratory Military.	$\$178  ext{ 07}  ext{ 28  ext{ 44}}  ext{ 551  ext{ 02}}  ext{ 15  ext{ 00}}  ext{ 48  ext{ 63}}  ext{ 5  ext{ 35}}  ext{ 5  ext{ 35}}$	1,260 93 1
Laboratory of applied mechanics		826 51
Interest on land contracts Interest from Globe Savings Bank	\$292 22 12 11	1,619 64
School of Medicine, fees		304 33 3, 152 00
		\$13,764 66

#### PAPER L-RECEIPTS FOR THE THREE MONTHS ENDING JUNE 30, 1897.

Your attention is called to the bill of Wilson, Moore & McIlvaine, presented herewith as *Paper R*, and to their claim of \$1,597.50 for services and expenses. Also to the payment of \$500.00 as a retainer fee to the attorney at Red Oak, Iowa.

The present contract for water service will expire January 1, 1898, and that for gas expires December 17, 1897. The Board is requested to take timely action in these matters.

Respectfully submitted,

S. W. SHATTUCK, Business Manager.

## TREASURER'S REPORT.

The Treasurer's report, presented by Professor Shattuck, was also referred to the Finance Committee.

E. G. KEITH, TREASURER, IN ACCOUNT WITH THE UNIVERSITY OF ILLINOIS,

AUGUST 31, 1897.

1897.				
1897.				
		Dr.		
April	28	U. S. Experiment Station warrant, due April 1.	\$3,750 00	
May	10	Remittance from S. W. Shattuck, on account of School of medicine	2,000 00	
••	18	Payment on land contract	250 00	
June	8	Appropriation for Chemical Laboratory repairs	9,714 93 200 00	
• •	22 26	Payment on land contract From S. W. Shattuck, paid warrants on account of Ex	200 00	
		periment Station	367 71	
	26	periment Station From S. W. Shattuck, paid warrants on account of general fund.	1,829 75	
••	- 26	Received from land contract	1,350 00	
July	6 10	U. S. appropriation for Experiment Station, due July 1st Received from S. W. Shattuck, for School of Pharmacy Received from S. W. Shattuck, for Shool of Medicine.	$3,750 \ 00 \\ 170 \ 47$	
••	19	Received from S. W. Shattuck, for School of Medicine.	1,000 00	
••	- 19	Received from State Treasurer, general appropriation.	76,650 00	
• •	19	Received from S. W. Shattuck, for Experiment Station. Received from State Treasurer, for Laboratory of Na-	183-31	
		tural History. Received from State Treasurer, for survey of water in	5,150 00	
			750 00	
••	26	Received from State Treasurer in error. Received from S. W. Shattuck, for School of Medicine. Received from State Treasurer, for completing library Received from State Treasurer, for central heating	63 45	
August	9 21	Received from S. W. Shattuck, for School of Medicine.	$919 \ 00 \\ 2,500 \ 00$	
••	21	Received from State Treasurer, for completing indrary	,	
	07	plant. Received from S. W. Shattuck, paid warrants Received from State Treasurer, U. S. appropriation	25,000 00	
••	20 30	Received from S. W. Shattuck, paid warrants	3,576 61	
×		due August 1	23,000.00	\$162, 175 23
1897.		Cr.		
1097.		Ur.		
August	19	By amount paid out of general fund, as per list of war-	\$75,859 25	
••	19	rants herewith By amount paid out of endowment fund sent to State	\$10,008 <u>2</u> 0	
	10	Treasurer as per agreement By amount paid out of Experiment Station fund, as per	1,800 00	
	19	by amount paid out of Experiment Station fund, as per list of warrants herewith	6,311 41	
•• [	19	list of warrants herewith By amount paid out of School of Pharmacy fund, as		
••	19	per list of warrants herewith By amount paid out of Laboratory of Natural History	2,214 26	
	1	fund, as per list of warrants herewith	2,379 10	
••	19	By amount paid out of School of Medicine fund, as per	3,577 09	
1.	31	list of warrants herewith By amount paid out of general fund, as per list of war-	0,011 00	
		by amount para out of general fund, as per list of war-		
		rants herewith	25,106 24	
		rants herewith By amount paid out of U. S. Experiment Station fund,		
••	31	rants herewith. By amount paid out of U. S. Experiment Station fund, as per list of warrants herewith. By amount paid out of Laboratory of Natural History	9 40	
•••	31 31	rants herewith. By amount paid out of U.S. Experiment Station fund, as per list of warrants herewith By amount paid out of Laboratory of Natural History fund, as per list of warrants herewith.		
•••	31 31 31	rants herewith. By amount paid out of U.S. Experiment Station fund, as per list of warrants herewith	9 40	
··· ·· ··	31 31 31	rants herewith. By amount paid out of U.S. Experiment Station fund, as per list of warrants herewith By amount paid out of Laboratory of Natural History fund, as per list of warrants herewith. By amount paid out of School of Pharmacy fund, as per list of warrants herewith By amount paid out of School of Medicine fund, as per	9 40 284 63 69 25	9447 676 97
· · · · · · · · · · · · · · · · · · ·	31 31 31	rants herewith. By amount paid out of U.S. Experiment Station fund, as per list of warrants herewith	9 40 284 63	\$117,676 37
	31 31 31	rants herewith. By amount paid out of U.S. Experiment Station fund, as per list of warrants herewith. By amount paid out of Laboratory of Natural History fund, as per list of warrants herewith. By amount paid out of School of Pharmacy fund, as per list of warrants herewith. By amount paid out of School of Medicine fund, as per list of warrants herewith.	9 40 284 63 69 25	\$117,676 37
	31 31 31	rants herewith. By amount paid out of U. S. Experiment Station fund, as per list of warrants herewith. By amount paid out of Laboratory of Natural History fund, as per list of warrants herewith. By amount paid out of School of Pharmacy fund, as per list of warrants herewith. By amount paid out of School of Medicine fund, as per list of warrants herewith. Balances—	9 40 284 63 69 25 65 75	\$117,676 37
••	31 31 31	rants herewith. By amount paid out of U.S. Experiment Station fund, as per list of warrants herewith By amount paid out of Laboratory of Natural History fund, as per list of warrants herewith By amount paid out of School of Pharmacy fund, as per list of warrants herewith By amount paid out of School of Medicine fund, as per list of warrants herewith Balances- General fund, Experiment Station fund	9 40 284 63 69 25 65 75 \$41, 119 26 1, 730 21	\$117, 676 37
··· ·· ··	31 31 31	rants herewith. By amount paid out of U. S. Experiment Station fund, as per list of warrants herewith. By amount paid out of Laboratory of Natural History fund, as per list of warrants herewith. By amount paid out of School of Pharmacy fund, as per list of warrants herewith. By amount paid out of School of Medicine fund, as per list of warrants herewith. Balances- General fund, Experiment Station fund. Laboratory of Natural History fund.	9 40 284 63 69 25 65 75 \$41, 119 26 1, 730 21 2, 486 27	\$117, 676 37
	31 31 31	rants herewith. By amount paid out of U.S. Experiment Station fund, as per list of warrants herewith By amount paid out of Laboratory of Natural History fund, as per list of warrants herewith By amount paid out of School of Pharmacy fund, as per list of warrants herewith By amount paid out of School of Medicine fund, as per list of warrants herewith Balances- General fund, Experiment Station fund	9 40 284 63 69 25 65 75 \$41, 119 26 1, 730 21 2, 456 27 276 16	\$117, 676 37
· · · · · · · · · · · · · · · · · · ·	31 31 31	rants herewith. By amount paid out of U. S. Experiment Station fund, as per list of warrants herewith By amount paid out of Laboratory of Natural History fund, as per list of warrants herewith. By amount paid out of School of Pharmacy fund, as per list of warrants herewith By amount paid out of School of Medicine fund, as per list of warrants herewith Balances- General fund, Experiment Station fund Laboratory of Natural History fund School of Medicine fund	9 40 284 63 69 25 65 75 \$41, 119 26 1, 780 21 2, 456 27 276 16 \$46, 611 90	
· · · · · · · · · · · · · · · · · · ·	31 31 31	rants herewith. By amount paid out of U. S. Experiment Station fund, as per list of warrants herewith. By amount paid out of Laboratory of Natural History fund, as per list of warrants herewith. By amount paid out of School of Pharmacy fund, as per list of warrants herewith. By amount paid out of School of Medicine fund, as per list of warrants herewith. Balances- General fund, Experiment Station fund. Laboratory of Natural History fund.	9 40 284 63 69 25 65 75 \$41, 119 26 1, 730 21 2, 456 27 276 16	\$44,498 86
· · · · · · · · · · · · · · · · · · ·	31 31 31	rants herewith. By amount paid out of U. S. Experiment Station fund, as per list of warrants herewith By amount paid out of Laboratory of Natural History fund, as per list of warrants herewith. By amount paid out of School of Pharmacy fund, as per list of warrants herewith By amount paid out of School of Medicine fund, as per list of warrants herewith Balances- General fund, Experiment Station fund Laboratory of Natural History fund School of Medicine fund	9 40 284 63 69 25 65 75 \$41, 119 26 1, 780 21 2, 456 27 276 16 \$46, 611 90	

#### APPROPRIATIONS.

On motion of Mr. Bullard, \$100.00 was re-appropriated for the protection of Engineering Hall from the drip from window sills.

Appropriations were made for the three months ending December 31, 1897, as requested by the Business Manager.

	1	
Board expenses	\$500 00	
Board expenses Salaries for instruction and President	35,000 00	X
Salaries for services	5,000 00	
Buildings and grounds	2.000.001	
Fuel, lights, and electric power Stationery, printing, etc	3,000 00	
Stationery, printing, etc	1,000 00	
Advertising and postage.	1,000 00	
Repair shop	1.000 00	
Mechanical department	500 00	
Departments	300 00	
Laboratories	1,000 00	
Library and apparatus	50 00	
Incidentals	800 00	
Furniture and fixtures,	500 00	
Heating apparatus	500 00	
Greenhouse	300 00	
Water supply	125 00	
Minnesota lands	100 00	\$52,675 00
School of Pharmacy	6,500 00	
School of Medicine	14,000 00	
Agricultural Experiment Station	4,500 00	
Water survey of the State	750 00	\$25,750 00
		\$78,425 00
		φ10,420 UU
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On motion of Mr. McKay, \$50.00 was appropriated for the payment of Wilson, Moore & McIlvaine's bill for legal services rendered the University in the matter of the H. M. R. Construction Company's bond.

It was ordered that the President and Secretary make a requisition on the Auditor for a warrant on the State Treasurer for the sum of \$1,597.50 in favor of John R. Tanner, Governor, J. S. McCullough, Auditor of Public Accounts, and Henry L. Hertz, Treasurer, to be drawn from the appropriation made by the General Assembly for defraying the expenses for legal services in the matter of the Spalding defalcation, and to be used in the payment of the bill of Wilson, Moore and McIlvaine for legal services rendered amounting to said sum.

It was also ordered that a further requisition for \$500.00 be drawn in favor of the same persons from the same fund, to be paid as a retainer fee to C. E. Richards, of Red Oak, Iowa.

#### COAL CONTRACT.

Mr. Smith from the Finance Committee made a report with regard to bids received for furnishing coal.

On motion of Mr. Bullard, the committee was directed to reject these bids and to call for bids again.

The committee was further instructed to report with regard to said bids to the Executive Committee, and the Executive Committee was given power to contract for coal for the ensuing year, in case a satisfactory contract could be made. 1897.]

By request of President McKay, Mr. McLean occupied the chair for the rest of the session.

The Executive Committee made the following report:

URBANA, ILLINOIS, September 21, 1897.

## To the Board of Irustees.

GENTLEMEN:—Your Executive Committee reports that at a meeting an appropriation of \$600.00 was made for the purpose of completing the repairs on Natural History Hall; \$500.00 to be used under the direction of Professor White, and \$100.00 to be used under the direction of Professor Rolfe.

Respectfully submitted,

F. M. MCKAY, S. A. BULLARD, Executive Committee.

This action of the Executive Committee was confirmed.

## APPOINTMENTS.

President Draper reported that he had engaged the following named instructors and assistants, pursuant to authority previously conferred by the Board:

John Perham Hylan, Ph. D., Instructor in Psychology, at \$80.00 a month for ten months.

Alice Putnam, Instructor in Violin, at \$80.00 a month for ten months.

Clarence Wolworth Alvord, A. B., Instructor in Mathematics and History, in the Preparatory School, at \$70.00 a month for ten months.

James Harry McKee, B. S., Assistant in Mechanical Engineering. at \$50.00<sup>,</sup> a month for ten months.

George David Hubbard, B. S., Assistant in Geology, at \$50.00 a month for ten months.

Herbert Anthony Weber, B. S., Assistant in General Engineering Drawing, at \$50.00 a month for ten months.

Charles Victor Seastone, B. S., Assistant in Theoretical and Applied Mechanics, at \$50.00 a month for ten months.

Richard Bird Ketchum, B. S., Assistant in Civil Engineering, at 50.00 a month for ten months.

Hubert Vinton Carpenter, B. S., Assistant in Physics, at \$500.00 a month for ten months.

John Langley Sammis, B. S., Assistant in Chemistry, at \$50.00 a month for ten months.

Robert Watt Stark, B. S., Assistant in Chemistry on State Water Survey at \$50.00 a month for ten months.

Matthew Brown Hammond, Ph. D., Assistant in Economics, at \$50.00 a. month for ten months.

Albert St. John Williamson, Assistant in Military Science and Tactics at \$10.00 a month for ten months.

The Secretary presented a statement of dues from students for the quarter ending June 30, 1897.

Board adjourned.

W. L. PILLSBURY,

Secretary.

F. M. MCKAY, President.

## MEETING OF OCTOBER 1, 1897.

The following call for a special meeting of the Board of Trustees of the University of Illinois was issued September 25, 1897:

"Upon the call of the President, Mr. F. M. McKay, there will be a special meeting of the Board of Trustees of the University of Illinois at 8:30 o'clock a. m., Friday, October 1, 1897, at the Leland Hotel, Springfield, Illinois, to consider such business as may be duly presented."

The Board met and adjourned to meet at 6 o'clock p. m.

### EVENING SESSION.

When the Board met pursuant to adjournment there were present Messrs. Armstrong, Bullard, McKay, McLean, Raymond and Pearce and Mrs. Flower; absent Governor Tanner, and Messrs. Inglis, Smith, and Morrison and Mrs. Carriel.

Mr. Bullard, from the Committee on Buildings and Grounds stated that to build the bridge over Silver Creek, on Burrill avenue, acording to the plans prepared by Professor Baker, would cost \$875.00, and asked for an additional appropriation of \$375.00 for this purpose.

On motion of Mr. Armstrong, the appropriation was made.

On motion of Mr. Bullard, the matter of state scholarships, and other scholarships in the University, was referred to the Committee on Instruction, which was directed to report to the Board at its next regular meeting.

The Board adjourned. W. L. PILLSBURY,

Secretary.

F. M. McKAY, President.

## MEETING OF DECEMBER 14, 1897.

The Board of Trustees of the University of Illinois met in the Trustees' Room, Library Hall, in Urbana, Illinois, at 3 o'clock p. m., Tuesday, December 14, 1897.

The members present were Messrs. Armstrong. Bullard, McKay, McLean, Morrison, Raymond, and Smith and Mrs, Carriel; those absent were Governor Tanner and Messrs. Inglis and Pearce and Mrs. Flower.

The minutes of the meetings of September 21, and October 1, 1897, were approved, as presented by the Secretary.

### COMMUNICATION FROM PRESIDENT DRAPER.

President Draper presented a request from Professor Townsend asking for a leave of absence without pay for the next school year, and the request was granted.

A request from Professor Palmer that the Business Manager be given authority to contract, on a satisfactory bid, for chemical supplies, to be imported, not exceeding \$1,500.00 in amount, was approved on motion of Mr. McLean.

The resignation of Miss Mary L. Jones, to take effect at the close of the present term, was presented and, on motion of Mr. Morrison, was accepted. President Draper was given power to fill the place temporarily.

It was recommended that Mr. Geo. W. Myers's title be made Professor of Astronomy and Applied Mathematics. It was voted that the title should be Professor of Astronomy. Later in the session, on motion of Mr. Morrison, this action was reconsidered, and the title was made Professor of Astronomy and Applied Mathematics.

## BLUE-PRINT ROOM, ETC.

. After some discussion of the following resolution action thereon was postponed until the next day:

*Resolved*. That from and after January I, 1898, the University, take into its own hands the sale of examination books, theme paper, pencils, etc., and also management of the blue print room in Engineering Hall, and that Mr. Charles T. Wilder be appointed to have charge of the matter for the period of six months, at \$70.00 per month.

That Mr. Wilder be also required to take charge of all photographic apparatus belonging to the University and that he be expected to use the same in the interest of the University and to its utmost advantage.

That provision be made in the next catalogue for a course in photography, to be taught by Mr. Wilder, and that his employment, if the service is satisfactory, be continued for ten months from the first of September next at \$80.00 per month, and that he be included in the corps of instruction.

President Draper stated that certain changes in the catalogue were under consideration, and that it would be necessary that these should be passed upon before the next regular meeting of the Board. It was accordingly ordered that the Committee on Instruction, in consultation with President Draper, should have authority to approve such changes as were deemed desirable.

Mr. S. J. Temple's bill for plans, etc., for a wagon house, was referred to the Committee on Buildings and Grounds.

Requests for appropriations from Prof. Myers were presented, and the Board authorized, on motion of Mr. Armstrong, an expenditure of \$40.00 for the purpose of building an isolated clock pier at the Observatory.

President Draper's bill for expenses for the last six months amounting to \$72.56, was ordered paid.

A communication from Professor Forbes with regard to a summer school was presented and was referred to the Finance Committee; as was also a communication from Professor Breckenridge asking for sundry appropriations.

A request from Professor Burrill that the Business Manager be authorized to contract on a satisfactory bid, for botanical supplies, to be imported, not exceeding in amount \$100.00, was approved on motion of Mr. Armstrong.

#### AGRICULTURAL EXPERIMENT STATION.

A report from the Agricultural Experiment Station was presented, and in accordance with requests therein contained, the Business Managar was authorized to contract, on a satisfactory bid, for chemical apparatus and supplies, to be imported, not exceeding in amount \$300.00, and appropriations of Station funds were made as follows: APPROPRIATIONS FOR QUARTER ENDING MARCH 31, 1898.

General Fund.	
Salaries Labor. Publications Postage and stationery Freight and express. Heat, light, and water Chemical supplies Seeds, plants, and sundry supplies Feeding stuffs. Library. Tools and machinery Furniture and fixtures. Scientific apparatus Traveling expenses Buildings and repairs.	$\begin{array}{c} \$1, 850 \\ 570 \\ 350 \\ 0 \\ 350 \\ 0 \\ 25 \\ 0 \\ 26 \\ 0 \\ 115 \\ 0 \\ 125 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ $
From Farm Fund.	
Labor Seeds, plants, and sundry supplies	\$500 0 250 0
Total	\$750 0

#### BUSINESS MANAGER'S REPORT.

The following report was received from the Business Manager and referred to the Finance Committee:

UNIVERSITY OF ILLINOIS, December 13, 1897.

F. M. McKay, 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 September 30, 1897:

Paper A is a statement of the current appropriations September 30, 1897.

Paper B is a statement of the State appropriations September 30, 1897.

Paper C is a statement of the U. S. fund September 30, 1897.

Paper D is a statement of the Laboratory of Natural History fund September 30, 1897.

Paper E is a statement of the Agricultural  $\text{Exp}\epsilon$ riment Station fund September 30, 1897.

Paper F is a statement of the School of Pharmacy appropriations September 30, 1897.

Paper G is a statement of the School of Medicine appropriations September 30, 1897.

Paper H is an estimate of receipts and expenses for the nine months ending June 30, 1898.

<sup>Paper I</sup> is a list of appropriations the Board is requested to make for the three months ending March 31, 1898.

Paper L is a statement of receipts by the Business Manager for the three months ending September 30, 1897.

Paper M is a list of the general University vouchers presented for audit, being 1 to 650, inclusive.

Paper N is a list of the Laboratory of Natural History vouchers presented for audit, being 1 to 100, inclusive.

Paper O is a list of the Agricultural Experiment Station vouchers presented for audit, being 1 to 100, inclusive.

-14 U. I.

 $Paper \ P$  is a list of School and Pharmacy vouchers presented for audit, being 1 to 25, inclusive.

Paper Q is a list of School of Medicine vouchers presented for audit, being 1 to 50, inclusive.

Paper R is an inventory of date July 1, 1897.

PAPER A-CURRENT	APPROPRIATIONS.
-----------------	-----------------

September 30, 1897.	Appro- priated.	Expended.	Balance.
Board expenses. Salaries for instruction and for President Salaries for services Buildings and grounds Fuel and lights. Stationery and printing. Preparatory School. Repair shop. Mechanical department. Departments. Laboratories. Library and apparatus. Incidental expenses.	\$1,092 26 27,584 24 3,137 84 1,000 00 5,199 67 1,609 11 770 21 1,006 56 1,150 52 1,220 75 2,937 63 153 18 1,222 77		$\left. \begin{array}{c} \$168 \ 15 \\ 4, 942 \ 50 \\ 102 \ 85 \\ 2, 725 \ 49 \\ 1, 036 \ 62 \\ 3 \ 189 \ 56 \\ 376 \ 37 \\ 1, 008 \ 92 \\ 935 \ 30 \\ 131 \ 56 \\ 507 \ 93 \end{array} \right.$
Sundries.         Closed out	$\begin{array}{c} 1, 604 \ 55\\ 406 \ 98\\ 1, 100 \ 55\\ 250 \ 00\\ 122 \ 72\\ 100 \ 25\\ 387 \ 50\\ 160 \ 00\\ 102 \ 15\\ 500 \ 00\\ 991 \ 59\\ 75 \ 00\\ 1, 000 \ 00\\ 375 \ 00\\ 100 \ 00\\ 375 \ 00\\ 562 \ 50\\ 885 \ 00\\ 500 \ 00\\ \hline \end{array}$	$\begin{array}{c} 28 \ 30 \\ 58 \ 22 \\ 778 \ 60 \end{array}$	$\begin{array}{c} 351 \ 13\\ 1, 026 \ 05\\ 5153 \ 98 \ 25\\ 99 \ 08\\ 160 \ 00\\ 4 \ 60\\ 73 \ 85\\ 441 \ 78\\ 212 \ 99\\ 75 \ 00\\ 1, 000 \ 00\\ 100 \ 00\\ 00\\ 00 \ 00\\ 00\ 00\$

Salaries, etc- Closed out.         Si56, 110 76 1, 200 00         Si56, 110 67 1, 200 00           Buildings and grounds.         4, 119 48 4, 119 48         4, 119 48 4, 119 48         5, 10 67 4, 199 48           Toilet rooms.         355 00         356 00         59 91 40 558         50 91 50 00           Approxed training.         1, 220 00         1, 005 58         214 42           School of Music.         2, 250 00         1, 305 00         2, 250 00           Lectures.         1, 99 69         3, 750 00         3, 750 00         3, 750 00           Advertising.         1, 100 00         3, 750 00         3, 750 00         3, 750 00           Accredited schools.         500 00         32 46         174 51         54           Accredited schools.         500 00         32 46         174 51         54           College of Literature and Arts, books.         200 00         311 11         58 81           Collogical department.         100 00         311 11         58 81           Cological department.         95 00         20 55 74 115         57 83 32           Bronze tablet.         175 00         57 83 3, 216 11 23         311 11           Cological department.         8188, 714 33         8184, 874 75         84, 860 18         84			
Heating aparatus.       1,200 00       1,200 00         Buildings and grounds.       4,119 48       4,119 48       4,119 48         Toilet rooms.       375 00       355 09       \$191 91         Art and design.       1,220 00       1,005 58       2,14 42         School of Music       2,250 00       1,005 58       2,14 42         School of Music       3,150 00       3,150 00       1,005 58         Agr and design.       3,150 00       3,150 00       1,005 58         Agr and design.       3,150 00       3,150 00       1,005 58         Agr and design.       3,150 00       3,150 00       1,005 58         Advertising.       3,000 00       3,150 46       140 54         Accredited schools       100 00       82 92 17 08         Botany (herbarium, etc)       150 00       113 51       36 49         Chemical angineering laboratory.       605 00       58 86       96 32         Chemical action ering aboratory.       605 00       58 86       31 11         Zoölogial depatrument.       35 00       21 27 68       76 78         Furniture and fixtures       400 00       31 70 00       31 11         Zoölogial depatrument.       35 00       20 85 74 15	Received. Expended. Balance. Assig	Received	1895-1897.
Apparatus and materials- Closed out	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Heating aparatus Buildings and grounds Toilet rooms Art and design Physical training School of Music Lectures Agriculture Preparatory School Advertising College of Literature and Arts, books Advertising College of Literature and Arts, books Signal bells Botany (herbarium, etc). Mechanical engineering laboratory Chemical Laboratory (repairs). Furniture and fixtures Furnishing Astronomical Observatory Zoölogical department Bronze tablet. Physics.
Biological Experiment Station. equipment       \$2,500 00       \$2,500 00          Paving street, etc,       \$9,300 00       \$9,300 00       \$9,300 00          Laboratory of Vegetable Physiology       \$2,000 00       \$1,975 30       \$24 70         Astronomical Observatory       \$15,000 00       \$15,000 00          Library Hall       \$150,000 00       \$145,136 56       \$4,863 44         Fire protection       \$2,000 00       \$1,710 03       \$2289 97         Library       \$6,000 00       \$5,000 00          Shop practice       \$3,000 00       \$5,000 00          Taxes on Minnesota lands       \$3,000 00       \$2,046 81       \$953 19         Cabinets- Geology       \$666 67       \$65 86       \$15 81	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	\$1,700 0 100 0 700 0 300 0 800 0 8000 0 800000000	Closed out. Applied chemistry. Chemistry. Psychology. Zoólogy. Physiology and hygiene. Botany and horticulture. Geology.
Paving street, etc	n \$3,000 00 \$2,994 85 \$5 15	tation \$3,000 00	Operating Biological Experiment Station
Laboratory of Vegetable Physiology       \$\$2,000 00       \$\$1,975 30       \$\$24 70         Astronomical Observatory       \$\$15,000 00       \$\$15,000 00       \$\$15,000 00         Library Hall       \$\$150,000 00       \$\$15,136 56       \$\$4,863 44       \$\$4         Fire protection       \$\$2000 00       \$\$145,136 56       \$\$4,863 44       \$\$4         Fire protection       \$\$2,000 00       \$\$1,710 03       \$\$289 97         Library       \$\$6,000 00       \$\$6,000 00       \$\$1.5,000 00         Shop practice       \$\$3,000 00       \$\$5,000 00       \$\$5,000 00         Chemical Laboratory       \$\$5,000 00       \$\$3,200 00       \$\$3,200 00         Vaccine Laboratory       \$\$3,000 00       \$\$2,046 81       \$\$953 19         Cabinets-       \$\$666 67       \$\$650 86       \$\$15 81	nt \$2,500 00 \$2,500 00	ipment \$2,500 00	Biological Experiment Station. equipment
Astronomical Observatory       \$15,000 00       \$15,000 00       \$15,000 00          Library Hall       \$150,000 00       \$15,000 00       \$15,000 00           Fire protection       \$2,000 00       \$1,710 03       \$289 97           Library       \$6,000 00       \$1,710 03       \$289 97           Library       \$6,000 00       \$5,000 00       \$6,000 00           Shop practice       \$3,000 00       \$3,000 00       \$3,000 00           Chemical Laboratory       \$5,000 00       \$3,200 00       \$3,200 00           Vaccine Laboratory       \$3,000 00       \$2,046 81       \$953 19          Cabinets-        \$666 67       \$65 86       \$15 81	\$9,300 00 \$9,300 00		Paving street, etc
Library Hall		y \$2,000 00	Laboratory of Vegetable Physiology
Fire protection       \$2,000 00       \$1,710 03       \$289 97         Library       \$6,000 00       \$6,000 00       \$6,000 00         Shop practice       \$3,000 00       \$5,000 00       \$5,000 00         Chemical Laboratory       \$5,000 00       \$5,000 00       \$5,000 00         Taxes on Minnesota lands       \$3,200 00       \$3,200 00       \$3,200 00         Vaccine Laboratory       \$3,000 00       \$2,046 81       \$953 19         Cabinets-       \$666 67       \$65 86       \$15 81	\$15,000 00 \$15,000 00		Astronomical Observatory
Library       \$6,000 00         Shop practice       \$3,000 00         Chemical Laboratory       \$5,000 00         Taxes on Minnesota lands       \$3,200 00         Vaccine Laboratory       \$3,000 00         \$3,000 00       \$3,200 00         \$3,000 00       \$3,200 00         \$3,000 00       \$3,200 00         \$3,000 00       \$3,200 00         \$3,000 00       \$3,200 00         \$3,000 00       \$3,200 00         \$3,000 00       \$3,200 00         \$3,000 00       \$3,200 00         \$3,000 00       \$3,200 00         \$3,000 00       \$3,200 00         \$3,000 00       \$3,000 00         \$3,000 00       \$3,000 00			Library Hall
Shop practice       \$3,000 00         Chemical Laboratory       \$3,000 00         Taxes on Minnesota lands       \$3,200 00         Vaccine Laboratory       \$3,000 00         S3,000 00       \$3,200 00         \$3,200 00       \$3,200 00         \$3,000 00       \$3,200 00         \$3,200 00       \$3,200 00         \$3,000 00       \$3,200 00         \$3,000 00       \$3,200 00         \$3,000 00       \$3,200 00         \$3,000 00       \$3,200 00         \$3,000 00       \$3,200 00         \$3,000 00       \$3,200 00         \$3,000 00       \$3,200 00         \$3,000 00       \$3,200 00         \$3,000 00       \$3,200 00         \$3,000 00       \$3,000 00         \$3,000 00       \$3,000 00         \$3,000 00       \$3,000 00         \$3,000 00       \$3,000 00         \$3,000 00       \$3,000 00         \$3,000 00       \$3,000 00         \$3,000 00       \$3,000 00         \$3,000 00       \$3,000 00         \$3,000 00       \$3,000 00         \$3,000 00       \$3,000 00         \$3,000 00       \$3,000 00         \$3,000 00       \$3,000 00     <			Fire protection
Chemical Laboratory       \$5,000 00       \$5,00	\$6,000 00 \$6,000 00		Library
Chemical Laboratory       \$5,000 00       \$5,00	\$3,000 00 \$3,000 00	\$3,000 00	Shop practice
Taxes on Minnesota lands       \$3,200 00       \$3,200 00         Vaccine Laboratory       \$3,000 00       \$2,046 81         Cabinets- Geology       \$666 67       \$650 86       \$15 81		\$5,000 00	Chemical Laboratory
Vaccine Laboratory         \$3,000 00         \$2,046 81         \$953 19           Cabinets- Geology         \$666 67         \$650 86         \$15 81		\$3,200 00	Taxes on Minnesota lands
Cabinets- Geology			
Zoölogy	\$666         67         \$650         86         \$15         81         \$            666         66         31         40         635         26         66            666         67          666         67	\$666 67 666 66 666 66	Geology Botany

## PAPER B-STATE APPROPRIATIONS, SEPTEMBER 30, 1897.

	1	1	1	1
1895-1897.	Received	Expended	Balance.	Assigned.
College of Engineering— Closed out Electrical engineering and physics Civil engineering Laboratory of applied mechanics and mu-	1,002 42	\$20,112 89 3,688 27 1,852 42	\$141 58	
nicipal and sanitary engineering Architecture College, library, parlor, etc	$1,852 42 \\ 1,752 42 \\ 600 00$	$1,786 \ 30$ $1,588 \ 65$ $370 \ 37$	163 77	66 12 163 77 229 63
	\$30,000 00	\$29,398 90	\$601 10	\$601 10
Furnishing and fitting Engineering Hall- Electric wiring Civil engineering Architecture. Municipal and sanitary engineering Mechanical department Electrical engineering and physics College, library, parlor, etc	$\begin{array}{c} \$1, 191 \ 77 \\ 478 \ 43 \\ 770 \ 38 \\ 401 \ 30 \\ 563 \ 78 \\ 1, 193 \ 39 \\ 400 \ 95 \end{array}$	$\begin{array}{c} \cdot\\ \$1, 191 & 77\\ 470 & 25\\ 769 & 80\\ 388 & 90\\ 541 & 23\\ 1, 107 & 42\\ 364 & 53\end{array}$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	58 12 40 22 55 85 97
	\$5,000 00	\$4,833 90	\$166 10	\$166 10
Salaries, etc.—         Salaries for instruction.         Salaries for services.         Agricultural department.         Administrative office.         Art and design.         Accredited schools.         Agricultural publication.         Buildings and grounds.         College of Literature and Arts.         Conservatory.         Decorating Library Hall         Heating apparatus.         Furniture and fixtures.         Illio.         Library supplies.         Lockjaw experiment.         Natural History Hall fire.         Oratorical contest.         Physical training.         Preparatory School         School of Music.         Typewriting bureau.         Woman's department         Mechanical engineering shops.	$\begin{array}{c} 300\ 00\\ 300\ 00\\ 500\ 00\\ 100\ 00\\ 250\ 00\\ 500\ 00\\ 500\ 00\\ 500\ 00\\ 500\ 00\\ 500\ 00\\ 500\ 00\\ 500\ 00\\ 500\ 00\\ 250\ 00\\ 250\ 00\\ 250\ 00\\ 250\ 00\\ 250\ 00\\ 300\ 00\\ 60\ 00\\ 60\ 00\\ \end{array}$	1,648 16 1,195 04 2,503 54 	$\begin{array}{c} 1, 104 \ 96\\ 300 \ 00\\ 300 \ 00\\ 500 \ 00\\ 100 \ 00\\ 100 \ 00\\ 1, 976 \ 22\\ 2, 806 \ 01\\ 24 \ 83\\ 700 \ 00\\ 100 \ 00\\ 100 \ 00\\ 100 \ 00\\ 100 \ 00\\ 100 \ 00\\ 200 \ 00\\ 55 \ 00\\ 00\\ 55 \ 00\ 00\\ 55 \ 00\ $	$\begin{array}{c} 300 \ 0 \\ 300 \ 0 \\ 300 \ 0 \\ 100 \ 0 \\ 200 \ 0 \\ 250 \ 0 \\ 500 \ 0 \\ 500 \ 0 \\ 500 \ 0 \\ 500 \ 0 \\ 100 \ 0 \\ 250 \ 0 \\ 0 \\ 250 \ 0 \\ 250 \ 0 \\ 250 \ 0 \\ 250 \ 0 \\ 250 \ 0 \\ 250 \ 0 \\ 0 \\ 250 \ 0 \\ 0 \\ 250 \ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ $
	\$35,000 00	\$23,642 84	<u>\$11,357 16</u>	\$38,023 78
Engineering equipment— Architecture. Civil engineering. Mechanical engineering. Physics and electrical engineering. Theoretical and engineering mechanics and	$\begin{array}{c} \$250 & 00 \\ 250 & 00 \\ 1,875 & 00 \\ 1,875 & 00 \end{array}$		$\begin{array}{c} \$250 & 00\ 250 & 00\ 782 & 20\ 1,875 & 00\end{array}$	\$500 00 500 00 3,750 00 3,750 00
Theoretical and applied mechanics and municipal and sanitary engineering College (in general)	$500 \ 00 \\ 250 \ 00$		500 00 250 00	$1,000 \ 00 \ 500 \ 00$
	\$5,000 00	\$1,092 80	\$3,907 20	\$10.000 00
Apparatus and materials— Astronomical Observatory Botany and horticulture Zoölogy. Geology. Applied chemistry. I hysiology.			·····	\$200 00 300 00 200 00 200 00 200 00 175 00 500 00
	\$1,500 00			\$1,575 00

## Paper B-State Appropriations - Continued.

June 30, 1897.	Received.	Expended.	Balance.	Assigned.
Completing Library Hall	\$5,000 00	\$4,452 93	\$547 07	\$5,000 00
Furnishing Library Hall	\$5,000 00	\$2,387 87	\$2,612 13	\$5,000 00
Cabinets	\$500 00	<u></u>		\$1,000 00
Fire protection			names and a second seco	\$1,000 00
Vaccine Laboratory				\$1,200 00
Equipment of men's gymnasium		<u></u>		\$3,000 00
Taxes on Minnesota lands				\$1,800 00
Water survey	\$750 00	\$452 16	\$297 84	\$750 00
Chemical equipment	\$2,500 00	\$1,012 08	\$1,487 92	\$5,000 00
Library	\$2,500 00	\$780 39	\$1,719 61	\$5,000 00
Pavement and walks	\$1,500 00	\$887 17	\$612 83	\$3,000 00
Shop practice	\$750 00	\$30 02	\$719.98	\$750 00
Central Heating plant		\$11,061 03	\$28,938 97	\$40,000 00
Bridge	\$500 00		\$499 10	\$500 00

## Paper B-State Appropriations-Concluded.

### PAPER C-UNITED STATES FUND.

Year ending June 30 1898.	Received.	Expended.	Balance.	Assigned.
Salaries for instruction	\$2,300 00	\$8,085 71	\$14,014 27	\$8,085 71

#### PAPER D-LABORATORY OF NATURAL HISTORY.

1895-1897.	Appro priated.	Expended.	Balance.	Assigned.
General balance July 1, 1896 Closed out. Salaries and assistants. Library Bulletins Report of Entomologist. Diseases of insects 1897–1899. Salaries and assistants. Field, office, etc. Library Bulletins. Report of Entomologist. Biological Experiment Station.	3,000 00 3,650 00 1,000 00 250 00 1,500 00 \$10,153 68 \$2,000 00 500 00 400 00	$\begin{array}{c} 3,650\ 00\\ 1,000\ 00\\ 500\ 00\\ 97\ 10\\ 883\ 58\\ \hline \\ \$9,130\ 68\\ \hline \\ \$9,130\ 68\\ \hline \\ \$851\ 89\\ 231\ 41\\ 13\ 00\\ 277\ 51\\ \hline \\ \hline \\ 1,247\ 71\\ \hline \end{array}$	152 90 616 41 \$1,023 00 \$1,148 11 1268 59 487 00 122 49 255 00 252 29	$\begin{array}{c} 3,000\ 00\\ 3,650\ 00\\ 1,000\ 00\\ 250\ 00\\ \hline 1,500\ 00\\ \hline 1,500\ 00\\ \hline 1,500\ 00\\ \hline 810,153\ 68\\ \hline 84,000\ 00\\ 81,500\ 00\\ \hline 1,500\ 00\\ \hline 250\ 00\\ 3,000\ 00\\ \hline \end{array}$

1897-1898	Appro- priated.	Expended.	Balance.
General Fund. Salaries. Labor. Publications. Postage and stationery. Freight and express. Heat, light, and water Chemical supplies. Seeds, plants, and sundries. Feeding stuffs. Library. Tools, implements, and machinery. Scientific apparatus. Traveling expenses. Contingent expenses. Buildings and repairs.	$\begin{array}{c} 871\ 04\\ 25\ 00\\ 25\ 00\\ 25\ 00\\ 20\ 00\\ 100\ 00\\ 44\ 00\\ 100\ 00\\ 44\ 00\\ 65\ 00\\ 65\ 00\\ 60\ 00\\ \end{array}$	$\begin{array}{c} 666 \ 34 \\ 20 \ 74 \\ 11 \ 91 \\ \hline 83 \ 63 \\ 10 \ 60 \\ 4 \ 71 \\ 122 \ 64 \\ 136 \ 97 \\ 30 \ 48 \\ 32 \ (0 \end{array}$	$\begin{array}{c} 204\ 70\\ 25\ 00\\ 4\ 26\\ 13\ 09\\ 40\ 00\\ 20\ 00\\ 16\ 37\\ 33\ 40\\ \end{array}$
Farm Fund. Labor. Seeds, etc	\$3,750 00 \$400 00 197 00 \$597 00	\$250 29 196 04	\$641 57 \$149 71 96 \$150 67

#### PAPER E-AGRICULTURAL EXPERI ENT STATION.

#### PAPER E-SCHOOL OF PHARMACY.

1897–1898.	Appro- priated.	Expended.	Balance.
Salaries for services. Buildings and grounds. Fuel and lights. Stationery and printing. Laboratories Incidentals. Sundries. Advertising. Furniture and fixtures. Unassigned	$\begin{array}{c} 26 & 00 \\ 65 & 92 \\ 27 & 07 \\ 120 & 13 \\ 199 & 69 \end{array}$	422 76 26 00 65 92 27 07 120 13 199 69 91 15 42 38	\$129 90 \$129 90

#### PAPER G-SCHOOL OF MEDICINE.

1897–1898.	Appro- priated.	Ex- pended.	Balance.
Salaries for instruction	63 02	$\begin{array}{r} 705 & 32 \\ 1,129 & 74 \\ 63 & 02 \\ 14 & 83 \\ 65 \\ 140 & 80 \\ 14 & 15 \\ 670 & 49 \\ 65 & 00 \end{array}$	<u></u>

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PAPER I-APPROPRIATIONS FOR THE THREE MONTHS ENDING MARCH 31, 1898.

Board expenses. Salaries for instruction and President Salaries for services	30,000 00 5,000 00	
Buildings and grounds Fuel, lights, and electric power	3,000 00	
Stationery and printing Advertising and postage,	600 00 600 00	
Repair shop	1,000 00	
Mechanical department Departments		
Laboratories Library and apparatus	600 00	
Incidentals	100 00	
Furniture and fixtures Heating apparatus	300 00 500 00	
Greenhouse Water supply	100 00	
Library school		\$44,775 00
School of Pharmacy	\$3,000 00	
School of Medicine Agricultural Experiment Station	12,000 00 4,500 00	19 500 <b>00</b>
		\$64,275 00

# PAPER L - RECEIPTS BY THE BUSINESS MANAGER FOR THE THREE MONTHS ENDING SEPTEMBER 30, 1897.

Buildings and grounds, rents.\$20 00Heating apparatus, old iron7 60Greenhouse.51 02Fuel, lights, coal.83 39South farm, rent.700 00Chemical laboratory81 40Vaccine laboratory2 50Mechanical department.707 07Repair shop.1, 330 43Minnesota lands, rent.114 40Interest on land contract.114 40University fees.50 00Agricultural Experiment Station.503 00Agricultural Experiment Station.503 00School of Madicine.5, 902 00	\$12,875 76
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A t gallery.       2.839 37       2.839 37         A tronomy.       7,459 65       18 60       7,478 22         A riculture       1,475 00       7,478 22       7,478 22         A pplied chemistry.       274 60       274 00       274 60         Art and design       1,463 25       430 45       1.893 70         Biological Experiment Station       2.292 49       3.361 00       60 00       57.13 43         Biological Experiment Station       2.300 00       50 00       3.850 00       3					
Apparatus aud equip ment.         ail illus- traive material.         Commer- cial ma- terial, etc.           Architecture.         \$3,528 73         \$1,358 15		PERMANENT.		VARIABLE	
A t gallery.       2.839 37       2.839 37         A tronomy.       7,459 65       18 60       7,478 22         A riculture       1,475 00       7,478 22       7,478 22         A pplied chemistry.       274 60       274 00       274 60         Art and design       1,463 25       430 45       1.893 70         Biological Experiment Station       2.292 49       3.361 00       60 00       57.13 43         Biological Experiment Station       2.300 00       50 00       3.850 00       3	DEPARTMENT.	and equip-	and illus- trative	cial ma-	TOTAL.
	A t gallery A stronomy. A rriculture A gricultural Experiment Station. Anpolied chemistry. Art and design. Botanical department. Biological Experiment Station. Chemical laboratory. College of Engineering. English. Electrical engineering. German. Geology. History Library. Laboratory of Natural History. Mathematics. Mechanical engineering. Municipal and sanitary engineering. Military. Preparatory School. Physical training. Public law and administration. Physics laboratory. Physics labo	$\begin{array}{c} 2, 839 \ 37\\ 7, 459 \ 65\\ 1, 475 \ 60\\ 4, 394 \ 45\\ 2, 292 \ 49\\ 3, 300 \ 00\\ 5, 845 \ 58\\ 8, 529 \ 93\\ 1, 177 \ 62\\ 3, 300 \ 00\\ 5, 845 \ 58\\ 8, 529 \ 93\\ 1, 177 \ 62\\ 3, 300 \ 00\\ 5, 845 \ 58\\ 421 \ 72\\ 3, 300 \ 00\\ 1, 20 \ 60\\ 23, 975 \ 34\\ 3, 300 \ 120 \ 00\\ 23, 975 \ 34\\ 3, 300 \ 120 \ 00\\ 23, 975 \ 34\\ 3, 300 \ 120 \ 00\\ 1, 586 \ 91\\ 3, 39 \ 30\\ 77 \ 00\\ 815 \ 00\\ 2, 068 \ 42\\ 1, 125 \ 75\\ 3, 810 \ 84\\ 5, 100 \ 1, 575\\ 3, 810 \ 84\\ 5, 100 \ 1, 575\\ 3, 810 \ 84\\ 5, 100 \ 1, 575\\ 3, 810 \ 84\\ 5, 100 \ 1, 575\\ 3, 810 \ 84\\ 5, 100 \ 1, 575\\ 5, 100 \ 1, 575\\ 3, 810 \ 84\\ 5, 100 \ 1, 575\\ 5, 100 \ 1, 100 \ 1, 100$	$\begin{array}{c} & 18 \ 60 \\ & 430 \ 45 \\ 3, 361 \ 00 \\ & 163 \ 50 \\ 908 \ 20 \\ & 3 \ 00 \\ 809 \ 5) \\ & 45 \ 00 \\ 17, 479 \ 15 \\ & 7 \ 00 \\ & \\ & 332 \ 33 \\ 660 \ 00 \\ 85 \ 15 \\ & \\ & \\ & 46 \ 75 \\ & \\ & 155 \ 50 \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ $	\$235 00 50 00 60 00 50 00 6, 046 36 328 05 328 05 328 00 1, 534 19 1, 534 19 10 00 219 40 349 29 11, 929 75 15 00 119 00	$\begin{array}{c} 24,150\ 96\\ 5,265\ 36\\ 17,544\ 67\\ 157\ 00\\ 1,586\ 91\\ 46\ 75\\ 9,892\ 97\\ 1,844\ 90\\ 77\ 00\\ 802\ 96\\ 15\ 00\\ 2,068\ 42\\ 12,133\ 77\\ 1,165\ 75\\ 5,934\ 84 \end{array}$

# PAPER R-INVENTORY, JULY 1, 1897-BOOKS, APPARATUS, EQUIPMENT, SPECIMENS, SUPPLIES, ETC.

#### FURNITURE AND FIXTURES.

	·		
Agricultural Experiment Station Astronomical Observatory Chemical Laboratory Engineering Hall-		\$196 25 219 40 688 00	,
Architecture Civil engineering College in general Municipal and sanitary engineering	$\begin{array}{c} 1,736 \ 03 \\ 455 \ 22 \\ 1.048 \ 43 \end{array}$		
Mechanical engineering Physics and electrical engineering Fire protection		373 00	
Fire protection. Mılitary Hall Natural History Hall. University Hall.		402 00 5,383 50 11,440 50	\$30,237 21
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 $Paper\ S$  is a communication from the Union Water Company in regard to the University's contract for water service.

Respectfully submitted,

S. W. SHATTUCK, Business Manager.

#### 1897.]

#### TREASURER'S REPORT.

# The following report was received from the Treasurer and referred to the Finance Committee:

#### E. G. KEITH, TREASURER, IN ACCOUNT WITH THE UNIVERSITY OF ILLINOIS.

September 30, 1897.

	Dr.		-
1897. Aug. Sept.    	<ol> <li>Balance.</li> <li>Received from State Treasurer on account of Labora tory of Natural History.</li> <li>Received from State Treasurer on account of Agricul- tural Experiment Station.</li> <li>Received from State Treasurer on account of School of Pharmacy.</li> <li>Received from State Treasurer on account of general fund.</li> <li>Received from State Treasurer on account of general fund.</li> <li>Received from S. W. Shattuck, warrants, account of credit of general fund.</li> <li>Received from S. W. Shattuck on account of School of Medicine.</li> <li>Received from S. W. Shattuck on account of general fund.</li> <li>Received from S. W. Shattuck, paid warrants on ac- count credit general fund.</li> <li>Received from S. W. Shattuck, paid warrants on ac- count of Agricultural Experiment Station fund</li> <li>Received from S. W. Shattuck, paid warrants on ac- count of Agricultural Experiment Station fund</li> </ol>	793 50	
1897. Sept 	Cr. 30 By amount paid out of general fund 30 By amount paid out of Experiment Station fund 30 By amount paid out of Laboratory of Natural History fund 30 By amount paid out of School of Medicine fund 30 By amount paid out of School of Medicine fund Balances- General fund Laboratory of Natural History fund 4,583 89 School of Medicine fund School of Pharmacy fund, overdraft		\$35, 676 06

E. G. KEITH, Treasurer.

The Secretary presented a statement of dues from students of the several departments of the University for the quarter ending September 30, 1897. This was referred to the Finance Committee.

The Board then adjourned to meet at 8 o'clock a.m. Wednesday, December 15, 1897.

Session of Wednesday, December 15, 1897.

When the Board met pursuant to adjournment the same members were present as at the preceding session.

The Secretary spoke of the offer of some person or persons claiming to represent an institution styled by them the "National University of Illinois, Chicago," to grant degrees, as indicated by letters received at the University from persons inquiring as to such degrees; and the matter was referred to the President of the Board, President Draper, and Mr. Pillsbury, with instructions to prepare and publish a statement setting forth clearly the fact that the University of Illinois was in no way whatever responsible for such offers.

#### REPORT OF FINANCE COMMITTEE.

The Finance Committee made the following report which, with the exception of the paragraph relating to a summer school, consideration of which was deferred until later in the session, was adopted and appropriations were made as therein recommended.

#### URBANA, ILLINOIS, Dec, 14, 1897.

#### 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 Business Manager on which University warrants Nos. 1,882 to 2,200, inclusive, for 1896 97, and Nos. 1 to 650, inclusive, for the year 1897-98; Agricultural Experiment Station warrants Nos. 280 to 400, inclusive, for the year 1896-97, and Nos. 1 to 100, inclusive, for the year 1897-98; Laboratory of Natural History warrants Nos. 247 to 286, inclusive, for the year 1896-97, and Nos. 1 to 100, inclusive, for the year 1897-98; School of Pharmacy warrants Nos. 160 to 176, inclusive, for the year 1896-97, and Nos. 1 to 25, inclusive, for the year 1897-98; and School of Medicine warrants Nos. 1 to 75, inclusive, for 1897, and Nos. 1 to 50, inclusive, for the year 1897-98, have been issued, and has found the same correct and duly receipted.

Your committee has examined the report of Elbridge G. Keith, Treasurer, for the term, August 31 to September 30, 1897, and finds that it shows a balance August 31st of \$44,498.86; balance and receipts, \$148,372.12; payments, \$35,676.06; balance of all funds September 30th, \$112,696.06.

Your commtttee reports as follows relative to the application of Professor Breckenridge for an appropriation of \$300 for experiments on the Big Four Railroad and one of \$100 for cleaning machinery.

We heartily commend the spirit and enterprise of Professor Breckenridge in developing the usefulness in his department, and would gladly recommend the appropriation asked for; but, in view of the fact that our funds are in a low condition, we cannot recommend the appropriation asked for, and would therefore recommend its disallowance.

As to the appropriation asked for in order to move machinery, etc., from the upper floor to the lower floor of the woodshop and to set up the machinery, we find that an amount sufficient for that purpose was included in the provision for fitting up a gymnasium (see page 185.)

As to the matter of establishing a summer school at Havana, we would respectfully report that, owing to the condition of our treasury, we deem it unadvisable to incur further liabilities at the present time.

We advise that the appropriations recommended by the Business Manager in his *Paper I* (see page 215) for the three months ending March 31st be made.

As to water and gas contracts, your committee, being unadvised as to the terms of present contracts, recommends that these matters be referred back to the Finance Committee with power to act.

Respectfully submitted,

THOMAS J. SMITH, ALEX. MCLEAN, N. B. MORRISON, Finance Committee.

#### SCHOLARSHIPS.

The Committee on Instruction presented the following report, which, after considerable discussion, was postponed until the March meeting of the Board:

URBANA, ILLINOIS, Dec. 14, 1897.

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

In the matter of free scholarships in the University, which was referred to the Committee of Instruction, at the last meeting of the Board, for investigation, and that a policy might be presented for your consideration, your committee respectfully reports:

By the act of 1867 "To provide for the organization and maintenance of the Illinois Industrial University," it is provided that, "Each county in the State shall be entitled to one honorary scholarship in the University, for the benefit of the descendants of the soldiers and seamen who served in the armies and navies of the United States during the late rebellion; but the Board of Trustees may from time to time add to the number of honorary scholarships when in their judgment such additions will not embarrass the finances of the University; nor need these additions be confined to the descendents of soldiers and seamen, such scholarships to be filled by transfer from the common schools of said county, of such pupils as shall from public examination to be conducted as the Board of Trustees of the University may determine, be decided to have attained the greatest proficiency in the branches of learning usually taught in the common school," etc.

The law further provides that such pupils "shall be entitled to receive, without charge for tuition, instruction, in any and all departments of the University for a term of at least three consecutive years." The language of this statute is sufficiently plain to indicate that it was the intention to admit to honorary scholarships only as the result of a competitive examination, and then, mainly the children of soldiers and sailors, who served in the late war, although the power was bestowed upon the Trustees to give such scholarships to others if they thought wise. We believe that this law is sufficiently broad; and, as the opportunity is given in each county for such an examination, we believe no scholarships should be given except as the result of a competitive examination, to be held in the county before admission to the University.

When this law was passed the University was an industrial college with no such departments as are conducted to-day, and the intent of the law was evidently to admit only to the regular classes of the University. No appropriation has ever been made by the legislature for the maintenance of the School of Pharmacy, School of Medicine, College of Law, etc.

These departments must be maintained through their fees, and we would recommend that no free scholarships be granted in any of these departments, believing there was no intent in the minds of the legislators to grant free professional instruction. If, at any time, the legislators should desire to open these departments free of cost. they have only to make an appropriation for their support, and give authority to the Trustees to grant free scholarships therein. There is still another reason why your Committee feels it unwise to extend free scholarships. People, as a rule, do not appreciate what they obtain too easily. In admitting one for each county, by competitive examination only, there is really a value put upon the scholarship through the competition and the limitation in number; if, on the contrary, it becomes known that any one can get a free scholarship by asking for it, the value of all competitive examinations will be done away, and we are very likely to bring in a class of young men who will not add to the reputation or standing of the University, who will come merely for the sake of the *guasi* reputation they may suppose to attach to the fact of having been students in the University.

Respectfully submitted,

LUCY L. FLOWER, J. E. ARMSTRONG, I. S. RAYMOND, Committee on Instruction. Mr. McLean offered the following resolution, and moved its adoption:

*Resolved*, That all requests for free scholarships not specially provided for by law, be referred directly to this Board, together with a statement in detail as to the reason for such requests.

It is expressly understood that free scholarships do<sup>t</sup> not include instruction in the departments of Law, Pharmacy, Music, and Medicine, unless otherwise ordered by this Board.

It was moved by Mr. Smith that the last paragraph of this resolution, beginning "It is expressly understood," be stricken out. On this motion the roll was called and the yeas were Messrs. Bullard, Smith, and McKay; the nays were Messrs. Morrison, Armstrong and McLean and Mrs. Carriel, and the motion was lost.

The roll was called on the passage of the resolution, and it was adopted by the following vote: Yeas—Messrs. Morrison, Raymond, Armstrong, Bullard, and McLean and Mrs. Carriel; nays—Messrs. Smith and McKay.

President Draper was authorized to secure, at the expense of the University, the attendance of Dr. W. T. Harris and Professor N. M. Butler at the next conference with high school principals.

The following resolution offered by Mr. McLean was adopted:

*Resolved*, That the appointment of a professor of chemistry in the School of Pharmacy, as requested by the Faculty of that school, be referred to the Committee on the School of Pharmacy for further investigation and report at a future meeting of the Board.

The following resolution offered by Mr. McLean was adopted:

*Resolved*, That Messrs Smith and Bullard be appointed to make arrangements at an early date with the State Treasurer whereby the University may obtain the appropriations now due.

#### SUMMER TERM AT THE UNIVERSITY.

Mr. Armstrong offered the following resolution:

*Resolved*. That it is the desire of this Board that steps be taken in the near future to keep the University running through the summer quarter. Therefore, it is further

*Resolved*, That the Council of Administration with the Executive Committee of this Board be directed to prepare a scheme for conducting such courses as they think best during the summer quarter each year, and that they report such a scheme to the Board at its nxet regular meeting.

Pending the consideration of these resolutions the Board adjourned to meet at 2 o'clock in the afternoon of the same day.

#### AFTERNOON SESSION.

When the Board met pursuant to adjournment the same members were present as in the morning.

The resolutions offered by Mr. Armstrong before adjournment were further considered and adopted.

It was understood that the proposition for a summer school at Havana, proposed by Professor Forbes, should be considered in connection with the foregoing resolutions. 1897.1

On motion of Mr. Bullard, \$60.00 was appropriated for the purchase of slides for use with the classes in astronomy.

#### LOSSES BY LIGHTNING.

The following resolution offered by Mr. Bullard was referred to the Finance Committee, to be reported upon at the March meeting of the Board:

WHEREAS, The losses of the University by fire arising from lightning have lately been so serious that it becomes necessary for this Board to take measures for protection against fire from this source, therefore

*Resolved*, That the sum of \$1,000, or so much thereof as may be needed, be appropriated for protecting the buildings of the University from damage by lightning, and that the Committee on Buildings and Grounds take charge of the work hereby ordered.

Mr. Raymond stated that Mr. Hedges, tenant on the south farm, desired to have the time for the next payment of rent extended to April 1, 1898, on his paying interest at the rate of 6 per cent. The matter was referred to Mr. Raymond with power to act.

One hundred and twenty-five dollars, or so much thereof as might be needed, was appropriated for repairing the tiling on the south farm, the money to be expended under the direction of the Business Manager.

The resolution with regard to the blue-print room was then taken up and adopted, and \$150.00 was assigned as capital for use in the operation of the room.

On motion of Mr. Bullard, \$54.00 additional was appropriated for the construction of the bridge on Burrill avenue, this appropriation having been made necessary because of extra labor on account of quicksand found in laying the foundation.

Mr. Bullard stated that \$526.92 more was needed in the construction of the greenhouse, and this sum was appropriated for this purpose.

The bill of P. E. Taintor, amounting to \$63.00, for cement work on the driveway through Machinery Building, was allowed and ordered paid.

The Board adjourned.

W. L. PILLSRURY,

Secretary.

F. M. McKay, President.

### MEETING OF MARCH 8, 1898.

The Board of Trustees of the University of Illinois met in the Trustees' Room, Library Hall, in Urbana, Illinois, at 9 o'clock a. m., 'Tuesday, March 8, 1898.

The members present were Messrs. Armstrong, Inglis, McKay, Morrison, Smith, and Raymond; those absent were Governor Tanner and Messrs. Bullard, McLean, and Pearce, and Mrs. Carriel and Mrs. Flower.

After some time spent in the discussion of University affairs. there being no quorum present, the board adjourned to meet at 1:30 p.m.

When the Board met pursuant to adjournment there were present the same members as in the morning, and in addition Messrs. Bul-Bullard and McLean, and Mrs. Carriel.

The minutes of the meeting of December 14, 1897, were approved as printed and presented by the Secretary.

The Board then proceeded to the election of officers.

On motion of Mr. Smith, Mr. McKay was elected President.

On motion of Mr. McLean, Mr. W. L. Pillsbury was elected Secretary.

Messrs. Smith and Bullard were elected to constitute, with the President of the Board as chairman, the Executive Committee.

Messrs. A. D. Barber, of Hamilton, E. A. Riehl, of Alton, and H. B. Gurler, of DeKalb, who had been recommended by the Illinois State Board of Agriculture, the Illinois State Horticultural Society, and the Illinois State Dairymen's Association, respectively, were appointed to represent them on the Advisory Board of the Agricultural Experiment Station. Messrs. Raymond and Morrison, together with Professors Burrill, Forbes, and Davenport, were also appointed members of the Advisory Board.

Professor Burrill was appointed Chairman of the Advisory Board.

Mr. Smith moved that there be added to the standing committees of the Board, a Committee on the School of Medicine, the School of Law, and the Library School.

The motion did not prevail.

#### COMMUNICATIONS FROM PRESIDERT DRAPER.

On recommendation of President Draper \$500.00 was appropriated for commencement exercises; also \$100.00 for incidental expenses in the Library.

The appointment of W. H. Simmerman as engineer in the heating department, at a salary of \$60,000 a month, was recommended and the appointment was made.

The matter of the superintendency of buildings and grounds was referred to the Committee on Buildings and Grounds with power to act.

A request from Professor T. A. Clark for leave of absence, without pay, during the next University year, was presented and approved.

It was ordered that the President's house be painted at an expense not exceed \$200.00, and the work was put in charge of the Committee on Buildings and Grounds.

A communication with regard to a small animal house was referred to President Draper with power to act.

The following rule with regard to the purchase of uniforms, prepared by the Committee of the Faculty on military affairs, was approved.

#### PURCHASING UNIFORMS.

In order that all uniforms worn at this University may be, in quality, make and finish in strict accordance with the qualifications adopted by the Board of Trustees, all students enrolled in the military department will be required to obtain them from that firm only that may, from time to time, be under agreement and bond with the Trustees to furnish said uniforms at a stated price and of standard quality.

Appropriations were made of \$30.00 for the purchase of equipment needed in the military department, and of \$75.00 for the purchase of a State flag.

The report of Professor Davenport, the Director of the Agricultural Experiment Station and Dean of the College of Agriculture, was presented, with the recommendation that the requests made therein be granted.

Authority was given to conduct experiments as proposed, and appropriations of Station and of the University funds were made as asked for in the report.

#### REPORT OF THE DIRECTOR OF THE AGRICULTURAL EXPERIMENT STATION.

UNIVERSITY OF ILLINOIS, March 3, 1898.

#### A. S. Draper, LL.D., President of the University of Illinois,

DEAR SIR:—The following is a report of the work of the various departments of the Agricultural Experiment Station, together with recommendations and estimates for the ensuing quarter.

The Chemist of the Station is away on leave, to return in June. The small amount of chemical work that is imperative in the way of analyses of fertilizers, is done by Mr. Smith, a graduate from last year's class. Mr. Clinton, Assistant Botanist of the Station, reports an addition to the herbarium amounting to about 1,300 specimens, some 400 of which were purchased. He is making a collection of Ustilagineae as a volume of Seymour and Earl's Economic Fungi. Much work was done during the past year with oat smut, and about 100 fields were visited in different parts of the State. The loss from this cause alone is often as high as 20 per cent., and is especially heavy in white elay soils of southern Illinois. The treatment by hot water is now well established, and Mr. Clinton proposes to visit certain sections to give practical demonstration of this method of prevention. He has made extensive experiments upon the germinating power of oats when subject to different degrees of heat and for different periods of time and proposes to extend his investigations the coming season before publishing. A good amount of information was secured last year upon the smut of broom corn, Indian corn, and sorghum, particularly the latter. Mr. Clinton has attended two institutes this winter, and has taught one class in the Winter School.

Mr. Blair, Assistant Horticulturist, has visited within the year 180 fruit plantations in 47 counties of the State for the purpose of studying the horticultural conditions of Illinois. All these visits were without expense to the Station, except the trip to Johnson county at the time of the meeting of the Southern Horticultural Society, which, it will be remembered, he visited for the purpose of making a practical demonstration of the methods of spraying. He reports that the exhibition created great interest and elicited many questions. Requests have come in for its repetition, but I have been obliged to decline, because of the expense. Mr. Blair is desirous of starting a small plum orchard, and in this is supported by Dr. Burrill.

A circular upon the use of the common insecticides is about ready for the press and it is proposed to institute somewhat extensive trials of different fungicides during the coming year preparatory to the more formal publication of a bulletin One of the subjects that occupied a large degree of attention last summer was orchard cultivation and the results of the season's experience are preparing for a bulletin, which will be ready for the printer within the month. Mr. Blair has now made a fairly complete study of the horticultural resources and possibilities of the State and has spent much time in becoming familiar with what the Station has done heretofore, all of which is of material advantage to his further work. During the term he has taught the largest class in horticulture ever in the University, namely, fourteen University students, besides those of the Winter School. This department's need for laboratory facilities, both for instruction and for experimentation, is most marked and entirely similar to that of the department of agricultural physics. I recently spent a day at Madison, Wisconsin, which confirmed my previous conviction that these two departments should be supplied with suitable buildings and apparatus at the earliest possible date.

This remark leads naturally to the work with nitragin performed by Professor Holden last year. At considerable expense we secured from Germany a dozen samples of the new product for soil inoculation and ours is one of two Stations in America to test the new discovery. The work was greatly hampered by the absence of glass or other protection, and during the fire last June at the Natural History building a good portion of the work was ruined. We have seriously debated the advisability of repeating the attempt to carry on so laborious and costly an experiment with our meager facilities and the chances of loss; but the importance of the subject and the fact that we are pioneers on this side of the water make it seem advisable to do something, or at least to make an attempt. Here lies a fertile field for inquiry, and we should like much to hold good ground until perchance we may be better equipped.

The corn breeding experiment has assumed gigantic proportions and Professor Holden has a mass of valuable data that will prove, I am sure, a contribution to our knowledge of corn. Publication on this subject should be made after another season's work, particularly if last year's promises of results should be fulfilled. The effects of inbreeding appear both pronounced and disastrous, the second generation from inbred seed being less than twothirds normal size and nearly barren. Remarkable variations have been brought to light in all portions of the plant, which seems peculiarly variable, and yet there is a pronounced tendency to respond to selection. The first year after all imperfect stalks and all extremely large, early, or late ones had been removed not one-fourth of the crop was left, but the second planting from this seed when closely selected after the same plan left almost a full stand, which shows that corn may be brought much nearer a constant type than has ever yet been done.

The permanent plats have now raised three consecutive crops of corn, and the individual differences or "personal equations" of each are fairly well established. On a few of these tested plats it is proposed to begin permanent experiments to test the behavior of leguminous crops grown continuously upon prairie soil, both alone and in company with other crops.

As was arranged at the last meeting of the Board, Professor Holden visited Grand Island and Norfolk, Nebraska, and made a close study of the sugar beet industry as regards both the producer of the beets and the manufacturer of sugar. He soon observed that peculiar relations obtain between these two interests and that the knowledge of practical details and a common understanding as between grower and manufacturer are absolute conditions of success. After considerable exertion he succeeded in securing some inside information and returned with a new conception of the magnitude of the business, its suitability for Illinois, and withal the danger that threatens a hasty attempt to establish factories without an assured supply of beets grown after economic methods. His investigations entirely changed the plan of our proposed bulletin. The first numbers of the bulletin are out, and I have no hesitation in saying that it is by far the best bulletin ever issued on this subject in the country, not excepting anything emanating from the Agricultural Department at Washington, and excepting only the work of Nicholson, of Nebraska.

We became so impressed with the possible benefits of saving a \$12,000,000 sugar bill to the State and of establishing on a safe basis the fifty factories that would be needed to make the sugar of Illinois, and we saw so many chances of disastrous failure from ill-advised haste, that a thing was done the like of which was never before attempted by any Experiment Station or College of Agriculture and that was to call a Sugar Beet Convention, and to employ and bring from Nebraska the man who is perhars better qualified than any other in America to teach the culture of the sugar beet and to advise our people as to safe procedure. Mr. Theodore Hapke is a graduate of a German university and has been for years a practical beet raiser. He superintended last year the beet fields of the railroad and irrigation companies in Colorado, and has just now consented to continue with them next year. We were fortunate in having had so capable a man to start our people. The Convention opened with 150 in attendance. In the afternoon fifty-six

The Convention opened with 150 in attendance. In the afternoon fifty-six registered, representing seventeen counties of the state, and their first action after the meeting was turned over to them by the Experiment Station was formally to thank the University for the interest taken and the help offered in this matter. A Sugar Beet Growers' Association was formed, with Professor Holden as Corresponding Secretary, and visitors said that this Convention would save the state more money than the University had ever cost. It would seem wise policy to recognize this State Association, which has

It would seem wise policy to recognize this State Association, which has taken for its work the business of arousing and regulating local markets, this year in growing beets and afterward in establishing factories. I propose that we deal as largely as may be with and through this organization without either sacrificing the work in localities not represented in the Association, or turning the work from our hands into those of the State Association. We must adhere to our resolve not to deal with individuals, except in rare cases and for reason; but must, I take it, pursue a policy that will tend to localize interest and to combine effort about centers where factories may be established later. With such localities we should co-operate in every possible way. We should furnish them bulletins and circulars of information and should arrange to analyze such samples as may be grown according to our direction and forwarded to us transportation prepaid. The people are grateful to the Station for its help and will be yet more grateful when they fully realize its nature. Professor Holden has spoken in many Farmers' Institutes of the --15 U. I. state this winter upon the subject of sugar beets and has been obliged to decline many more invitations. The chief aim has been to steady and shape popular enthusiasm and to induce the right sort of study and procedure. A letter from a Chicago agricultural editor says that we are coming to be considered authority on the sugar beet, and I feel that Professor Holden deserves credit for quickly and accurately estimating the conditions involved.

It would seem well to raise at the Station the coming season three or four acres of beets of different varieties and at different distances apart. We should in this way become familiar with their handling, a thing that is desirable because we are likely to be called upon for information for some time to come. It is recommended also that experiments be conducted in growing beet seed. Seed is not now produced in this country, not because we are unable to produce a satisfactory quality, but because when seed growing has been tried in Nebraska the yield has been insufficient. It is certainly worth while to test this matter, for our soil ought to be productive of large crops.

We have no results from last year's work tending to show whether or not beets can be grown in the white clay lands of southern Illinois, and it is proposed to test this matter on our own rented lands at Edgewood and Odin.

In southern Illinois an important work is only partly done. We have demonstrated not only the possibility of tile drainage, but something at least of its beneficial effect in improving the texture of the soil and increasing the corn crop from 15 to 25 per cent. We have shown that the cow pea is an exceedingly valuable crop, but I question if the general public will not forestall us and adopt the crop before we can fully prove its benefits by actual demonstration. I sincerely trust that it will do so. We must learn further concerning sub-soiling those lands; irrigation, whenever a favorable season occurs; the effect of barnyard manure and of lime; the benefit of winter protection; the introduction of clover; and the use and abuse of meadows. The experiments at Edgewood should be continued as heretofore and at Odin with certain additions as suggested above.

Since April last Mr. Fraser has been studying the natural variations in milk with four cows and has collected good material, which he is getting into shape for a bulletin this spring. He found it necessary to make some experiments on more accurate methods of determining solids not fat, and we have united a dairy and feeding experiment with three cows that are fed a known ration, first of the same composition for all and in amounts entirely safe. This will be afterward varied in amount and composition to note effect both of kind and amount of food as well as of the behavior of each separate animal. A good experiment of this kind has never yet been performed and Mr. Fraser and myself are looking for some important results now that we have an experienced herdsman and a skilled feeder.

The dairy department has done a large amount of work in attempting to discover the real source of impure milk by means of bacteriological and other tests. Mr. Fraser has made some study of city milk supplies, especially of Chicago, and now proposes that experiments be authorized looking to methods of obtaining and delivering pure milk. I believe that the Station can do an excellent work by attacking strongly the problem of city milk supply and would recommend that this line of work be authorized. In November, Mr. Fraser spent three weeks among the dairies of northern Illinois and during the winter he has spoken at five Farmers' Institutes besides the State Dairymen's Association.

Because of additional purchases we have been able to dispose of some of our inferior specimens of cattle and I consider that the herd is assuming a creditable showing. We are fortunate in having Mr. Dalziel with us as herdsman. He has fed hundreds of cattle and thousands of sheep in Scotland, and comes to us not merely for employment, but for the opportunity to do experimental feeding and in the hope of building up a good herd.

I would recommend that our herd be subjected to the tuberculine test, not that there is reason to suspect disease, but as a precautionary measure. Public herds often suffer because the management lacks the necessary courage to take radical steps; but there is no valid reason why they should not be treated in all respects with the same precautions as private herds. The four teams and two colts owned by the University are in excellent condition and are doing us credit. Late in the fall I traded one of our old teams which had never been entirely sound for \$75.00 worth of feed. They would have brought more in the spring, but we got all they were worth and saved the cost of wintering.

Whether the institute work done by the members of the Station staff should be considered college or station work is perhaps a question. In any event the call for attendance upon institutes is something enormous and it is certainly growing. I have attended ten such meetings besides our own state institute and the state institute of Indiana, at Huntington. The sort of work is valuable to our staff, because it keeps the individual in touch with the people and their needs. It is valuable to the institution because it serves to carry our work to those engaged in actual business and it commends our efforts to them and builds up in them a belief in the University; but it is a serious invasion of time and simply reduces the winter season to a state of affairs in which we can but keep afloat with daily duties without doing much good work. Those of us who teach, and most of the staff are so engaged a part of the time, find great difficulty in securing time for even the least amount of careful study of literature or for original investigation. The State Farmers' Institute Association is getting into much better working order, and it is to be hoped that dates may be so arranged another winter that less time will be wasted in travel.

The State Institute just closed was in every way profitable to the Station, as it was to all interests of the University, and resolutions were adopted asking for an agricultural equipment commensurate with the needs of the subject and with the standing of Illinois among the great agricultural states.

The ravages of fire have cost the Station not far from \$3,000.00 within the space of a year. The labor of restoring the chemical laboratory has been an arduous one so far as funds are concerned, and has compelled a degree of reduction of estimates that is to be regretted. By oversight no request has been made for a restoration of the loss at the hands of the Legislature. This should be done at the next session. Again, Illinois should undertake to print the results of Experiment Station work, as is done in so many other states, not by the State printer, but by augmenting our printing fund. If this were done, it would not only allow of doing more work here, but would put into circulation much material that is tied up for want of publication funds. Thirteen states make annual appropriations to the experiment stations in amounts varying from \$2,500.00 to over \$96,000.00.

At the time of reorganization of the Station the office of Secretary was abolished. By common consent Mr. Pillsbury was to continue to edit the bulletins as heretofore, both in the interest of uniformity, and because he is peculiarly fitted for this important work. One has only to notice the grave errors and inconsistencies that creep into the bulletins of many states, or to be acquainted with the services of Mr. Pillsbury as a "layman" editor of technical literature to appreciate the value of this work; and because of this fact, and because he is already rendering us this service, I would propose that his name be added to the staff as "editor of station literature."

Summary of leading work for the year and of recommendations:

Botany.—Smut of oats and fungus diseases of the apple.

Horticulture.-Fungicides, orchard cultivation, and a new plum orchard.

Agricultural Physics.—Nitragin experiments, corn breeding, leguminous crops on permanent plats, sugar beets, and continuation of experiments in southern Illinois.

Dairy.—Variations in milk; obtaining and delivering pure milk.

Live Stock.—Tuberculine test and a careful feeding experiment with three cows.

Printing aided by State; Editor of Station Literature.

Upon recommendation of the Advisory Board, I also recommended experiments with the sunflower and the artichoke. I transmit without recommendation, except as to the interest and value of the subject, the report of Dr. McIntosh giving results of work upon tetanus.

#### Professor Davenport, Dean of College of Agriculture,

SIR:—I submit to you the following report of the work done in the experiments on guinea pigs, rabbits, and horses. Dr. Burrill very kindly supplied me with *bacillus tetani*.

December 20th I inoculated two guinea pigs, which died in sixty hours, after the operation without showing any of the signs of lock jaw. On the 26th of December I inoculated a horse with the *bacillus tetani* and at the end of the second week the muscles of the hind parts became stiff and tetanized. The following day the jaws were locked. He could drink but could not eat any food. By the end of the third day all the muscles of the body were tetanized, showing all the symptoms of lock jaw with the exception that touching him would not produce any extra spasms and that the membrane of the eye was not protruded over it, which is always the case in tetanus brought on by injuries. The horse got only one dose of the bromide of potassium as he would not drink although he could swallow. I tried injections of the medicine per rectum but he would not retain them. The horse continued in a tetanic condition for a week, and as I could not get him to take the medicine I considered it advisable to destroy him.

In the rabbits so far I have not been able to produce tetanus; but Dr. Burrill is preparing some fresh material and when it is ready I shall try again.

The *bacillus tetani* killed the guinea pig so quickly that we had not time to try the bromide of potassium.

The horse is our best subject, but I have found great difficulty in getting horses at a price I could afford to pay for them and am waiting an opportunity to get some more. I have had two cases of tetanus in the country caused by injuries: one of them got completely well in four days by the bromide treatment; the other one is somewhat better and I think will recover.

The object of the experiment is to find out for a fact if the *bacillus tetani* obtained from the earth is the cause of tetanus and, if so, whether or not the bromide of potassium will cure it. From what I have done I am convinced that the bromide of potassium. if a sufficient quantity can be taken by the horse, will cure nearly every case, and if so that it should be used for the cure of tetanus in the human being.

I have thirty-five dollars of the money allowed me still on hand, but as we would require, say ten or fifteen horses, to make our experiment of importance, I shall need some more money. I consider this a very valuable experiment, since nothing of the kind has as yet been undertaken.

Respectfully submitted,

D. McIntosh.

The following estimates are to cover the work as outlined for the coming quarter and it is asked that appropriations of Station funds be made to meet them. APPROPRIATIONS FOR QUARTER ENDING JUNE 30, 1898.

General Fund. Salaries. Labor. Publications. Postage and stationery. Freight and express. Heat. light, and water. Feeding stuffs. Library. Tools, implements and machinery. Scientific apparatus. Traveling expenses. Buildings and repairs. Contingent. Total.	$\begin{array}{c} 910 \ 00\\ 475 \ 00\\ 35 \ 00\\ 20 \ 00\\ 15 \ 00\\ 265 \ 00\\ 55 \ 00\\ 45 \ 00\\ 50 \ 00\\ 60 \ 00\\ \end{array}$
From Farm Fund. Labor. Seeds, plants, and sundry supplies Total	\$520 00 230 00 \$750 00

In this connection I present some matters as Dean of the College of Agriculture and ask for appropriations of University funds to meet bills and to make repairs on the porch at the farm house.

The following bills are at hand and awaiting payment:

Membership fee University of Illinois in Association of American Agricultural Colleges and Experiment Stations. Rent of experiment fields at Odin, Illinois	\$10 00 25 00
Rent of experiment fields at Edgewood	10 00

It will be remembered that it was held that the funds of the Experiment Station should not be used for rent and that last year a University appropriation was made for that purpose.

The porch at the farm house greatly needs renewing. I have waited from quarter to quarter disliking to ask for a semi-personal matter when we have needed so many things for work. The board roof leaks, the columns are loose, and, while I have endeavored to keep the porch together, the days of its respectability are quite gone.

In order to secure a trustworthy and definite estimate I have asked Mr. Sedgwick to submit one on a plan that will fit the angle between the upright and the wing, with an octagonal projection of some three feet, giving a pleasing effect to the corner. His bid on the job finished is \$156.00.

If this amount can be appropriated it will greatly add to the appearance of the house and the comfort of the occupants, and I should esteem it a personal favor as well as a needed bit of repair.

Last fall a fire that escaped from Professor Palmer's lot destroyed about fifty rods of fencing between our farm and land belonging to Mr. McClain. I have been unable to learn definitely as to the title to the fence that was destroyed, but understand that Mr. McClain is willing to replace half of the fence. I have taken it for granted that the whole matter lies within the province of the Committee on Buildings and Grounds and allude to it here only to call attention to the matter. Professor Holden estimates the cost of restoration at not less than 60 cents per rod.

Respectfully submitted,

E. DAVENPORT, Director.

#### EMPLOYMENT OF STUDENT LABOR AT THE UNIVERSITY.

#### Io the Board of Trustees.

At the regular meeting of the Board in September last a resolution was adopted to the effect that student labor should be employed as far as practicable, and the President was directed to prepare a scheme for carrying out the proposition and present the same to the Board. Replying thereto I have to say that a considerable part of the incidental work, both clerical and manual in character, is performed by students. I think this is done to as great a degree as is consistent with the interests of the University, and of needy students as well. It is the common experience of the University that student labor is unprofitable; but, as stated, a considerable amount of work is given students to do as a means of helping the needy. It, of course, is not desirable to make work as a means of helping them. Moreover, it is surprising how rapidly students come to depend upon the University for support, in one way or another, when it is afforded. In my judgment it is decidedly against University policy to permit this number to be enlarged beyond bounds which are avoidable. The true course, it seems to me, is not to give persons who have not become students reason to believe that they can come here and depend upon the University for support, but to encourage mutual confidence between the officers and instructors of the University and the students who are already here, and to afford the needy ones relief through work so far as it is feasible for the University to do it. Even this should be-done in a quiet way and not made very prominent. I am inclined to think that this is now done much more than the members of the Board suppose. I have never known a case, and since the matter was brought up in the Board I have made inquiry among the members of the Faculty and administrative officers, and am confident that no worthy and deserving student has been turned away from the University because of inability to meet at once any University charges.

We are continually needing more assistants in our laboratories. I think we have been accustomed to pay more for this class of labor than is customary in other universities. It seems to me altogether wise to provide leading professors with such assistance, and I think it practicable to do it more fully through the aid of the most meritorious students. They should be paid small fees, according to the length of time needed, and their employment should be put upon the merit basis. Those should be employed who are doing their work with the greatest regularity and competency and who show that they may be counted upon. Students who are not in need of this compensation will not desire such work. If the Board would open the way for a little more liberty of action in the selection of such assistance, I am confident that it would not involve much if any greater expenditure of money; that it would procure more assistance when most needed; and that it would be a safe and defendable policy in aiding worthy and deserving students without extending the natural tendency to depend upon the assistance of the University when such assistance is afforded. I therefore, for the sake of putting the matter in form for the action of the Board, recommend the following resolution:

*Resolved*, That so far as practicable the incidental work in the offices and laboratories, and manual work about the University, be given to students who are earning their way through the University, giving preference to those who are most worthy and competent.

A. S. DRAPER, President.

The resolution offered was adopted.

President Draper announced to the Board that he had been officially advised that on the preceding day, March 7th, in spite of his repeated and positive refusals to permit the use of his name, he had been elected Superintendent of Schools of the City of New York by the Board of Education of that city, and that he was continually in receipt of telegrams from gentlemen of the highest standing in the 1898.]

public affairs of the city and state of New York urging his acceptance; a committee from the Board of Education had been appointed to visit him and had telegraphed asking him to name the time when he would receive them; he had all along intended to remain with the University but felt bound to present the facts to the Board as it was in session.

On motion of Mr. Morrison, it was voted to appoint a committee, with Mr. Inglis, State Superintendent of Public Instruction, as chairman and Mr. McKay, President of the Board, as one of the members, to prepare and present to the Board a resolution with regard thereto. Messrs. Morrison and Smith were appointed as the other members of this committee.

The following communication from Professor Breckenridge with regard to the work of the mechanical engineering laboratory was presented and it was ordered printed.

#### MECHANICAL ENGINEERING DEPARTMENT.

N. C. Ricker, Dean of College of Engineering,

URBANA, March 5, 1898.

DEAR SIR:—There are several matters of importance to the mechanical engineering department that I wish to present to the Board of Trustees at its March meeting, and I submit them to you, hoping that they may have your approval and commendation. They are as follows:

Moving and Setting up the Engines and Equipment of the Department in the new Steam Engineering Laboratory.

This will cost from \$200.00 to \$250.00. I request that this amount be allowed for this purpose.

Current Expenses for Experimental Laboratory Work.

This department offers three full courses and three half courses in "Experimental Work in Steam Engineering." These include all the students in the departments of sanitary, electrical, and mechanical engineering. The field covered by the experiments undertaken is a very large one and the nature of the work during the past may be indicated by a partial list of some of the more important tests made:

1. One hundred and twenty-six tests of the evaporative efficiency of many grades of Illinois coal. (These experiments have saved the University \$1,500.00 in coal bills during the last three years.)

2. Tests on the flow of steam through pipes.

3. Tests of three types of house heating boilers.

4. Tests of different types of radiators as to their heating capacity.

5. Tests of the Champaign Cold Storage plant.

6. Tests of Electric Street R. R. plant, boilers, engines, generators, and cars.

7. Duty trial of water works plant at Urbana.

8. Tests of different types of injectors.

9. Tests on the value of exhaust steam for heating purposes.

10. Tests on the power required to drive shafting, fans, and machine tools.

11. Tests on the relative strength of drop forgings and hand forgings.

12. Tests of strength of wire cables.

13. Twenty two locomotive road tests on Illinois Central R. R., on three types of locomotives in actual service.

14. Tests on the regulation of engine speed by shaft governors.

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Tests on the steam consumption of different types of engines.

The above list of experiments suffices to show the range of work done, under many difficulties, for want of a well equipped laboratory. This represents, I believe, good engineering investigation, which is possible only after a careful training in the use and manipulation of a large variety of instruments especially designed for such work.

It has cost at least \$900.00 to make the tests enumerated in the above list. Of this amount not over \$250.00 has been borne by the University, the remaining \$650.00 having been paid for by the parties with whom the department has coöperated in this work. In other words, outside parties have furnished the equipment and borne a large share of the expenses of the laboratory work in steam engineering.

The results of this kind of work can not fail to be of lasting benefit to our engineering interests. It has opened up friendly relations with many manufacturing concerns and large corporations; it has place our graduates in good positions and in some cases has afforded a chance for vacation work to our undergraduates; it places the department in communication with state engineering interests, and helps to demonstrate, in some small degree at least, that professors of engineering are engineers.

The future of our steam engineering laboratory work is exceedingly bright, for we now have a Steam Engineering Laboratory. The generous appropriations made by the Board for increasing our equipment will enable us to add to it very materially.

Our relations to engineering interests about the state have been multiplied and the department now has arrangements for several important tests, enumerated as follows:

1. A series of tests to determine the effect on the fuel consumption of **locomotives**, caused by scale incrustation on the tubes.

The Illinois Central R. R. will furnish us with a new and clean tube locomotive for our first tests and allow us to test same locomotive at the end of four, eight, and twelve months under same conditions. These tests will show at what thickness of scale it will pay to put in new tubes, as well as many other disputed points in this connection.

2. A duty trial of a 6,000,000 gallon high duty pumping engine for the city of Aurora, Illinois.

This is a triple expansion Nordberg Corliss engine and has a guaranteed duty of 130,000,000 ft. lbs.

3. A duty trial of an Allis Corliss pumping engine recently enlarged for the city of Decatur, Illinois.

4. Test of electric light plant for Bement, Illinois.

5. Tests of "Serve tubes" compared with plain tubes, as to relative conductivity and steaming capacity. (The "Serve tube" is a form of tube used in all kinds of steam boilers. It is made at Sheffield, England. The company manufacturing this tube has sent this department four tubes and the "Big Four" R. R. will give us the four plain tubes for these experiments.)

6. "Locomotive Road Tests" on the "Big Four" R. R.

After several conferences with Mr. J. A. Barnard, general manager of the Peoria and Eastern division of the "Big Four," I think I have paved the way for a most advantageous opportunity for "locomotive testing," superior in fact to any offered by any technical school in the United States. Mr. Barnard offers to cooperate with us in this matter and will go into it for a long period, say five or six years. He will fit up a special car to be used for this work only. They will furnish locomotives for testing from time to time as either they or the University wish to determine various points. They will fit up these locomotives, furnishing material and labor for such attachments as are useful only for this work.

The University will have to furnish and mount such of its apparatus as pertains to the tests and that can be used in any regular experimental work.

15.

The value of this work cannot be estimated in any direct way. The "Big Four" R. R. is erecting large and modern shops at Urbana. To be associated with these people will be of much direct value to all our engineering students. The opening up of broader fields for our graduates and many students remaining with us only two or three years is not to be overlooked.

If we can accomplish what seems profitable in this work it will be one of the finest advertising schemes imaginable. It is something that will grow from year to year, giving our students advantages not to be obtained at present at any other institution. It practically presents the University with an equipment for locomotive testing, maintained without expense to us, compared to which no institution could ever hope for its equal.

The test car which they will provide is No. 909, recently used for combination mail and baggage car. This they will fit up as per drawings furnished them, and thus afford us a safer means of observation. There will be plenty of room not only for our apparatus, but for our tools, clothes and material. Arrangements can be made for sleeping in this car at end of run, reducing individual expenses. I shall propose an appropriate painting of this car, so that the University of Illinois may obtain its share in whatever credit there may be in its get up and suitably advertise our engineering interest.

I have gone over this subject at length, which you will pardon, I hope. You have seldom seen any of this work going on; with our new Laboratory you will see much more of it.

The present appropriations made for the department of mechanical engineering do not allow for any current expenses for experimental work. The department has always had these expenses and they have been provided for by certain appropriations made from time to time by the Board. These expenses consist of such items as follow: Printing laboratory blanks; typewriting of reports to parties concerned; blue printing; photographs of some tests; express charges; cartage; pipe and fittings; oil and waste; indicator cards; indicator cord; batteries; glycerine; paint; hardware; repairs to instruments; gaskets and packing; material and temporary fixtures; setting up special apparatus.

I feel sure that all of these expenses are necessary and that you will agree with me as to their worth. Such expenses will increase with added equipment and increase of students.

In conclusion I respectfully request that the Board appropriate \$150.00 for current expenses of the steam engineering laboratory work for the spring term, 1898; that the same amount, \$150.00, be appropriated for each term of the next college year.

Hoping that the foregoing statements may have been clearly presented and that you may add to these your approval as Dean of the College of Engineering, I remain,

Respectfully yours,

L. P. BRECKENRIDGE,

Professor of Mechanical Engineering.

Approved, and transmitted to the President.

N. C. RICKER, Dean.

Concerning this communication the following resolution was adopted:

Resolved, That the Board commend the energy of Professor Breckenridge in securing opportunities for steam engineering tests upon the plants of different cities, railroads, and other corporations and make an appropriation of \$150.00 for office expenses in such work. But the financial circumstances of the University make it necessary that, as heretofore, the expenses of tests at a distance from the University be borne by the parties directly benefited thereby.

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

*Resolved*, That the chemistry and mechanical engineering departments be, and hereby are, requested to make an exhaustive analysis of Illinois coals, so as to ascertain the chemical and power producing qualities thereof, and that \$150.00 be appropriated for such investigation.

#### GAS CONTRACT.

The Finance Committee presented the following memorandum of an agreement with the Champaign & Urbana Railway, Gas and Electric Company for gas:

Memorandum of an agreement between the University of Illinois by the Finance Committee, acting in pursuance to the authority of the Board of Trustees and the Urbana & Champaign Railway, Gas and Electric Company, touching the use of gas.

It is agreed that the gas, which shall be of good quality, consumed by the University of Illinois in its buildings for any or all purposes, including gas used since the termination of the last contract, shall be charged and paid for at the rate of \$1.40 per thousand feet, payments to be made at the end of every three months.

This contract shall continue in force for two years from the 17th day of December, 1897.

January 17, 1898.

#### UNIVERSITY OF ILLINOIS,

By Thomas J. Smith, Chairman of Finance Commitee. URBANA & CHAMPAIGN RAILWAY, GAS & ELECTRIC Co.,

In Italian, das & Elleoraio oo.,

By N. M. Harris, Secretary.

The action of the Committee was confirmed.

#### WATER SUPPLY.

Mr. Smith also stated the terms on which the Union Manufacturing Company would furnish the University with water. Thereupon the following resolutions offered by Mr. Armstrong were adopted:

*Resolved*, That the Committee on Buildings and Grounds be directed to investigate various methods for the manufacture of gas and to recommend to the Board at its meeting next September a scheme for the erection of a gas plant adequate to all the needs of the University.

*Resolved*, That the Committee on Buildings and Grounds be directed to present to the Board at its meeting next June a scheme for the consideration of a water plant of sufficient capacity to meet the needs of the University.

It was voted to appropriate \$1,000.00, or so much thereof as might be needed for the protection of the University buildings from lightning by putting up lightning rods.

The question of conferring honorary degrees, together with a letter from Hon. Hugh Crea, of Decatur, was referred to the Committee on Instruction for investigation and report.

The special committee appointed at the last meeting of the Board to consider the subject of a summer school, made an informal report of progress and asked for time until the June meeting of the Board to consider a further report. 1897.]

#### Mr. Armstrong was added to the committee.

It was voted that special meetings of the Board be held at the dates of the commencements of the School of Pharmacy and of the School of Medicine.

#### ATHLETICS AT THE SCHOOL OF MEDICINE.

#### The following resolution was adopted:

Resolved, That the amount of the indebtedness of the Athletic Association at the School of Medicine, not exceeding the sum of \$800.00, be paid from any surplus funds of said School. The Business Manager shall audit bills.

Hereafter the officers of the School of Medicine are requested to see that students shall conduct their athletic matters wholly upon their own financial responsibility, and that the same shall be carried on with the approval of the Athlectic Committee of the General Faculty and the Athletic Advisory Board, the same as other University athletic.

The bill of Cunningham & Boggs, for \$10 45, costs in the Supreme Court in the Bruner case, was ordered paid.

It was also ordered that a writ of error be prosecuted in the Bruner case in order that the case may be heard on its merits before the Supreme Court.

The committee appointed to present a resolution concerning the election of President Draper to the superintendency of the City Schools of New York, and his declination thereof, made the following report:

WHEREAS, The Board of Education of the City of New York has made flattering offers to Dr. A. S. Draper, President of the University of Illinois, respecting the position of superintendent of the schools of that great metropolis; and

WHEREAS, His election to the high and responsible position referred to is only a just recognition of his commanding abilities as an educator; and

WHEREAS, He has declined the position tendered him by the said Board of Education of the City of New York, with its central position and its largely increased salary; therefore, be it

*Resolved*, That we, the Trustees of the University of Illinois, fully appreciate the decision of the President of the University to remain with us and lead to still higher ground and a more triumphant future the grand advance which has already been made under his wise and efficient leadership.

> SAMUEL M. INGLIS, F. M. MCKAY, THOMAS J. SMITH, N. B. MORRISON, Committee.

On motion of Mr. Smith, the Director of the Agricultural Experiment Station was requested to make a test of the peachblow potato the coming season, and Station funds to the amount of \$25.00 were appropriated for the purpose.

On recommendation of President Draper, and a motion of Mr. Armstrong, it was voted to approve the holding of a summer school at the Biological Experiment Station, at Havana, and \$300.00 was appropriated as a guarantee fund for the expense thereof.

#### BUSINESS MANAGER'S REPORT.

#### The Business Manager made the following report :

UNIVERSITY OF ILLINOIS, March 7, 1898.

F. M. McKay, Esq., President Board of Trustees, University of Illinois,

Sir:--I have the honor to hand you herewith my report as Business Manager, for three months ending December 31, 1897:

Paper A is a statement of the current appropriations, December 31, 1897.

Paper B is a statement of the State appropriations December 31, 1897.

Paper C is a statement of the U.S. fund December 31, 1897.

Paper D is a statement of the Laboratory of Natural History fund December 31, 1897.

Paper E is a statement of the Agricultural Experiment Station fund December 31, 1897.

Paper F is a statement of the School of Pharmacy appropriations December 31, 1897.

Paper G is a statement of the School of Medicine appropriations December 31, 1897.

Paper H is an estimate of receipts and expenses for the six months ending June 30, 1898.

Paper I is a list of appropriations the Board is requested to make for the three months ending June 30, 1898.

Paper L is a statement of receipts by the Business Manager for the three months ending December 31, 1897.

December 31, 1897.	Appropri- ated.	Expended.	Balance.
Board expenses	\$1,592 20	$\begin{bmatrix} $1,390 \ 15 \\ ( \ 6,050 \ 16) \end{bmatrix}$	\$202 11
Board expenses Salaries for instruction and for President U.S. Fund	52, 221 96	$\left\{\begin{array}{c}20,650&55\\25,127&90\end{array}\right\}$	393 35
Salaries for services {Current}	8,337 8	$\begin{array}{c} 4 \left\{ \begin{array}{c} 6,634 \ 56 \\ 1.648 \ 16 \end{array} \right\}$	55 12
Buildings and grounds	2,000 00	0 1,774 22	225 78
Fuel and lights.	8,199 6		4,415 22
Stationery and printing	$2,609\ 1$ $2,075\ 2$		1,539 81
Preparatory School Repair shop	2,506 5		418 74
Mechanical department	1,720 7		542 96
Departments	1,520 7		1.249 91
Laboratories	3,937 6		1,442 59
Library and apparatus	203 1		166 13
Incidental expenses	2,522 7	7 990 71	1,532 06
Sundries.			
Closed out	3,082 0	5 3,082 05	
Furniture and fixtures	406 9		129 36
Heating apparatus	1,190 5		965 10
Water supply	375 0		
Minnesota lands	222 7		78 96 278 99
Commencement	387 5		99 08
Stone posts	160 0		160 00
Tenant farming, etc., in Illinois	4 6		4 60
South farm.	227 1		127 88
State Fair exhibit			142 83
Catalogue.	991 5		212 99
Publication of essay.	75 00	0	75 00

PAPER A-CURRENT APPROPRIATIONS.

December 31, 1897.	Appropri- ated.	Expended.	Balanc e.
Remodeling men's gymnasium. Bridge. Winter School of Agriculture. Moving to Library Hall. President's expenses. Library School. Blue print room.	$\begin{array}{c} 429 & 00 \\ 100 & 00 \\ 500 & 00 \\ 72 & 56 \\ 200 & 00 \end{array}$	192 63 72 56 152 45	$\begin{array}{c} 1,000 & 00 \\ 427 & 70 \\ 100 & 03 \\ 307 & 37 \\ \hline \\ 47 & 55 \\ 150 & 00 \\ \hline \\ $16,494 & 37 \\ \end{array}$

### Paper A-Current Appropriations-Concluded.

1895-1897.	Received.	Expended	Balance.	Assigned.
Salaries, etc. —         Closed out		$\begin{array}{c} 244 \ 52\\ 1, 162 \ 78\\ 133 \ 75\\ 3, 849 \ 55\\ 174 \ 51\\ 495 \ 74\\ 82 \ 92\\ 113 \ 51\\ 598 \ 68\\ 9, 012 \ 32\\ 318 \ 18\\ 555 \ 00\\ 20 \ 85\\ 171 \ 50\\ 558 \ 68\\ 552 \ 60\\ 20 \ 85\\ 171 \ 50\\ 582 \ 65\\ 582$	$\begin{array}{c} \$19, 61\\ 5 \ 48\\ 57\ 22\\ 199\ 69\\ 56\ 25\\ 50\ 45\\ 25\ 49\\ 4\ 26\\ 17\ 08\\ 36\ 49\\ 96\ 32\\ 167\ 68\\ 36\ 49\\ 96\ 32\\ 167\ 68\\ 19\ 82\\\\ 74\ 15\\ 3\ 50\\ 17\ 35\\ \end{array}$	544 5722 1996 5622 5044 22542 1700 3644 9633 16766 1888  
Apparatus and materials— Closed out Applied chemistry. Psychology Zoölogy Physiology and hygjene. Botany and horticulture. Geology Astronomy.	\$189,714 93 \$2,400 00 100 00 300 00 800 00 680 00 400 00 520 00 \$6,000 00	$\begin{array}{c} \$2,400 & 00\\ 73 & 62\\ 300 & 00\\ 800 & 00\\ 689 & 45\\ 670 & 14\\ 329 & 01\\ \end{array}$	\$26 38	110 55 9 86 70 99
Operating Biological Experiment Station Laboratory of Vegetable Physiology	\$3,000 00 \$2,000 00	\$3,000 00 \$1,975 30	 \$24 70	
Library Hall	\$150,000 00	\$150,000 00		
Fire protection	\$2,000 00	\$2,000 00		
- Vaccine Laboratory	\$3,000 00	\$2,713721	\$286 79	\$286 79
Cabinets— Geology Botany. Zoölogy	\$666 67 666 66 666 67	\$650 86 31 40 67 60 \$749 86	\$15 81 635 26 599 07	\$15 81 635 26 599 07 \$1,250 14

#### Received. Expended Balance. 1995-1897. Assigned. College of Engineering— Closed out...... Electrical engineering and physics..... Laboratory of applied mechanics and mu-nicipal and sanitary egineering..... \$21,965 31 3,809 05 . . \$20 80 \$20 80 $\substack{1,852\\1,752\\600\0}$ 1,838 13 1,747 62 420 40 14 29 14 29 Architecture...... College, library, parlor, etc ..... 4 80 179 60 4 80 179 60 ..... \$30,000 00 \$29,780 51 \$219 49 \$219 49 Furnishing and fitting Engineering Hall-Electric wiring Civil engineering \$1, 191 77 478 43 770 38 401 30 563 78 1, 193 39 \$1, 191 77 478 43 .... Architecture Municipal and sanitary engineering. Mechanical department. Electrical engineering and physics. College, library, parlor, etc. \$0 58 769 80 \$0 58 388 90 12 40 12 40 541 23 22 55 81 12 22 55 1,112 27 81 12 400 95 36 42 36 42 364 53 \$5,000 00 \$4.846 93 \$153 07 \$153 07 1897-1899. Salaries, etc.— Salaries for instruction... Salaries for services... Agricultural department. Administrative offices. Advertising... Art and design... Accredited schools... Buildings and grounds... College of Literature and Arts. $\begin{array}{r} \$25,127 \hspace{0.1cm}90\\ 1,648 \hspace{0.1cm}16\\ 2,300 \hspace{0.1cm}00\\ 300 \hspace{0.1cm}00\end{array}$ \$25,127 90 1,648 16 1,601 27 $\begin{array}{c} \$25,127 \hspace{0.1cm}90\\ 1,648 \hspace{0.1cm}16\\ 2,300 \hspace{0.1cm}00\\ 300 \hspace{0.1cm}00\end{array}$ \$698 73 300 00 . . . . . . . . . . . . 1,000 00 292 34 500 00 3,596 59 500 00 3,596 59 ... $\begin{array}{c} 250 & 00\\ 3, 053 & 73\\ 1, 000 & 00\\ 323 & 54\\ 179 & 54\\ 50 & 00\end{array}$ 250 00 5,526 92 2,473 19 Conservatory..... Decorating Library Hall..... $\begin{array}{c} 2,473 \\ 2,500 \\ 676 \\ 46 \\ 520 \\ 46 \\ 50 \\ 00 \end{array}$ 3,500 00 1,000 00 Decorating Library Hall. Heating apparatus. Furniture and fixturès. Illinois Agriculturist. Illini Illio. Library supplies. Lockers. Lockjaw experiment. Natural History Hall fire. Oratorical contest. Physical training Preparatory School. School of Music. Technograph. Typewriting bureau. 700 00 100 00 $\begin{array}{r} 50 & 00 \\ 250 & 00 \\ 100 & 00 \end{array}$ 250 00 500 00 100 00 $\begin{array}{c} 325 & 26 \\ 600 & 00 \end{array}$ 24 74 350 00 $\begin{array}{c} 350 & 00 \\ 600 & 00 \\ 50 & 00 \\ 3,700 & 00 \\ 200 & 00 \end{array}$ 50 00 3.696 67 .......... 500 00 250 00 192 69 500 00 100 00 Typewriting bureau. Woman's department. Mechanical engineering shops..... 193 23 250 00 300 00 300 00 37 50 60 00 60 00 56,690 43 Unassigned..... 56,690 43 \$66.502 96 \$53,309 57 \$110,000 00 \$43,497 04 Engineering equipment-Architecture..... Civil engineering..... \$500 00 \$173 87 \$326 13 \$500 00 500 00 3,750 00 63 80 1,191 55 436 20 2,558 45 2,999 66 500 00 3.750 00 3,750 00 Mechanical engineering..... Physics and electrical engineering...... 3.750 00 750 34 Theoretical and applied mechanics and mu-nicipal and sanitary engineering..... 1.000 00 275 00 725 00 1,000 00 College (in general)..... 500 00 15 55 484 45 500 00 \$10,000 00 \$2,470 11 \$7,529 89 \$10,000 00 Apparatus and materials— Astronomical Observatory..... Astronomical Observatory. Botany and horticulture. Zoölogy Geology. Applied chemistry Psychology. Physiology. Chemistry. Unassigned $\begin{array}{r} \$326 & 62 \\ 20 & 30 \\ 178 & 04 \end{array}$ \$123 38 279 70 \$450 00 300 00 \$450 00 300 00 200 00 200 00 21 96 200 00 200 00 200 00 175 00 50 00 175 00 175 00 50 00 50 00 500 00 500 00 500 00 500 00 500 00 500 00 625 00 Unassigned..... 625 00 \$3,000 00 \$425 04 2\$2,574 96 \$2,375 00

#### Paper B—State Appropriations—Continued.

	Received.	Expended	Balance.	Assigned.
Campleting Library Hall	\$5,000 00	\$5,000_00	<u></u>	\$5,000 00
Furnishing Library Hall	\$5,000 00	\$4,797 94	\$202 06	\$5,000 00
Cabinets	\$1,000 00	·····	\$1,000_00	\$1,000 00
Fire protection	\$1,000 00	\$188 48	\$811 52	\$1,000 00
Vaccine Laboratory	\$1,200 00		\$1,200 00	\$1,200 00
Equipment of men's gymnasium	\$3,000 00	\$1,350 37	\$1,649 63	\$3,000 00
Taxes on Minnesota lands	\$1,800 00	\$1,738 81	\$61 19	\$1,800 00
Water survey	\$3,000 00	\$981 61	\$2,018 39	\$3,000 00
Chemical equipment	\$5,000 00	\$1,469 26	\$3,530 74	\$5,000 0
Library	\$5,000 00	\$1,304 53	\$3,695 47	\$5,000 00
Pavement and walks	\$3,000 00	\$2,728 17	\$271 83	\$3,000 0
Shop practice	\$1,500 00	\$478 95	\$1,021 05	\$1,500 0
Central heating plant	\$40,000 00	\$34,830 92	\$5,169 08	\$40,000 0
Bridge	\$500 00	\$500 00		\$500 0

# Paper B-State Appropriations-Concluded.

PAPER C-UNITED STATES FUND.

Year ending June 30, 1898.	Received.	Expended.	Balance.	Assigned.
Salaries for instruction	\$23,000 00	\$20,650 55	\$2,349 45	\$2,349 45

#### PAPER D-LABORATORY OF NATURAL HISTORY.

1895–1897.	Received.	Expended.	Balance.	Assigned.
General balance July 1, 1896 Closed out Report of Entomologist Diseases of insects	8.150.00	8,150 00 156 44		93 56
1897-1898.	\$10, 153 68	\$9,275 12	\$878_56	\$878 56
Salaries and assistants Field, office, etc. Library Bulletins. Report of Entomologist Biological Experiment Station.	1 750 00	360 44 454 98 377 89 1,983 73	1,139 561,045 02372 11250 001,016 27	$\begin{array}{c} 1,500 & 00 \\ 1,500 & 00 \\ 750 & 00 \\ 250 & 00 \end{array}$

1897-1898.	Appro- priated.	Expended.	Balance.
General Fund.	an 550 00	e0 770 00	
Salaries Labor. Publications. Postage and stationery. Freight and express. Heat, light and water. Chemical supplies. Seeds, plants and sundries. Feeding stuffs Library. Tools, implements and machinery. Scientific apparatus Live stock. Traveling expenses Contingent expenses. Buildings and repairs.	$\begin{array}{c} 25 \ 00 \\ 160 \ 07 \\ 144 \ 00 \\ 24 \ 16 \\ 247 \ 64 \\ 464 \ 67 \\ 50 \ 00 \end{array}$	$\begin{array}{c} 1,726\ 59\\ 44\ 00\\ 40\ 74\\ 69\ 54\\ 120\ 00\\ 7\ 45\\ 106\ 23\\ 54\ 18\\ 19\ 14\\ 244\ 59\\ 244\ 59\\ 244\ 59\\ 244\ 59\\ 240\ 00\\ 52\ 98\\ 108\ 33\end{array}$	$\begin{array}{c} \$156 \\ 9 \\ 2 \\ 2 \\ 3 \\ 9 \\ 17 \\ 53 \\ 8 \\ 89 \\ 8 \\ 5 \\ 0 \\ 3 \\ 0 \\ 248 \\ 0 \\ 10 \\ 0 \end{array}$
Farm Fund.	\$7,500 00	\$6,734 00	\$766 0
Labor Seeds, etc	\$933 00 414 00 \$1,347 00	\$655 19 323 65 \$988 84	\$267 8 90 3 \$358 1

#### PAPER E-AGRICULTURAL EXPERIMENT STATION.

#### PAPER F-SCHOOL OF PHARMACY.

1897-1898.	Appro- priated.	Expended.	Balance.
Salaries for instruction	$\begin{array}{c} 1,000\ 00\\ 2,134\ 33\\ 402\ 65\\ 147\ 57\\ 1,065\ 30\\ 3\ 00\\ 342\ 47\\ 199\ 69\\ 797\ 07\\ 98\ 36\end{array}$	$\begin{array}{c} 1,000\ 0C\\ 2,134\ 33\\ 402\ 65\\ 147\ 57\\ 1,065\ 30\\ 3\ 00\\ 342\ 47\\ 199\ 69\\ 797\ 07\\ 98\ 36\\ 29\ 50\\ \end{array}$	\$209 87 \$209 87

#### PAPER G-SCHOOL OF MEDICINE.

1897-1898.	Appro- priated.	Expended.	Balance.
Salaries for instruction Salaries for services Buildings and grounds. Fuel and lights Stationery and printing. Laboratories Books and publications. Apparatus and materials Incidentals. Advertising Furniture and fixtures Unassigned	$\begin{array}{c} 2,541\ 63\\ 8,263\ 99\\ 415\ 83\\ 190\ 11\\ 1,291\ 10\\ 25\ 00\\ 924\ 11\\ 293\ 41\\ 1,297\ 46\\ 240\ 86\end{array}$	$\begin{array}{c} 2,541\ 63\\ 8,263\ 99\\ 415\ 83\\ 190\ 11\\ 1,291\ 10\\ 25\ 00\\ 924\ 11\\ 293\ 61\\ 1,297\ 46\\ 240\ 86\\ \end{array}$	\$966 30 \$966 30

## PAPER L-RECEIPTS BY THE BUSINESS MANAGER FOR THE THREE MONTHS ENDING DECEMBER 31, 1897.

		1 - C
Interest on land contracts	\$970 71	1
University fees	5,579 26	6
Preparatory School fees	1.001 31	
Music fees	500 00	
Salary for services, Ricker and White		
Salary for services, meker and white	126 95	
Minnesota lands, rents		
Buildings and grounds, rents	15 00	
Heating apparatus	2 00	)
Greenhouse	19 24	.   ·
Fuel and lights, coal		
Potencial laboratory		
Botanical laboratory		
Chemical laboratory	22 81	
Laboratory of applied mechanics	5 00	
Wechanical denartment	232 52	1
Agricultural Experiment Station	637 24	
Agricultural Experiment Station. School of Pharmacy.	7.188 50	
School of Medicine	19.865 00	
School of Medicine	19,809 00	\$30,231 99
		1
Principal of land contracts		1,968 34
Total collections	0	\$38,200 29
		400,200 20
	1	

Paper M is a list of the general University vouchers presented for audit, being 651 to 1,325, inclusive.

Paper N is a list of the Laboratory of Natural History vouchers presented for audit, being 101 to 176, inclusive.

Paper O is a list of the Agricultural Experiment Station vouchers presented for audit, being 101 to 188, inclusive.

Paper P is a list of the School of Pharmacy vouchers presented for audit, being 26 to 119, inclusive.

Paper Q is a list of the School of Medicine vouchers presented for audit, being 51 to 206, inclusive.

Paper R is a request for a school house site.

Paper S is a number of bills presented by Messrs. Wilson, Moore & Mc-Ilvaine.

Respectfully submitted,

#### S. W. SHATTUCK, Business Manager.

It was voted that the Board donate an acre of land in the southwest corner of the S. W., S. E., 31-124-26, Pope county, Minn., to School District No. 84 of said Pope county for a school house site, the same to revert to the University of Illinois when no longer used as a school site; and the President and Secretary of the Board were directed to make a deed for the same to said School District No. 84.

It was ordered that a requisition for \$923.08 be made on the Auditor in favor of the commissioners appointed by the Legislature in the Spalding matter, same to be used in the payment of Wilson, Moore & McIlvaine's bill of January 5, 1898, for said amount.

It was also ordered that a like requisition for \$155.85 be drawn, said sum to be used in payment of the bill rendered by Wyllys W. Baird to Wilson, Moore & McIlvaine December 4, 1897, for the sum of \$150.00; and the bill of Hewitt, Hollway & Co., for \$5.85, also rendered Wilson, Moore & McIlvaine February 16, 1898. Said requisition to be drawn when said bills should be approved by the Attorney General, and filed with the Secretary of this Board.

—16 U. I.

Appropriations were made as follows in accordance with the recommendation of the Business Manager's report:

#### APPROPRIATIONS.

Board expenses	\$500 00	
Salaries for instruction and President	29,000 00	
Salaries for services	4.000 00	
Buildings and grounds	1,500 00	
Spel and lights and electric power	2,000 00	
Stationery, printing, and postage	500 00	
Advertising and catalogue	2,000 00	
Repair shop		
Mechanical department	200 00	
Departments	100 00	
Laboratories	200 00	
Library and apparatus	50 00	
ncidentals	500 00	
Furniture and fixtures	300 00	
Heating apparatus	300 00	
Freenhouse	100 00	
Water supply	500 00	
Library School	300 00	
Minnesota lands		
Commencement	300 00	
	an 000 00	\$43,450 00
School of Pharmacy	\$2,000 00	
chool of Medicine		
Agricultural Experiment Station	4,500 00	10 500 00
		18,500 00
	-	601 0F0 00
	1	\$61,950 00

#### TREASURER'S REPORT.

The Treasurer's report was submitted by the Secretary and this together with the vouchers presented by the Business Manager, was referred to the Committee on Finance.

E. G. KEITH, TREASURER, IN ACCOUNT WITH THE UNIVERSITY OF ILLINOIS December 31, 1897.

1897.		Dr.		
September	90	Balance		\$112,696 00
October	30	Received from U. S. Treasurer, on account of Agricul-		\$112,030 VC
october		tural Experiment Station	\$3,750 00	
• •	19	tural Experiment Station Received from S. W. Shattuck, on account of School of	\$5,100 00	
	10	Medicine	10,000 00	
••	30	Medicine Received from S. W. Shattuck, on account of general		
		fund	3,892 11	
• •	30	Received from S. W. Shattuck, paid warrants on ac-		
		count of Agricultural Experiment Station fund	421 66	
	30	Received from S. W. Shattuck, on account of School of	:	
	~ ~	Ph rmacy	3,000 00	
November	29	Received from S. W. Shattuck, paid warrants on ac-	4 900 70	
		count of general fund.	4,380 72	
	29	Received from S. W. Shattuck, on account of credit of	123 59	
	90	general fund Received from S. W. Shattuck, paid warrants on ac-	120 00	
	49	/ count of Agricultural Experiment Station fund	· 544 28	
	29	Received from S. W. Shattuck, on account of School of	011 -0	
		Medicine	5,000 00	
• •	29	Medicine Received from S. W. Shattuck, on account of School of		
		Pharmacy	2,000 00	
December	31	Received from S. W. Shattuck, paid warrants on ac-		
		count of general fund	3,295 73	
••	31	Received from S. W. Shattuck, on account of School of	0 000 00	
• •		Pharmacy	2,000 00	
	31	Received from S. W. Shattuck, of account of School of	5,000 00	
		Medicine	5,000 00	\$43,408 09
		•		PE0, 300 00
		•	i	\$156.104 15

Treasurer's Report—Concluded.

1007		Cr.		
1897. December	31	By amount paid out of general fund	\$102, 159 77	
		By amount paid out of Agricultural Experiment Sta- tion fund By amount paid out of Laboratory of Natural History	4,731 04	
5 6 4 6	31	By amount paid out of Laboratory of Natural History fund By amount paid out of School of Pharmacy fund By amount paid out of School of Medicine fund	$\begin{array}{c} 2,723 \\ 5,902 \\ 37 \\ 14,683 \\ 79 \end{array}$	#100 900 s
		Balances-       \$11,859 55         General fund       \$2,097 81         School of Medicine fund       10,307 84         Laboratory of Natural History fund       1,860 05         School of Pharmacy fund, overdraft	\$26, 125 25 221 91	\$130,200 { 25,903 ;
				\$156,104

E. G. KEITH, Treasurer.

The Board then adjourned to meet at 7:30 p.m., at the Beardsley, in Champaign.

#### EVENING SESSION, TUESDAY, MARCH 8, 1898.

The Board met pursuant to adjournment, the same members being present as in the afternoon.

On motion of Mr. Armstrong, it was voted that the members of the Board only be appointed on standing committees.

Mr. Bullard, from the Committee on Buildings and Grounds, made an informal report stating that the Committee expected to accept the Central Heating Plant the next day.

Mr. McKay read a letter which he had obtained from the Attorney General with regard to scholarships in the University, and after some discussion, a motion was made by Mr. Smith to reconsider the action of the Board taken at its last meeting with reference to scholarships.

On motion of Mr. McLean further consideration of the subject was postponed until the next meeting of the Board.

The Finance Committee was given leave to file its report with the Secretary.

#### STANDING COMMITTEES.

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

Agriculture-Raymond, Morrison, Pearce, McLean.

Buildings and Grounds-Bullard, Smith, Armstrong, Flower.

Finance-McLean, Raymond, Smith.

Instruction-Armstrong, Bullard, Smith, Inglis.

Publication-Smith, Raymond, Carriel.

Library-Flower, Carriel, Armstrong, McLean, Bullard.

Students' Welfare-Carriel, Morrison, Inglis.

School of Pharmacy-McLean, Armstrong, Flower, Carriel, Morrison. School of Medicine-Armstrong, Flower, Carriel, Morrison, Raymond.

#### REPORT OF FINANCE COMMITTEE.

URBANA, ILLINOIS, March 9, 1898.

To the Board of Trustees of the University of Illinois.

GENTLEMEN:—Your Finance Committee begs leave to report that it has examined the vouchers submitted by the Business Manager on which University warrants have been issued as follows: University vouchers, 651 to 1,325, inclusive; Agricultural Experiment Station vouchers, 101 to 108, inclusive; State Laboratory of Natural History vouchers. 101 to 176, inclusive; School of Pharmacy vouchers, 26 to 119, inclusive; School of Medicine vouchers, 51 to 206, inclusive, and has found the same correct and duly receipted.

Your Committee has also examined the report of Elbridge G. Keith, Treasurer of the University, for the quarter ending December 31, 1897, and found that the receipts for the quarter, together with the balances on hand September 30, 1897, amounted to \$156,104.15; that the amount paid out on warrants drawn during the quarter was \$130,200.81, and that the balances on hand December 31, 1897, were \$25,903.04.

Respectfully submitted,

ALEX. MCLEAN, I. S. RAYMOND, T. J. SMITH, Committee on Finance.

The Board adjourned.

W. L. PILLSBURY,

Secretary.

F. M. McKAY, President.

#### MEETING OF APRIL 19, 1898.

The following call for a special meeting of the Board of Trustees of the University of Illinois was issued April 11, 1898:

"Upon the call of the President, Mr. F. M. McKay, there will be a special meeting of the Board of Trustees of the University of Illinois at 9 o'clock a. m., Tuesday, April 19, 1898, at the Sherman House, Chicago, to consider matters pertaining to the School of Medicine, and such other business as may be presented."

Pursuant to this call the Board met at 9 o'clock a.m., April 19, 1898, at the Sherman House, in Chicago.

There were present Messrs. Armstrong, Bullard, McLean, McKay, Morrison, Pearce, Raymond, and Smith and Mrs. Carriel; absent Governor Tanner, Mr. Inglis, and Mrs. Flower.

#### DEGREES CONFERRED.

#### SCHOOL OF MEDICINE.

President Draper presented a list of persons recommended by the Faculty of the School of Medicine of the University of Illinois for the degree of Doctor of Medicine and Surgery, and on motion of Mr. McLean, authority was given to confer upon them this degree at the commencement of the School of Medicine to be held in the afternoon at the Grand Opera House. Chicago.

Victor V. Bacon, M. D. Henry Lester Baker, Walter S. Bebb, William Belitz, Jacob Bursma, A. B., J. Baptist Butts. Emery Marcus Byers, Leo L. Cahill Bert Mather Carr, Amos Foster Conard, Frank Howard Conner, B. S., George E. Coon, John Francis Corbin, B. S., Alfred C. Crofton, Ph. D., M. D., Ira Hugh Dillon, Alorstus N. J. Dolan, A. M., William Fecumseh Dowdall, Robert Emmerson, Francis Gebastian Feeney, Bartholomew F. Flanagan, Geoffrey J. Fleming, M. Arista Bingley, David A. T. Bjorkman, A. B., Fred Hamilton Blayney, A. B., Darwin E. Brown, William Flocton Brownell,

Marcus Samuel Fletcher, B S., Hugh Martin Hall, Thomas J. Hambley, Ph. B., Eunice Bertha Hamill, William Ernest Hart, George B. M. Hill, H. C. Homer, Martin Luther Hooper, M. D.• John Henry Hovenden, Ernest Alexandr Hunt, B. S., Charles Ellsworth Husk. Charles Stuart Hutchinson, M. S. Wentworth Lee Irwin, M. D.. Simeon Rycerson Johnson, B. S. Felix T. Kalacinski. Oliver P. Kemp, B. S., Clarence Bruce King, Benjamin F. Kirkland, Charles Albert Kittredge, Eugene Colburn Knight, Arvid Ernest Kohler, Frank Benson Lucas, Elijah A. Lyon, Ph. G., M. D., Matthew E. McManes, Thomas Ulysses McManus, A. B A. Baxter Miller. Ward Redfield Ford, Ph. G., Amandus Ulysses Fuson, Samuel Carson Garber, B. S., Henry Bernard Graeser, John Arthur Mutchler, B. S., John Stephen Nagel, Ph. G., James M. Neff, George F. Newhall, Timothy Van Buren Overton, Addison C. Page, A. B., Otto Hugo Pageleen, B. S., William Robert Pennington, M. D., William Abraham Pietrowicz, Fred D. Pratz, A. B., Charles P. Proudfoot, William Abraham Purington, Henry Courtland Rogers, Roy Allen Roszell, George Rubin, Paul Sheldon Scholes, A. B., Henry G. Schuessler, Franz F. H. Schuldt, Wesley Morley Sherin, Austin Ulysses Simpson, B. S. Charles E. Simpson, Daniel Gilmore Simpson, A. B., John H. Slater, Emanuel Frank Snydacker, George H. Sollenbarger, Harry Randolph Spickermon, William H. Stayner. William J. Steele, B. S. Bayard Taylor Stevenson, Carl Downer Stone, William Truman Stone, M. D., Charles Frederick Stotz, Henry J. Swink, A. M., William H. Vary, Olander E. Wald, William Godfrey Wegner, Willibald John Wehle, Ph. G., Charles Franklin Whitmer. Ph. G., Frank B. Whitmore, B. S., M. D., Eugene D. Whitney, Ph. B., Louis G. Witherspoon, B. S., Milton Cyrus Wolf, John Jacob Wuerth, Ph. G., George Van Wyland, Charles Ira Wynekoop, B. S.

#### SCHOOL OF PHARMACY.

President Draper presented a list of persons recommended for degrees by the Faculty of the School of Pharmacy of the University of Illinois, and upon motion of Mr. McLean, authority was given to confer degrees as recommended, at the commencement of the School of Pharmacy to be held at the Grand Opera House, Chicago, in the afternoon of April 21, 1898.

#### FOR THE DEGREE OF GRADUATE IN PHARMACY.

Joseph Samuel Ashmore, George William Atzel, John Bakkers, Herbert Arthur Bauer, William Townzen Bowman, Bert Lemon Brenner, Harry Alexander Clark, Samuel Bricker Donaberger, Arthur Wardo Freeman, Andrew Hove Harris, William Frederick Herrmann, Axel Sanfred Holmsted. Hugh Benton Honens. Clyde Ernest Huddleston, George Jacob Kappus, Joseph Robert Kloppenburg. William Gabriel Joseph Kops, Ernest August Koropp, Bohumil Lauber, Bertram Maier, Otto Herman Mentz, Algy Charles Moore Edward Paul Albert Neverman, Egil Thorbjorn Olsen, Charles Francis Rainey, Charles Theodore Frederick William Ruhland, Ziska Erhart Schuetz, Frank Siedenberg, William Smale, Maximilian Sobel, William Stroetzel, Charles Reuben Thompson, Charles Augustus Warhanik, Mark Henry Waiters, Henry Weigand, Jr. Paul Harry Wiedel.

• FOR THE DEGREE OF PHARMACEUTICAL CHEMIST.

Charles Everett Jones.

#### FOR THE DEGREE OF MASTER IN PHARMACY.

Nicholas Gray Bartlett.

Henry Biroth. Ezekiel Herbert Sargent.

President Draper presented a letter from Mr. George E. Gardner resigning his professorship in the School of Law. The resignation was accepted to take effect September 1, 1898. 1897.]

President Draper recommended the appointment of Mr. Charles A. Winston to be an assistant professor in the School of Law at a salary of \$1,200.00 a year, term of service to begin September 1, 1898.

On motion of Mr. Smith, this appointment was made as recommended.

EMPLOYMENT OF INSTRUCTORS FOR WORK OUTSIDE OF THEIR REGULAR DUTIES.

#### Io the Board of Trustees.

The conditions have heretofore made it convenient for us to employ University professors in other than their professional duties and give them extra compensation therefor. I have for a considerable time doubted the advisability of so doing and have now come to the conclusion that it is so hurtful to the educational interests of the University as to require an early and complete discontinuance of the custom. It necessarily follows that men who are so employed are unable to give the time and attention which they otherwise would to their classes. The additional compensation given to a few members is widely demoralizing to the instructional force. It is clear to my mind that it will be wise policy to emphasize the importance of the department of buildings and grounds and secure for the head of that department a man who is entirely competent to superintend the work of constructing and repairing structures, as well as the work of caring for and beautifying the grounds. I am sure that there will be less confusion and annoyance from janitors and workmen, and consequently less interruption to the natural work of the institution.

I do not mean by the foregoing to suggest that any one is at fault about the matter. We have all yielded to the conditions in which we found ourselves, and have made use of the best means at command for going ahead. But the experience surely demonstrates that it is necessary to take a different course in the future. I therefore recommend the adoption of the following resolution.

*Resolved*, That after the present University year no one connected with the instructional force of the University shall be employed in any work which does not naturally come within the scope of his duties and for which additional compensation will be expected, without the approval of the President of the University and the action of the Board of Trustees in regular session.

A. S. DRAPER, President.

The foregoing resolution was adopted on motion of Mr. Armstrong.

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

*Resolved*, That the Board understands that the services of all the professors and instructors touching matters within their expert or professional knowledge should be fully given to the promotion of all University ends without their expecting additional compensation.

#### LUNCH ROOM-DEPARTMENT OF DOMESTIC ECONOMY.

President Draper presented the following conmunication:

#### To the Board of Trustees.

The necessity of better living accommodations for students of the University has become so urgent that I can no longer delay presenting the matter formally and urgently to the Board of Trustees. The increase in attendance has outrun the increase in accommodations. Many students already find it exceedingly difficult to secure suitable rooms and nourishing food at reasonable rates. This is perhaps more emphatically true of the Faculty than of the students. There seems to be a very general lack of appreciation of the importance of this subject on the part of people living in the cities adjacent to the University. It has been a surprise to me that private capital has not ventured to erect more buildings, with modern conveniences, in the neighborhood of the University; and also, to provide more facilities for obtaining meals near us. There is no room for doubt but that such accommodations would be quickly seized upon and appreciated. Unless something is done in this direction, with new energy, we shall be embarrassed still more with the advent of the increased attendance which we are bound to anticipate at the beginning of the next University year. I have every reason for saying that the difficulty in securing proper rooms and suitable board, at reasonable rates, is now the most serious difficulty in the way of the growth of the institution.

Other institutions have been obliged to confront this difficulty. There is scarcely a large university in the country which has not at one time or another been obliged to initiate measures for meeting the needs of its faculty and students. Indeed, there are few of the larger universities which do not maintain a lunch room where faculty and students can obtain their meals, or at least part of them. These lunch rooms are, I am told, easily self-supporting, if managed competently. If such a room could be established at our University, it would be a greater boon to many of our people than is commonly supposed; and, aside from providing needed food, it would enable us to make a shorter noon recess and arrange a schedule of recitations which would more completely facilitate our work.

It has occurred to me that we might, next fall, start a department of domestic economy, about which we have frequently talked, and that in some way this department might open a lunch room and thus accomplish several desirable purposes at the same time. The room under the chapel in University Hall, which has heretofore been occupied as the electrical laboratory, will be vacated in a few days, and, while there are calls for it by departments already established, I am not sure but the best use we can put it to will be to establish a lunch room in it.

I submit the whole matter to the serious consideration of the Board of Trustees and ask for such action upon it as may seem practicable.

A. S. DRAPER, President.

Mr. McLean offered the following resolution:

*Resolved*, That the room now used for the electrical laboratory, but soon to be vacated, be properly arranged, under the supervision of a committee of the Board, as a restaurant, and that it be given rent free to some qualified caterer for the term of one year.

On motion of Mr. Raymond, this resolution was referred to Mr. Pearce, President Draper, and the Committee on Students' Welfare, as a special committee.

The question of the establishment of a department of domestic science was, on motion of Mr. McLean, referred to President Draper for investigation and report.

The matter of smoking on University premises was referred to the Committee on Students' Welfare.

President Draper presented, with his approval, a request from Dr. Kinley for the appropriation of \$50.00 to defray the expenses of continuing the investigation into the cost of production of corn and oats, and the appropriation was made. President Draper presented, with his approval, a request from Professor Myers for an appropriation of \$60.00, to be used in the publication of the results of an investigation made by him of the light changes in a variable star, based on observations given him by Professor Pickering, of Harvard Observatory, and the appropriation was made.

President Draper presented a request from the Students' Democratic Club of the University asking for the use of Military Hall for a lecture to be given by the Hon. William J. Bryan, sometime during the month of May next.

Mr. McLean moved that the request be not granted, inasmuch as it was contrary to the policy of the Board to have Military Hall used for other than University purposes.

Mr. Morrison moved to amend the motion so as to grant the use of the Hall, in accordance with the request.

Upon this amendment the ayes were—Messrs. Bullard and Morrison; the noes—Messrs. Armstrong, McKay, McLean, Pearce, Raymond, Smith, and Mrs. Carriel, and the amendment failed.

The motion was then carried.

The following report was received from the Committee on Buildings and Grounds:

#### HEATING, LIGHTING, AND POWER PLANT.

#### To the Board of Trustees.

Your Committee on Buildings and Grounds desires to report that M. Yeager & Son, the general contractors on the new mechanical and electrical laboratory and boiler house, had their contract completed at the time of the March meeting of the Board. The architects, Messrs. McLane & Temple, reported to your Committee that the work and materials had been satisfactory and that the contract had been completed according to the drawings and specifications.

The time stipulation of the contract was that all the buildings were to be completed and ready for the acceptance of the Committee on December 1, 1897. The work for several reasons stated by the contractors, which they claimed to be sufficient, was not completed on the date stated. The difference between the date of completion called for by the contract and date on which the work was ready for acceptance was figured by the architects to be 97 days. The forfeiture clause in the contract required a deduction of twenty-five dollars per day for each and every day the work remained uncompleted and not ready for acceptance after December 1, 1897. The amount of forfeiture for the 97 days was \$2,425. The Committee did not feel like assuming the responsibility of deciding whether or not the reasons set forth by M. Yeager & Son, the contractors, for the delays were sufficient to excuse them from demands of the forfeiture clause and therefore ordered that the request of M. Yeager & Son for a release from the forfeiture clause of the contract be referred to the Board for action.

Your Committee feels that the contractors have done their work well and have given us a good and satisfactory building. We desire to commend the work which they have done. We desire to say also that the boiler house was turned over to us for the use of the University, though not fully completed, two days before the date required by the contract, and that the delay mentioned has occurred on the engineering laboratory. The new boiler was placed in the boiler house during the month of December and on the 28th was fired up for steam. The cold storage and coal handling machinery was put in as soon as possible thereafter. It is true, therefore, that the plans of

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1898.]

Professor Breckenridge for the use of the heating apparatus during the winter just past have not been disarranged on account of the delay in the completion of the work of the contract.

#### Respectfully submitted.

S. A. BULLARD, Chairman.

April 19, 1898.

Mr. Smith moved to waive in settlement with Yeager & Son \$2,000.00 of the penalty. Mr. Morrison moved to amend by waiving the full penalty in the settlement, and the amendment prevailed by the following vote: Yeas—Armstrong, Bullard, McLean, Morrison, Raymond, and Mrs. Carriel; nays—Messrs. McKay and Smith.

The motion as amended was adopted.

On motion of Mr. Raymond, \$1,100.00 was appropriated for the erection of a structure for housing wagons and farm implements and for fencing yards for farm animals, this sum being in addition to the \$800.00 appropriated at the meeting of the Board September 21, 1897.

On motion of Mr. Raymond, \$30.00 was appropriated for tiling on the south farm.

#### SCHOOL OF MEDICINE-SCHOOL OF PHARMACY.

The following communication from the Business Manager, Professor Shattuck, was presented by President Draper, and so much as relates to the School of Pharmacy was referred to the Committee on the School of Pharmacy; and so much as relates to the School of Medicine was referred to the Committee on the School of Medicine.

UNIVERSITY OF ILLINOIS, April 16, 1898.

President A. S. Draper,

DEAR SIR:-I beg to offer the following statement:

	· · · · · · · · · · · · · · · ·	
This amount is made up as follows:		
Salaries for instruction	۰ ۲	\$1,500 (
Salaries for services		1.500 (
Rent		2,400 0
Advertising, etc		1,000 (
Laboratories	· · · · · · · · · · · · · · · · · · ·	1,200 (
Fuel and lights		500 (
Stationery and priving		200 (
Furniture		100 (
Repairs		200 ( 900 (
Miscellaneous		

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I understand that it is proposed to add to the instruction in chemistry to such an extent that the expense would be increased \$1,000.00.

The income of the School of Medicine for the year ending April 21, 1898, will be about The expenses for the same time will be about	\$40.000 0	)0 30:
Estimated balance	\$8,000 0	)0

This balance ought to be held as a working capital, as the income from this time to October 1st, is not sufficient to meet the expenses for that time.

I notice by the reports of Dr. Steele. Actuary, that quite a number of rebates on tuition have been made; as at present no authority has been given by the Board of Trustees for this, I desire instructions in the matter.

Respectfully submitted,

S. W. SHATTUCK.

Business Manager.

Upon the request of Professor Forbes, presented by Mr. McKay, Ernest B. Forbes was appointed entomological assistant in the State Laboratory of Natural History and assigned to duty in the State Entomologist's office; salary to be \$70.00 a month.

The Board adjourned.

W. L. PILLSBURY,

Secretary.

F. M. McKAY, President.

#### MEETING OF JUNE 7, 1898.

The Board of Trustees of the University of Illinois met in the Trustees' Room, Library Hall, Urbana, Illinois, at 9 o'clock a. m., Tuesday, June 7, 1898.

The members present were Messrs. Armstrong, Bullard, McKay, McLean, Morrison, Pearce, Raymond, Smith and Mrs. Flower and Mrs. Carriel; absent, Governor Tanner.

The proceedings of the Board for the meetings of March 8, 1898, and April 19, 1898, were presented by the Secretary and approved.

#### COMMUNICATIONS FROM PRESIDENT DRAPER.

President Draper presented papers as follows:

#### To the Board of Trustees:

I respectfully make the following recommendations touching the Corps of Instructions for the next year:

#### DEANS.

1. That the present deans of the several colleges and of the woman's department be reappointed.

#### PROMOTIONS AND SALARIES OF PROFESSORS.

1. That William D. Pence, assistant professor of civil engineering, be made associate professor of civil engineering.

2. That the salary of Frank F. Frederick, professor of art and design, be made \$2,000.

3. That the salary of Charles C. Pickett, professor of law, be made \$2,100.

4. That the salary of James M. White, associate professor of architecture, be made \$1,700.

5. That the salary of Frank Smith, assistant professor of zoölogy, be made \$1,400.

6. That Violet D. Jayne, assistant professor of the English language and literature, be made associate professor of the English language and literature, and that her salary be made \$1,600.

7. That the salary of Lewis A. Rhoades, associate professor of the German language and literature, be made \$1,800.

8. That Joseph C. Blair, instructor in horticulture, be appointed assistant professor of horticulture and that his salary be \$1,200, to be paid equally by the University and the Agricultural Experiment Station.

9. That John P. Hylan, instructor in psychology, be appointed assistant professor of psychology and that his salary be made \$1,000.

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10. That Alison Marion Fernie, instructor in vocal music, be appointed assistant professor of vocal music and that her salary be \$1,400.

11. That the salary of Herman S. Piatt, assistant professor of the Romance Languages, be made \$1,300.

12. That the salary of George W. Myers, professor of astronomy and applied mathematics, be \$1,900 per year.

13. That Oscar Quick, instructor in physics, be made assistant professor of physics and that his salary be made \$1,000.

# NEW APPOINTMENTS OF PROFESSORS.

1. That William Lincoln Drew be appointed professor of law at a salary of \$2,000 per annum.

2. That Thomas Welburne Hughes be appointed assistant professor of law at a salary of \$1,200 per annum.

#### REAPPOINTMENT ()F PROFESSORS.

That the following named persons be reappointed instructors for ten months from September 1, 1898, at the salaries indicated, viz:

1. Alton C. Burnham, instructor in mathematics, \$90 per month.

2. Carlton R. Rose, instructor in chemistry, \$90 per month.

3. Agnes S. Cook, instructor in rhetoric, \$80 per month.

4. George H. Myer, instructor in German, \$90 per month.

5. William H. Kavanaugh, instructor in mechanical engineering, \$80 per month.

6. William C. Brenke, instructor in mathematics, \$80 per month.

- 7. Alice Putnam, instructor in violin, \$80 per month.
- 8. Charles P. Wilder, instructor in photography, \$80 per month.

9. That Matthew B. Hammond, assistant in economics, be made instructor in economics and that his compensation be made \$80 per month.

10. That Wilber J. Fraser, instructor in dairying, be reappointed to the same position at a salary of \$1,000 per year (12 months) to be paid equally by the University and the Agricultural Experiment Station.

# NEW INSTRUCTORS.

It is recommended that the following named persons be appointed instructors for ten months from September 1, 1898, at the salaries indicated, viz:

1. Henry Lawrence Schoolcraft instructor in history, \$80 per month.

- 2. Martha Jackson Kyle, instructor in rhetoric, \$70 per month.
- 3. Neil Conwell Brooks, instructor in German, \$70 per month.
- 4. Edward Lawrence Milne, instructor in mathematics, \$80 per month.

## ASSISTANTS.

That the following named persons be appointed laboratory and other assistants for ten months from September 1, 1898, at the compensation indicated, viz:

1. In geology, George D. Hubbard, \$60 per month.

2. In theoretical and applied mechanics, Charles V. Seastone, \$60 permonth.

3. In civil engineering, Harry William Baum, \$50 per month.

4. In mechanical engineering.

- 5. In physics, Hubert V: Carpenter, \$60 per month.
- 6. In chemistry, John Langley Sammis, \$60 per month.
- 7. In chemistry and applied chemistry, Albert Philip Sy, \$50 per month.
- 8. In zoölogy, -----, \$50 per month.
- 9. In botany, Charles W. Young, \$50 per month.
- 10. In art and design, Stanley M. Lewis, \$30 per month.
- 11. In music, Jessie Y. Fox, \$30 per month.
- 12. In military, A. D. DuBois, \$10 per month.

## LIBRARY.

It is recommended that the following named persons be appointed to positions in the library and in the department of library science at the salaries indicated, the first four appointments being for twelve months:

Margaret Mann, head cataloguer and instructor in library economy, \$900.

2. Maude W. Straight, reference librarian and instructor in library economy, \$900.

- 3. Grace O. Edwards, assistant cataloguer, \$720.
- 4. Laura R. Gibbs, assistant in charge of loan desk, \$600.
- 5. Elma Warwick, accession clerk (ten months), \$500.
- 6. W. O. Waters, order clerk (one-half time ten months), \$250.
- 7. Jane E. Cooke, loan assistant (one-half time ten months), \$200.

## PHYSICAL TRAINING.

1. That George A. Huff be reappointed assistant director of the gymnasium and coach of athletic teams for ten months from September 1, 1898, at \$120 per month.

2. That Ella H. Morrison be reappointed director of physical training for women for ten months from September 1, 1898, at \$100 per month.

## CLERICAL ASSISTANTS.

1. That Miss-Lillie Heath be continued as Secretary to the President at \$900 per annum.

2. That Mr. L. A. Boice be continued as clerk in the office of the Registrar at \$55 per month.

3. That Mr. William F. Marker be reappointed as elerk in the office of the Business Manager at \$55 per month. Mr. Marker is absent because of ill health, and in case of his inability to perform the service it is recommended that the Business Manager be authorized to fill the position at his discretion.

That Miss Sue W. Ford be continued as chief stenographer in the typewriting bureau at \$55 per month.

5. That Mrs. Jennie M. Laflin be continued as stenographer at \$45 per month, and that the President be empowered to employ in the fall another stenographer in the bureau at \$45 per month.

The appointments under this head are all for a year (twelve months).

## SHOPS.

That foremen in the shops be appointed for ten months from September 1, 1898, at the compensation indicated, viz.:

- 1. Machine shop, Cyril B. Clark, \$85 per month.
- 2. Wood shop, Albert R. Curtis, \$85 per month.
- 3. Srith shop, Henry Jones, \$60 per month.
- 4. Foundry, Joseph H. Wilson, \$60 per month.

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## PEPARATORY SCHOOL.

That the following instructors in the Preparatory School be reappointed for ten months from September 1, 1898, at the compensation indicated, viz.:

- 1. Edward G. Howe, \$1,800 per annum.
- 2. Clarence W. Alvord, \$90 per month.
- 3. Reuben S Douglas, \$80 per month.
- 3. Lillie A. Clendenin, \$70 per month.
- 5. Charles B. Randolph, \$80 per month.

### WATER SURVEY.

1. That Clendon V. Millar be appointed chief assistant for the year (12 months) at \$900.

2. That Robert W. Stark be appointed assistant for the year (12 months) at \$600.

# GARDENERS.

1. That Richard Uttenweiler be reappointed as gardener for the year (12 months) at \$60 per month.

2. That Fred Atkinson be reappointed as assistant gardener for the same term at \$40 per month.

#### STOREKEEPERS.

1. That M. T. Lindsey be reappointed as storekeeper in the chemical laboratory for ten months from September 1, 1898, at \$40 per month.

2. That I. H. Allen be reappointed storekeeper in the electrical laboratory for the same period, at the same salary.

### STUDENT ASSISTANTS.

That \$500 be appropriated for student assistants who may be employed from time to time by the President as they may be needed.

#### MESSENGERS.

That messengers be employed in the following offices at \$3 per week from the opening of the University in September to the close of Commencement week: The office of the President; the offices of the Dean of the General Faculty and the Dean of the College of Agriculture, jointly; the office of the Dean of the College of Engineering: the offices of the Dean of the College of Literature and Arts and the Dean of the Woman's Department, jointly; the office of the Head Librarian; and the offices of the professors of chemistry, jointly.

## JANITORS AND WATCHMEN.

1. That the appointment of all janitors and watchmen terminate at the first of July unless specifically continued by the Superintendent of Buildings and grounds, under the authority here conferred.

2. That the appointment of a night watchman and a day watchman be authorized at \$40 per month for twelve months.

3. That janitors be authorized for the different buildings, as follows:

(a)	Library building, at	\$10.00	ner month.
(b)	University Hall, at	37.00	per monta:
(c)	Engineering Hall, at	37.00	• •
(ď)	Chemical Laboratory, at	32.00	• •
(e) (f) (g) (h) (i)	Natural History Hall, at	35.00	* *
$(\mathbf{f})$	Electrical and mechanical laboratories, at		••
(g)	The metal and wood shops and the testing laboratory jointly, at		••
(h)	Military Hall and the men's gymnasium jointly, at	32.00	••
(:i)	Astronomical Observatory, at		• •
(j)	Closets, at	27.00	••
	•		

4. That scrub women be employed as may be necessary at 1.00 per day, and that 1.000.00 be appropriated for that purpose.

All help employed by the Superintendent of Building and Grounds shall be employed pursuant to the rules and under the authority here conferred, but shall be kept under employment only when in his judgment it is necessary.

It will be necessary to appoint another and possibly two instructors in mathematics at from \$70.00 to \$80.00 per month for ten months, but I am not ready to nominate, and ask authority to fill one or both of these places, as may be necessary; and also to appoint assistants in the departments of mechanical engineering, general engineering drawing, and entomology, the heads of these departments being not yet ready to make recommendations.

It is recommended that all appointments and changes take effect on September 1, 1898, unless otherwise specially noted.

## FELLOWS.

Upon the nomination of the faculty, I recommend the appointment of fellows  $\cdot$  for the ensuing year with a stipend of \$300.00 for each:

College of Literature and Arts, department of English, Lucy Carson; department of art and design, Emma E. Seibert.

College of Science, department of physiology, Louise A. Dewey; department of mathematics and astronomy, Harry C. Coffeen.

School of Law, Charles A. Klotz.

### APPROPRIATIONS.

It is recommended that the following appropriations be made for miscellaneous expenses:

1	Administrative offices College of Literature and Arts	\$300 00
. 5	College of Literature and Arts	250 00
	College of Agriculture and improvements and expenses at Experiment	250 00
0	. Conege of Agriculture and improvements and expenses at Experiment	1 000 00
	Station farm	1,000 00
- 4	Art and design	300 00
5		500 00
6	. School of Music	250 00
7	Preparatory School	250 00
- 8	Oratorical contests	200 00
9		500 00
10		100 00
11	. Technograph	100 00
12		75 00
	Illinois Adriculturist, deficit from last year	23 40
13		500 00
14	Astronomical ()bservatory	200 00
15	Pattorn and bation true	400 00
16		200 00
17	. Geology	250 00
18	Library	500 00
19	School of Law	500 00
20		300 00
21	Psychology	300 00
21	r sychology	a00 00

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It is also recommended that the services of one man at the horse barn at \$40.00 per month, one at the cattle barn at \$30.00 per month, and one farm hand at \$30.00 per month, be hereafter paid by the University.

It is also recommended that \$200.00 of the salary of Mr. George P. Clinton, a member of the Station staff, be paid by the University in consideration of instruction in the department of botany.

It is also recommended that \$500.00 be appropriated for shelving and other furnishings in the library.

A. S. DRAPER.

The recommendations with regard to the reappointment of deans and Professors Pence, Frederick, Pickett, and White, were severally approved as read.

A communication from the students of the Law School, presented by Mr. Smith, was referred to the Committee on Instruction and President Draper.

Mr. Pearce moved that the other recommendations of the foregoing paper be approved by the Board.

Mr. Armstrong moved to amend by referring the recommendations with regard to the assistants in the Library, to the Library Committee, and this amendment was adopted.

The motion as amended was adopted.

# DEPARTMENT OF ELECTRICAL ENGINEERING.

## To the Board of Trustees.

Heretofore our work in electrical engineering has been embraced in the department of physics. For years there has been trouble among the people carrying on the work of electrical engineering; it has frequently extended to the students; the necessities of the case have subdued it from time to time, but it breaks out occasionally, and it has recently done so to the great hurt of all the interests involved. For years every effort has been made to heal the difficulty, but without avail. Not being altogether certain as to the cause of this trouble I have favored delaying action, in the confidence that time would reveal the source of the difficulty and locate the responsibility. I think it has done so.

As the name of the head of the department of physics and electrical engineering, Professor Carman, has been involved in the recent discussion. I feel bound to made specific reference to that officer. It is unquestionably the fact that the demands made upon him by the work in both physics and electrical engineering, with the planning and installing of the new electrical laboratory and the new heating plant, have been more than he could reasonably be expected to meet to the entire stisfaction of these new interests and his regular work; but there has not been the slightest ground to doubt, and no prominent or reasonable person about the University has doubted either his high attributes as a man, his learning as a physicist, his competency as a practical electrical engineer, or his efficiency as a teacher.

We have two assistant professors in electrical engineering, Messrs. William Esty and Bernard V. Swenson. They have been equal in rank and pay most of the time for several years. Professor Esty comes from a family of teachers, is perhaps thirty years of age, a graduate of Amherst and of the Massachusetts Institute of Technology, and was for a year employed in commercial work by one of the leading electrical companies of the country. He came here in 1893. He is one of the hardest workers in the University. He has from time to time suffered somewhat on account of the troubles in the department, to which I have alluded, but has always shown the strongest character under trial. He has been constantly discreet. No word which could -17 U. I.

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be hurtful to others has been permitted to escape him. His strength as a student, his great industry and the steadiness of his ways have won for him the esteem of all thoughtful persons about the University. No one doubts his scientific attainments, his mastery of his subject, or his ability to teach. He is not in strong health, however, and, possibly because of lack of opportunity, has not shown a tendency towards aggressive leadership or organizing ability. He has proved his right not only to the good will but to some substantial approval on the part of the University. He has been thought of for head of the electrical engineering department when it should be separately constituted, and two months ago was recommended to me for that position in an official communication by the Dean of the College of Engineering.

Professor Swenson is twenty-six years old; he graduated at this University in 1893 and has since been employed here, spending one summer at Cornell. He is naturally a bright young man and has been active and energetic. His taste has led him into mechanical rather than theoretical work. He is much more naturally adapted to commercial work than to teaching. He has not shown the qualities which fit one for leadership and would not be thought of as a safe head for any University department.

Each of these young men has been growing in the direction of his tastes and endencies. Year after year they have become more and more unlike and farther apart.

The time has apparently come when it is advisable to organize a separate department of electrical engineering and equip it as strongly as we can. The new organization for this department has had my best attention. First, it has been necessary to think of the advisability of continuing the assistant professors referred to. I have had no doubt about it in the case of Professor Esty; have weighed carefully the suggestion of Dean Ricker that he be given the headship of the department; but have not as yet been able to conclude that it would be wise to do so, for reasons which I have already suggested. I have had an extended correspondence, running to every important technical school in the country, and to every man of prominence whose name I could get. In this correspondence many names have been proposed, but out of a score of men of more or less promise none appears who is older, has had more experience, or whose preparation is more thorough, or who gives better promise than Professor Esty, and I am strongly of the opinion that a new man should not be brought in above him unless clearly he has a right to be above him by reason of stronger attainments and larger experience.

I am as clearly of the opinion that the interests of the work will be promoted by the retirement of Professor Swenson. For a considerable time I have been aware that the conviction was gaining ground among the leading men in the College of Engineering that his undue familiarity with students, his antagonism to his associates and superior officers, and his loose talk have been the cause of the friction and demoralization which have annoyed us so much. I have been very late coming to this conclusion myself and probably should not have been satisfied of it as yet had not direct and positive proof been presented. About two weeks ago Professor Swenson amazed me by coming and volunteering statements concerning his superior officer, which were not only without justification but were absurd, and showed that he had lost all sense of his own youth and inexperience and had become utterly demoralized in thought and feeling to an extent which ought to preclude his continuance in the faculty.

It is well to say, also, that statements made to Dean Ricker on the part of Mr. Ferdinand J. Foote, the mechanician in the department and an altogether too intimate companion of Professor Swenson, lead to the same conclusion as to him. Therefore, I make the following recommendations:

1. That after the present year the work in electrical engineering be organized as a separate and independent department of the College of Enginvering.

2. That Professor Carman be made the head of the department of physics with the same title as now of professor of physics.

3. That William Esty, assistant professor of electrical engineering, be appointed associate professor of electrical engineering at a salary of \$1,600 per annum.

4. That the services of Bernard V. Swenson, assistant professor of electrical engineering, be discontinued at the end of the present year, September 1, 1898, and the services of Mr. Foote be discontinued at the end of his present term of employment, July first, next.

5. That the President of the University be empowered to engage a suitable person as professor of electrical engineering, if such person can be found, at a salary not exceeding \$2,250 per annum; if not, that he be empowered to engage an assistant professor at less salary; and that he also be empowered to engage a mechanician to serve the departments of physics and electrical engineering, at not to exceed \$75 per month for ten months.

A. S. DRAPER.

The foregoing paper with regard to the electrical engineering department was referred to the Committee on Instruction.

Several communications concerning this department, which had been received by the members of the Board, were also referred to the Committee on Instruction.

#### HEAT, LIGHT, AND POWER PLANT.

## To the Board of Trustees:

The new central heating, lighting and power plant of the University is now in operation. It is necessary to make some definite provision for its management. To that end I recommend the adoption of the following:

1. That the University Heating, Lighting, and Power Plant, so far as all extensions and matters affecting the plans and the general operations of the plant are concerned, be under the advisory control of the heads of the mechanical and electrical departments, and that they be held responsible, respectively, for the general condition and effectiveness of the same.

2. That all matters relating to the purchase and distribution of supplies, as well as the details of operations and maintenance, the employment of help, the certification of pay rolls, etc., be under the direction of the Superintendent of Buildings and Grounds.

3. That the force, to be employed by the year (twelve months) to commence July 1st next, be constituted as follows, at the salaries indicated.

(a) Chief enginer, Joseph Morrow, \$900 per annum.

- (b) Steam fitter, Charles Ewalt, \$360 per annum.
- (c) Fireman, Edward W. Justice, \$600 per annum.
- (d) Firemen, Spencer Stucky, \$600 per annum.
- (e) Engineer, Walter Zimmerman, \$840 per annum.

(f) An additional engineer, to be employed from September first next for ten months, at \$60 per month; and that authority be given to employ two additional helpers in the boiler house and two in the engine room, when in the judgment of the Superintendent it may be necessary, at not to exceed \$35 per month each.

A. S. DRAPER.

This paper was referred to the Committee on Buildings and Grounds.

## MEMORIAL IN HONOR OF PROFESSOR J. B. TURNER.

## To the Board of Trustees.

The presence of Professor Jonathan B. Turner, of Jacksonville, Illinois, at the Commencement exercises, at the advanced age of ninety-three years, is deserving of special note. Professor Turner has been of great prominence and has made the deepest impression upon the educational interests of the State and of the country. To his effort, more than to that of any other individual, was due the legislation which has given rise to the Land Grant Colleges. His clear vision and heroic treatment of the subject more than forty years ago gave the special form and characteristics to these institutions which have won for them the deep sympathies of the industrial masses. The State University of his own State is under obligations to him which it can never repay; but it seems to me that its management may well do itself the honor of initiating proceedings looking to the erection of some fitting memorial to this heroic old man whose patriotic and unyielding purposes brought it into existence and gave it the opportunity to become what it has, and promote the public interests as it has. I have recently had some letters offering to make contributions, if necessary, to such a memorial. Whether it should be undertaken directly by the University as a public function, or whether it should be a voluntary gift to be participated in by a great number of people whose sympathies would be with the enterprise, I am not certain. I submit the matter to the Trustees for such action as may seem to them appropriate.

A. S. DRAPER.

On motion of Mr. Morrison, it was voted that this communication with regard to a memorial in honor of Professor Turner be referred to a special committee of five. Messrs. McLean, Morrison, Bullard, and Raymond and Mrs. Flower were appointed on this committee.

Letters from physicians of the vicinity with regard to the desirability of passenger elevators in the University buildings were referred to the Committe on Students' Welfare.

It was ordered, on recommendation of the Committee on Buildings and Grounds, that a tablet be put in the main building of the Heating Plant similar to tablets in Engineering Hall and the Library, and an appropriation of \$125 was made therefor.

President Draper presented the following paper from the Advisory Board of Athletics:

# IMPROVEMENT OF ILLINOIS FIELD.

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

The Advisory Board of Athletics being especially charged with the care of the athletic interests here centered begs leave to call your attention to that portion of your property known as Illinois Field.

It has been reported that a suggestion has been made looking to a removal of the Field from its present location, to one in the rear of the main group of buildings, or to the Fair Grounds. The Advisory Board believes such a change would be disastrous to our athletic interests and for the following reasons:

First, the efficiency of Illinois Field in promoting the interests of physical training depends in our judgment on its nearness to gymnasium facilities. The gymnasium is now permanently located and fitted with proper appliancs and is within a short distance of the field. A large number of students have only a limited time at their disposal for exercise in the Field and any removal to a greater distance would effectually prevent a large number of students from using the Field as an exercise ground. It is especially desirable in the view of the Board that the advantage of the Field be secured to the largest

possible number. We estimate that the average student who takes exercise in the Field has rather less than one hour at his disposal. When we remember that he must take out of this time what is required for dressing and bath, we consider that the change of location would work a serious hardship to our athletic interests.

Again, a convenient location is a great incentive to students to view the work of the various teams. This both encourages loyalty and enthusiasm for the teams and is also a great incentive to the teams to do their best. In its present location, a large number of students watch the work. A more remote location would very seriously curtail the number.

Again, the Advisory Board is of the opinion, that a removal would very seriously curtail the receipts at the games. As now situated the grounds are easy of access and our receipts are, we think, very largely increased thereby. These conclusions are the result of long observation of the athletic situation as it exists at the University and are so conclusive to the Advisory Board that we beg that the Board of Trustees will give them careful consideration.

The Advisory Board asks leave to make the following suggestions and petitions concerning Illinois Field: We believe that it is generally recognized that the board fence at present inclosing the Field is unsightly and not in keeping with the rest of the University's property. We hereby petition that the fence be removed and that your honorable body will appropriate a sufficient sum to place an ornamental iron fence around the present Field and also around the University property to the north of the present Field and reaching to University avenue, and a strip 30 feet wide at the south of the Field.

The limits of the present Field are quite inadequate. The track is a very poor one and is quite unfitted for our needs. The extensions prayed for would give us much needed room and make it possible to put in a good third of a mile track of proper width. The land to the north of the present Field contains eighty-five trees' By the removal of less than twenty of these, a number of them poor, the needed track extension can be secured. The land prayed for at the south of the Field is the width of 30 feet, and its addition to the Field would in no wise injure the parade grounds.

The present grand stand at the Field is an unsightly building and we greatly desine to see it removed from the grounds. We petition that it be done and that the Board of Trustees appropriate a sufficient sum to erect a tasty grand stand.

The present grounds are poorly drained and the track, as we have stated, is in very poor condition. We hereby petition your honorable body to appropriate a sufficient sum to place either the present track or such track as may be built in first-class condition.

As regards the fence, it has perhaps been suggested that it would not furnish sufficient protection from the public at the games and that thereby we should suffer in receipts. We are confident that good police service would go far to remove the difficulty; but if this should not be found sufficient, canvas stretched inside the fence and a short distance from it would effectually shut off the view.

Should such improvements as suggested commend themselves to you, the University would then have an athletic park that would be well fitted for its large and constantly growing athletic interests. We beg leave to express the hope that the considerations mentioned will have force with your honorable body.

We further hope that you will grant us the privilege of appearing before you at your present meeting to make further brief statements and to answer any questions, should you desire to ask them.

We beg leave to submit herewith a plan of the proposed ground; also, we submit the following estimates for the improvements prayed for:

Fence, ornamental iron, seven feet nigh around the proposed park Grand stand to accommodate five hundred Building of necessary track and grading and draining of grounds	1,500 (	00·
Total	\$4,500	00

We therefore hereby petition that the Board of Trustees appropriate the sum of four thousand five hundred dollars for the purposes herein specified.

HERBERF J. BARTON, S. W. PARR.

Faculty members of the Advisory Board of Athletics, for the Board.

It was voted to hear Messrs. Barton and Parr at 3 o'clock p. m.

On motion of Mr. Bullard a committee of two was appointed to prepare and present to the Board a resolution concerning the Hon. S. M. Inglis, State Superintendent of Public Instruction and, *ex* officio, a member of the Board, recently deceased.

The President appointed on this committee Messrs. Bullard and Armstrong.

The President of the Board presented a communication he had received from Professor Forbes, Director of the State Laboratory of Natural History, concerning appointments upon the Laboratory staff for the ensuing year.

The communication was referred to President Draper.

The question of voice culture in the University was referred to the Committe on Instruction for investigation and report.

President Draper presented, with his approval, a request from Professor Frederick recommending an annual exhibition of art work to be held at this University at the time of the High School Oratorical and Athletic contests, and that prizes aggregating \$50.00 be awarded for the best work shown.

It was voted to inaugurate such an exhibition, and that \$50.00 be appropriated for prizes.

DEGREES CONFERRED.

President Draper stated that upon recommendation of the Faculty of the University he asked authority to confer degrees at commencement as follows, and the authority was given:

COLLEGE OF LITERATURE AND ARTS .- DEGREE OF BACHELOR OF ARTS.

IN SPECIALIZED COURSES-THESES REQUIRED.

D Edythe Beasley, Lee Byrne, Delbert Riner Enochs, Rollin Orlando Everhart, Leone Pearl House, Helen Jordan, Caroline Lentz, Edward Frederick Nickoley.

### IN GENERAL COURSES-THESES NOT REQUIRED.

William Wesley Black, William Wagner Dillon, Fred Gates Fox, Alice Belle Frazey. William John Futton, Fred Silvey Hall, William Vipond Pooley, Lewis Archibald Robinson, Stanley Livingston Soper, Joseph Clarence Staley, Guy Andrew Thompson, William Luther Unzicker, 1898.7

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Georgia Etherton Hopper, Joseph Hunter Marshutz, Reed Miles Perkins, Cicero Justice Polk, Rufus Walker, Jr., Sarah Emeline Webster, Lewis Forney Wingard, Minnie Barney Woodworth.

## College of Engineering.—Degree of Bachelor of Science.

### IN ARCHITECTURE.

Fred Clarkson Beem, Lyle Ireneus Brower, Charles Richard Clark, Chester Morton Davison, Stuart Falconer Forbes, Arthur Edwin Fullenwider, Charles Ernest Hair, John Nevins, Arthur Lewis Thayer.

#### IN ARCHITECTURAL ENGINEERING.

Herbert John Naper.

IN CIVIL ENGINEERING.

Clark God'rey Anderson, Henry Cyrille Breidert, Thomas Wiley Clayton, Harry Edwards Eckles, Don Hays, John William Musham,

Frederick William von Oven, George Joseph Ray, Ferdinand Frederick Emil Toenninges, Joshua Percy Webster, Allison James Wharf. David Couden Wray.

# IN ELECTRICAL ENGINEERING.

Philip Judy Aaron, Edwin Ladue Brockway, Guy Jacob Chester, Charles Albert Clark. Edgar Francis Collins, Claude Douglass Encohs. Henry Anthony Goodridge, Thomas Milford Hatch, Arthur Burton Hurd,

Albert Carl Linzee, Charles James McCarty, Harry Monroe May, Henry Fleury Merker. Henry Mark Pease, Rome Clark Saunders, Clyde Leigh Wetzel, Frederick Henry Wilson, Herman Louis Wuerffel.

#### IN MECHANICAL ENGINEERING.

Morgan J Hammers, Frederick Alexander Mitchell,

Andrew Henry Neureuther, Albert St. John Williamson.

#### IN MUNICIPAL AND SANITARY ENGINEERING.

Louis Engelmann Fischer.

COLLEGE OF SCIENCE-DEGREE OF BACHELOR OF SCIENCE.

IN SPECIALIZED COURSES, THESE REQUIRED-CHEMISTRY.

Erwin Howard Berry,

Charles Albert Walter, James Thompson Wolcott.

## MATHEMATICS AND ASTRONOMY.

Harry Clay Coffeen,

Arthur R Crathorne, James Harvey Dickey.

#### NATURAL SCIENCE.

### Wallace Craig.

IN GENERAL COURSES-THESES NOT REQUIRED.

Jay Jennings Arnold, Albert Fred Kaeser, Nellie lone Kofoid, Grace Eliot Morrow, Ora M Rhodes. 263

## UNIVERSITY OF ILLINOIS.

# DEGREE OF PHARMACEUTICAL CHEMIST.

## Charles Albert Walter.

COLLEGE OF AGRICULTURE—DEGREE OF BACHELOR OF SCIENCE.

Francis David Linn,

SCHOOL OF LAW-DEGREE OF BACHELOR OF LAWS.

Louis Maxwell Kent, A. B., Roy Verner Spalding, Andrew Jackson Kuykendall, A. B., George Bedell Worthen,

SCHOOL OF LIBRARY SCIENCE--DEGREE OF BACHELOR OF LIBRARY SCIENCE.

Grace Osborne Edwards, A. B.

FOR CERTIFICATE.

Louise Beerstecher Krause.

GRADUATE SCHOOL-MASTERS' DEGREES.

DEGREE OF MASTER OF ARTS.

David Hobart Carnahan, A. B., William Grant Spurgin, A. B.

DEGREE OF MASTER OF LITERATURE.

Nathan Austin Weston, B. L.

DEGREE OF MASTER OF ARCHITECTURE.

George Wesley Bullard, B. S.

DEGREE OF CIVIL ENGINEER.

Albert Claude Hobart, B. S.

DEGREE OF MECHANICAL ENGINEER.

Frank Lyman Busey, B. S.

DEGREE OF MASTER OF SCIENCE.

James Ansel Dewey, B. S., Adolph Hempel, B. S., George David Hubbard, B. S., Arthur Ernest Paul, B. S., Frederick William Schacht.

COMMISSIONS AS BREVET CAPTAINS IN THE ILLINOIS NATIONAL GUARDS.

Arthur R Crathorne, Delbert Riner Enochs, Harry Monroe May, Ora M Rhodes, Alber St. John Williamson, Herman Louis Wuerffel.

The Board adjourned to meet at 3 o'clock p. m.

1898.]

# AFTERNOON SESSION, JUNE 7, 1898.

When the Board met pursuant to adjournment the same members were present as in the morning.

Messrs. Barton and Parr, of the Athletic Advisory Board, were heard in behalf of the request of said board for the enlargement and improvement of Illinois Field.

After some discussion the matter was referred to the Finance Committee to report upon at this meeting.

The Registrar presented reports of dues from students for the quarters ending December 31, 1897, and March 31, 1898. These reports were referred to the Finance Committee.

Mr. Smith presented the following report with regard to the suit brought against the University and its Business Manager, Professor Shattuck, by Busse & Gleason, of Chicago.

# URBANA, June 7, 1898.

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

GENTLEMEN:—I beg leave to state that Busse & Gleason brought suit against the University of Illinois, and S. W. Shattuck, as Business Manager, for an alleged balance due as sub-contractors on the Library. Service was had upon myself, and then at the request of President McKay, I took charge of the case and filed a demurrer raising the question whether or not the University of Illinois could be sued. The court overruled the demurrer and directed me to answer, which I did by plea. Trial was had, and on the evidence of young Gleason, the court dismissed the action as against S. W. Shattuck, and gave judgment against the University of Illinois. The judgment was for \$486.85 and costs.

I prayed an appeal which was allowed, bond to be filed and bill of exceptions within thirty days from May 13, 1898.

I deem it important to the University of Illinois to have the question settled whether or not an action will lie against this institution.

Respectfully submitted,

THOMAS J. SMITH.

After some discussion, on motion of Mr. Bullard, it was voted to instruct the Business Manager, Professor Shattuck, to pay the amount of the claim on getting a satisfactory discharge, and also to pay the costs.

The Board then adjourned to meet at 7:30 p.m.

# EVENING SESSION, JUNE 7, 1898.

When the Board met pursuant to adjournment the same members were present as at the previous session.

The following resolution was adopted:

*Resolved*, That the President and Secretary be directed to draw upon the Auditor of Public Accounts such requisitions 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.

# REPORT OF THE LIBRARY COMMITTEE.

To the Board of Trustees of the University of Illinois.

Your Library Committee begs leave to report that it approves the recommendations of President Draper concerning persons to be employed in the library for the ensuing year and the salaries to be paid them.

Respectfully submitted.

LUCY L. FLOWER, MARY T. CARRIEL, JAMES E. ARMSTRONG, ALEX. MCLEAN, S. A. BULLARD,

Committee on Library.

The report of the Committee was adopted and the appointments were made as recommended.

**REPORTS FROM COMMITTEE ON INSTRUCTION.** 

PHYSICS AND ELECTRICAL ENGINEERING.

URBANA, June 7, 1898.

To the Board of Trustees of the University of Illinois.

Your Committee on Instruction begs leave to report advising that the recommendations of President Draper with regard to the Physics and Electrical Engineering Department (see page 257) be approved, with the exception that he be requested to make a serious effort to bring Professor Swenson into more satisfactory relations with his associates in his department, and that he terminate Professor Swenson's connection with the University of Illinois unless satisfied that it is practicable to accomplish that result.

Respectfully submitted,

JAMES E. ARMSTRONG,

Chairman Committee on Instruction.

The report of the Committee was adopted.

CONFERRING HONORARY DEGREES.

URBANA, June 7, 1898.

To the Board of Trustees of the University of Illinois.

Your Committee on Instruction begs leave to offer the following resolution and to recommend its adoption:

WHEREAS, It is found to be the custom in state universities of the adjoining states to grant honorary degrees, therefore be it

Resolved, That it is the sense of this Board that honorary degrees be given, but only upon rare occasions for exceptionally high merit in literary, scientific, and other educational work, and upon a three-fourths vote of both the Faculty and Board of Trustees.

Respectfully submitted,

JAMES E. ARMSTRONG, S. A. BULLARD, T. J. SMITH,

Committee on Instruction.

This recommendation of the Committee was adopted by the following vote: 1898.]

Ayes—Messrs. Pearce, Morrison, Armstrong, McLean, Bullard, Smith and Mrs. Carriel, (8); Noes—Mr. McKay and Mrs. Flower (2).

Mr. McKay being obliged then to go home called Mr. McLean to the chair and he presided for the remainder of the meeting.

Mr. Pearce was also obliged to withdraw at this time.

On motion of Mr. Smith \$100.00, or so much thereof as might beneeded, was appropriated towards paying the expenses of the Alumnidinner.

The Committee on Students' Welfare reported as follows:

URBANA, June 7, 1898.

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

Your Committee on Students' Welfare begs leave to report that it will answer the communications from physicians with regard to elevators in University building, saying that their letters have received careful attention, that the Board appreciates the importance of the subject, and hopes that, when the finances of the University will permit, the defect referred to may be remedied.

Respectfully submitted,

MARY T. CARRIEL, N. B. MORRISON, Committee on Students' Welfare.

The report was approved.

The following resolution presented by Mr. Bullard was adopted:

Resolved, That hereafter the recommendations of the President shall be presented to the Board with such explanation thereon as he may see fit to offer; that by general consent action may be had thereon at once; and that upon the request of any member any recommendation shall be referred to the proper committee for report at the same meeting of the Board.

Upon motion of Mr. Morrison, the matter of removing the old heating plant was referred to the Committee on Buildings and Grounds with power to act.

President Draper's bill of expenses since January 1, 1898, amounting to \$88.65, was ordered paid.

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

# MORNING SESSION, JUNE 8, 1898.

The Board met pursuant to adjournment and adjourned to meet at 3 o'clock in the afternoon.

# AFTERNOON SESSION, JUNE 8, 1898.

When the Board met pursuant to adjournment the same members were present as at the close of the session of Tuesday evening except Mr. Armstrong, seven in all.

The committee appointed to prepare a minute with regard to the death of Hon. S. M. Inglis, presented the following which was adopted, and it was ordered that a copy of the minute be sent to the widow of the deceased:

## HON. S. M. INGLIS, SUPERINTENDENT OF PUBLIC INSTRUCTION.

The removal of Samuel M. Inglis from the duties of earthly existence has withdrawn from the membership of this Board one of its most active and efficient members. We have recognized in Mr. Inglis a man of great heart, genial, courteous and manly; a wise adviser and counselor, familiar with all the problems of school management; an educator of a strong and sound judgment upon all duties of the state toward children in its care, and of a comprehensive conception of the potential influences of education upon our national growth and perpetuity.

Mr. Inglis entered into every phase of the work of this Board with diligence, wisdom, and faithfulness, and we are profoundly moved with the sense of loss sustained by this Board in his removal.

We extend to his bereaved wife and family our deep sympathy in their sorrow and trust that to them, as to ourselves, the memories of the noble, christian life just closed will alleviate the deep sorrow which overshadows them.

# Reports from Committee on Buildings and Grounds.

### SUPERINTENDENT OF BUILDINGS AND GROUNDS.

URBANA, June 8, 1898.

## To the Board of Irustees of the University of Illinois.

In pursuance of your instructions passed at the meeting of last March, (see p. 42) your Committee on Buildings and Grounds, after considering a number of applications for the position of superintendent of buildings and grounds, has appointed Mr. Nelson S. Spencer, of Champaign. Mr. Spencer is a graduate of the University of the class of 1882, from the course in architecture. He had charge of the wood shops of the University for a year or two after his graduation, but severed his connection with the University to follow his profession in Nebraska. He returned from there to Champaign two years ago and is now a practicing architect in that city. His employment with us is to commence July first, salary \$100.00 per month.

Your committee recommends the following: That the superintendent of buildings and grounds be made the custodian of all drawings, plats, charts, maps, and surveys, and of pipe, drainage, plumbing, and wire systems of the buildings and grounds of the University; that a room or rooms of sufficient size be set apart for their bestowal and preservation and for labor connected therewith; that all new drawings, maps, plats, etc., be made on mounted white paper of scale of convenient size; that old drawings, plats, etc., that are not now in a form or condition for preservation be made new; that all changes, modifications, or extensions made in the buildings, plumbing, drainage, tunneling, water or gas piping, wiring, or other work, plats of which ought to be preserved, shall be carefully entered upon the old plats and drawings, and that such other records be made in book form as may be necessary and satisfactory; that the Committee on Buildings and Grounds have general supervision of the work herein contemplated and report from time to time to the Board; that the sum of \$200.00, or so much thereof as may be needed, be appropriated to provide furniture and materials, and that such labor as may be necessary be certified on the pay roll of the superintendent of buildings and grounds, and that such labor be under his direct charge.

Respectfully submitted,

S. A. BULLARD, J. E. ARMSTRONG, T. J. SMITH, LUCY L. FLOWER, Committee on Buildings and Grounds. The action of the Committee was approved and its recommendations were adopted. An appropriation of \$200,00 for the purposes named was made,

The Committee on Buildings and Grounds reported that the Heating, Lighting, and Power Plant was nearly completed and that the cost of the plant had exceeded the \$80,000.00 appropriated by the State for this purpose by about \$7,500.00.

The Committee recommended that to meet the deficiency there be appropriated \$5,000,00 from the equipment fund for the College of Engineering and \$2,500.00 from the general fund.

This recommendation was adopted and the sums named were appropriated.

The Committee on Buildings and Grounds reported that the cost of putting up lightning rods had exceeded the appropriation by \$135.44, and asked that this additional amount be appropriated.

The Committee also recommended that lightning rods be put on the farm house, the Observatory, and the buildings of the Heating. Plant at an expense of not to exceed \$75.00,

Both these amounts were appropriated as recommended.

The Committee on Buildings and Grounds reported back President Draper's recommendations (see page 259) with regard to the management of the Central Heating Plant and advised that they be approved.

The report of the Committee was adopted.

The Committee on Buildings and Grounds asked that \$115.00 be appropriated for completing the lighting of the Gymnasium, and the amount was appropriated.

The Committee on Buildings and Grounds reported that Messrs. Ricker and White had incurred, upon the order of the Committee, in connection with certain improvements and repairs, expenses to the amount of \$71.00, and that Mr. White had incurred expenses to the amount of \$127.44.

The Committee recommended an appropriation to reimburse these gentlemen for their expenses, and also that \$150.00 be appropriated to pay Mr. White for services in connection with said improvements and repairs.

The recommendations of the Committee were adopted and the sums named were appropriated.

The Committee on Buildings and Grounds reported that it had made some investigations with regard to the expense of an independent water plant for the University, and had found that such a plant would cost about \$10,000.

The Committee recommended that, inasmuch as it was not advisable to take so large a sum from current University funds, an attempt be made to secure from the Legislature at its next session an appropriation for such plant.

1898.]

It was ordered that for the present the Business Manager pay bills for water furnished the University at the rate of \$1,000 a year, paying quarterly.

On motion of Mrs. Flower, the Committee on buildings and Grounds was authorized and instructed to advertise for bids, and to let contracts for coal to be used by the University for the next year.

President Draper presented the following estimates, furnished by the Director of the Agricultural Experiment Station, of appropriations needed for the current quarter ending June 30, 1898, and the next quarter ending September 30, 1898.

AGRICULTURAL EXPERIMENT STATION-ESTIMATES, CURRENT QUARTER.

From Farm Fund.		
Labor.	\$300	00
QUARTER ENDING SEPTEMBER 30, 1898.		
From General Fund.		
Salaries.         Labor.         Publications.         Postage and stationery.         Freight and express.         Heat. light and water.         Caemical supplies.         Freeding stuffs.         Tools, implements, and machinery.         Scientific apparatus         Traveling expenses.         Buildings and repairs.         Contingent.	$\begin{array}{c} 605\\ 275\\ 30\\ 30\\ 25\\ 110\\ 75\\ 510\\ 30\\ 35\\ 165\\ \end{array}$	00 00 00 00 00 00 00 00 00 00 00 00 00
From Farm Fund.		
Labor	\$530 220	
Total	\$750	00

Appropriations from Experiment Station funds were made to meet these estimates.

President Draper reported back, with his approval, the recommendations of Professor Forbes, Director of the State Laboratory of Natural History, with regard to appointments and salaries for the ensuing year beginning July 1, 1898, and the appointments were thereupon made, as follows:

Lydia M. Hart, artist, \$20.00 a month, with pay at the rate of 35 cents an hour when the work given her comes, at this rate, to more than the salary named.

E. B. Forbes, entomological assistant, \$70.00 a month.

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Wallace Craig, laboratory assistant, \$45.00 a month from September 1, 1898. E. H. Scott, office assistant, \$20.00 a month for the year beginning July 1, 1898.

The following resolution offered by Mr. Smith was adopted:

*Resolved*, That all communications pertaining to matters of business or to appointments, to be presented to the Board of Trustees for action, first be presented to President Draper for his examination and recommendation, and such other suggestions as he may deem proper.

This order shall apply to the U. S. Agricultural Experiment Station and to the State Laboratory of Natural History, as well as to other departments of the University.

# TREASURER'S REPORT.

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

E. G. KEITH, TREASURER, IN ACCOUNT WITH THE UNIVERSITY OF ILLINOIS,

### MARCH 31, 1898.

<b></b>	•			
		Dr		
1000		Balance, December 31, 1897		\$25,903-34
1898. January	6	From United States Treasurer for Agricultural Experi		
• •	8	From Treasurer of Illinois, for general fund	\$3,750 00 15,000 00	
**	29	From S. W. Shattuck, for Medical School fund	$ \begin{array}{c} 131 & 83 \\ 935 & 81 \end{array} $	
••	$\frac{29}{29}$	" " interest on land contracts for		
Febuary	4	From S. W. Shattuck, for School of Medicine fund	1,600 49 5,000 00	
	4	School of Pharmacy fund	1,156 74	
••	$\frac{7}{8}$	From S. W. Shattuck, for general fund	$ \begin{array}{c} 15,000 \ 00 \\ 2,000 \ 00 \end{array} $	•
• •	7	_ Experiment Station fund	410 82	
••	17	From S. W. Shattuck, paid warrants account of general		
••	26	fund From S. W. Shattuck, for general fund	$\begin{array}{c} 3,679&61\ 631&85 \end{array}$	
 March	$\frac{26}{18}$	" School of Medicine fund paid warrants for general fund	$1,000 \ 00 \\ 1,357 \ 60$	
march	18	for general fund	2,000 00	
	$\frac{22}{24}$	School of Pharmacy fund School of Medicine fund	$491 \ 00 \\ 3,459 \ 82$	
••	28	From State Treasurer, general fund	15,000 00	
••	31	From S. W. Shattuck, paid warrants for general fund for general fund	$1.66298 \\ 2,00000$	
		_		76,268 55
		<i>a</i> .		\$102,171 89
		Cr.		
March	31	By amount paid out of general fund, as per list of war- rants herewith	\$63,202 43	
••	31	By amount paid out of Agricultural Experiment Station		
••	31	fund, as per list of warrants herewith By amount paid out of School of Pharmacy fund, as	·4,442 06	
• •		per list of warrants herewith By amount paid out of Laboratory of Natural History	3,620 26	
		fund. as per list of warrants herewith	2,222 08	
		By amount paid out of School of Medicine fund, as per list of warrants herewith	4,977 59	
February	24	By amount paid out by order of S. W. Shattuck, for cashier's check	150 00	
	i			\$78,614 42

Balances- General fund, Experiment Station fund School of Medicine fund School of Pharmacy fund-overdrawn Laboratory of Natural History fund- overdrawn	\$8,439 65 1,816 57 14,921 90 \$1,258 62 362 03	\$25, 178 12	23, 557 47 \$102, 171 89
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Treasurer's Report—Concluded.

# BUSINESS MANAGER'S REPORT.

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

UNIVERSITY OF ILLINOIS, June 7, 1898.

F. M. McKay, Esq., President of the Board of Trustees, University of Illinois.

 ${\rm SIR}{:}{-}{\rm I}$  have the honor to hand you herewith my report as Business Manager, due at this time:

Paper A is a statement of the current appropriations March 31, 1898.

Paper B is a statement of the State appropriations March 31, 1898.

Paper C is a statement of the United States fund March 31, 1898.

Paper D is a statement of the Laboratory of Natural History fund March 31, 1898.

Paper E is a statement of the Agricultural Experiment Station fund March 31, 1898.

Paper F is a statement of the School of Pharmacy appropriations March 31, 1898.

Paper G is a statement of the School of Medicine appropriations March 31, 1898.

Paper H is an estimate of receipts and expenses for the twelve months ending June 30, 1899.

Paper I is a list of appropriations the Board is requested to make for the three months ending September 30, 1898.

Paper L is a statement of receipts by the Business Manager for three months ending March 31, 1898.

Puper M is a list of the general University vouchers presented for audit, being 1,326 to 2,050, inclusive.

Paper N is a list of the Laboratory of Natural History vouchers presented for audit, being 177 to 248, inclusive.

Paper O is a list of the Agricultural Experiment Station vouchers presented for audit, being 189 to 325, inclusive.

Paper P is a list of the School of Pharmacy vouchers presented for audit, being 120 to 168, inclusive.

March 31, 1898.	Appro- priated.	Expended.	Balance.
Board expenses	\$2,092 26	\$1,565 55	\$526 71
Salaries for instruction and for President {Current} State}	81.221 96	$\left\{\begin{array}{c}10,244 & 97\\23,000 & 00\\47,813 & 08\end{array}\right\}$	163 91
Salaries for services {Current	14,054 82	$\left\{\begin{array}{c} 12,406 & 66 \\ 1.648 & 16 \end{array}\right\}$	
Buildings and grounds	2,600 00	2,561 66	38 34
Fuel and lights Stationery and printing	$     \begin{array}{r}       11,199 & 67 \\       2,608 & 11     \end{array} $	$8,905\ 79$ $1,551\ 20$	2,293 88 1,027 85
Preparatory School Repair shop	$\begin{array}{c} 3,389 & 21 \\ 3,506 & 00 \end{array}$	$\begin{array}{c} 3,388 & 66 \\ 3,032 & 66 \end{array}$	55 473 34
Mechanical Department	2,220 75	1,745 78	474 97
Departments Laboratories	1,520 75 3,937 63	$\begin{array}{r} 399 & 62 \\ 3.086 & 78 \end{array}$	$1,121 \ 13 \\ 850 \ 85$
Library and apparatus Incidential expenses	$203 18 \\ 2,522 77$	$64 36 \\ 1.505 38$	$138 82 \\ 1.017 39$
Sundries.		1,505 56	1,017-59
Furniture and fixtures	` 706_98	485 74	221 24
Heating apparatus	1,190 55	277 10	913 36
Water supply Minnesota lands	$500 \ 00 \ 222 \ 72$	$   \begin{array}{r}     375 & 00 \\     189 & 76   \end{array} $	$125 \ 00 \\ 32 \ 96$
Greenhouse	300 25	61 78	238 47
Land for experiments	$\begin{array}{c} 35 & 00 \\ 227 & 15 \end{array}$	$\begin{array}{ccc} 35 & 00 \\ 108 & 83 \end{array}$	118 32
State Fair exhibit	500 00	372 22	127 78
Publication of essay Removal of men's gymnasium	$75 00 \\ 1,000 00$	138 77	$     75 00 \\     861 23 $
Bridge Winter School of Agriculture	429 00 100 00	$\begin{array}{r} 429 & 00 \\ 51 & 32 \end{array}$	48.68
Moving to Library Hall	500 00	192 63	48 68
Court expenses Library School	$     \begin{array}{r}       10 & 45 \\       300 & 00     \end{array} $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	
Blue print room	150 00	44 61	105 39
	\$137.325 21	\$126.014 12	\$11.311 09

## PAPER A-CURRENT APPPOPRIATIONS.

PAPER B--STATE APPROPRIATIONS, MARCH 31, 1898.

1895-1897.	Received.	Expended.	Balance.	Assigned.
Salaries, etc.—         Closed out.         Toilet rooms.         Art and design         Physical training.         Lectures         Preparatory School.         Advertising.         College of Literature and Arts, books.         Accredited schools.         Signal bells.         Botany (herbarium, etc.).         Mechapical engineering laboratory.         Chemical laboratory (repairs.)         Furniture and fixtures.         Zoölogical department.         Bronze tablet.         Physics.         Law school.	$\begin{array}{c} 375 \ 00 \\ 250 \ 00 \\ 1,220 \ 00 \\ 199 \ 69 \\ 190 \ 00 \\ 200 \ 00 \\ 500 \ 00 \\ 100 \ 00 \\ 100 \ 00 \\ 695 \ 00 \\ 9,180 \ 00 \\ 95 \ 00 \\ 175 \ 00 \\ 175 \ 00 \\ \end{array}$	$\begin{array}{c} 355\ 09\\ 250\ 00\\ 1,220\ 00\\ 114\ 50\\ 145\ 61\\ 500\ 00\\ 82\ 92\\ 113\ 51\\ 619\ 18\\ 400\ 00\\ 38\ 85\\ 171\ 50\\ 582\ 65\\ 2,967\ 58\\ \end{array}$	$\begin{array}{c} 85 & 19 \\ 47 & 84 \\ \hline 14 & 39 \\ \hline 17 & 08 \\ 36 & 49 \\ 75 & 82 \\ 144 & 52 \\ \hline 56 & 15 \\ 3 & 50 \\ 17 & 35 \\ 552 & 42 \\ \hline \end{array}$	$\begin{array}{c} \$19 \ 91 \\ \hline \\ \$5 \ 19 \\ 47 \ 84 \\ \hline \\ 14 \ 39 \\ \hline \\ 17 \ 08 \\ 86 \ 49 \\ 75 \ 82 \\ 144 \ 52 \\ \hline \\ 56 \ 15 \\ 8 \ 50 \\ 17 \ 35 \\ \hline \\ 532 \ 42 \end{array}$

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1895-1897.	Received.	Expended	Balance.	Assigned.
Apparatus and materials— Closed out Applied chemistry Physiology and hygiene. Botany and horticulture. Geology.	\$4,020 00 100 00 800 00 680 00 400 00	100 00		
Geology	\$6,000 00	<u>\$5.932 46</u>	\$67 54	\$67 54
Laboratory of Vegetable Physiology	\$2,000 00	\$1,975 30	\$24 70	
Vaccine Laboratory	\$3,000 00	\$3,000 00		
Cabinets— Geology Botany Zoölogy	\$666 67 666 66 666 67 \$2,000 00	\$650 86 31 40 101 10 \$783 36	\$15 81 635 26 565 57 \$1,216 64	\$15 81 635 26 565 57 \$1,216 64
College of Engineering— Closed out Electrical engineering and physics Laboratory of Applied Mechanics and Municipal and Sanitary Engineering	\$21,965 31 3,829 85 1,852 42	\$21,965 31 3,829 67 1,852 42	\$0 18	\$0 18
Architecture College, library, parlor, etc	$1,752 42 \\ 600 00 \\$	1,752 42 600 00		
Furnishing and Fitting Engineering Hall- Closed out Architecture. Municipal and Sanitary Engineering Mechanical department Electrical engineering and physics College library, etc.	\$30,000 00 \$1,670 20 770 38 401 30 563 78 1,193 39 400 95 \$5,000 00	769-80	\$0 18 \$0 58 12 40 22 55 81 12 36 42 \$153 07	22 55 81 12
1897-1899.         Salaries, etc.—         Closed out	$\begin{array}{c} & \$600 & 00 \\ \$7, \$13 & 08 \\ 1, 648 & 16 \\ 3, 556 & 00 \\ 300 & 00 \\ 500 & 00 \\ 500 & 00 \\ 500 & 00 \\ 5, 526 & 92 \\ 3, 500 & 00 \\ 5, 526 & 92 \\ 3, 500 & 00 \\ 5, 526 & 92 \\ 3, 500 & 00 \\ 5, 526 & 92 \\ 3, 500 & 00 \\ 5, 500 & 00 \\ 500 & 00 \\ 500 & 00 \\ 500 & 00 \\ 500 & 00 \\ 500 & 00 \\ 500 & 00 \\ 500 & 00 \\ 500 & 00 \\ 500 & 00 \\ 500 & 00 \\ 500 & 00 \\ 500 & 00 \\ 250 & 00 \\ 250 & 00 \\ 300 & 00 \\ 210 & 00 \\ 31, 442 & 36 \\ \$110, 000 & 00 \\ \end{array}$	47,813 08 1,648 16 1,601 27	300 00           381, 954 73           300 00           937 57           258 13           407 35           250 00           60           1,000 00           478 94           158 84           50 00           125 00           125 00           200 00           412 66           250 00           68 79           100 00           50 77           300 00           50 77           300 00           51, 442 36           \$39, 150 17	$\begin{array}{c} \$600 & 00\\ 47, \$13 & 08\\ 1, 648 & 16\\ 3, 556 & 00\\ 300 & 00\\ 500 & 00\\ 500 & 00\\ 500 & 00\\ 5, 526 & 92\\ 3, 500 & 00\\ 5, 526 & 92\\ 3, 500 & 00\\ 5, 526 & 92\\ 3, 500 & 00\\ 5, 526 & 92\\ 3, 500 & 00\\ 5, 500 & 00\\ 5, 500 & 00\\ 5, 500 & 00\\ 5, 500 & 00\\ 5, 500 & 00\\ 5, 500 & 00\\ 5, 500 & 00\\ 5, 5, 5, 5, 64\\ \end{array}$

# Paper B-State Appropriations-Continued.

	1		t	1
1895-1897.	Received.	Expended.	Balance	Assigned.
Engineering equipment— Architecture.         Civil engineering.         Mechanical engineering.         Physics and electrical engineering.         Theoretical and applied mechanics and municipal and sanitary engineering.         College (in general).         Apparatus and materials— Astronomical Observatory.         Botany and horticulture Zoölogy.         Geology.         Psychology.         Physiology.         Physiology.         Unassigned.	$\begin{array}{c} \$500 & 00\\ 500 & 00\\ 3, 750 & 00\\ 3, 750 & 00\\ 1, 000 & 00\\ \hline \$10, 000 & 00\\ \hline \$10, 000 & 00\\ \hline \$510 & 00\\ 240 & 00\\ 200 & 00\\ 200 & 00\\ 200 & 00\\ 125 & 00\\ 500 & 00\\ 500 & 00\\ 500 & 00\\ 500 & 00\\ \hline \$3, 000 & 00\\ \hline \end{array}$	$128 83 \\ 1,275 65$	371 17	$\begin{array}{c} 509\ 00\\ 3,750\ 00\\ 3,750\ 00\\ \hline \\ 1,000\ 00\\ \hline \\ \$10,000\ 00\\ \hline \\ $10,000\ 00\ 00\\ \hline \\ $10,000\ 00\ 00\\ \hline \\ $10,000\ 00\ 00\ 00\ 00\ 00\ 00\ 00\ 00\ 0$
Completing Library Hall	\$5,000 00	\$5,000 00		\$5,000 00
Furnishing Library Hall	\$5,000 00	\$4.828 94		
Cabinets			\$1,000 00	\$7,000 00
Fire protection	\$1,000 00	\$194 27	\$805 73	\$1,000 00
Vaccine Library	\$1,200 00	<u>\$169 44</u>	\$1,030 56	\$1,200 00
Equipment of men's gymnasium	\$3,000 00	\$1,626 60	\$1,373 40	\$3,000 00
Taxes on Minnesota lands	\$1,800 00	\$1,738 81	\$61 19	\$1,800 00
Water survey	\$3,000 00	\$1,525 16	\$1,474 84	\$3,000 00
Chemical equipment	\$5,000 00	\$3,157 00	\$1,843 00	\$5,000 00
Library	\$5,000 00	\$2,910 13	\$2,089 87	\$5,000 00
Pavement and walks	\$3.000 00	\$2,728 17	\$271 83	\$3,000 00
Shop practice	\$1,500 00	\$678 88	\$821 12	\$1,500 00
Central heating plant	\$40,000 00	\$37,697 91	\$2,302 09	\$40,000 00
Bridge (Burrill avenue)	\$500 00	\$500 00		\$500 00

# Paper B-State Appropriations-Concluded.

# PARER C-UNITED STATES FUND.

Year ending June 30, 1898.	Received.	Expended.	Balance.	Assigned.
Salaries for instruction	\$23,000 00	\$23,000 00		

1895-1897.	Received.	Expended.	Balance.	Assigned
General balance July 1, 1896 Closed out. Report of Entomologist Diseases of insects	$\$253 \ 68 \ 8, 150 \ 00 \ 250 \ 00 \ 1, 500 \ 00 \ 00 \ 00 \ 00 \ 00 \ 00 \ 00$	191 32		$\$253 \ 68 \ 8, 150 \ 00 \ 250 \ 00 \ 1, 500 \ 00$
1897-1898.	\$10, 153 68	\$9,310 00	\$843 68	\$10,153 68
Salaries and assistants Field, office, etc Library Bulletins Report of Entomologist Biological Experiment Station	750 00	$ \begin{array}{r} 700 25 \\ 634 56 \\ 627 84 \\ \hline 2,425 92 \\ \end{array} $	$\begin{array}{r} 122 \ 16 \\ 250 \ 00 \\ 574 \ 08 \end{array}$	3,000 00

# PAPER D-LABORATORY OF NATURAL HISTORY.

#### PAPER E-AGRICULTURAL EXPERIMENT STATION.

1897-1898.	Appro- priated.	Expended.	Balance.
General fund— Salaries Labor. Publications Postage and stationery Freight and express Heat, light, and water. Chemical supplies Seeds, plants, and sundries Feeding stuffs Library Tools, implements, and machinery Scientific apparatus. Live stock Traveling expenses. Contingent Buildings and repairs Furniture and fixtures	$\begin{array}{c} 2,296\ 590\\ 550\ 00\\ 80\ 00\\ 97\ 00\\ 203\ 90\\ 51\ 00\\ 275\ 07\\ 269\ 00\\ 274\ 16\\ 352\ 64\\ 548\ 67\\ 50\ 00\\ 240\ 00\\ 108\ 33\end{array}$	$\begin{array}{c} 2,422\ 96\\ 825\ 13\\ 74\ 24\\ 114\ 13\\ 120\ 00\\ 12\ 24\\ 208\ 72\\ 231\ 75\\ 267\ 12\\ 460\ 88\\ 391\ 29\\ 40\ 00\\ 187\ 32\\ 147\ 07\\ 318\ 63\end{array}$	576 $8390$ $3876$ $6665$ $3725$ $704$ $15738$ $1000$ $5268$
Farm fund— Labor Seeds, etc	\$11,250 00 \$1,433 00 664 00 \$2,097 00	\$1,118 59 771 70	\$314 41

#### PAPER F-SCHOOL OF PHARMACY.

1897–1898.	Appro- priated.	Expended.	Balance.
Salaries for instruction Salaries for services. Buildings and grounds. Fuel and lights Stationery and printing. Laboratories Library Incidentals Sundries. Advertising. Furniture and fixtures Museum Unassigned	$\begin{array}{r} 488 & 96 \\ 173 & 02 \\ 1,192 & 77 \\ 5 & 50 \end{array}$	$\begin{array}{c} 1,375 \ 00\\ 2,741 \ 73\\ 488 \ 96\\ 173 \ 02\\ 1,192 \ 77\\ 5 \ 50\\ 428 \ 73\\ 199 \ 69\\ 837 \ 07\\ 98 \ 36\\ 22 \ 50\\ \hline \end{array}$	

## PAPER G-SCHOOL OF MEDICINE.

1897–1898.	Appro- priated.	Expended	Balance.
Salaries for instruction Salaries for services. Buildings and grounds. Fuel and lights. Stationery and printing Laboratories Books and publications Apparatus and materials Incidentals Advertising Furniture and fixtures Unassigned	$263 \ 25 \ 1,291 \ 10 \ 25 \ 00 \ 1,634 \ 44 \ 486 \ 47 \ 2,266 \ 07 \ 245 \ 56$	$\begin{array}{c} 4, 153 \ 69 \\ 8, 617 \ 15 \\ 1, 382 \ 39 \\ 263 \ 25 \\ 1, 291 \ 10 \\ 25 \ 00 \\ 1, 634 \ 44 \\ 486 \ 47 \\ 2, 266 \ 07 \\ 245 \ 56 \end{array}$	

# PAPER L-RECEIPTS BY THE BUSINESS MANGER FOR THE THREE MONTHS ENDING MARCH 31, 1898.

Principal on land contracts	\$340 00	
Interest on land contracts		
University fees		
Music fees	511 00	
Preparatory School	1,914 98	
Repair shop	88 91	
Fuel and lights (coal)	114 45	
Mechanical department		
Greenhouse	71 46	
Buildings and grounds	15 00	
Minnesota lands, rents	220 76	
Library School	9 43	
Chemical laboratory	1,075 19	
Physical laboratory	25 90	
Zoölogical laboratory	17 89	
Physiological laboratory	5 10	
Geological laboratory	$5 48 \\ 3 66$	
Mineralogical laboratory		
Botanical laboratory		
Preparatory laboratory		
Civil engineering		
General engineering drawing Agricultural Experiment!Station		
School of Medicine		
School of Medicine School of Pharmacy		
SCHOOL OF I Har macy	2,201 14	\$24.912 89
•		φ <b>ωι</b> , στω Ου

[June 8,

Paper Q is a list of the School of Medicine vouchers presented for audit, being 207 to 315 inclusive;

Paper R is a bill from Cunningham & Boggs for printing in the Bruner case;

The whole of the \$40,000, the present year's appropriation for the central heating plant, has been expended, and also the greater part of the \$40,000 for the next year. It will be necessary for the Board to provide for the interest on this payment, and for any payments above the \$80,000 appropriated by the State.

Rspectfully submitted,

S. W. SHATTUCK, Business Manager.

In accordance with the recommendations of the Business Manager the following appropriations were made for the quarter ending June 30, 1898.

APPROPRIATIONS FOR QUARTER ENDING SEPTEMBER 20, 1898.

Board expenses. Salaries for instruction Salaries for instruction Salaries for services Buildings and grounds. Fuel, lights, and electric power Stationery, printing, etc. Advertising and postage. Repair shop. Mechanical department. Departments Laboratories. Library and apparatus. Incidentals Furniture and fixtures, Heating apparatus. Water supply. Greenhouse. Blue print room.	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	
Departments	300 00	
Incidentals Furniture and fixtures,	. 800 00 500 00	
Heating apparatus. Water supply. Greenhouse.	$\begin{array}{c} 500 & 00 \\ 500 & 00 \\ 200 & 00 \end{array}$	
Blue print room. Minnesota lands Library School.	200 00 200 00 200 00	
Library supplies School of Pharmacy	<u>\$1,500 00</u>	\$49,650 00
School of Medicine. Agricultural Experiment Station Laboratory of Natural History.	8,000 00 4,500 00	
Water survey of the State.		\$17,750 00
		\$67,460 00

An appropriation of \$900 00, or so much thereof as might be needed, was made to meet the interest due on amounts advanced by Treasurer.

The bill of *The Herald* for printing abstract and brief in the Bruner case, amounting to \$28.00, was approved and the amount appropriated.

The Business Manager was authorized to pay the Treasurer's clerk at the rate of \$600.00 a year.

For the payment of band scholarships \$225.00 was apropriated, and \$270.00 for the payment of military scholarships.

The following resolution offered by Mr. Smith was adopted:

Resolved, That this Board hereby sets apart as an athletic park to be called Illinois Field, a part of the north campus extending 700 ft. south from the 1898.]

south line of University avenue, and hereby appropriates the sum of \$3,000.00 for the improvement of the same, in accordance with the recommendations presented by the Athletic Advisory Board, and that such improvement be made under the direction of the Committee on Buildings and Grounds as fast as funds in hand shall justfiy.

### REPORT OF FINANCE COMMITTEE.

URBANA, June 8, 1898.

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

Your Finance Committee begs leave to report that it has examined the vouchers submitted by the Business Manager on which warrants have been issued and paid as follows:

General University warrants, Nos. 1,326 to 2,050, inclusive, except No. 2,040; Agricultural Experiment Station warrants, No. 189 to 325, inclusive; State Laboratory of Natural History warrants, Nos. 177 to 248, inclusive, except No. 225; School of Pharmacy warrants, Nos. 120 to 168, inclusive; School of Medicine warrants, Nos. 207 to 315, inclusive, and has found the same correct and duly receipted.

Your committee also examined the report of the Treasurer of the University, Elbridge G. Keith, for the quarter ending March 31, 1898, and found that the receipts for the quarter, together with the balances on hand, amounted to \$102,171.89; that the amount paid out on warrants drawn through the quarter was \$78,614.42, including overdrafts on funds of the School of Pharmacy and of the State Laboratory of Natural History, amounting to \$1,620.65; that the Experiment Station balance and the School of Medicine balance amount to \$25,178.12.

Respectfully submitted,

ALEX. MCLEAN, THOS. J. SMITH, ISAAC S. RAYMOND, Finance Committe.

Matters concerning the School of Pharmacy were referred to the Committee on the School of Pharmacy with power to act.

The board adjourned.

W. L. PILLSBURY,

Secretary.

F. M. McKAY, President.

# MEETING OF JULY 7, 1898.

The following call for a special meeting of the Board of Trustees of the University of Illinois was issued July 2, 1898:

"Upon the call of the President, Mr. F. M. McKay, there will be a special meeting of the Board of Trustees of the University of Illinois at 9 o'clock a. m., Thursday, July 7, 1898, in the Trustees' Room, Library Hall, Urbana, Illinois, to consider matters concerning the electrical department of the University, and such other business as may be duly presented."

There were present at the meeting Messrs. Bullard, McKay, McLean, Morrison, Raymond, and Smith and Mrs. Carriel; absent, Governor Tanner, Messrs. Armstrong, Freeman, and Pearce, and Mrs. Flower.

After some discussion of the subject for which the meeting was called, the Board took a recess until 11 o'clock.

After recess the Board received an invitation from Professor Davenport to visit the Experiment Station farm and see the planting of sugar beets, and the invitation was accepted on motion of Mr. Bullard.

President McKay presented Professor Swenson's resignation of his position of assistant professor of electrical engineering in the University.

Mr. Smith moved to accept the resignation, and then moved that further consideration of the matter be postponed until the September meeting of the Board.

The vote on the motion to postpone was as follows: Ayes—Messrs. Bullard, McLean, Morrison, Raymond, Smith and Mrs Carriel; nay —Mr. McKay, and the motion to postpone prevailed.

The Board adjourned.

W. L. PILLSBURY,

Secretary.

F. M. MCKAY, President.

# Financial Statement of the University of Illinois for the twelve months ending June 30, 1897.

RECEIPTS, JULY 1, 1896-JUNE 30, 1897.		
Balances— State appropriation, general State appropriation, Laboratory of Natural History U. S. Agricultural Experiment Station Overdraft current funds	166 28	\$170,593 26 1,237 08
Interest on endowment and land contracts Fees from students Departments and laboratories Miscellaneous. State appropriations. State appropriations, Laboratory Natural History U. S. Government U. S. Agricultural Experiment Station. School of Pharmacy. School of Medicine.	$\begin{array}{c} \$23,241\ 10\\ 22,915\ 95\\ 3,638\ 83\\ 7,407\ 21\\ 111,364\ 93\\ 9,900\ 00\\ 22,000\ 00\\ 18,018\ 67\\ 13,465\ 46\\ 3,152\ 00\\ \end{array}$	\$169, 356 18 \$35, 104 14
EXPENDITURES, JULY 1, 1896-JUNE 30, 1897.		\$404,460 32
Salaries for instruction	\$106, 455 35 13, 511 70 4, 610 90 16, 672 21 167, 987 25	309, 237 41
Laboratory of Natural History Agricultural Experiment Station School of Pharmacy School of Medicine	\$8,800 67 18,107 75 13,585 36 3,088 43	43,582 21
Balance		\$51,640 70 \$404,460 32

# WARRANTS FOR YEAR ENDING JUNE 30, 1898.

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# GENERAL UNIVERSITY WARRANTS.

No.	Date.		To whom.	For what.	Amour
	1897.		i		
1	1897. July  	1	C. A. Kofoid	Salary, part May and June, 1897	\$189
2			Miles Newberry		40
- 3	••		Lydia M. Hart	Drawings	31
4			U. & C. Elect. St. R'y Co	Gas and power	750
5	••		Odin Coal Co	Coal	1.110
6	••		Petty & Savers	Coal Cabinet	69
7			A. P. Carman	Potty ownongoe	3
8	••		E. G. Howe	···	6
- 9			H. E. Summers		25
10			Hack & Anderson	Printing catalogue	739
11	••			Jars, etc	5
12	••				11
$\overline{13}$			E. W. Sampson	Trays.	-9
14			Kny, Scheerer Co	Chemicals, etc	25
15	₽.		Richards & Co.	Milk tester	8
16	••		George W. Parker & Son	Cases, door, etc	64
17	••	- 1	Creamery Package Mfg Co.	Creamery apparatus etc.	16
18	••		C. & U. Phœnix Telephone Co.	Services to September 5, 1897	45
19	••		Union Mfg Co	Services to September 5, 1897 Water, 3 months, to July 1, 1897	125
20	••		Champaign County Herald	Printing proceedings, etc	88
21	••		Standard Oil Co	Oil	20
$\overline{22}$	• •		Richards & Co.	Tubing, filter, paper, etc	24
$\overline{23}$	• •		Charles W. Bird & Co.	Duplicator and supplies	3
$\tilde{24}$	••		Edward J. Nolan, treasurer	Proceedings for 1897	5
25	••		Ginn & Co	Subscription	$\tilde{2}$
$\overline{26}$	••		Crosby Steam Gauge and V. Co	Subscription	111
27	••		Whitall, Tatum & Co.	Chemicals	22
$\overline{28}$	••		Eichberg & Bear	Chemicals Wire mats, etc	19
$\frac{1}{28}$	••		Carl Fischer	Music	5
30	••		Public School Publishing Co	Mu-ic. Advertisement.	12
31	• •				20
$\overline{32}$	••		Ashcroft Mfg Co	Indicator cocks	11
33	••	J	J. H. Washburn	Membership fee, 1897	10
$\overline{34}$	••		Eimer & Amend	Thermometers, etc.	115
35	••		Eugene Dietzgen Co	Paper, cloth, etc. Brass castings	11
36	•• .		Diamond Clamp and Flask Co.	Brass castings	8
37	••		Ralph Allen	Jersey calf	25
38	• •		Cleveland Twist Drill Co	Socket, reamers, etc	4
39	••	1	Charles A. Schieren & Co	Cement.	1
40	••	1	James B. Clow & Sons	Unions, plugs, valves, etc	13
41	••	- 1	Fuller & Fuller Co	Corks, glass, drugs, etc.	115
42	••		Bausch & Lomb Optical Co	Minerals, microscope Stop watch Hay and straw	346
43	••		Riley Jewelry Co	Stop watch	4
44	••		H. McFadden & Bro	Hay and straw	7
45	••		F. D. Winkley.	Cover and tap	1
46	••		Orr & Lockett Hardware Co	Cover and tap Screw hooks, etc	4
47	••		J. C. Vaughan.	Seeds.	9
48	••		Lyon & Healey	Seeds	9
49	••		C. H. Evans & Co	Advertisement	5
50	• •	- [	G. E. Stechert.	Subscription, etc.	55
51	• •		Boyer Ry Speed Recorder Co	Charts. etc	3
$\tilde{52}$	••		Maltby & Wallace Co	Cap. screws. etc	12
53	••		Twin City Electric Co.	Cap, screws, etc Rubber tubing, etc	1
54	••		Mittendorf & Kiler	Wardrobe, glass. etc	15
55	••		J. D. Phillips	Lottering diplomas Flower pots	76
56	• •		Thomas Enorths	Flower nots	Ĭ

,

. Date		To whom.	For what.	Amoun
1897.			1	
July	1	E. H. Davis & Co	Alcohol. Tubing, etc. Hardware, plumbing, etc. Locks, keys, etc.	\$1 2
8	-	Goodrich Hard Rubber Co	Tubing, etc	78
9		Hubbard & Sons	Hardware, plumbing, etc	33 1
ő ··		Yale & Towne Mfg Co	Locks, keys, etc	11 (
1		The Smith Prem'rTypewrit'rCo	Ribbons	9 (
2		Western Banknote and Eng. Co	Diplomas	25
3		Engineering News Pub. Co	Advertisement, to July 17, 1897	6
1		Chicago Times-Herald	Description	31
5		Hammer Dry Plate Co	Dry plates	$\begin{array}{c} 10\\2\end{array}$
			Typewriting	4
		T U Trorott	Tin galvanized iron etc	12
		A F Wuestemann	Ston watch and renairing	$1\hat{2}$ 6
í ··		A C McClurg & Co	Printing invitations and stationery	151
í ··		D H Ll vde & Son	Books, supplies, etc.	12
		William Price.	Calcimining, painting, etc	101
3		E. Henry.	Janitor supplies. etc	60
		The Gazette	Printing announcement, etc	222
5		C. T. Wilder	Blue prints	57
July	10	F. M. McKay	Expenses to board meeting	160
		Alex. McLean	Alcohol. Tubing, etc. Hardware, plumbing, etc. Locks, keys, etc. Kibbons Diplomas. Advertisement, to July 17, 1897 Dry plates Typewriting. Tees, unions, etc. Tin, galvanized iron, etc. Stop watch and repairing. Printing invitations and stationery Books, supplies, etc. Qalcimining, painting, etc. Janitor supplies, etc. Printing announcement, etc. Blue prints. Expenses to board meeting.  Services and expenses Laws of 1897. Mimeograph work. Stakes Expenses	28
3		J. E. Armstrong		67
		T. J. Smith		95
21		Isaac S. Raymond	9	
		Mann, Haves & Miller	Services and expenses Laws of 1897 Mimeograph work. Stakes. Expenses	835
	•	Chicago Legal News Co	Laws of 1897	$\frac{2}{17}$
3		H. P. Harris	Mimeograph work	10
			Stakes	61
		Pohingon & Puun	Tost pine fruelay ote	56
· · ·		A P Cunningham & Son	Drugs hasket hulls ate	25
• •		Henry Trevett	Hardware etc	100
···		H. P. Harris Bevis & Co. B. V. Swens n. Robinson & Burr. A. P. Cunningham & Son, Henry Trevett. C. A. Besore. G. C. Willis. S. A. Forbes	Stakes. Expenses Test pine, fre clay, etc Drugs, basket balls, etc Hardware, etc. Lumber, etc. Bunting, crash, etc. Expenses.	149
<u>í</u>		G C Willis	Bunting, crash, etc.	139
		S A. Forbes.	Expenses	57
• • •		S A. Forbes. W. O. Krohn		38
••		Goes Lithograph ng Co	Printing warrant books Grading, hauling, etc	41 (
••		T. R. Leal	Grading, hauling, etc	59 (
••		Goes Lithograph ng Co T. K. Leal Amos F. Moore Warner & Swasey. Hubbard & Sons		425
· · ·		Warner & Swasey	Toles ope. Hardware, etc. Expenses and lumber. Lumber	1,200
1		Hubbard & Sons	Hardware, etc	20
		1. O. Bedamick	Expenses and lumber	12 2
		J. C. Sedgwick James H. Rice Co Charles H. Mears & Co	Lumper	23
· · ·	10	Charles H. Mears & Co	Printing proposals	249 4 40 8
July,	15	Tribuno Co	r rinting proposais	34
••		Ashero t Mfr Co	Indiantors etc	36
		William Price	Painting	36 30
••		W. W. Walls & Co.	Lumber	81
		Champaian County Herald	Printing letter head	34
•••		Crosby Steam Gauge and V. Co	Cards.	2 (
• • •		Champaign Supply Co	Gat. valves, etc	14 (
••		A. H. Abbott & Co	Mats	15
		Western Union Telegraph Co	Telegrams for May and June	38 (
1		A. B. Dick Co	Mimeograph paper, etc	5 '
		D. Appleton & Co	Books	. 6
		Ward Bros	Binding. etc	101
		Inomas Naughton	Photographs	7
		Unaries A. Besore	Lumper	60
		T H Trovott	Jabon handmana ata	3 ( 13 (
	- 1	Clayton F Summy Co	Tuning pianos	13 .
		Twin City Electric Co	Rettories etc	9
••		B. V. Swenson	Lumber Printing proposals Indicators, etc. Painting Lumber Printing letter head Cards. Gat. valves, ete. Mats Telegrams for May and June Mimeograph paper, etc. Books. Binding. etc. Photographs. Lumber Sash. Labor, hardware, etc. Tuning pianos Batteries, etc. Expenses wiring building. etc. Postage Su drv items	20
		Isaac Fielding	Postage	35
• •		W. W. Lindley.	Postage	120 (
••		S. W. Shattuck, business mgr	Su dry items	84 6
• •	ļ	S. W. Shattuck, business mer.	Pay-rolls of students. June. 1897	542 \$
• •	ĺ	<ul> <li>Baat Filting</li></ul>	Su dry items Pay-rolls of students, June, 1897 Pay-rolls of men. June, 1897 Salary, July, 1897.	620 4
Taalar	31	A. S. Draper	Salary, July, 1897	583 3
Joury	- [	T. J. Burrill	44 =	200 (
July	1	W Chattmal	••	166 6
5 my	1	5. W. Sualluck		
5 ury . 		N. C. Ricker	• • •	191 6
···		S. W. Shattler N. C. Ricker Ira O. Baker S. A. Forbes U. W. Rolfe		191 ( 183 ) 83 )

# Warrants-Continued.

# UNIVERSITY OF ILLINOIS.

# Warrants – Continued.

		To whom.		For what.
1896.		1		
uly.	31	D. McIntosh A. N. Talbot A. W. Palmer F. F. Frederick S. W. Parr	Salary, July.	1897
	-	A. N. Talbot	, , , , , , , , , , , , , , , , , , ,	
• •		A. W. Palmer	••	
••		F. F. Frederick		
		D. McIntosh A. N. Talbot. F. F. Frederick S. W. Parr. H. J. Barton C. M. Moss D. K. Dodge L. P. Breckenridge. David Kinlev. Eugene Dayenport		·····
		H. J. Barton		
		D. K. Dodgo	••	•••••
		L P Broakonnidgo	••	
		David Kinley		
		Arnold Tompkins A. P. Carman George W. Myers.	••	
• •		Arnold Tompkins	••	
٠.		A. P. Carman		
• •		George W. Myers.	• • 1	
• •		H. E. Summers	••	
••		E. J. Townsend	••	
••		E. B. Greene		
		James M White	1	
		Katharine Merrill		
		W. U. Kronn.		
••		W. D. Pongo		
		H S Grindley		
		T A. (lark		
		B. V. Swensor.		· · · · · · · · · · · · · · · · · · ·
4.4		A. H. Daniels	••	
		Percy F. Bicknell	••	
4.1		Geo. D. Fairfield	••	
••		George W. Myers. H. E. Summers. E. J. Townsend. E. B. Greene James M White Katharine Merrill W. O. Krohn. W. H. Van Dervoort W. D. Pence H. S. Grindley. T. A. Clark. B. V. Swenson. A. H Daniels. Percy F. Bicknell Geo. D. Fairfield Chas. W. Tooke. Walter H. Jones. Henry H. Everett. Fred A. Sager.	••	
		Walter H. Jones.		
		Henry H. Everett		
		Fred A. Sager		
		Fred A. Sager. Wm. Esty Lewis A. Rhoades Frank Smith.		
4.4		Lewis A. Knoades	••	·····
		C D MaLono		
* *		P G Holden	• •	
		I E MaGilwrow		
		W J Fraser	••	
4.4		J. C. Blair.	••	
4.4		Edward G. Howe	••	
4.4		W. L. Pillsbury	••	
• •		Geo. W. Graham	••	
••		Frank Smith. C. D. McLane. P. G. Holden. J. E. McGilvrey. W. J. Fraser. J. C. Blair. Edward G. Howe. W. L. Pillsbury. Geo. W. Graham Lillie Heath. Sue W. Ford	**	
•••		Sue W. Ford		
••		L. A. Boice		
		W. F Marker		
		D. Meintosh		•••••
		Richard IIttenweiler		
		W. L. Philsbury. Geo. W. Graham Lillie Heath Sue W. Ford. L. A. Boice. W. F Marker D. McIntosh. C V. Millar. Richard Uttonweiler. Henry J East. W. R. Hoffman. L. G. Lathrop. J. J. Johnson. Joe Morrow	••	·····
		W R Hoffman	• •	•••••
• •		L. G. Lathrop.		• • • • • • • • • • • • • • • • • • • •
		J. J. Johnson	••	
• •		Joe Morrow	••	
• •		Albert R. Lee.	••	
		B. F. Sturtevant Co.	Extras on hea	ating contract.
••		H. M. Dickson Mfg Co	Changing cou	inters
••		Robinson & Burr.	Speaking tub	9es
		Peoria Steam Marble Works	Contract and	extras
••		Kicker & White.	Architects' c	ommission
		H. M. R. Construction Co	Name plates.	
		A. D. Wuesteman.	medals and t	argets
		Brickbullder Fublishing Co	abscription	to January, 1898
		W I. Pilleburg	Canrometer.	mial ata
••		S W Shattuck business men	DAPenses to 1	riai, etc
• •		S W Shattuck, Jusiness mgr.	Scholarshing	•••••
		Warner & Swasev	Observatory	equipment
		Geo. Carpenter & Co	Sails rented	edarbinent
		Pittsburgh Plate Glass Co	(flass	
		Dickinson Cement Co.	Cement.	
* *		J. C. Sedgwick	Lumber.	
		Geo. W. Parker & Son	Wire doors	te
		Chas. Howison	Work on dray	vings
		Wie Decaler	01	

# Warrants-Continued.

o.	Date.		To whom.	For what.	Amou
	1897.				
10	July	31	Office Specialty M't'g Co.	Binding case's, etc Photographs Hardware, etc. Painting repairs, etc. Lumber Pipe fittings, etc. Frames, etc. Advertisement. Tables	\$6
11		0.	Thos. Naughton	Photographs	.9
12	• •		Hubbard & Sons	Hardware, etc.	· 9
13	• •		A. C. McClurg & Co	Painting repairs, etc	14
4	••		Chas. A. Besore.	Lumber	54
15	• •		Champaign Supply Co	Pipe fittings, etc	17
6	••		Walker & Mullekin	Frames. etc	7
17			Ill. Soc. of Eng. and Surveyors.	Advertisement	10
8	• •		Petty & Sayers	Tables	20
9			E. Davenport	Expenses	18
0	••		Chicago Chonicle Co	Advertising	69
1			S. W. Shattuck, Business M'g'r	Freight	99
2				Expressage	57
3			TAT ATT F 1. 31.	Sundry items	82
45			W. W. Lindley	Advertisement. Tables Expenses Advertising Freight Expressage Sundry items Postage Expenses.	58
C C	4	4.4	T E Amathana	Expenses	10
7	Aug.	14	J. E. Armstrong	**	10
8	• •		S A Bullard	••	89
$\frac{9}{9}$			W I. Pillebury	••	63 78
0	• •		T R Log	(Frading hauling etc.	69
ĭ	••		R. W. Stark	Salary July 1897	50
$\overline{2}$	֥		Edward Bush	Collecting samples	3
3	••		Chas. T. Wilder	Blue prints	61
4	••		Sheldon Brick Co	Postage Expenses. 	16
5	••		J. C. Sedgwick.	Expenses, etc	9
6	• •		W. W. Walls & Co	Lumber	10
7	••		Seth J. Temple	Services as architect	200
8			A. Swannell	Glass, drugs, etc	27
9	••		Hill Art Glass and Dec'r'tive Co	Shellac, finishing, etc	741
0			McClellan & Price	Contract painting, etc	52
1			J. D. Green	Roofing cornice, labor, etc	275
2			Alexander Lumber Co	Lime, plaster, etc	4
3			J. M Chase	Painting	140 33
4			The Gazette	Printing	33
5			Knowlton & Bennett	Tracing paper, blanks, etc	9
67			Mittendori & Kiler	Frames, chairs, etc	13
8	••		Chicago Recora	Adventisement	33
9	••		Cheg A Bagoro	Auvertisement	197
0	• •		P E Tainfor	Comont walks	1,143
ĭ	4.6		C. D. McLane	Services as architect	200
$\overline{2}$			S. W. Shattuck Business M'g'r	Taxes on lands	1,450
3	• •		E. G. Keith	Services of clerk	150
4	• •		J. C. McFarland	Extra on copper work	8
5	• •		Minnesota Sandstone Co	Contract for cut stone	5,157
6	••		J. C. McFarland	" roofiing	716
7	••		Robinson & Burr. Peoria Steam Marble Works John Caretti & Co Twin City Electric Co Jas. H. Rice Co	plumbing	346
8			Peoria Steam Marble Works	marble work	1,114
9			Jonn Caretti & Co	mosaic work	761
0			Twin City Electric Co	wiring	159
1			Jas, n. f. Ce Co	glass	288
$\frac{2}{3}$	••		Chiaggo Angh'l Iron Work-	wiring glass plastering ornamental iron fire proofing hardware mill work painting Emery cloth Air pump, tubes, etc. Oak cases and cards Water pipe Locks, knobs, etc. Current and gas Contract for flooring library building Repairing slate roof Labor, olds, etc. Plastering, etc. Poors Lorks humber	1,206
3 4			Expanded Motol Fine Press	fine pressing	1, 548
4 5			Orr & Lockett Hardware Co	" hardware	1,219
6			H M Dickson Mfg Co	** mill work	831
7			Hill Art Glass and Dec'r'tive Co	" nainting	664
8			Chas, H. Besly & Co	Emery cloth	1
9	••		Eimer & Amend	Air pump, tubes, etc.	16
0	• •		Library Bureau	Oak cases and cards	27
1	* *		Jas. B. Clow & Sons	Water pipe	21
2	••		Orr & Lockett Hardware Co	Locks, knobs, etc	21
3	**		U. & C. Electric Street R'y Co.	Current and gas	651
4	Aug.	20	T. Wilee Co	Contract for flooring	162
5			H. M. R. Construction Co	library building	1,099
6			Wylie Miller	Repairing slate roof	204 162
7			Hill Art Glass and Dec'r'tive Co	Labor, oils, etc	162
8			Vic Beasley	Plastering, etc	80
9			H. M. Dickson Mfg. Co	Doors, locks, lumber	68
0			Unampaign County Herald	Printing programs, etc	103 267 19
1			The Gazette	Labor, oils, etc. Plastering, etc. Doors, locks, lumber. Printing programs, etc. Photographs Metal polish. Painting roof, etc. Clock, oil, etc.	267
32			Cldham Prog	Motol polich	19
53 34			Wm Price Estate	Pointing roof etc	152
			IN III. FILLE ENSTATE	r annung root, etc	152

# UNIVERSITY OF ILLINOIS.

# Warrants—Continued.

	Date.		/ To whom.		For what.		Amo
1	1897.		······································				
86 <sup>1</sup> .	Aug.	20	Champaign Supply Co McBeath & Park Geo. W. Parker & Son Berkefeld Filter Co. Fuller & Fuller Co Prentiss Tool and Supply Co Mary Turner Carriel. T. R. Leal. Isaac Fielding. W. W. Lindley. S. W. Shattuck, Business Mgr.	Pine tees, e	te		\$
17		20	McBeath & Park	Cleese cloth	hats		φ.
33	• •		Geo W Parker & Son	Book case		••••••	
9	• •		Berkefeld Filter Co.	Filters		••••••	
ŏ	••		Fuller & Fuller Co	Iodine etc.			
)i	• •		Prentiss Tool and Supply Co	Drill			5
$\hat{2}$	• •		Mary Turner Carriel	Expenses.			
3	••		T. R. Leal	Grading, ha	uling.etc.		1
14	• •		Isaac Fielding	Postage			2
5	• •		W. W. Lindley	••			2
)6	• •		S. W. Shattuck, Business Mgr.	Petty expen	ses		1
7	••			Freight			20
8				Expressage			1 2
9			** ** **	Pay roll of n	nen, July.	1897	1,4
0				Pay roll of s	tudents, J	uly,1897	29
1/2	Aug.	31	A. S. Draper	Salary, Au	gust, 1897	1897 uly, 1897	58
2			A. S. Draper T. J. Burrill S. W. Shattuck N. C. Ricker				20
3			S. W. Snattuck				16
4			IN. U. Kicker				19
5			Ira O. Baker S. A. Forbes C. W. Rolfe				18
6			O. A. FOIDES				. 17
8			D MaIntosh	••	• •	·····	. 17
9			D. McIntosh	• •		•••••	10
0			D. McIntosh A. N. Talbot. F. F. Frederick S. W. Parner. H. J. Barton Uhas. M. Moss D. K. Dodge. L. P. Breckenridge David Kinley	• •			17 17
1			F F Frederick		* *		15
2	••		S W Parr	• •	• •		17
3			H. J. Barton		• •		16
4	• •	1	Chas. M. Moss.	••	• •		17
5	• •		D. K. Dodge.	••	• •		16
6			L P. Breckenridge	• •	• •		16
7			David Kinley	••	• •		18
8			Eugene Davenport	••	••		9
9	**		David Kinley Eugene Davenport Arnold Tompkins	**			15
0			A. P. Carman	••		· · · · · · · · · · · · · · · ·	18
1		- 1	A. P. Carman				14
2	4.4		H. E. Summers Edgar J. Townsend		4.4		13
3			Edgar J. Townsend				13
4			James M. White				14
5	••		Vathening Maurill		• •	•••••	12 10
7			Wm O Krohn				15
8			Wm H VenDervoort			••••••••••	13
9	4.4	1	W. D. Pence H. S. Grindley T. A. Clark B. V. Swenson A. H. Daniels		* *		12
Ő	4 6		H. S. Grindley	4.4	• •		10
ĭ			T. A. Clark	••			$\hat{1}\hat{2}$
2			B. V. Swenson	• •	4.6		10
3	4 4		A. H. Daniels	••	• •		10
1			Percy F. Bicknell		• •		12
5	٠٠		Percy F. Bicknell Geo. D. Fairfield	• •	• •		10
6	••		Chas W. Tooke	• •	• •		10
7	• •	- 1	Wulter H. Jones	••	••	•••••	7
3			Henry H. Everett Fred A. Sager William Esty			••••	11
2			Fred A. Sager	••			. 9
0		- 1	william Esty			• • • • • • • • • • • • • • •	10
1			Lewis A. Rhoades Frank Smith		••	•••••	12
3			C D Malara				10 9
3		- 1	C. D. McLane		٠.		9 5
5	••		P. G. Holden. J. E. McGilvery		* *		10
3		1	W. J. Fraser.		• •		10
ź	• • •		foseph C. Blair	• •	* *		4
3	* *	}	Joseph C. Blair Edward G. Howe		• •		15
j.	••		W. L. Pillsbury	• •	••		15
j	• •		W. L. Pillsbury Geo. W. Graham	• •	• •		10
í	••		Lillie Heath		••		6
2			Sue W. Ford	* *	• •		5
3	• •		Sue W. Ford L. A. Boice	* *	• •		5
1		1	Wm. F. Marker		• •		5
5			Joe Morrow		••		7
3	4.4	- [	Wm. F. Marker Joe Morrow		••		20
7	4.4			••	* *		5
3	**	]]	Henry J. East W. R. Hoffman J. J. Johnson L. G. Lathrop	**	••		4
	• •	17	W R Hoffman		••		3
			1. 10. HOH man				3

# Warrants-Continued.

۰.	Date.		To whom.	For what.	Amóun
1	1007			Salary, August, 1897 Part salary to June 30, 1897 Salary 3 monhes. to September, 1897 Final payment on heating contract. Indicator springs. Locks and keys. Balance Tubing, etc. Microscope lenses, etc. Bottles, tubing, etc. Microscope lenses, etc. Bottles, tubing, etc. More subies. Bottles, tubing, etc. Bottles, tubing, etc. Bottles, tubing, etc. Bottles, tubing, etc. Microscope lenses, etc. Bottles, tubing, etc. Horaz tfor tunnels. Lath Pipe, tees, etc. Advertisement. Thermometers. Grass seeds, plants, etc. Hardware. Sand. Printing Pipe Startilizers, nails, etc. Books., etc. Picture frames. Bubber bandages Safe. Sandpaper, etc. Duplicator Cabinet. Ditching. Labor and material. Chemicals, etc. Labor and material. Chemicals. Advertisement. Cutter and threader Castings. Blue prints. Glass, putty, etc. Lumber. Awpings, etc. Flooring, etc. Sand. Apparatus. Soda.	
2	1897. Aug.	31	D. McIntosh	Salary, August, 1897	\$75
3	Aug.	51	C. V. Millar	Satary, August, 1001	60
4	• •		R. W. Stark		50
5	••		S. W. Shattuck	Part salary to June 30, 1897	50
6	• •		L. P. Breckenridge	Salary 3 monhes, to September, 1897	62 1,357 10
7	••		B. F. Sturtevant Co	Final payment on heating contract.	1,357
8	• •		Ascheroft Mfg. Co	Indicator springs	10
9			Yale & Towne M'f'g Co	Locks and keys	4
0			Eimer & Amend.	Balance Tubing, etc	116
1			Bausch & Lomb Optical Co	Microscope lenses, etc	84
2			Richards & Co	Bottles, tubing. etc	35
3			Rochester Optical Co	Photographic supplies	77
4			Wingler Prog. ().	Bolts and fron	20
5	* *		John P. Bongott	Contract for tunnels	335
7	• •		Putnem Machine Co	Loth	6,882 500
8			Cuono Co	Dating toon of a	175
9	* *		Engineering News Pub Co	Advertisement	6
0			A P Cunningham & Son	Thermometers	1
1	••		J. C. Vanghan	Grass seeds, plants etc	19
2	* *		Orr & Lockett Hardware Co	Hardware	8
3	••		Sheldon Brick Co	Sand	5
4	• •		Champaign Times	Printing	1 8
5	••		Home Comfort Heat. & Plum.Co	Pipe	19
6	• •		Union Mfg Co	Water, 3 months	125
7	••		E. Henry	Oils, etc	6
8	••		Hubbard & Sons	Stertilizers, nails, etc	19
9	••		G. E. Stechert	Books., etc	34
0			Mittendorf & Kiler	Picture frames	8
1			Watson Faulkner	Rubber bandages	3
2			Mosler Safe Co	Safe	42
3			T. H. Trevett	Sandpaper, etc	2
1			Lawton & ( o	Duplicator	6
5			Typewriter Emporium	Cabinet	11
3	* *		Agricultural Experiment Stat'n	Ditching.	007
3	٠.		Repair shop, Univ. of III	Labor and material	287
3			Chom Laboratory	Chamicala ata	1,043
5	••		Machanical department	Labor and metarial	355
	Sept.	15	Richards & Co	Chemicals	709
2	Dep.	10	The Inter Ocean	Advertisement	1 1
3	• •		Tribune Co		ŝ
i	**		Smalley Mfg Co.	Cutter and threader	108
5	••	- {	Crosby St'm Gage & Valve Co.	Castings	4
3	• •		Chas. T. Wilder	Blue prints	48
7	• •		H. Swannell	Glass, putty, etc	9
3			W. W. Walls & Co	Lumber	17
2	••		Twin City Electric Co	Awnings, etc	45
	••		Unas. A. Besore	Flooring, etc	108
			reuty & Sayers	Sana	15
3	••		wш. J. Boimer	Apparatus	14
			Champaign Supply Co	Ninnlog ninog etc	3
			Malthy & Wallago Co	Pino toos ote	45 38
		- 1	D H Lloyd & Son	Int.	38
	••		Jas B Clow & Son	Pine	27
			E. H. Sargent & Co	Tuhe	1
	• •		A. C. McClurg & Co	Stationery, etc.	98
	••		Chicago Carpet Co	Linoleum matting etc	501
	••		<b>brunswick Balke Collender Co</b>	Chairs, desks, etc.	1,271
			Western Union Telegraph Co	Telegrams	3
	4.4	1	O. S. Blakeslee	Platinum wire, etc	335
	4.4		J B. Colt & Co	Lantern, etc	237
	**		V. W. Shuck	Level. etc	237
	* *		Library Bureau	Contract for book stacks	300
	**			Contracts for brackets, floors, etc	2,750
3	**		Gresham & Lloyd	Contract for lighting fixtures	1,400
	••	- 1	F. J. Foote	Work on batteries, etc	90
2			E. H. Renner & Bro	Work with team	10
ų.			J. U. Sedgwick	Ventilating Military Hall	64
2			Vic Beasley	Plastering	256 31
3			Unicago Times Herald	Aqvertisement	31
1		-1	Unas, Mullendorf	Gastings.         Blue prints.         Glass, putty, etc.         Lumber.         Awnings, etc.         Flooring, etc.         Sand	22
5			Smith Fremier Typewriter Co.	1 ypewriter and cabinet	138
		1	wm. Frice Estate	Contract for paint'g & calcimining.	789

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# UNIVERSITY OF ILLINOIS. [Sept. 15,

# Warrants-Continued.

•			To whom.	For what. Final payment Expenses Hauling and grading Contract for heating mains. Battery cells Contract for heating tunnels Books. Looker cases.			Amoun
1			3				
8	Sept.	15	Ricker & White	Final payment	```		\$475
$\tilde{9}$		10	Geo. W. Myers	Expenses			12
0			Walter H. Jones				15
1	• •		T. R. Leal	Hauling and gi	adin	g	78
2			Robinson & Burr	Contract for he	ating	; mains	1,450 224
3			Ohio Storage Battery Co	Battery cells	• • • • • • •	••••••••	224
1			John B. Bennett.	Contract for ne	ating	tunnels	910
5			LaFayette Lumber Mfg Co	Books Locker cases	• • • • • •	•••••	400 220
6	••		S. W. Shattuck, business m'g'r				43
3	••		5. W. Shattuck, Susiness in g i	Freightage	• • • • • •		216
9	• •		** ** **	Pay roll of stud Pay roll of men Salary, Septem	ents.	August, 1897	394
0	• •			Pay roll of mer	, Aug	ust, 1897	1.778
1	Sept	30	A. S. Draper T. J. Burrill	Salary, Septem	ber,	1897	583
4			T. J. Burrill. S. W. Shattuck			•••••	200
3			S. W. Shattuck			• • • • • • • • • • • • • • • • • • • •	166
ŀ					••		191
5			S A Forbes	• •	••		, 187 83
7	••		$C W Rolf_{\Theta}$	••	• •		175
	••		D. McIntosh	••	4.4-		50
í	••		A. C. Baker. S. A. Forbes C. W. Rolfe. D. McIntosh A. N. Talbot.	••	••		175
j.	••		A. W. Palmer F. F. Frederick. S. W. Parr. H. J. Barton.	• •	* *		175
L	••		F. F. Frederick	** .	• •		158
	••		S. W. Parr		••		175
	**		H. J. Barton			•••••	175
			Chas. M. Moss			· · · · · · · · · · · · · · · · · · ·	175
			Chas. M. Moss D. K. Dodge L. P. Breckenridge		••	·····	166
	••		David Kiploy	4 1	٠.		187 187
i.	••		David Kinley Eugene Davenport Arnold Tompkins	* *	4 4		91
	••		Arnold Tompkins	* *	••		166
	• •		A. P. Carman.	• •	••		187
	••		George W. Myers	••	••		150
2	••		Edgar J. Townsend	**	••		137
1	••		A. P. Carman. George W. Myers. Edgar J. Townsend E. B. Greene.				141
							166
į	••		G. C. Pickett. Katharine Sharp Geo. T. Kemp. James M. White.			•••••	125
	••		Coo II Romp		٠.		166 166
3	••		James M White	• •	• •		133
	**		L. A Bhoades	••	• •		141
)	••		H. H. Everett	* *	••		133
	••		W. H. Van Dervoort	**	••		137
	••		A are bloodes. H. H Everett W. H. Van Dervoort. W. D. Pence. Walter H. Jones. H. S. Gründler				133
3	••		Walter H. Jones		••		100
			H. S. Grindley. T. A <sup>§</sup> Clark. H. S. Piatt B. V. Swenson.		••		108
5	••		T. A. Ulark	••	• •		133 100
	••		B V Swongon	••	• •		108
3	• •		A. H. Daniels	, ••	÷ •		108
í	••		George D. Fairfield.	••	۴.		108
	••		B. V. Swenson. A. H. Daniels George D. Fairfield Charles W. Tooke. Fred A. Sager. William Esty Frank Smith	**	••		108
	••		Fred A. Sager	••	**		100
	••		William Esty		••		108
	**		Frank Smith	**	••		100
			C D. McLane	**	••	· · · · · · · · · · · · · · · · · · ·	100
			C. D. McLane. P. G. Holden. J. E. McGilvrey. S. J. Temple. J. D. Phillips. Violet D. Jayne. Mary L. Jones. Osage Oujak		4.		54 108
			S. T. Temple	••	• •		100
3	••		J. D. Phillins	••	••		83
ý.	••		Violet D. Javne	••	••		125
	* *		Mary L. Jones	••	••		100
	**		Oscar Quick	••	••		80
	••		Edward J. Lake		••		70
	••		Ella H. Morrison		••		100
4			Mary L. Jones. Oscar Quick. Edward J. Lake. Ella H. Morrison. J. George A. Huff W. J. Fraser Carlton R. Rose. Joseph C. Blair. Margaret Mann Alison Fernie. Agnes. S Cook. H. C. Howland C. H. Rowell Geo. H. Meyer.		••	····	120
j.	•••		w. J. Fraser		••	•••••	37 80
	••		Josoph C. Blair	••	• •		45
3			Margaret Mann		••		45
	• •		Alison Fernie	• •	• •		100
j			Agnes S Cook.	**	• •		70
í.	••		H. C. Howland	••	4.4		80
			A 17 B	4.4	* *		70

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<i>warrants</i> —Continued	ants—Continue	ed.
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•	Date.		To whom.		For what	t.	Amou
	1897.	1					
4		10	W. H. Kavanaugh John P. Hylan Alice Putnam. A. C. Burnham C. F. Hottes W. C. Brenke Jessie Y. Fox. G. D. Hubbard H. A. Webber C. V. Seastone. R. B. Ketchum	Salary, Sept	ember, 189	96.,	8
Ð			John P. Hylan				8
6			Alice Putnam				8
7			A. C. Burnham				90
3			W O Bronke			<i>•</i> • • • • • • • • • • • • • • • • • •	70
'n			Jassie V For	••	·· ·	•••••	3
	••		G. D. Hubbard	••	•• •		5
	••		H. A. Webber		••		5
ļ	••		C. V. Seastone	••	•• •		51
-			R. B. Ketchum				5
5			Jas H. McKee				5
į			A. V. Seastone. R. B. Ketchum				5
3			John L. Sammis				5
1			C B Clark	••			8
ł			A R. Curtiss			••••	8
Į	••		Henry Jones	••	• •		Ğ
I	••		J. H. Wilson	••	• •		6
	••	•	D. H. Carnaham	••	••		3
	••	1	H. C. Hobart		••		3
			E. W. Poole		••		90 90
l			F. W. Schacht.				3
			A. E. Paul			•••••	3
			M. B. Hammond. C. B. Clark. A. R. Curtiss. Henry Jones. J. H. Wilson. D. H. Carnaham. H. C. Hobart E. W. Poole. F. W. Schacht. A. E. Paul A. St. J. Williamson E. G. Howe. Lillie A. Clendenin. R. S. Douglass C. B. Randolph.	••			1 15
			Lillie A Clendenin		- •	· · · · · · · · · · · · · · · · · · ·	10
	••		R. S. Douglass	• •	••	· · · · · · · · · · · · · · · · · · ·	7
Ì			C. B. Randolph	••	••		7
	•••		C. B. Randolph. C. W. Alvord . W. L. Pillsbury. George W. Graham		••		7
			W. L. Pillsbury		••		16 10
			George W. Graham				10
1			Lillie Heath				1 7
			Sue W. Ford				5
			W E Morkov			· · · · · · · · · · · · · · · · · · ·	5
			Jonnie M Leffin		••	•••••	4
	••		S. W. Shattuck	Salary 3 mo	nths to de	te	10
1			D. McIntosh	Salary, Sept	ember. 8	ate 97	7
			C. V. Millar				7
			R. W. Stark		•••		5
		ł	F. J. Foote	1			7
1		1	F W Instra			•••••	75
	••		M T Lindson		· · · ·		4
	••	1	I. H. Allen				4
	••		Richard Uttenweiler	••	• •		6
	••		Fred Atkinson	••	••		3
	••		C. B. Ewalt		* *		2
			George W. Graham Lillie Heath Sue W. Ford L. A. Boice W. F Ford Jennie M. Laffin S. W. Shattuck D. McIntosh. C. V. Millar. R. W. Stark F. J. Foote Joe Morrow E. W. Justus. M. T. Lindsey I. H. Allen. Richard Uttenweiler. Fred Atkinson C. B. Ewalt. H. J. East. Samuel Morse. W. R. Hoffman L. G. Lathrop J. J. Johnson Elbert E. Pound A. S. Golden. Allen McGlaughlin Philip Schwehm J. Bishop & Co. Arthur W. Palmer Fruller & Fuller Co. Cambridge Botanical Supply Co Isaaca S. Raymond F. M. McKay S. A. Bullard J. E. McLane				4
			Samuel Morse				
			W. K. Homman			· · · · · · · · · · · · · · · · · · ·	3
			L. G. Lathrop			•••••	33
	•••		Elbert E. Pound		••	•••••	3
	••		A. S. Golden		••	•••••	3
	· · ·		Allen McGlaughlin	• •	• •		3
	••		Philip Schwehm	••	••		2
			J. Bishop & Co	Repairs on r	latinum v	ware	11
			Arthur W. Palmer	Expenses			1
			Fuller & Fuller Co	Acids, ammo	onia, etc	• • • • • • • • • • • • • • • • • • •	6
			Campridge Botanical Supply Co	Covers, pape	ers, etc		6
			F M McKov	Expenses to	uoard me	eeing	62
	••		S. A. Bullard	••	••		
	••		J. E. Armstrong	••	••	••••••	1
)	•• •		Alex. McLane .	••	• •		13
			Wilson, Moore & McIlvaine	Legal servic	es	·····	5
2	••		Isaac Fielding	Postage star	nps		3
3	••	1	W. W. Lindley				5
	1		Alex. McLane. Wilson, Moore & McIlvaine Isaac Fielding. W. W. Lindley G. E. Stechert.	Books		• • • • • • • • • • • • • • • • • • •	6
5	1						
•			Advancement of Science	Subscription	1	•••••	
6	1		Goodsell Observatory of Carle- ton College				
	•••						21

-19 U. I.

[Sept. 30,

•	Date.		To whom.	For what.	Amou
Í	1007	Ī			1
3	1897. Sept. 3	۵	Twin City Electric Co	Gas fixtures	\$10
3			E. Henry	Gas fixtures. Supplies, etc. Pinting pamphlets, etc. Pipe supplies, etc. Cloth. Services to December 15, 1897. Services Sonometer, coil, etc. Mimeograph work. Laundry work. Rubber tubing, chemicals, etc. Acids and filters Chemicals.	32
Ď			The Gazette	Printing pamphlets. etc	17
i	••		Champaign Supply Co	Pipe supplies, etc	22
2	• •		G. W. Yates	Cloth	1
3	••		C. & U. Phoenix Telephone Co.	Services to December 15, 1897	49
L)		- [	D. E. Harris & Co	Services	23
5		1	W. A. Olmsted Scientic Co	Sonometer, coil, etc	51
5			H. P. Harris	Mimeograph work	10
[]			Empire Steam Laundry	Laundry work	6
3		ŀ	Eimer & Amend	A aida and filtana	86 15
2			Bishanda & Co	Chon icola	374
	••	ŀ	Filenards & Co	Frances	314
	• •		Katharing I. Shawn	mapeuses	15
8		ł	Gere & Philbrick	Examination of title	12
		Ŧ	Lyon & Hoaly	Music stand etc	7
	* *		Clayton F Summy Co	Tuning pianos	18
	••	1	Richards & Co	Bottles, tubes, etc.	22
1	••.		John B. Bennett	Cement tops for tables. etc	11
3	••	ſ	Henry Trevett	Hardware	106
	••		C. N. Clark & Co	Labor	4
	••		Standard Oil Co	Rubber tubing, chemicals, etc Acids and filters Chemicals Expenses 	10
l	• •		Chas. A. Besore	Lumber	359
		ľ	Hubbard & Sons	Hardware, plumbing, etc	168
	••		Sheldon Brick Co	Sand	1
	**		Wm. Price estate	Tar oil, etc	15
			Robinson & Burr	Pipe fittings, etc	118
			R. S. Wilber	Drayage	65
1		-	J. C. Sedgwick	Labor	20
			Mittendorf & Kiler	Picture frames	15
1			Champaign Cabinet Co	Book case.	19
1		ł	H. Swannell	Toilet paper, supplies, etc	75
			Petty & Sayers		$\frac{1}{9}$
		Ľ	Cunningnam Bros	Plates, etc	82
			Wallace Supply Co	Choirg	27
			Walker & Mulliken	Chemicala eta	22
			Lond & Rumphon Co	Lights of class	25
	••		T H Castor & Co	Enevelopedia	1
	* *		Whitell Tetum & Co	Bottles	3
	• •		E. Davenport & Co	Paper cloth.etc	16
		1	Frank W. Dorr	Specimens of earthworms	4
1	* • •		Carl Fischer J. Church Co Yale & Towne Mfg Co Lawton & Co Geo. E. Marshall & Co Alox Nielscon	Music	7
	• •		J. Church Co	Sheet music. Padlocks, keys, etc. Duplicators and refilling. Record books, etc.	23
	••		Yale & Towne Mfg Co	Padlocks, keys, etc	22
	* *	ľ	Lawton & Co	Duplicators and refilling	15
1	••	-	Geo. E. Marshall & Co	Record books, etc	5
	••	1	Alex. Nielsen	Specimens	2
1		1	Montgomery Ward & Co	Plates	. 3
	••	ł	Alex. Nielsen Montgomery Ward & Co Chas. H. Besly & Co	Steel wire, rods, etc	19
			Eugene Arnstein	Enamels	3 8
1		ŀ	E. G. Smith	Brook and gauge	84
Į.	••	- [	Francke & Schindler	Chamicals ate	$21^{4}$
		ł	T P Colt & Co	Objective	5
1	••		W W Walls & Co	Record books, etc. Specimens Plates. Enamels. Hook and gauge Brassscrews, etc. Objective. Cement. Lockers, etc. Music Expressage Freightage. Sundry items Contract steam pipe covering. Tables, desks, etc.	7
ł		ŀ	H M Diekson Mfg Co	Lockers etc.	600
	٠.	ľ	J. C. Vaughan	Seeds	6
1	••	1	E. T. Paul Music Co	Music	ĭ
	• •		S. W. Shattuck, Business Mor	Expressage	$4\hat{2}$
	4 4	1	Standard Busiless Hgr	Freightage	87
Ł	••		6. 6. 6.	Sundry items	94
1	Oct.	4	Walsh & Wyeth	Contract steam pipe covering	1,399
4			Library Bureau	Tables, desks, etc	1,349
1	• •	1	M. Yeager & Son	Contract for central heating plant.	3,100
	••	1	W. L. Pillsbury	Expenses to board meeting	10
ł	••		McLane & Temple	Tables, desks, etc Contract steam pipe covering Contract for central heating plant Expenses to board meeting 'as architects Water.3 months. to January 1, 1898 Gas to Sept. 24; notor to Oct. 1; oloctric lights to Sant 28	52
5	••	1	Union Mfg Co	Water. 3 months, to January 1, 1898 Gas to Sept. 24; motor to Oct. 1; electric lights to Sept. 28	125
	••		U. & C. Gas and Electric Co	Gas to Sept. 24; motor to Oct. 1;	
1					487
	••		G. R. Petty & Co		33
	••		Knowlton & Bennett	Fountain pens, etc Varnishing, etc Collecting samples of water	5
	••		J. M. Chase	Varnishing, etc	1
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ſo.	Date.	To whom.	For what.	Amoun
	1898.	, .	Typewriter ribbons. Stakes. Fish Barometer, etc. Zinc, etc. Printing blanks, etc. Pipe and fittings. Lights of glass. Lockers for warerobes, etc. Advertisement to October 31, 1897. Tuly. Sept. and Oct. Gate valves, etc. Tracing cloth, etc. Rugs, cushions, etc. Wardrobe and table.	]
363	Oct.	4 F. S. Webster Co	Typewriter ribbons	\$2
004		Miller & Leming	Stakes	7
65		L. V. Manspeaker	Fish	12
66 67	• •	Twin City Electric Co	Zing etc	12
38		Champaign County Ptg. Co	Printing blanks etc	190
<u>39</u>	• •	Crane Co	Pipe and fittings.	89
Ŏ	• •	James H. Rice Co	Lights of glass	9
1	••	Orr & Lockett Hardware Co.	. Lockers for warerobes, etc	369
2	••	Public School Pub. Co	. Advertisement to October 31, 1897	12
3		School News & Prac. Educate	r July, Sept. and Oct.	12
4		A P Cuppinghem & Son	Traing aloth ote	25 13
5 6		Chicago Carnet Co	Rugs cushions etc	131
7	••	H. E. Scholle & Co	. Wardrobe and table	18
8	••	Bausch & Lomb Optical Co	. Syringes, scissors, etc.	14
9	••	Warner & Swasey	. Repairs on micrometer	5
0	••	Machinist Supply Co	. Brass rod, etc	8
1		Robinson & Burr	Weights, etc	17
$\frac{2}{3}$		A C McClurg & Co	Stationery and supplies	208
4		Gustav E. Stechert	Books	141
5	• •	Brunswick-Balke-Collender C	Tracing cloth, etc. Rugs, cushions, etc. Wardrobe and table Syringes, scissors, etc Repairs on micrometer Brass rod, etc. Weights, etc Carbons Stationery and supplies. Books books Leather cushions, chairs, tables Expenses.	319
6	••			
7	••	S. W. Shattuck	. Petty expenses, etc	126
8		T. I. Mairs	. Expenses	31
9		W. J. Fraser	Petty expenses, etc Expenses. Hauling, grading, etc. Work. Lumber, etc. Hardware Pipe, bushings, etc. Phates, etc. Photos Seed boxes. Supplies, etc. Seed boxes. Supplies. Expenses. '' to board meeting Services of clerk 3 months Blue prints of railroad construction Spectrometer Motor. Cylinder oil Swing churn, fittings. etc. Wagon, etc. Belt. Museum supplies. Use of telephones, etc.	31
$\begin{array}{c} 0 \\ 1 \end{array}$		I. T. Wolcott	Work	59 21
$\overline{2}$	••	Chas. A. Besore	Lumber etc.	93
3	••	T. H. Trevett	. Hardware	12
4	••	Champaign Supply Co	. Pipe, bushings, etc	36
5	••	C. H. Baddeley	. Plates, etc	10
6		Thomas Naughton	. Photos	1
7		Library Bureau	Library supplies, etc	367
$\frac{8}{9}$	۰.	R R Bowker	Supplies	8 25
0	• •	Alexander Lumber Co	Expenses	20 5
1	• •	J. E. McGilvrey		27
2	• •	Lucy L. Flower	. " to board meeting	63
3		E. G. Keith	Services of clerk 3 months	· 150
4		Northern Pacific R'y Co	Blue prints of railroad construction	15
5		Thomas W. Gleeson	. Spectrometer	74 75
7	••	Standard Oil Co	Cylinder oil	10
3	••	A. H. Barber & Co	Swing churn fittings etc.	10
9	••	Miller Harness Co	Wagon, etc.	46
0	<b>* *</b>	Champaign Supply Co	. Belt	11
1		F. Cormack. Central Union Tel. Co Bausch & Lomb Optical Co	. Museum supplies	10
2		Central Union Tel. Co	Use of telephones, etc	9
3 4		Bausch & Lomb Optical Co	Microscopes, etc	342
5	· · · ·	Crane Co	Wagon, etc Belt. Museum supplies Use of telephones, etc Valves, packing, etc Printing board proceedings, etc Law books. Glue, etc Subscription Expenses to board meeting. Materials.etc.	30 119
6	••	West Pub Co	Law books	132
7	••	Fuller & Fuller Co	Glue, etc.	8
3	••	The Illini	. Subscription	125
9	••	J. E. Armstrong	. Expenses to board meeting	30
2		B. V. Swenson S. W. Shattuck, business mgr	Materials, etc. Sundry items Expressage	18
1	••	S. W. Shattuck, business, mgi	Sundry items	$\frac{61}{59}$
3	••	· · · · · ·		87
í			Pay-rolls of men. September, 1897.	1,331
5	••	** ** **	Freightage Pay-rolls of men, September, 1897 students, Salary, October, 1897	378
3ļ(	)ct. 3	0 A. S. Draper	. Salary, October, 1897	583
1		A. S. Draper T. J. Burrill S. W. Shattuck		200
3	••	IS, W. Shattuck		166
9	••	N. C. Ricker I. O. Baker.	• •• •• •••••	191 187
1		S. A. Forbes	• • • • • • • • • • • • • • • • • • • •	187
2	• •	S. A. Forbes. C. W. Rolfe. D. McIntosh.	· · · · · · · · · · · · · · · · · · ·	175
3	4.41	D. McIntosh		50
4	••	A. N. Talbot	· · · · · · · · · · · · · · · · · · ·	175
5	••	A. N. Talbot A. W. Palmer F. F. Frederick. S. W. Parr. H. J. Barton.		175
6 7	••	F. F. Frederick		158
		113. W. FAPP		175

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Amount	\$175	187	187	91	166	101		141	195	166	166	150	137	133	141	133	137	108	133	100	108	108	001	100	108	100	32	108	100	8£	1001	8	02	120	37	8 8	22 12	100	02.08	32	02	88	88	02 02	75	080	202	20	00	202	202	202	25	383	88	88	08	88	127
what.	 1897																																																										
F'or W	October, 1	:	:	:	::	:	:	:	:	:	;	:	:	:	::	::	::	:	;	:	: :	::	:	:	•	::	:	:	::	::	;	::	::	:	; ;	::	:	::	::	:	::	:	::	:	:	::	:	::	: :	:	:	::	:	::	::	•	::	::	:
	Salary,	:	:	:	: :	:	:	:	:	:	:	:	:	:	•	::	:	:	:	:	::	::	:	:	::	::	:	:	::	:	:	::	: :	:	::	: :	:	::	:	:	::	:	: :	:	:	: :	:	::	: :	:	:	::	:	::	::	:	::	: :	
To whom.	C. M. Moss.	٩d	D. Kinley	E. Davenport	A. Tompkins	A. F. Carman	P. D. Garos	G E. Gandnan	C C Piekett	Katharine I. Sharn	G. T. Kemp	Geo. W. Myers.	E J. Townsend	J. M. White.	L. A. Rhoades	H. H. Everett	W. H. VanDervoort	W. D. Fellce	T. A. Clark	H. S. Piatt	B. V. Swenson	A. H. Daniels	C W Troke	F. A. Sager	Wm. Esty	Frank Smith	P. G. Holden	J. E. McGilvrey	S. J. Temple.	Violet D. Jayne	Mary L. Jones.	Oscar Quick	E.J. Lake	Geo. A. Huff.	W. J. Fraser	C. K. Kose	Margaret Mann	Allison M. Fernie	Agnes S. Cook.	Chester H. Rowell	H. Meyer.	J. P. Hylan	Aliçe Putnam	A. C. Burnham	2-5	Jessie Y. Fox	d. u. McKee. G. D. Hubbard	H. A. Webber	C. V. Seastone.	H. V. Carnenter	J. L. Sammis.	M. B. Hammond.	Anna rossier C. B. Clark	A. R. Curtiss	Henry Jones	D. H. Carnahan	· .	E. W. Poole	H W Cabaabt
Date.	Oct. 30		:	::	::		:	:	:	:	:	:	:	:		::	. :	:	:	:	::	::	:	:	:	::	:	:	::	::	•	::	::	:	::	::	:	::	::	:	::	:	::	;	:	::	:	::	::	:	:	::	:	::	::	:	::	::	

э.	Date.	To whom.	For what.	Amour
	1897.	1	Salary, October, 1897 Services, October, 1897 Water survey, October, 1897 Services, October, 1897	
15	Oct. 30	A. St. John Williamson	Salary, October, 1897	\$10
16		E. G. Howe		150
<b>7</b>	••	Lillie A. Clendenin	** **	65
8	••	R. S. Douglass	** **	75
9	••	C. B. Randolph	** **	70
0		C. W. Alvord		70
$\frac{1}{2}$		W. L. Pillsbury		162 100
2		Geo. W. Graham	Services, October, 1897	100
2	••	Suc W Flord		75
5		Sue w. Foru	** **	55 55
31	• •	W F Marker		55
7	* *	Jennie M Laffin	** **	55 45
3	**	Georgia E. Hopper	** **	30
۶ł	••	Adelaide M. Chase	·· ··	25
0	• •	Leo C. Smith	• • • • • • • • • • • • • • • • • • • •	20
1	••	C. V. Millar	Water survey, October, 1897	75
$\frac{2}{3}$	••	R. W. Stark		50
8	••	F. J. Foote	Services, October, 1897	75
4		l'oe Morrow		75
5		F. W. Justis		50
6		W. H. Lindson		50
78	••	H. T. Lindsey	Collecting class material Collecting class material Collecting class material Collimater, etc. Collimater, etc. Collimater, etc. Coronograph, etc. Cocean freight, etc. Fruit jar. Subscription Plumbago, tools, etc. Scales, etc. Glass cylinder. Belt. Books. Wire belt lacing. Pine and cherry lumber. Horn. Files, rods, etc. Nitric and muriatic acids. Seeds. Coal. Iron. Lumber. Books. Coal. Iron. Lumber. Books. Coal. Iron. Lumber. Books. Coal. Iron. Lumber. Books. Coal. Iron. Lumber. Photograph supplies. Scales, etc. Plates. Jars, etc. Emery wheels. Drills. Files, etc. Emery wheels. Drills. Files, etc. Challs. Coal. Coa	40 40
3		Richard Uttenweiler		40 60
0	••	Fred Atkinson.		35
1	••	Chas B Ewalt		25
$\hat{2}$	• •	D McIntosh	Salary, October, 1897	75
3	• •	Henry J. East		40
4	••	Samuel Morse		40
<b>5</b>	••	W. R. Hoffman	** **	37
6		L. G. Lathrop		32
7		J. J. Johnson		32
8		E. E. Pound		32
9		A. S. Golden		32
$\begin{array}{c} 0 \\ 1 \end{array}$	••	Philip Schwohm		32
$\dot{2}$	• •	E A Nelson		32
3	••	C C Adams	Collecting class material	25
4	• •	Watson Faulkner	Alcohol	5
5	••	Warner & Swasey	Collimater. etc	150
6	••	James C. Biddle	Chronograph, etc	495 25
7	• •	G. W. Sheldon & Co	Ocean freight, etc	25
8		John Gayner	Fruit jar	18
9		R. R. Bowker	Subscription	3
0		F. B. Stevens	Plumbago, tools, etc	9
1		Wm I Pohm	Class orlinder	122
$\frac{2}{3}$		Chas A Schieron & Co	Rolt	14
4	••	D. Appleton & Co	Books	6
$\overline{5}$		Geo. W. Southwick & Co	Wire belt lacing.	8
6	••	Maltby & Wallace Co	Pine and cherry lumber	60
7	••	Boston Musical Instrum'nt Mfg	Horn	60 43 23
8	**	Chas. H. Besly & Co	Files, rods, etc	23
9		Baker & Adamson Chemical Co	Nitric and muriatic acids	68
9		J. C. Vaughn	Seeds	18
1		Udin Coal Co	Coal	321
2		Jones & Laughlins	Iron.	15 26
3 4		Alexander Lumber Co	Lumper,	26 400
4 5	••	E B Greene	Books	400
6	••	Geo E Marshall & Co	Index Book	1 10
ž	••	Yale & Towne Manufacting Co.	Refitting keys, etc.	
8	••	Walker & Mulliken	Picture frames	6
ğ	••	Sweet, Wallach & Co	Photograph supplies	10
Ō	••	Eimer & Amend	Scales, etc	12
1		G. Cramer Dry Plate Works	Plates.	13
$\frac{2}{2}$		Kariher Grocery Co	Jars, etc	43
3		Norton Emery Wheel Co	Emery wheels	16
4		Cleveland Twist Drill Co	Drills.	10
5		Allerton, Clarke & Co	Files, etc	10 10 12 2 16
86		Henry K. Worthington	Plunger, ring., etc	
37		Twin City Electric Co	Snades, etc	16
38 39		Richle Prog. Testing Mast.	Chucks	19
	1	pricine pros. resting mach, Co.	juravity apparatus	11 49

[Oct. 30,

. Date	ə.	To whom.	For what.	Amour
1897				1
Oct.	30	Burrows Bros. Company	Books Tracing cloth. etc Printing and binding Note covers, etc. Extra stairway, stacks, etc Sash, sockets, etc. Fittings. etc.	\$28
		Knowlton & Bennett	Tracing cloth, etc	6
		Charles A. Besore	Lumber	94
		The Gazette	Printing and binding	77
		D. H. Lloyde & Son	Note covers, etc	21
		Library Bureau	Extra stairway, stacks, etc	442
		Orr & Lockectt Hardware Co	Sash, sockets, etc	9 103
		Orr & Lockectt Hardware Co Robinson & Burr Mittendorf & Kiler J. E. McGilvrey. Edward Gleason H. M. R. Construction Co Library Bureau. John B. Bennett Schipper & Block Carpet Co T. R. Leal	Fittings, etc Wardrobe, baskets, etc Expenses visiting schools	46
••		J E MaGilyroy	Expanses visiting schools	40
Nov.	4	Edward Gleason	Final payment as sub-contractor	4,850
	*	H. M. R. Construction Co.	on contract	650
3 **		Library Bureau.	Contract book stacks, etc Final payment on tunnels, etc Contract for window shades Cutting trees, hauling, etc Contract for plumbing in gymnas'm	250
••		John B. Bennett	Final payment on tunnels, etc	80
5 **		Schipper & Block Carpet Co	Contract for window shades	198
		T. R. Leal	Cutting trees, hauling, etc	115
		Walsh & Henck	Contract for plumbing in gymnas'm	100
		E. Barr	conservatory	241
1		A. P. Carman	Expenses	10
		m. reager & Son	Street naming	9,750
Nov.	15	S A Bullard	Expanses	1,800 25
Nov.	10	Vale & Towne Manufacing Co.	Keva	25 6
		Walch & Wyeth	Pipe coverings	4
i ••		T. R. Leal.	Hauling, moving, etc	$4\hat{2}$
		Sangamon Coal Co	rinal payment on tunnels, etc. Contract for window shades. Cutting trees, hauling, etc. Contract for plumbing in gymnas'm conservatory. Expenses Contract for heating plant. Street paving. Expenses. Keys. Pipe coverings. Hauling, moving, etc. Coal. Labor and material on transformers Cedar poles, etc. Bugle. Steel gauges Paper cloth. Corks, etc Sulphur, etc. Law books. Bushings, nipples, etc.	130
	i	Twin City Electric Co	Labor and material on transformers	27
3		Urbana & Champaign Elect.		
		Lt. Ry. Co	Cedar poles, etc	20
		M. C. Lilley & Co	Bugle	5
		Unarles H. Besly & Co	Steel gauges	2
		Fullen & Fullen Co	Comba etc	11 23
· · ·		Price's Pharmoan	Sulphur ote	1
		Callaghan & Co	Law hooks	2,532
••		Crane Company	Cedar poles, etc Bugle. Steel gauges Paper cloth. Corks, etc Sulphur, etc Law books. Bushings, nipples, etc Expenses.	52
		Chas. A. Hart.	Expenses	32
		Callaghan & Co Crane Company. Chas. A. Hart. H. E. Summers. E. Harlen Scott.		56
		E. Harlen Scott		۰4
		Eimer & Amend	Tubes, rubber stoppers	26
		Prang Educational Co	Colored card-board	3
		M. Lowenstern & Son	Oli clota	$^{1}_{22}$
		Flather & Company	Bonging on letho	3
		E. Henry	Gasoline oils etc	6
••	1	Wm. Miebach & Co	Copper. etc.	í
	1	Champaian County Herald	Paper	$1\hat{6}$
••		Wm. Price Estate	Shades and hanging	3
		Thomas Naughton	Photographs	3
		The Gazette	Printing	4
		E. T. Paul Music Co	Music	1
		Lyon & Healy	Band folios	4
	- 1	Cont Ficher	" " Tubes, rubber stoppers Golored card-board Oil cloth Steel, bolts, etc Repairs on lathe. Gasoline, oils, etc Copper, etc. Paper. Shades and hanging Photograpbs. Printing Music. Band folios. Horn. Music. Expenses.	35
		Uari Fisher Ira A Rakar	music Expenses	8 3
				ູ
		News Co	Subscription	4
		Kenyon News & Postal Sub.Co.	Subscription Markers, etc Emery tools, etc Copy of publication Slides from photographs Sewer pipe Wigrometer	24
••		Kenyon News & Postal Sub.Co. W. F. John Barnes Co	Emery tools, etc	68
		National Brick Mfg Ass'n	Copy of publication	1
••		L. Manasse	Slides from photographs	11
		National Sewer Pipe Co	Sewer pipe	33
		Tinius Olsen & Co	Micrometer	75
•••		D Green	Moulding, labor, etc	45
		TH Trongett	Montol grate etc.	$\frac{2}{35}$
• •		C. J. Sahin	Rent of tarnauline and goal	17
• •	ŀ	Westinghouse Elect. & Mfg Co	Watt meter, etc.	107
••		Charles T. Wilder.	Blue prints	44
••	- 1	Geo. E. Martin	Fire screens	8
••		Charles A. Besore	Lumber, etc	160
		James B. Clow & Son	Pipe and fittings	300 -
		Robinson & Burr	Pipe, lead	7
1		Bausch & Lomb Optical Co	Solides from photographs. Sewer pipe Micrometer. Slating, labor, etc. Moulding, etc. Mantel, grate, etc. Rent of tarpaulins and coal. Watt meter, etc. Blue prints. Fire screens. Lumber, etc. Pipe and fittings. Pipe, lead. Microscopes, filters, etc. Shannon files. Aluminum wire.	$132 \\ 6$
1				

10.	Date.		To whom.	For	what.	Amour
	1897.		J. Bishop & Co. J. S. Ford Johnson & Co. Gross & Delbridge Co. Narragansett Machine Co. Indiana Engineering Society . G. C. Willis. B. T. Batsford. Lechtertier Barbe. Geo. Rowney & Co. Bernh Liebisch. Dr F. Krantz. Newton A. Wells. Gresham & Lloyde. Carl Fischer. Mittendorf & Kiler. W M. Hinton. School News & Pract. Educator Eugene Dietzgen & Co. Armour Institute. Western News Co. George Allen. Brunswick Balke Collender Co. A. H. Andrews Co. Geo. Geo. W. Hoffman. Marshall Field & Co. J. L. Kerr. J. C. Blair. E. H. Renner & Bro.			
265		15	I Bishon & Co	Remodeling plati	num wore	\$94
966		10	J. S. Ford Johnson & Co.	Furniture.	num ware	45
967	••		Gross & Delbridge Co.	Stethoscope, band	lages. etc	15
968	••	i	Narragansett Machine Co	Basket balls		18
69	••		Indiana Engineering Society	Advertisement		6
70			G. C. Willis	Calico, cheese clo	oth, etc	31
$\frac{71}{72}$			B. T. Batsiora	BOOKS	• • • • • • • • • • • • • • • • • • • •	149 25
$\frac{12}{73}$			Geo Rowney & Co	Studies	•••••	20 15
74	••	1	Bernh Liebisch	Books		10
75	••		Dr F. Krantz	Chemical appara	tus.:	155
76	••		Newton A. Wells	Contract, decorat	ing library	1,069
$\frac{77}{78}$			Gresham & Lloyde	lighting	g fixtures, etc	210
$\frac{10}{79}$	۰۰		Mittondonf & Kilon	Rusic	+a	12 44
80	••		W. M. Hinton	Use of calf		44
ŝĭ	••		School News & Pract. Educator	Advertisement		12
32	• •		Eugene Dietzgen & Co	Beam compass, e	tc	27
33			Armour Institute	Book and sorting	tray	4
84			western News Co	Subscription		3
35 36			Brungwick Balks Collonder Co.	nam		30 318
50 37	••		A. H. Andrews Co.	Castings etc	iairs	318
28	••		Geo. W Hoffman.	Metal polish, etc.	••••••	
39	••		Mandel Bros	Rugs	· · · · · · · · · · · · · · · · · · ·	118
90	**		Marshall Field & Co	Pillows, etc		12
91			J. L. Kerr	Mason and mater	ials furnished	101
)2 )3			J. C. Blair	Expense	• • • • • • • • • • • • • • • • • • • •	19
13 14	••		J. L. Kerr. J. C. Blair E. H. Renner & Bro W. W. Lindley. Ozias Riley. S. W. Shattuck, Business Mgr.	Hauling coal, etc	••••••	107 30
5	• •		Ozias Riley	rostage stamps.		69
6	• •		S. W. Shattuck. Business Mgr.	Sundry items	· · · · · · · · · · · · · · · · · · ·	73
)7	• •		· · · ·	Expressage		99
8			** **	Freightage		123
99				Pay-rolls of men	October, 1897	1,479 219
00	Nov.	30	A. S. Draper	Salary Norombo	October, 1897 ents October, 1897. er, 1897	583
)2			S. W. Shattuck N. C. Ricker.			200
3	• •		S. W. Shattuck	••	••	166
14	••		N. C. Ricker		**	191
)5			Ira O. Baker			187
16 17			S. A. Forbes	**	•••	83
8	••		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 Ches M. Mose	4.4	••	$175 \\ 50$
9	* *		A. N. Talbot	4.4	4.6	175
0	• •	i	A. W. Palmer	" "	••	175
1	**		F. F. Frederick	••	••	158
2			S. W. Parr			175
34	• •		H. J. Barton	**		175
4 5			Chas. M. Moss.	**		175 166
6	• •		D. K. Dodge. L. P. Breckenridge David Kinley Eugene Davenport. Arnold Tompkins.		•• ••••••••	100
7	• •		David Kinley	••	••	187
8	••		Eugene Davenport	••	••	91
9	• •		Arnold Tompkins	••	· · · · · · · · · · · · · · · · · · ·	166
0	••		Welten II. Jan en			187
12			waiter H. Jones		•••••••••••••••••••••••••••••••••••••••	100 141
3	••		G E Gardnar	* *	•• ••••••	141
4	۰.		C C Pickett			125
5	٠.		Whiter H. Jones. E. B. Greene C. C. Pickett. Katharine L. Sharp. Geo. T. Kemp Geo. T. Kemp Geo. W. Myers. Edgar J. Townsend. Jes M. Wbite	••	**	166
6	••		Geo. T. Kemp	••	•••	166
7	• • •		Geo. W. Myers	••		150
8	••		Edgar J. Townsend			137
9 0			Edgar J. Townsend. Jas. M. White . Lewis A. Rhoades. Henry H. Everett. Wm. H. Van Dervoort. W. D. Pence. H. S. Grindley. T. A. Clark H. S. Piatt. B. V. Swensen. A. H. Daniels.			133
1	••		Henry H Everett	* *	•••	141 133
$\frac{1}{2}$	٠.		Wm. H. Van Dervoort	••	••	137
3	••		W. D. Pence	• •	••	133
4	••		H. S. Grindley	• •		108
5	••		T. A. Clark	••		133
6	••	1	H. S. Piatt			100
78			B. V. Swensen A. H. Daniels Geo, D. Fairfield Chas, W. Tooke	••	•• •••••••••	108 108
			A. II. Damiers	••	••	
9	• •		(teo. D. Egirtield			108

[Nov. 30,

<b>&gt;</b> -	Date.	To whom.		For wh	at.	Am
	1897.	Fred A Secure	0.1	NT	1007	1
$\frac{11}{12}$	Nov. 30	Fred A. Sager	Salary,	November,	1897	
13	••	Wm. Esty. Frank Smith C. D. McLane P. G. Holden J. E. McGilvrey J. D. Phillips. Violet D. Jayne. Mary L. Jones. Osear Quick. Edward J. Lake. Eille H. Morrison Geo. A. Huff				
4	* *	C. D. McLane		••		
5	* *	P. G. Holden		••	• • • • • • • • • • • • • • • • • • •	
6	**	J. E. McGilvrey		••		
7	**	S.J. Temple			•••••	1
8	**	J.D. Phillips				
9 0	**	Morry L. Jayne		• •		
1	••	Osean Opiek				
2	••	Edward J Lake		••		
3	• •	Ella H. Morrison		• •		
1	÷ i	Geo. A. Huff		••		
5	•• /	W. J. Fraser.		• •		
6	• •	Carlton R. Rose Joseph C. Blair		••		
7	••	Joseph C. Blair		••		1
8	••	Margaret Mann				
9	••	Alison M. Fernie		••	· · · · · · · · · · · · · · · · · · ·	1
D)	**	Alison M. Fernie. Agnes S. Cook. A. C. Howland. Chester A. Rowell.				
1	••	Choster A Borrell			•••••	
23	**	G H Moyor				
4	**	G. H. Meyer. W. H. Kavanaugh J. P. Hylan		••		
5	• •	J. P. Hylan		• •		1
6	••	Alice Putnam	••	• •		
7	••	A. C. Burnham	••	• •		
8	••	A. C. Burnham. Chas. F. Hottes W. C. Brenke. Jessie Y. Fox Jas. H. McKee. Geo. D. Hubbard H. A. Webber C. V. Seastone. R. B. Ketchum H. V. Carpenter. J. L. Sammis. M. B. Hammond. Anna Fossler C. B. Clark. A. R. Curtiss. Henry Jones.		••		
9	**	W. C. Brenke		••		
0	••	Jessie Y. Fox				
1		Jas. H. McKee				
	••	Geo. D. Hubbard			· · · · · · · · · · · · · · · ·	
34	••	H. A. Webber			•••••	
5	••	P. P. Kotohym	{	••		
6	6 6 V	H V Corporter		• •		
ž	* *	J L Sammis	••	• •		
8	* *	M. B. Hammond	•••	••		
9	÷ i	Anna Fossler	••	• •		
0	••	C. B. Clark	•	• •		
1	* *	A. R. Curtiss		••		
2	**	Henry Jones			· · · · · · · · · · · · · · · ·	
3		J. H. Wilson			····· ·	
4		D. H. Carnaham			•••••	
5	**	Henry Jones J. H. Wilson D. H. Carnaham A. C. Hobart. E. W. Poole. F. W. Schacht. E. E. Paul.		· · ·	•••••	
7	* *	F W Schecht	• •	••	·····	
3	* *	E E Paul	• •	••		
á	••	Don Sweeney	• •	••		
3	••	A. St. J. Williamson	• •	••		
1	٠.	Edward G. Howe	••	••		
2	* *	Lillie A. Clendenin	. '			
3	• •	R. S. Douglass		••		
1	••	C. B. Randolph	••	••		
5	••	U. W. Alvord		••		
		W. L. Pillsbury				
	**	E. E. Paul. Don Sweency A. St. J. Williamson Edward G. Howe Lillie A. Clendenin R. S. Douglass C. B. Randolph C. W. Alvord W. L. Pillsbury Geo. W. Graham Lillie Heath Sue W. Ford L. A. Boice W. F. Marker. Jennie M. Laflin			•••••	
3	* 4	Sue W Ford			•••••••	
3	* *	L A Boice	••	••		
í	• •	W F. Marker	11			
2	••	Jennie M. Laflin.	• •	••		
3	••	V F Marker Georgia E. Hopper Adelaide M. Chase. A. W. Palmer. C. V. Millar. R. W. Stark. F. J. Foote. Loe Morrow		· •		
	••	Adelaide M. Chase	••	••		
	••	A. W. Palmer	••	3 months to	date	
5	••	C. V. Millar		November,	1897	
1		R. W. Stark				1
3		F.J.Foote				
2		F. J. Foote Joe Morrow E. W. Justus W. H. Zimmerman M. T. Lindsey I. H. Allen R. Uttenweiler. Fred Atkinson C. B. Ewalt D. Melntosh	••			
0		E. W. Justus			· · · · · · · · · · · · · · · · · · ·	
		W. H. Zimmerman				
2		H. I. Linasey				
3	••	R Uttonwoilor		••		
4′ 5		Fred Atkinson	••	••		
6 6	**	C B Ewelt	**	••	•••••	
7	••	D. Melntosh		••		
8	••	D. McIntosh H. J. East	••	• •		
11		Samuel Morse				

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10.	Date.		To whom.	For what.	Amour
•	1007				
190	1897. Nov.	90	W P Hoffman	Salary November 1907	\$37
120	NOV	οU	$V$ , $\Lambda$ , $Homman \dots$	Salary, November, 1897	32
122			I I Johnson	** **	32
23			E E Pound		32
24	* *		A S Golden	•• •• •••	32
25	• •	1	Allen McGlaughlin		32
26	+ +		E. A. Nelson	•• ••	32
27			Philip Schwehm.	•• ••	27
28	• •		E. Barr	Contract masonry foundation	564
29	• •		T. R. Leal.	Grading and hauling	69
30	• •		C. C. Adams	Collecting class materials, etc	31
31	••		W. A. Olmsted Scientific Co	Hydrometer, etc	6
32	••		Gustav E. Stechert	Books	79
33	••		B. V. Swenson	Indicator coil, etc	98
34			Municipal Engineering Co	Subscription to Dec. 1, 1898	2
35			Engineering Record	31, 1898	5
36			Engineering News Pub. Co		4
37			Kopinson & Burr	Salary, November, 1897 Contract masonry foundation Grading and hauling Collecting class materials, etc Hydrometer, etc Books Indicator coil, etc. Subscription to Dec. 1, 1898 31, 1898 Pipe supplies, etc. Lumber.	6
			B. V. Swenson. Municipal Engineering Co Engineering Record. Robinson & Burr. Charles A. Besore. L. B. Groenhelde	Lumper	72
39			J. R. Greenhalch J. A. Parker & Son		1
40		1	J. A. Farker & Son	Wushn	1
41			Detroit Twist Drill Co	Muslin. Muslin. Waste. Drills Plulleys . Plumbing and materials. Slote beee	18
$\frac{42}{43}$	••		Medert Petert Puller Co		18
43 44	• •		Hubbard & Song	Plumhing and materials	13
44 45	• •		Smith & Webster	Slate hase	27
<b>1</b> 6	• •		Twin City Electric Co	Batteries, sockets, etc.	11
47	••		Engineering News Pub. Co	Lumber. Lamp Muslin. Waste. Drills . Pulleys . Plumbing and materials. Slate base . Batteries, sockets. etc. Advertisement to Dec. 16, 1897. Paints, oils, etc. Catalogue slips, etc. Fire screens . Contract for boilers. '' superstructure '' plumbing. Expenses, six months. Cow and heifer.	6
18			C. Hunt	Paints, oils, etc.	3
49	••		Library Bureau	Catalogue slips, etc	43
50	••		George Martin	Fire screens	8
51	••		National Water Tube Boiler Co	Contract for boilers	1,624
5 년	* •		Lord & Burnham	" " superstructure	1,355
53]	••		Walsh & Heuck	" " plumbing	788
54	**		Walsh & Heuck A. S. Draper. M. E. Jones Hubbard & Sons. Carmichael & Andrews. J. E. McGilvrey W. L. Pillsbury. E. H. Renner & Bro. W. W. Lindley. F. M. McKay. Alex McLane. S. A. Bullard	Expenses, six months	72
55			M. E. Jones.	Cow and heifer	400
56			Hubbard & Sons	Contract for iron pipe, valves, etc	923
57	Dee	201	Carmichael & Andrews	Cow and heifer. Contract for iron pipe, valves, etc bridge	500
58 59	Dec.	40	J. E. McGilvrey	Expenses visiting schools	76 15
59 50			F H Ponnon & Pro	Expenses stamps Hauling coal, etc. Postage stamps Expenses.	68
31	• •		W W Lindley	Pustage stamps	· 60
32			F M McKay	Evnenges	43
33	• •		Alex McLane	Exponses	61
34	••		S. A. Bullard	**	12
55	••		J. E. Armstrong	••••••••••••••••••••••••••••••••••••••	13
36	••		N. B. Morrison	**	166
57[	**	- [	Isaac S. Raymond	۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰	26
38	••		S. A. Bunlard J. E. Armstrong. N. B. Morrison Isaac S. Raymond. Thomas J. Smith T. R. Leal. S. W. Shattuck, business mgr.	4.4 	13
59	••	Į	T. R. Leal	Hauling, filling ditch, etc Taxes on Minnesota lands	80
10			S. W. Shattuck, business mgr.	Taxes on Minnesota lands	287
11				Expressage	68
2	••			Freightage.,	325
3	٠.		44 44 44	Freightage. Sundry items Pay rolls of students, Nov'mb'r, 1897 Pay rolls of men, November, 1897 Salary for December, 1897	188 221
4	• •			Pay rolls of man November 1907	1,010
6	Dec <sub>i</sub> i	81	A S Draner	Salary for December 1807	1,010
7			A. S. Draper T. J. Burrill S. W. Shattuck N. C. Ricker	Salary for December, 1851	200
8	• •		S. W. Shattuck	6.6 6.6	166
9	• •		N. C. Ricker		191
0	••		I. O. Baker	44 44	187
31	• •		S. A. Forbes	•• •• •••	83
32	••	- 1	C. W. Rolfe	** **	175
33	••		D. McIntosh	** ** ********	50
34	••	1	A. <u>N.</u> Talbot		i 175
35	• •	- 1	A. W. Palmer		175
6	••	1	N. C. Klöker I. O. Baker S. A. Forbes C. W. Rolfe D. McIntosh A. N. Talbot A. W. Palmer F. F. Frederick S. W. Parr J. Barton		158
37			S. W. Parr		175
88			H. J. Barton Chas. M. Moss		175
39	••	-1	Unas. M. MOSS		175
)0  )1	••	·	D. K. Dodge L. P. Breckenridge	** ** ***	166
			L. F. Breckenridge		187
)2  )3	••		L. F. Breckelridge David Kinley Eugene Davenport Arnold Tompkins A. P. Carman W. H. Jones E. B. Greene.	········	187
		1	A world Temphing		91
)4	• •	ŀ	A P Carmon	· · · · · · · · · · · · · · · · · · ·	166
151		- 1.	A. I. Varman	•• ••	187
95 96	* *	- F	W H Jones	44 44 ·····	100

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о.	Date.	To whom.		For wh	at.	Am
	1897.		1			1
98	Dec. 31	<ul> <li>G. E. Gardner</li> <li>C. C. Pickett</li> <li>Katharine L. Sharp</li> <li>George T. Kemp</li> <li>Geo. W. Myers</li> <li>Edgar J. Townsend</li> <li>James M. White</li> <li>Lewis A. Rhoades</li> <li>H. H. Everett</li> <li>Wm. H. Van Dervoort</li> <li>W D. Pencè,</li> <li>H. S. Grindley</li> <li>T. A. Clark</li> <li>H. S. Piatt</li> <li>B. Y. Swenson</li> </ul>	Salary.	December.	1897	\$
99		C. C. Pickett				
)0	**	Katharine L. Sharp		• •		
)1		George T. Kemp		••		
)2		Geo. W. Myers		••		
3		Edgar J. Townsend				
)4	**	James M. White			•••••	
)5 )6		Lewis A. Khoades		• •	·····	
)7 )7	••	Wm H Van Dervoort		۰۰		
8	••	W D Ponco		* *	•••••••••	
)ğ	••	H. S. Grindley.		••		
0	" "	T. A. Clark		••		
ĺ1	••	H.S Piatt		•• •		
12	••	H. S Platt B. <u>V. Swenson</u>		••	· · · · · · · · · · · · · · · · · · ·	
13	••	A. H. Daniels		• •		
4		Geo. D. Fairfield				
5	**	Chas. W. Tooke			····	
6	**	Geo. D. Fairfield Chas. W. Tooke Fred A. Sager			······	
7	••	William Esty Frank Smith			· · · · · · · · · · · · · · · ·	
8 9	••	C D Malano		• •	•••••••••	
20	••	C. D. McLane. P. G. Holden		••	••••••	l .
21	••	P. G. Holden J. E. McGilvrey	••	••		
$\frac{1}{22}$	••	Seth J. Temple	••	• •		
23	4 6	J. D. Phillips	••	••		
24	••	Violet D. Jayne	••	••		1 :
25	••	Mary L. Jones	••	••		:
26	••	Oscar Quick	••	••		
7	**	Edward J. Lake		••	· · · · · · · · · · · · · · · · · · ·	:
8	••	Ella H. Morrison	· · · ·		·····	
9		Geo. A. Huff				
0		V. J. Fraser Carlton R. Rose Joseph C. Blair Margaret Mann				
31	**	Carlton R. Rose			••••••	
32 33	••	Joseph C. Blair				
33 34	••	Margaret Mann Alison M. Fernie. Agnes S. Cook. A. C. Howland. Chester H. Rowell. George H. Meyer. W. H. Kavanaugh J. P. Hylan. Alice Putnam. A. C. Burnham. Chas. F. Hottes.		• •	· · · · · · · · · · · · · · · · · · ·	
5	••	Amor S. Cook		• •	·····	
86		A C Howland	••	••		
17	••	Chester H. Bowell.		••		
8	••	George H. Meyer		••		
۶ō	. ••	W. H. Kavanaugh	••	• •		
0	••	J. P. Hylan		·•• ·••		
1	••	Alice Putnam		••	· · · · · · · · · · · · · · · ·	
2		A. C. Burnham				1
3					•••••••	
4	••	W. C. Brenke		••	· · · · · · · · · · · · · · · ·	
5	••	Jessie Y. Fox		• •		
16 17	••	W. C. Brenke. Jessie Y. Fox. Jas. H. McKee. Geo. D. Hubbard. H. A. Webber. C. V. Seastone. R. B. Ketchum H. V. Carpenter. J. L. Sammis. M. B. Hammond. Anna Fossler. C. B. Clark A. R. Curtiss.		••		
18	**	H & Webber		٠٠	·····	
19	••	C V Seastone		٠.		
0	••	R. B. Ketchum		٠.		
1	**	H. V. Carpenter	••	••		
$\tilde{2}$	••	J. L. Sammis	••			
3	••	M. B. Hammond		•		
34	••	Anna Fossler		••		
5	••	C. B. Clark		••		
6	••	A. R. Curtiss		••		
7	••	Henry Jones				
3		J. H. Wilson,				
ð		D. H. Carnaham			·····	
0		A. U. Hobart				
	••	C. B. Clark A. R. Curtiss Henry Jones J. H. Wilson D. H. Carnaham A. C. Hobart. E. W. Poole F. W. Schacht A. E. Paul.			•••••	1
2		A T Poul		••	· · · · · · · · · · · · · · · · · · ·	
34	• •	A. D. Fault	••	••	· · · · · · · · · · · · · · · · · · ·	
5		A St J Williamson		••	•••••••	
0 6	**	Edward G Howe		• •	•••••	
7	••	Lillie A. Clendenin	••	••		:
8	• •	R. S. Donglass	. ••	• •		
$\tilde{9}$	••	C. B. Randolph	••			
0	**	Č. W. Alvord		• •		
1	••	A. E. Paul. Don Sweney Edward G. Howe Lillie A. Clendenin R. S. Douglass C. B. Randolph. C. W. Alvord W. L. Pillsbury S. W. Shattuck. Geo. W. Graham	••	• •		
2	••	S. W. Shattuck	Salary.	3 months, to	date	
3	**	Geo W Graham	Salary't	for services.	December, 1897	

Io.	Date.	To whom.	For what.	Amour
	1897.	1		
274	Dec 31	Lillie Heath	Salary for services. December, 1897	\$75
275	Dec. 31	Sue W Ford	Salary, for services, December, 1001	55
276		L A Boice		55
277	• •	W F Marker	•• ••	55
78	••	Jennie M Lafin		45
279		Georgia E. Honner		30
80	* *	Adelaide M Chase		30 25
81		F [ Footo		75
$\tilde{82}$		Joe Morrow		75
83		<ul> <li>Boe morrow.</li> <li>W. H. Zimmerman.</li> <li>M. T. Lindsey</li> <li>I. H. Allen.</li> <li>Richard Uttenweiler.</li> </ul>	•• ••	50
84	• •	W H Zimmerman	•• ••	50
85	• •	M. T. Lindsev	** **	40
86	•	I H Allon	•• ••	40
87	• •	Richard Ilttenweiler	** **	60
88	• •	Fred Atkinson	•• ••	35
89	••	C. B. Ewalt.	** **	25
90	• •	Honny I Feet		40
91	••	Henry J. East W. R. Hoffman		37
91 92	••	L G Lathron		32
92 93	• •	T T Johnson		20
93 94	14 A	E E Pond		32 32
94 95	• •	L. G. Lathrop J. J. Johnson E. E. Pond A. B. Golden Allen McGlaughlin.	** **	32 32
95 96	••	Allon McGloughlin	** **	32
$\frac{96}{97}$	••	F A Nolcon	** **	- 52 90
97 98	• •	L. A. Neison		32 27
	••	D Malatach		27
99 00	••	O W Miller	Salary for December, 1897       Salary for services, December, 1897         Salary for services, December, 1897       Cement floor and walks.         Shower apparatus.       Publications.         Publications.       Subscription         Clock.       Coke, etc.         Circuit breaker	75 75
00	••	D. W. Millar	Salary for December, 1897	50
	ά.	R. W. Stark	Salary for services, December, 1891	200
$\frac{02}{02}$	••	D E	Lumper	200
03	••	P. E. Taintor	Cement noor and walks	185 38
		walcott, webster Mig. Co	Snower apparatus	30
05		R. R. Bowker	Publications	9
06	••	New York Tribune	Subscription	10
07	• •	C. C. Gere	Сюск	1
08	••	Chesapeake & Onio Co	Coke, etc.,	40
09¦		Westinghouse Elec. & Mfg. Co.	Circuit breaker	22
10	••	E. Dietzgen Co	Instrument and rubber stamp	6
11		Keuffel & Esser Co	Repairs on tape	10
12	• •	Toledo Bridge Co	Blue prints	10
13		John A. Bashear	Grating and prisms, etc	96
14		W. J. Keep	Testing apparatus	200
15	•	Lydia Hart.	Work on charts	27
16		Richards & Co	Tubes, bottles, etc	14
17		Herring, Hall, Marvin Co	Coin safe,	45
18		Sheldon Brick Co	Labor	5
19		J. R. Wood	Fire brick	31
20		S. S. White Dental Mfg. Co	Cylinder and oxygen	_36
21		A. U. McClurg & Co	Books	329 45
22		Jones & Laughlins	Channel beams	45
23	**	L. P. Breckenridge	Expenses	23
24	••	Champaign Supply Co	Sewer tile, etc	12
25	••	The Illini	Subscription, etc	145
	1898.		0.1.1	
26	Jan. 7	A. Selicoorty	Qia iron	1
411		Electric Appliance Co	wire tape, etc	10
28		Wm. J. Bohm	Glass tube	1
29	••	James B. Clow & Son	Old iron	20
30	••	U. & U. Phoenix Tel. Co	Services to March 10, 1898	36
31	•••	Singbusch & Stoltey	Soap	1
32	••	Miller & Leming	Stakes	5
33	•••	Sangamon Coal Co	Coal	186
34!		Cunningham Bros	Shellac	2
35		Mrs. Frank Smith	Preparation of class material	4
36.	••	E. Henry	Janitor supplies	72
37	••	Twin City Ice & Cold St'r'ge Co.	Preparation of class material Janitor supplies. Ice Printing Expenses. Gas burnishers. Vise, screws, wire, etc. Paper Seeds Advertisement.  Keys, locks, etc.	5 71
38	••	Champaign Co. Printing Co	Printing	71
39	• •	J. E. McGilvrey	Expenses	21
10	••	Acme Burnisher Co	Gas burnishers	26
11	• •	T. H. Trevett	Vise, screws, wire, etc	16
12	• •	P. F. Pettibone & Co.	Paper	' Ž
13	••	J. C. Vaughan	Seeds	17
14	• •	Sanders Publishing Co.	Advertisement.	14
45	••	The Farmer's Voice		17
<b>1</b> 6	• •	W. D. Hoard & Co	**	ż
47	• •	Prairie Farmer Publishing Co	· ·	Å
				14

о.	Date.	To whom.	For what.	Amou
	1898.			
49		7 W. I. Saffell & Co	Couch, chairs, etc Photographs Lamps, plates, cans, etc Book supports Sewer pipe, etc Baskets, nuts. Scale beam Steel Labels Horse for experiment use Expenses Photographs Hoisting apparatus. Cement driveway Lumber, paper, etc Tile Printing programs, etc Services	\$34
00		Athletic Association	Photographs	3
51	**	C. H. Baddeley	Lamps, plates, cans, etc	45
52		John J. McVey	Book supports	9
53		Hubbard & Sons	Sewer pipe, etc	31 11
54		L. K. Howse & Co	Baskets, nuts	11
55		Montgomery Ward & Co	Scale beam	3
56		Scully Steel & Iron Co	Steel	
57		Dennison Mig. Co	Labels	2
58 59		U. H. Millis	Further and the second	5 13
59 30	••	Thomas Naughton	Photographs	10
31	••	Manning Myxwell & Moore	Hoisting enneratus	31
52		P E Taintor	Coment driveway	63
33	* *	Chas A Besore	Lumber naner etc	86
34	••	Union Tile Co.	Tile	3
35		Champaian County Herald	Printing programs, etc	67
36		C. G. Armstrong	Services.	150
37	• •	D. H. Lloyde & Son.	Music	14
38		Adler & Hornsteiner	Clarionets, horns. etc	132
39	••	Lyon & Healy	Music	74
70		College Review Stock Co	Advertisement	5
11	• •	Chas. W. Groves	Educational Directory,	5
2	**	Smith-Premier Typewriter Co.	Ribbons	51
73	••	Richards & Co.	Chemicals, tubes, etc	51
74		Machinists Supply Co	Printing programs, etc. Services. Clarionets, horns, etc. Music. Advertisement. Educational Directory, Ribbons. Chemicals, tubes, etc. Sheet brass, etc. Drop hangers. Pulley. Tubing, chemicals, etc. Hauling coal Book Periodicals.	15
75		Maltby & Wallace Co	Drop hangers	32
76		W. F. & John Barnes Co	Pulley	2
77		Eimer & Amend.	Tubing, chemicals, etc	24
78		E. H. Kenner & Bro	Hauling coal	65
79		Durrows Bros. Co	D00K	22
30 31		A O MeClarge & Co	The report hooks ato	22
32		Cheg T Wildon	Blue prints	287
33		FW Devoe & CT Beynolds Co	Stongile	19
34		F F Frederick	Exnenses	l é
35	4.4	G C Willis	Crash flannel etc	31
36	••	T R Leal	Grading hauling etc	89
37	٠٠	Kaehler & Martini	Chemical apparatus, etc.	1,292
88	••	Hartmann & Braun	Apparatus	498
39	• •	A. B. Dick Co	Mimeograph ink	1
90	••	C F. Bradley Co	Typewriter ribbons, etc	5
91	• •	Western Bank Note & Eng. Co.	Diplomas	125
92		Chas. H. Besly Co	Emery wheel, wire, solder, etc	9
93		Kariher Grocery Co	Matches, etc	
94		W. W. Walls & Co	Cement, etc	2
95		Baker & Adamson Chemical Co	Filters, etc	5
96		Diquid Carbonic Acid Mig. Co.	Book Periodicals Ink, paper, books, etc. Blue prints Expenses. Crash, flannel, etc, Grading, hauling, etc. Chemical apparatus, etc. Apparatus. Mimeograph ink Typewriter ribbons, etc. Diplomas Emery wheel, wire, solder, etc Matches, etc. Cement, etc. Frilters, etc. Acid. Repairs on manometer. Ol.	6000
97 98		W S Porel	Repairs on manometer	1 3
	۰۰	Champaign Times	Oil Printing reports Expenses	
99 00		E G Howo	Exponeos	
)1		H W Lynch	Coal	492
)2	• •	W. S. Royal. <i>Champaign Times</i> . E. G. Howe H. W. Lynch. Consolidated Oil & Feed Co	Coal. Oil	494
)3	* *	Odin Coal Co U. & C. R'y (fas & Electric Co. Carmichael & Andrews	Coal. Motor to Jan. 1, '98; gas to Dec. 24, '97 Contract for bridge.	1,30
)4	* *	U. & C. R'y (las & Electric Co	Motor to Jan. 1. '98: gas to Dec. 24 '97	929
5	•• •	Carmichael & Andrews	Contract for bridge	42
)6	••	M. Lowenstern & Son		
)7	••	M. Lowenstern & Son Holland Linseed Oil Co	ğil	
8	• •	Chas. F. Witt Walch & Wyeth School News & Pract'l Educ't'r Callaghan & Co,	Repairs on apparatus	
)9	• •	Walch & Wyeth	Pipe coverings	1 2
.0		School News & Pract'l Educ't'r	Advertisement, 3 months	
1		Çallaghan & Co,	Books	1 1/
2		J. D. Green	Slate and tin roofing, etc Brackets, locks, etc Brick	58
3		Urr & Lockett Hardware Co	Brackets, locks, etc	64
4		J. A. Wood.	Brick.	28
15	4.1	William Dries estate	ripe, tees, ells, etc	176
16		Walsh & Hone's	Contrast plumbin	
17	• •	Waish & Heuck	Reside work	3
18 19		Robinson & Burr	Somer pipe ofe	9
20		F.I. Dibble	Transmitter and recovering correct	37
21		Lunkenheimer Co	Pripe, tees, ells, etc. Frames, lead. oils, etc. Contract plumbing. Brick work. Sewer pipe, etc. Transmitter and reservoir gauge. Valves.	
$\frac{21}{22}$	••	The Gagette	Printing	5
$\frac{22}{23}$			Hardware Blue prints of bridge	
		ILLOIL J LLOYOUL	LALWILL W CIL C	90

Date.		To whom.			For wh	at	Amoui
1000							
1898. Jan.	7	Library Bureau Knowlton & Bennett Sweet & Wallach Co Nevins Memorial John Wiley & Sons Architectural Record. Chas. F. Hottes Astronomical Journal		Trove cord	e ata		\$7
" all.	•	Knowlton & Bennett		Index hook	5, 000		13
		Sweet & Wallach Co		Negatives.	• • • • • • • • • • • •		2
••		Nevins Memorial		Conv of cat	alogue.		5
••		John Wiley & Sons		Books			4
••		Architectural Record.		Subscriptio	n		$\hat{2}$
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		Central Union Tel. Co.		Rent of tele	phones .		28
•••		Leland Stanford Jr. Un	iversity	Book	~ 		1
		Patterson Bros		Brass pipe		ember 31, 1898	18
		Am. T. Comstock Am. Arch. & Bldg. New Rogers & Manson Eimer & Amend		Subscriptio	n for 1898		4
		Am. Arch. & Bldg. New	s Co	Subscriptio	n to Dece	ember 31, 1898	25
••		Rogers & Manson		•• "		•• ••	2
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		E. H. Renner & Bro	<b></b>	Hauling cos	al, etc		92
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		Özias Riley S. W. Shattuck, Busine	ss Mgr.	Sundry iter	ns	, etc , Dec., 1898 auary, 1898 898.	84
				Freightage			87
		**		Expressage			47
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			••	••	men, Jai	nuary, 1898	1,072
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		T. J. Burrill				´ <b></b>	200
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		N. Clifford Ricker	<b></b> .				191
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1		Lowig A Phondon	•••••••••		••		
		Lewis A. Rhoades Henry H. Everett W. H. VanDervoort W. D. Pence. H. S. Grindley T. A. Clark. H. S. Piatt. B. V. Swenson A. H. Daniels G. D. Feizfield	•••••	••	••	•••••	141
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		H S Piott	•••••		• •		
••		B V Swongen	• • • • • • • • • •		••		
		A H Daniela	•••••		• •		100
		G D Fairfold	• • • • • • • • • •	• •	• •		
		Chag W Tooko	• • • • • • • • • •	• •	• •		
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		G. D. Fairfield Chas. W. Tooke. Fred A. Sager. William Esty. Frank Smith	• • • • • • • • •	••	• •		
		Fronk Smith	•••••		• •		100
		C D Malana	• • • • • • • • • •		••		
		C. D. McLane. P. G. Holden J. E. McGilvrey Seth J. Temple	• • • • • • • • • •		• •	•••••	
		T E MaGilymov	•••••		••	•••••	54 108
2		Soth T. Tomple	•••••		٠.	•••••	100
		D Philling	• • • • • • • •		••	•••••	100
		J. D. Phillips Violet D. Jayne Oscar Quick	•••••		••	· · · · · · · · · · · · · · · ·	
)		violet D. Javne		1			1 126

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	1898.							
)1	Jan;	31	E. J. Lake Ella H. Morrison. Geo. A. Huff. W. J. Fraser. C. R. Rose J. C. Blair.	Salary for	January	1898	\$	
$\mathbf{\tilde{2}}$			Ella H. Morrison				i	
)3	••		Geo. A. Huff		••	<b></b>	1	
)4			W.J. Fraser					
5			C. R. Rose				8	
6			J. C. Blair					
7	• •		Margaret Mann					
8			Anson M. Fernie			•••••	1	
9 0	• •		A C Howland!	••	• •			
ĭ	••		Chester H. Rowell	• •	• •			
$\hat{2}$	• •		Geo. H. Mever	**	••		· /	
3	••		W. H. Kavanaugh		• •		8	
4	• •		J. P. Hylan		••		1 8	
5	••		Alice Putnam	• • •	* *		8	
3			A. C. Burnham		••			
7			Maude W. Straight			····		
3			Chas. F. Hottes					
9			W. C. Brenke					
)			U. I. WHAR	• •	••	•••••		
12			James H. McKee	••				
3			George D. Hubbard	••	• •	•••••		
t i	• •		C. N. ROSE Margaret Mann . Alison M. Fernie Agnes S. Cook . A. C. Howland!. Chester H. Rowell Geo. H. Meyer. W. H. Kavanaugh J. P. Hylan Alice Putnam A. C. Burnham. Maude W. Straight. Chas. F. Hottes W. C. Brenke. C. T. Wilder. Jessie Y. Fox. James H. McKee George D. Hubbard. H. A. Webber. C. V. Seastone R. B. Ketchum.	• •	• •	· · · · · · · · · · · · · · · · · · ·	• [	
5			C. V. Seastone	٠٠	• •			
6	• •		H. V. Carpenter J. L. Sammis M. B. Hammond	••	• •		6	
7	••		H. V. Carpenter	• •	**			
8	••		J. L. Sammis		••			
9			M. B. Hammond				. 1	
D			Anna rossier					
2	• •		C. B. Clark	• •			8	
	• •		Honny Jones	••			6	
3			I H Wilson		• •		i	
5	٠.		D. H. Carnahan					
6	* *		A. C. Hobart.	* *	••			
ź	••		C. B. Clark A. R. Curtis Henry Jones J. H. Wilson D. H. Carnahan A. C. Hobart E. W. Poole F. W. Schacht A. E. Paul		• •		é	
3	••		F, W. Schacht	••	• •		6	
9	••		A. E. Paul	• •	••		5	
0	••		A. St. J. Williamson A. St. J. Williamson Edward G. Howe Lillie A. Clendenin	**	••		5	
1			A. St. J. Williamson				1	
2	• •		Edward G. Howe	.4 4	• •		15	
34	••		B S Donglagg	• •			6	
5			Lillie A. Clendenin R. S. Douglass C. B. Randolph. C. W. Alvord W. L. Pillsbury. Geo. W. Graham. Lillie Heath Sue W. Ford L. A. Boice.	• •	* *		-	
<u>s</u>	* *		C W Alvord	••	* *		7	
7	• •		W. L. Pillsbury.	• •			16	
3	4		Geo. W. Graham	• •			îč	
)	••		Lillie Heath	• •	••		7	
	••		Sue W. Ford	••	••		5	
	••		L. A. Boice	••	••		5	
	••		Wm. F. Marker	• •	••		5	
31	••		Vini F. Marker. Georgia E. Hopper. Adeline M. Chase. Mary T. Pierce. F. J. Foote.	••	••		4	
	••		Georgia E. Hopper		••		30	
5	••		Adeline M. Chase		••		2	
	• •		F I Foote				27	
3	• •		Toe Morrow	••			7	
			Doe Morrow. E. W. Justus W. H. Zimmerman M. T. Lindsay	• •			5	
)	• •		W. H. Zimmerman	• •	••		5	
íl.	• •	1	M. T. Lindsay	* *	• •		4	
	* *		I. H. Allen	••	••		4	
ŧİ.	••		I. H. Allen Richard Uttenweiler	••	• •		6	
	••		Fred Atkinson Chas. B. Ewalt	••	••		3	
	••		Chas. B. Ewalt	••	••		2	
					••		7	
	••		D. Mennosh C. V. Millar. R. W. Stark. Henry J. East. W. R. Hoffman L. G. Lathrop J. J. Johnson E. E. Pound		2		7	
	••		K. W. Stark				5	
	÷.		пеніу J. East				4	
	• •		V. R. HUIIIIan	• •		•••••	' 3 3	
	••		J. J. Johnson	• •	••		· 3	
3	••		E. E. Pound		• •			
	••	ľ	E. E. Pound A. S. Golden A. McGlaughlin	• •	••		: 3	
5	• •	ľ	A. McGlaughlin	• •	••		3	
	• •	1	E. A. Nelson	••	* *		ុទ័	

10.	Date.		To whom.	For what.	Amou
	1898.			Salary for January, 1898 Blue prints and photo material Asbestos paper. Subscriptions. Jeloluse. Printing, etc. Expenses. Labor and material on bridge Boiler rivet steel	
577		31	Philip Schwehm	Salary for January 1898	\$27
578		91	Chas. T. Wilder	Blue prints and photo material.	60
579	• •		McIntosh Battery & Optical Co.	Asbestos paper	1
580	••		West Publishing Co	Subscriptions	24
581	••		National Jeloluse Co	Jeloluse	6
582	••		Champaign County Herald	Printing, etc	38 15
583			E. Davenport	Expenses	15
584			b. Davenbort. Soully Steel & Iron Co. Kny, Scheerer & Co. E. S. Golden. Wm. Price estate.	Labor and material on bridge Boiler rivet steel	49
585			Scully Steel & Iron Co	Boiler rivet steel	1
586			Kny, Scheerer & Co	Condensers Tags for furniture, etc	0
587			E. S. Golden		18
88	• •		WIII. Price estate	Painting roof, etc	30
89	• •		Oncor & Co	Book	57
590 591	• •		A E Thomas	Scales Services in rehearsals, etc Rent of double bass	
592	• •	1	B N Rothov	Rent of double bass	4
593	••		C J Sabin	Coal	
594	••		J D Philling	Coal Lettering diplomas	4
595	••		Henry H Everett	Expenses	18
96	• •		Wm. Price estate. Burrow Bios. Co. Queen & Co. A. E. Thomas. B. N. Rethey C. J. Sabin. J. D. Phillips Henry H. Everett J. A. Reeves Ralph Bennett J. T. Wolcott	Coal. Photographs Typewriting, etc. Contract for conservatory. heaters, pipe, etc	44
97	••		Ralph Bennett	Photographs	3
98	••		J. T. Wolcott	Typewriting, etc	41
<u>99</u>	••		Lord & Burnham Co	Contract for conservatory	2,730
500	•••	1	Hubbard & Sons	heaters, pipe. etc	1,002
01	••		J. T. Wolcott Lord & Burnham Co Hubbard & Sons John M. Gregory	Liectures	100
02			E. G. Keith. Katharine L. Sharp. C. A. Kofoid. T. R. Leal. J. E. McGilvrey.	Salary for services	150
03			Katharine L. Sharp	Expenses	
04		1	C. A. Kofoid		2
05			T. K. Leal	Grading and hauling. Expenses visiting schools Expenses for music	35
606		-	J. E. McGilvrey	Expenses visiting schools	4
07			Walter H. Jones. Henry Heil Chemical Co	Lamp weights ate	1
08 09	• •		Standard Oil Co	Lamp, weights, etc Oil	22
10	••		Standard Oil Co Jones & Laughlins	Oil Machine bolts, steel, etc	27
	••		Pietorial Printing Co	Cardboard boxes.	55
12	• •		Fuller & Fuller Co	Glue, hard oil, etc	
13	••		Fuller & Fuller Co Chicago Calcium Light Co	1+98	5
14	۰.		Wm J Bohm	Renairing tube	3
15	• •		Concago Calcium Light Co Wm. J. Bohm Electric Appliance Co Goodyear Vulcanite Co Gardner Governor Co Samuel M. Morton Otis C. White Eimer & Amend. National Educational Ass'n Enginaering Naws Pub Co.	Repairing tube Shades Rods. rubber, etc	49
16	••		Goodyear Vulcanite Co	Rods, rubber, etc	17
17	••	1	Gardner Governor Co		17
18	• •		Samuel M. Morton	Lantern slides	37
19	* *		Otis C. White	Apparatus	12
20	• •		Eimer & Amend	Apparatus Platinum tube	129 37
211	••		National Educational Ass'n	Proceedings Subscription Library notes, etc	37
22			Engineering News Pub. Co	Subscription	4
23			Library_Bureau	Library notes, etc	12
24		1	Gustav E. Stechert	DOOKS	457
25			Library Bureau Gustav E. Stechert A, C. McClurg & Co Orr & Lockett Hardware Co Cosmonoliton Incondict L't Co	Books, stationery, etc	268
26			Orr & Lockett Hardware Co	Sand paper, glue, etc Lights, chimneys, etc Publications	25
27			Cosmopolitan Incand'c't L't Co Publishers' Weekly Bausch & Lomb Optical Co	Dublighting	15
$\frac{28}{20}$	••		Raugah & Lomb Ontian.	Quen thermometer etc	34 30
29 30	••		Thomas Nanghton	Photographs	30 8
30 31	• •		Thomas Naughton A. P. Cunningham & Son	Photographs Tracing cloth, etc	22
$\frac{31}{32}$	••			Burlan chairs etc	19
33	• •	1	F. K. Robeson & Bro. Crosby St'm Gauge & Valve Co. The Gazette. Chas. A. Besore. James Littler.	Globe valves.	58
34	••		Crosby St'm Gauge & Valve Co	Globe valves	47
35	••		The Gazette	Printing	90
36	• •		Chas. A. Besore	Printing Lumber and coal	315
37	• •		James Littler	Coal	1
38	• •		E. Barr	Hard brick	· 6
39	••		Dr. H. E. Cushing	Services, medicine, etc	3
40			Champaign Co. Printing Co	Printing letter heads	8
41		1	Henry Ostendorf	Printing letter heads	2
42			J. M. Chase		26
43		1	E. Barr Dr, H. E. Cushing Champaign Co. Printing Co Henry Ostendorf. J. M. Chase. Sheldon Brick Co Hubbard & Song	Sand	3
44			Hubbard & Sons	valves, fittings, etc	33
45			Champ'ign M'hine & Supply Co	Anchor polts, tees, plugs, etc	19
46		J	Hubbard & Sons. Champ'ign M'hine & Supply Co Robinson & Burr	Valves, fittings, etc Valves, fittings, etc Anchor bolts, tees, plugs, etc Pipe. valves, regulator, etc Repairing roofs of buildings	152
47			J. D. Green	Repairing roofs of buildings	150
48	••		Edwin D. Weary	Book	3
49	••		Uanagnan & Co	Law books. Balances, weights, etc. Advertising. Iron tank, etc.	14
50	Feb.	14	The Line	Adventising	410 100
		141	A 10C I bbbU	auverbising	100

303

[Feb. 14,

».	Date.		To whom.	For what.	Amoun
1	1898.				
3	Feb;	14	A. E. Wuesteman	Regulator Lead tubing Toilet paper, etc Globes, carbons, e4c Pyrometer, etc Rubber boots Cement	\$1 8
4			Walsh & Heuck	Lead tubing	1
5	• •		H. Swannell.	Toilet paper. etc.	52 8
6	• •		The Electric Arc Light Co	Globes, carbons, elc	18 0
7	• •		Queen & Co.	Pyrometer, etc.	14
8	• •		The Broadway.	Rubber boots	14 ' 9 (
9			P E Tainfor	Rubber boots. Cement. Decimal classification, etc. Pipe, galvanized iron, etc. Lights, chimneys, etc. Magnesia pipe covering. Pump. Brooms, soap, etc.	3
ŏ			Twin City Ice & Cold St'r'ge Co	Ice	3
1			Library Bureau	Decimal classification, etc.	87 1
$\hat{2}$			Henry Trevett	Pine galvanized iron etc	68
3	* *		Cosm'n'lt'n Incan Gas Light Co	Lights chimneys etc	21
4			Walch & Wyeth	Magnesia nine covering	6
5			Manning Maxwell & Moore	Pumn	6
6			E Henry	Brooms soan etc	38
7	4.4		Twin City Electric Co	Brackets shades etc	38 20
8			Ponular Astronomy	Lentern slides	11
9			Byusch & Lomb Optical Co	Knives labels jars etc	28
ŏ			Fimer & Amond	Chamical apparatus ata	100
1	• •		William Cox	Computers	20
2			Kanyon Naws & Postal Sub Co	Subscriptions	20
3			Konffol & Eegon Co	Magnesia pipe covering. Pump. Brooms, soap, etc. Lantern slides Knives, labels, jars, etc. Computers. Subscriptions. Dividers. Books. Cells, battery, jars, etc. Shovels, galvanized iron, etc. Repairs on pump. Paper, cloth, etc. Subscription. Advertisement. Electric motor. Blackboards.	17
4			Burrow Bros Co	Booke	11
5	••		Wostern Floatria Co	Colle bettory jara ata	25
9 6			T H Trowett	Showels calvanized iron etc.	29
7	• •		Wm I Bohm	Banairs on nume	29
8	••		Fugana Diatzgan & Co	Paper sloth ats	19
9			I Ma Haddam & Dro	Paper, cloth, etc.	19
0			H. MCFauden & Dro	Subseminition	14
	••		Western News Co	Subscription	33
1			Raoul Renault		1
2			whiteside Co. Farmers' Inst	Advertisement	1
3			E. S. Blakeslee	Electric motor	10
4	• •		w. A. Olmsted	Blackboards. Expenses Lumber and coal.	14
5			A. P. Carman	Expenses	14
6			Chas. A. Besore	Lumper and coal	219
7			Brunswick-Balke Collender Co	Qak desk	10
8				UCOal	207
9			Odin Coal Co		357
0			Crane Company	. Pipe fittings, etc	101
1			Whitall, Tatum & Co	Jars, bottles, apparatus, etc	172
2			Gustav E. Stechert	. Books	189
931			W. W. Lindley	. Postage	18
94			Ozias Riley	. Postage stamps	38
95			$[\underline{\mathbf{A}}, \underline{\mathbf{W}}, \underline{\mathbf{Palmer}}, \dots, \underline{\mathbf{N}}]$	Pipe fittings, etc Jars, bottles, apparatus, etc Books Postage Postage stamps Expenses Hauling coal, etc. Ocean freight, etc. Expressage.	8 116
)6			E. H. Renner & Bro.	. Hauling coal, etc	116
7			S. W. Shattuck, business mgr	. Ocean freight, etc	94
8				Expressage	50
99				Pay rolls, students, January, 1898	251
)0[				Pay rolls, men, January, 1898	851
1	Feb.	28	A. S. Draper	Expressage. Pay rolls, students, January, 1898. Pay rolls, men, January, 1898. Salary for February, 1898.	583
2			A. S. Draper T. J. Burrill S. W. Shattuck N. C. Ricker Ira O. Baker S. A. Forbes C. W. Rolfe D. McIntosh		
3			S. W. Shattuck		. 166
4			N. U. Ricker	• • • • • • • • • • • • • • • • • • • •	. 191
5			Ira O. Baker		
6			S. A. Forbes		. 83
7			[C. W. Rolfe		
8			D. McIntosh		. 50
9	••		C. W. Lolles. D. McIntosh A. N. Talbott. A. W. Palmer. F. F. Frederick. S. W. Parr.		. 175
0	••		A. W. Palmer		. 175
1	••		F. F. Frederick		. 158
$\tilde{2}$	• •		S. W. Parr		175
3	• •		H. J. Barton		. 175
4	••		Chas. M. Moss		175
5	• •		D. K. Dodge		166
6	* *		S. W. Parr H. J. Barton Chas. M. Moss. D. K. Dodge L. P. Breckenridge David Kinley Eugene Davenport Arnold Tompkins A. P. Carman Walter H. Jones E. B. Greene		187
7	•		David Kinley.		
8	• •		Eugene Davenport	• • • • • • • • • • • • • • • • • • • •	
9	••		Arnold Tompking		166
20	• •		A P Carman	•••	
-01			Walter H Jones	•	
211	••		E B Groopo	· · · · · · · · · · · · · · · · · · ·	
			Goo E Gardner	••• •••••••••	
$2\overline{2}$			Geo. E. Garuner	· · · · · · · · · · · · · · · · · · ·	. 166 . 125
$\frac{22}{23}$	• •				
21 22 23 24	••		C. C. Pickett.	• • • • • • • • • • • • • • • • • • • •	
22 23 24 25			Katharine L. Sharp	· · · · · · · · · · · · · · · · · · ·	. 166
$\frac{22}{23}$	••		Katharine L. Jones Geo. E., Gardner C. C. Pickett. Katharine L. Sharp Geo. T. Kemp. Geo. W. Myers Edgar J. Townsend.		. 166 . 166

<b>)</b> .	Date.	To whom.	For what.		
1	1898.				
91	Feb. 2	James M. White	Salary for February, 1898	18	
δ)		Lewis A. Rhoades	Salary for Peordary, 1000	14	
31	• •	Henry H. Everett Wm. H. VanDervoort W. D. Pence.	**	1 19	
32	* *	Wm H VanDervoort	••	13	
34		W D Boneo		10	
33		W. D. Fellee	· · · · · · · · · · · · · · · · · · ·	15	
34	••	H. S. Grindley T. A. Clark	• • • • • • • • • • • • • • • • • • • •	10	
35		T. A. Clark	**	13	
36	**	H. S. Platt	•• ••••••••	10	
37		B. V. Swenson	**	10	
38		A. H. Daniels	•• ••••••	10	
39		Geo, D. Fairfield	•	10	
10	• •	Chas. W. Tooke	••	10	
1	••	Fred A. Sager	۰،	10	
2	••	William Esty	•• •• •••	10	
3	••	Frank Smith	••	10	
4	•• •	C. D. McLane		10	
5	" "	P G Holden	•••••••••••••••••••••••••••••••••••••••	1 10	
6	* *	J E McGilvrev	4	10	
7		S I Temple		10	
		T D Dbilling		1 10	
18		Violet D. Terre		1	
19		violet D. Jayne	• • • • • • • • • • • • • • • • • • • •	12	
50		Usear Quick	•• ••••••••••••••••••••••••••••••••••••	5	
1		Euward J. Lake	••	1 .3	
52		T. A. Clark H. S. Platt. B. V. Swenson A. H. Daniels Geo, D. Fairfield Chas. W. Tooke Fred A. Sager. William Esty Frank Smith C. D. McLane. P. G. Holden J. E. McGilvrey. S. J. Temple. J. D. Phillips. Violet D. Jayne. Osear Quick. Edward J. Lake. Edla H. Morgison.	•• •••••••	10	
53		Geo. A. Huff. W. J. Fraser. Carlton R. Rose. Joseph C. Blair.	۰۰ · · · · · · · · · · · · · · · · · ·	12	
54		W. J. Fraser	•• ••••••••	8	
55		Carlton R. Rose	**	1 8	
56	••	Joseph C. Blair	۰ <b>،</b>	4	
57	• •	Margaret Mann		1 7	
58	* *	Joseph C. Blair. Margaret Mann Allison M. Fernie. A. C. Howland Chester H. Rowell Geo. H. Meyer. W. H. Kavanaugh J. P. Hylan Alice Putnam. A. C. Burnham		10	
59	• •	Agnes S. Cook	·. ·	8	
30		A C Howland		1 5	
51	• •	Chester H Rowell			
32	* *	Goo H Mover	·······		
33		W H Koweneugh			
24		T D Hrlen			
34 35	• ••	Aliao Dutnom			
56 56		Ance rutham	•• •••••••	8	
	••	A. C. Burnnam	•,		
57		Madde w. Straight	•	1 3	
38	••	Unas. F. Hottes	•	1 3	
39		W. C. Brenke	•,	1 7	
10		C. T. Wilder	•• •••	1 7	
11		Jessie Y. Fox	۰٬۰۰۰٬۰۰۰٬۰۰۰	1 8	
2		Jas, A. McKee	•	5	
13	•••	Geo. D. Hubbard		5	
14		[H. A. Webber		5	
75	• •	C. V. Seastone		1 5	
16	* *	R. B. Ketchum		5	
7	• •	Alice Putnam. A. C. Burnham Maude W. Straight. Chas. F. Hottes. W. C. Brenke. C. T. Wilder. Jessie Y. Fox. Jas. A. McKee. Geo. D. Hubbard H. A. Webber. C. V. Seastone. R. B. Ketchum. H. V. Carpenter. J. L. Sammis. M. B Hammond. Anna Fossler.		5	
18	••	J. L. Sammis			
79		M. B Hammond	· · · · · · · · · · · · · · · · · · ·	5	
SŐ	• •	Anna Fossler	· · · · · · · · · · · · · · · · · · ·	E	
31	• •	A R. Curtis A. R. Curtis Henry Jones. J. H. Wilson.	•• •••		
32	••	A B Cuntis			
		Honmy Jones		8	
33	• •	T TT Wilson		6	
34		រុ. ជ. Wilson			
35					
86		A. C. Hobart. E. W. Poole. F. W. Schacht.		1 8	
37		E. W. Poole		1 5	
38		[F. W. Schacht		1 5	
39	••				
90	••	Don Sweeney	••		
)1	••	A. S. Williamson			
$\hat{2}$		Edward G. Howe		1	
3	••	Lillie A Clendenin		15	
94	• •	R S Donglass			
6		C B Bandolph			
95	••	C. D. Mandolph		1 3	
96		A. E. Paul Don Sweeney. A. S. Williamson. Edward G. Howe Lillie A. ClenJenin R. S. Douglass. C. B. Randolph C. W. Alvord W. L. Pillsbury Geo. W. Graham Lillie Heath		1.3	
27	••	w. L. Pillsbury		16	
98		ueo. W. Graham		1 10	
99		Lullie Heath		1 5	
)0		Sue W. Ford		E	
)1	**	L. A. Boice	**	1 5	
)2		Lillie Heath Sue W. Ford L. A. Boice W. F. Marker Jennie M. Lafiin. Georgia E. Hopper.		5	
)3	••	Jennie M. Laflin		4	
)4	• •	Georgia E. Hopper			

-20 U. I.

[Feb. 28,

0.	Date.		To whom.	For what.	Amour
	1898.				1
05	Feb.	28	Adelaide M. Chase	Salary for February, 1898	\$25
υoι			Adelaide M. Chase Mary T. Pierce. Joe Morrow		25
07 08			W, U. Waters		20
09			F I Footo	•••	75 75
10	• •		E W Justus	**	50
11	• •		W. H. Zimmerman	**	50
12			M. T. Lindsey	**	40
13	••		I. H. Allen Richard Uttenwiler		40
14			Richard Uttenwiler		60
15		- 1	Fred Atkinson		35
16			C. B. Ewalt.		25
$17 \\ 18$			Henry J. East. W. R. Hoffman. L. G. Lathrop J. J. Johnson. A. S. Golden. Allen McGlaughlin. E. A. Nelson	**	40 37
19		÷	$\mathbf{L} \in \mathbf{G}$ Lethron		32
201	٠.		J. J. Johnson	••	32
21			A. S. Golden		32
221	• •		Allen McGlaughlin	**	32
23	••		E. A. Nelson.		32
24			Philip Schwehm	Salary, February, 1898 Salary, 3 months, to Feb. 28, 1898	27
			U. V. Millar	Colour Doburour 4000	75
26 27	••		n. w. Stark	Salary, February, 1898	50 75
8	• •		A W Polmor	Salary 3 months to Feb 28 1808	25
29			J C Blair	Books	23
sŏl	• •		Orr & Lockett Hardware Co	Letter plates, etc.	3
31	• •		Frank Smith	Class materials, etc	21
2	•••		E. O. Vaile	Advertisement	10
33	••		E. Barr	Pressed brick, etc	8
34	••	1	Hibbard. Spencer, Bartlett & Co	Netting	6
35			Bausch & Lomb Optical Co	Objective. etc	7
36 37			Western News Co	Subscriptions	21 18
38	••		Wm McGuiro	Painting bridge semples	10
39	••		Shawmut Fuse Wire Co	Switch	10
10	• •		Howe, Brown & Co	Tool steel, etc.	55
11	••		L. P. Breckenridge	Expenses of lecture	14
12	••		Charles Lents & Son	Centrifuge and attachment	24
13			Providence Public Library	Subscription	2
14	••		Ginn & Co	Book	2
15 16			Burrows Bros. Co	Subscription	7
17	• •		Modert Petert Pullor Co	Pullove	15 17
18	••		Vale & Towne Mfg Co	Kevs	3
19	• •		Crane Co	Pipe valves, etc	101
50	* •		Odin Coal Co	Coal	585 43
1	March	18	Alex McLean	Expenses	43
<b>2</b>			F. M. McKay		28
3			Samuel M. Inglis		10
4			Lease S. Raymond	••	13
5 6		l	S A Bullard		34 31
57	••		J E Armstrong	**	13
8	••		Mrs. Dora S. Smith	Work on museum material.	25
59			Samuel Bartley	Rent of land	10
0	••		Morrison & Woodward		25
1	••		S. B. Hedges	Milk	18
2			Robinson & Burr	On contract	239
3	••		Hubbard & Sons	Hardware and contract for mains	424
4			J. Wiseman & Son	Faint and painting	10 303
6	• •		The Inland Publishing Co	Subscription	303
57	• •		The New England Pub Co.	Copies af pamphlets	14
8	• •		James G. Bildle	Analytical balance.	92
<b>;</b> 9	* *	- 1	Hibbard, Spencer, Bartlett &Co	Hardware	11
10	• •		The Illini	Advertisement	125
1	•		A. Tompkins	Expenses	9
12	••		Franke & Schindler	Wire rope	6
13	• •		Miller & Sibley	Jersey neifer	195
74 75	••	ĺ	Woston Floatric Inict Oc	Chemicles	19 9
6	••		H. W. Lynch	Salary, February, 1898 Salary, 3 months, to Feb. 28, 1898 Books Letter plates, etc Class materials, etc Advertisement. Pressed brick, etc Netting Objective, etc. Subscriptions. Thermometers, etc Painting bridge samples Switch. Tool steel, etc Expenses of lecture Centrifuge and attachment. Subscription. Book Subscription. Bolrs, steel, etc Pulleys Keys. Pipe valves, etc Coal Work on museum material. Rent of land Hardware and contract for mains Paint and painting Making cement floor Subscription. Copies af pamphlets. Analytical balance. Hardware Advertisement. Expenses. Dessent floor Subscription. Copies af pamphlets. Analytical balance. Hardware Advertisement. Expenses. Dessent floor Subscription. Copies af pamphlets. Analytical balance. Hardware Advertisement. Expenses. Wire rope. Jersey heifer. Chemicles.	418
		1		Value	410

о.	Date.		To whom.	For what.	Amou
	1898.		[	-	1
79	March	18	Mathiessen & Hegle Zinc Co	Spelter . Hardware . Electrical supplies : Pantagraph, etc. Oil . Fittings . Portrait . Books . Hooks , plates, etc . Scissors and turntables Photographs .	. <b>\$</b> 9
SUI			Champaign Mach. & Supply Co	Hardware	. 35
81			Electric Appliance Co	Electrical supplies	1
82	**		Crosby St'm Gauge & Valve Co	Pantagraph, etc	16
33	**		Wm. S. Royal	Oil	.  1
34	••		Illinois Malleable Iron Co	Fittings	
35	••	Ĩ	J Manz & Co	Portrait	6
36			Callahan & Co	Books	2
37			Orr & Lockett Hardware Co	Hooks, plates, etc	13
38			Bausch & Lomb Optical Co	Scissors and turntables	18
9			L. H. Owbridge	Photographs	8
0			H. D. Oldnam	Ink, pens, paste, etc	3
1			Robinson Bicycle Trainer Co	Trainors and dials	43
2			Unas. H. Besly & Co	Rods, tuping, pliers, etc	. 13
3			Bates & Guild Co	Pencil sketches	3
4			Grant Gear works	Machine	60
5	••		Henry J. Green	Thermograph and thermometers	31
6	**		S A. FORDES	Expenses	. 8
)7 )8			T P Lool	TTling and labor	987
)9 99			S W Shottuck husinoss more	Der volla of mon Feb 1808	833
0			5. W. Shattuck, business mgr.	Pay-rolls of men, rep., 1030	333
	March	31	A S Dranor	Solume Monch 1909	583
$\hat{2}$	••	01	T. J. Burrill	Scissors and turntables. Photographs Ink, pens, paste, etc. Trainors and dials. Rods, tubing, pliers, etc. Pencil sketches. Machine Thermograph and thermometers. Expenses. Hauling and labor. Pay-rolls of men. Feb., 1398 students, Feb., 1598. Salary, March, 1898	200
3	**		A. S. Draper. T. J. Burrill S. W. Shattuck N. C. Ricker Ira O. Baker. S. A. Forbes. C. W. Rolfe. D. McIntosh A. N. Talbot. A. N. Talbot. A. N. Palmer. F. F. Frederick. S. W. Parr. H. J. Barton. Chas. M. Moss. D. K. Dodge. J. P. Breckenridge. David Kinley.	**	166
4	••		N. C. Ricker	• •	191
5	* *		Ira O. Baker	**	191 187
6	• •		S. A. Forbes	••	83
7	••		C. W. Rolfe.	**	175
8	* •		D. McIntosh		. 50
<u>9</u>	••		A. N. Talbot.	4.6	. 175
0	• •		A. W. Palmer	4.4	. 175
1	••		F. F. Frederick	**	. 158
2	••	1	S. W. Parr		. 175
3	••	1	H. J. Barton	44	.  175
4	••		Chas. M. Moss	• •	.  175
5	••		D. K. Dodge	4.4	
6	••		L. P. Breckenridge	**	
7			David Kinley	**	. 187
8			E. Davenport	4.4	. 95
9			Arnold Tompkins	4.4 6.4	. 166
$\begin{array}{c} 0 \\ 1 \end{array}$			A. P. Carman	4 4 · · · · · · · · · · · · · · · · · ·	
$\frac{1}{2}$			F P Croope	÷ • · · · · · · · · · · · · · · · · · ·	
$\frac{4}{3}$			Goo E Gordnor	۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰	166
4			() () Piekott	6 6 · · · · · · · · · · · · · · · · · ·	
5	6 G		Katharine L. Sharp	· · · · · · · · · · · · · · · · · · ·	166
6	••		Geo. T. Kemp	· · · · · · · · · · · · · · · · · · ·	
7	• •		G. W. Myers	**	150
8	• •	1	Edgar J. Townsend	6 6 · · · · · · · · · · · · · · · · · ·	137
ğ			Jas. M. White	**	
ŏ	• •		D. K. Dodge L. P. Breekenridge David Kinley. E. Davenport. Arnold Tompkins A. P. Carman. Walter H. Jones E. B. Greene Geo. E. Gardner. C. C. Pickett. Katharine L. Sharp. Geo. T. Kemp G. W. Myers. Edgar J. Townsend. Jas. M. White L. A. Rhoades. Henry H. Everett. W. H. Van Dervoort. W. D. Pence. H. S. Grindley T. A. Clark. H. S. Piatt.		141
1			Henry H. Everett	**	133
2	••		W. H. Van Dervoort	4.6	137
3	••		W. D. Pence	<b>44</b>	133
1	••		H. S. Grindley	4.4 	108
5	••		T. A. Clark	**	. 133
6	••		H. S. Piatt	**	. 100
7	•••		H. V. Swenson		108 108 108
8	••		A. H. Daniels	**	108
9	••		Geo. D. Fairfield		108
0	••		Unas. W. Tooke		
1	••		Fred A. Sager		. 100
2			william Esty		108
3			C D Mol and	••	
4	• •		D. D. McLane		100
5	••		T. A. Clark H. S. Piatt R V. Swenson A. H. Daniels Geo. D. Fairfield Chas. W. Tooke Fred A. Sager William Esty Frank Smith C. D. McLane P. G. Holden J. E. McGilvrey.		
6			J. E. MCGHIVrey		. 108
7	••		D D Dilling	6 6 6 6	100
8	••		Violot D. Jayno	••	83
9	• •		Oscor Quick	**	80
0	••		Edward I. Loke	4.4	80
1	• •		P. G. Holden J. E. McGilvrey. Seth J. Temple. J. D. Phillips Violet D. Jayne. Oscar Quick Edward J. Lake Edward J. Lake Eila H. Morrison Geo. A. Huff. W. J. Fraser.	44 44 	100
2			$\Box_{\alpha\alpha}$ A $\Box_{\mu}$	**	100 120 37
3					

[March 31,

0.	Date.	To whom.	For w	hat.	Amou
	1898.				
55	March 31	Carlton R. Rose	Salary, March, 1898		. \$80
00		J. C. Blair Margaret Mann. Alison M. Fernie Agnes S. Cook.		·····	45
57		Margaret Mann			75
$\frac{58}{59}$		Allson M. Fernie		·····	100
59 60		Agnes S. Cook			80
61	••	A. C. Howland Chester H. Rowell Geo. H. Meyer W. H. Kavanaugh J. P. Hylan			70
$\tilde{62}$	••	Geo. H. Mever			70
63	**	W. H. Kayanaugh.	**		80
64	••	J. P. Hylan			80
65		Alice Putnam A. C. Burnham Maude W. Straight. Chas. F. Hottes			80
36	••	A. C. Burnham			90
<b>5</b> 7	• •	Maude W. Straight			75
58	••	Chas. F. Hottes			70
39		W. C. Brenke			75
70	••	C. T. Wilder		•••••	70
71		Jessie Y. Fox			30
72 73	••	J. H. MCKee	<b></b> .	····	50
74		Chas. F. Hottes. W. C. Brenke. Jessie Y. Fox. Jessie Y. Fox. How C. D. Hubbard. H. A. Webber. C. V. Seastone. R. B. Ketchum. H. V. Carnenter.	• •		50 50
5	• •	C V Seastone			50
6	••	R. B. Ketchum	••		50
7	**	H. V. Carpenter			50
8	• •	H. V. Carpenter J. L. Sammis M. B. Hammond Anna Fossler.	• •		50
9	••	M. B. Hammond	••		50
0	• •	Anna Fossler	••		50
1		U. B. Clark			85
2	•••	A. R. Curtiss Henry Jones. J. H. Wilson D. H. Carnaham			85
3	••	Henry Jones			60
4		J. H. Wilson			60
5		D. H. Carnaham			30
6		A. C. Hobart.			30
7		F. W. Schacht	••		30
8		A. E. Paul			30 30
9 0	• •	A S Williamson	••		10
1		Edward G. Howa	• •		150
$\frac{1}{2}$	••	Lillie A Clendenin			- 65
3	••	R S Douglass	••		75
4	• •	C. B. Randolph	••		75 70
5	**	C. W. Alward	••		70
6	••	W. L. Pillsbury	••	services	162
7		S. W. Shattuck	• •		100
8		D. McIntosh			75 75
9		<u>C. V. Millar</u>			75
0		A. C. Hobart. F. W. Schacht. A. E. Paul Don Sweeeey. A. S. Williamson. Edward G. Howe Lillie A. Clendenin R. S. Douglass C. B. Randolph C. W. Alward. W. L. Pillsbury S. W. Shattuck. D. McIntosh C. V. Millar. R. W. Stark. Geo, W. Graham Lillie Heath. Sue W. Ford.			50
1		Geo. W. Graham		services	100
2		Lillie Heath	• •		75
3		L. A. Boice	**		55 55
4		Lonnio M. Lofflin	* *		45
6	••	Georgia E. Honner	÷ •		30
7		Adelaide M. Chase	••	•• •••	25
8		Mary L. Pierce.			25
9	••	Georgia E. Hopper. Adelaide M. Chase. Mary L. Pierce. W. O. Waters. F. J. Foote.	* *		20
ŏ	••	F. J. Foote	• •	services	75
1	••	Joe Morrow	**		75
2	••	E. W. Justus	••	•• ••••••	- 50
31	••	W. H. Zimmerman	**	**	50
L	••	E. W. Justus W. H. Zimmerman M. T. Lindsey		·· ·····	40
5			•		40
3		Richard Uttenweiler Fred Atkinson			60
7	•.	Fred Atkinson	••		35
3		C. B. Ewalt. Henry J. East. W. R. Hoffman. L. G. Lathrop. J. J. Johnson. E. A. Nelson. A. S. Golden.	• •		25
2		Henry J. Hast	44		40
		W. R. HOIIMAN	• •	•••••	37 32
		L. G. Lathrop			32 32
3	••	E A Nelson	••		32
1		A S Golden	• •		32
5	••	Allen McGlaughlin	**		32
6	••	Allen McGlaughlin Philip Schwehm	••		27
7	••	W. F. Marker. Central Electric Co American Steam Gage Co J. H. Young			55
8	••	Central Electric Co	Wire, tubes, lamps,	etc	70
	•• 1	A	Donto monh and an		23

Date.		To whom.	For what.	Amou
1898.			Pocket recorder Timer Services Book Sunshade Lantern slides and express Mounting skin Blue print Plants Plower pots Stamps Hauling Expresses Labor and hauling Expressage Freight France	
March	31	Riehl Bros	Pocket recorder	\$125
	01	C. C. Gere	Timer	17
		Whitall, Tatum & Co	Tinct	15
••		E. Hastings	Services	10
		John Wiley & Sons	Book	1
••		The Baker & Adam'n Chem Co	Acid and ammonia	1
• • •		Fauth & Co	Sunshade	1
		Samuel M Morton	Lantern slides and express	18
		David S. Jordon	Mounting skin	2
		H H Seurlock	Blue print	2
		C & II Phoenix Telephone Co	Tolonhono sorvicos	37
••		Geo Witthold	Plante	
		Detroit Flower Pot Mfy	Flower pots	10
		Origo Bilow P M	Stompe	79
••		F H Poppor & Pro	Uanling	193
• •		L. H. Menner & Dro	Emperance	195
		J. E. McGlivrey	Expenses	14
		r. K. Leal	Labor and hauming	90
		S. W. Shattuck, business mgr.	Expressage	52
1			Freight	197
1			Freight. Expenses, etc	197 132
April	15	The W.J.Johnston Co	General index	8
		Western Electric Co	Switch connections	20 53
		John Roebling's Sons Co	Wire	55
FI		J. D. Green	Repairing sheet tin and boxes	18
		Engineering News Publish'gCo	Preight         General index         Switch connections.         Wire         Repairing sheet tin and boxes.         Advertisement.         Plates         Photographic materials.         Mop wringer.         Shot and repairing         Chemicals         Mimeograph supplies         Book, etc.         Lantern, nails, etc.         Cloth, etc.         Hauling         Lumber         Printing, etc.         Electrical supplies         Book	6
		G. Cramer	Plates	25
•••		Sweet, Wallach & Co	Photographic materials	18
••		Wilson & Christensen	Mop wringer	0000
		L. C. Garwood	Shot and repairing	8
		J. T. Wolcott	Services	. 1
		Armour & Co	Pigs bags	1
• •		Fuller & Fuller Co	Chemicals	19
••		A. B. Dick Co.	Mimeograph supplies	2
		D. H. Lloyde & Sons.	Book, etc	29
• •		T. H. Trevett	Lantern nails etc	Ē
••		G C Willis	Cloth etc	70
•••		R. S. Wilber	Hanling	148
••		Chas A Besore	Lumber	126
		The Gazette	Printing ote	104
••		Champaian County Herald	1 1110ing, 000	104 77
		Western Electrical Instur Co	Electrical supplies	10
••		Wm D Pongo	Evoressage	1
••		Amoriaan Society of (1 E	Book	. 1
••		Coming & Co	Colorimotor	· 1 28
••		Knoffel & Esser Co	Protypaton of a	20
••		William Cor	Computer	0
		Dishle Dres	Computer	3
••		Wra I Bahru	Sleves	12
••			Tupes	6
		Hubbard & Sons	naroware	15 29
		ward's Nat. Science Estab t	Bira skins	29
		$J. \cup. W $ inship $\cup 0$	Lumber Printing, etc Electrical supplies Expressage Book. Calorimeter. Protractor, etc Computer Sieves Tubes. Hardware Bird skins. Circulars Lumber Mare	15
		Alexander Lumber Co	Lumper	34
		U. H. Mills.	mare	8
		п. m. Dickson Mfg. Co	Doors, glass, etc	60
		Uallagnan & Co	BOOKS	29
		waiker & Mulliken	Frames, chairs, etc	29
		School News and Prac. Educ'r	Advertisement	12
		Gaertner & Regennas	Repairing	2
		к. к. Bowker	Books	5
		F. M. Morris	•••••••••••••••••••••••••••••••••••••••	$5 \\ 20$
		Boston Book Co	Library Journal	20
		The Burrows Bros. Co	Book	7
••		Freidenker Pub. Co	<b>4</b> • • • • • • • • • • • • • • • • • • •	2
••		Armour Inst. of Technology	Index	12
••		Bausch & Lomb Optical Co	Slips, covers, squares, etc	47
••		Wm. H. Armstrong & Co	Forceps, syringe, etc	19
••	1	D. P. & John Wilkinson Co	Tool holder	1
• •	1	Brainard Milling Mach, Co	Repairing machine	12
		Machinists Supply Co	Cutters, pins, studs, etc.	6
••		Jones & Laughlins Co	Bolts and beams.	ő
	1	Mittendorf & Kiler	Rubber ting baskets etc	23
••		H. M. Shuck & Co	Circulars Mare Mare Doors, glass, etc Books. Frames, chairs, etc Advertisement. Repairing Books. Library Journal. Book Library Journal. Book. Slips, covers, squares, etc, Forceps, syringe, etc Tool holder. Repairing machine Cutters, pins, studs, etc. Bolts and beams Rubber tips, baskets, etc Hooks and glue. Oil Seeds. Milk	20 1
••		Westinghouse Church Kars Co	All giue	8
		Standard Oil Co	V.1.	
		I C Vaughan	Sonda	· 22 39 12
			DEEU A	

[April 15,.

No.	Date.		To whom.	For what.	Amoun
	1898.			Pads and pens Hanger, pulleys, etc. Brooms.shellac, etc. Keys. Gas and electricity Paper Flag, sword and belt Books, stationery, etc. Moulding, shades, glass, etc. Chalk lines and plumb bobs. Glasses and stands. Rubber boots Oil Advertisement. Books Canvas. Speed recorder. Expenses. Coal. Hardware and labor. Microscope Membership fee. Expenses. Contract plumbing and labor. Locks and hinges. Fibre. Hauling.	
107	April	15	Library Bureau	Pads and pens	\$9
108			Champaign Mach. & Supply Co	Hanger, pulleys, etc	28 ( 39 )
109 110			E. Henry	Brooms, shellac, etc	2
111			Urb. & Cham. Rv., Gas & El. Co.	Gas and electricity	1,088
112	••		Cunningham Bros	Paper	6 8
113			M. C. Lilley & Co	Flag, sword and belt	69 8
114			A. C. McClurg & Co	Books, stationery, etc	100
$\frac{115}{116}$	••		William Price Estate	Moulding, snades, glass, etc	268 8 1
117	••		W. A Olmsted Scientific Co	Glasses and stands	8
118	••		H. D. Stoltev & Co	Rubber boots	4
119			W. S. Royal,	Oil	1
120			Public School Pub. Co	Advertisement	12
$\frac{121}{122}$	••		Edward Thompson Co	BOOKS	76 (
122	••		Bover Ry Speed Recorder Co	Speed recorder	80 0
124	* *		A. P. Carman	Expenses.	7
125	• •		M. B. Hammond		15 8
126			Odin Coal Co	Coal	788 4
127			H. W. Lynch	Handmone and labor	275 2 10 8
$\frac{128}{129}$	•••		Banseh & Lomb Ontical Co	Microscope	29 0
130	• •		A. A. A. Coll. Exp. St.	Membership fee	10 0
131	••		David Kinley	Expenses.	13
132			Dunlap & Wright	Contract plumbing and labor	65 (
133			Orr & Lockett Hardware Co	Locks and hinges	104
$134 \\ 135$			E H Bonnon & Bro	Fibre	4 8
136	••		E. Davenport	Expenses	8
137	••		The Kny-Scheerer Co	Myographion, knives, etc	94
135			C. H. Russell & Co	Doors, keys, etc	1
135			Francke Hardware Co	Screws, washers, etc	18
140 141			Gustav F. Frederick	Services, nooks, etc	$\begin{array}{c} 11\\249\end{array}$
142	••		Righle Bros Testing Mach Co.	Locks and hinges. Fibre. Hauling. Expenses Myographion, knives, etc. Doors, keys, etc. Screws, washers, etc. Services, hooks, etc. Books. Sp. grav. apparatus Telephone service. Stamps. Hauling. Carbons Expressage. Freight. Pay rolls of men. March. 1898.	6
143	••		Central Union Telephone Co	Telephone service	15 6
144	••		W. W. Lindley	Stamps	35 (
145			T. R. Leal.	Hauling	56 8
146 147			J. B. Colt & Co	Expression	5 ( 63 )
148	•.•		S. W. Bhattuck, Business ingi.	Freight.	144
149	••			Pay rolls of men, March, 1898	
150	• •		··· ·· ·· ··	Preight. Pay rolls of men, March, 1898. students, March, 1898. Portfolio Books Daily News Almanac.	277 (
151	April	30	The J. C. Witter Co Edward Thompson Co	Portfolio	3
152 153	• •	}	Callaghan & Co	Боокв	4
54	••		The Chicago Record	Daily News Almanac	3
55	••		The Burrows Bros. Co	Books	7 (
56	••		Champaign Mach. & Supply Co	Belting reducers	17
57			U. H. Baddeley	Beer and lamp	$\frac{4}{12}$
58 59	••		Narragansett Machine Co	Parallel hars, etc.	12 52
60	••		A. G. Spalding & Bros	Portfolio Books. Daily News Almanac. Books. Belting reducers. Beef and lamp Gardboard, pedigree blanks, etc. Parallel bars, etc. Buck, striking bags, etc. Lumber. Oil, shades, etc Insulators, tubes, etc. Wire. Pipe, etc. Trucks. Thermometers, tubing, etc. Enamel register, etc. Soap Pulseometer Hardware Ice. Chemicals Coke. Posts, wire, etc Books. Nove, etc. Shovel and rakes Sewing covers.	58
61 İ	••	1	Chas. A. Besore	Lumber	27
62	••		William Price Estate	Oil, shades, etc	80
53 64			Uentral Electric Co	Insulators, tubes, etc	53 65
65	••		Crane Co	Pine lete	31
66	••		John F. Townsley Mfg. Co	Trucks	24
67	••		Eimer & Amend	Thermometers, tubing, etc	71
68	••	1	Hubbard & Sons	Enamel register, etc	4
69 70			Singousen & Stoltey	Soap	$^{1}_{90}$
71	• •		Henry Trevett	Hardware	90 15
72	••		Twin City Ice & Cold St'ge Co.	Ice	2
73	* *	- 1	Fuller & Fuller Co	Chemicals	$1\overline{2}$
74			Urbana & Cham. Gas & Elec.Co	Coke	4
75	••		Unicago General Fixture Co	Posts, wire, etc	12 120
76 77	••		A. U. MCUIUITE & UO	DOORS	425
$\frac{1}{78}$	• •		T. H. Trevett	Rope, plyers, etc.	425
79	.• •		American Society of M. E	Copies of paper	1
			I C Vaughan	Seeds.	10
80 81		!!	9. 0. Yauguan	Security (1997)	1 8

lo.	Date.	To whom.	· For what.	Amour
	1898.		Lenses, paper, etc. Rubber boots Labor and materials. Lumber. Machine screws. Lenses, etc. Lamps. Lumps. Lumps. Lumber Expenses. Napkins and cuspidors. Pipe Stamps. Hauling. Hauling, etc. Grading, etc. Salary, April, 1898.	
183	April 30	Knowlton & Bennett	Lenses, paper, etc	\$3
184 185		John Armstrong	Rubber boots	2 15
186	••	W. W. Walls & Co	Lumber.	100
187	<b></b> .	Chas. H. Besley & Co	Machine screws	1
188	• •	Bausch & Lomb Optical Co	Lenses, etc	22
189		Electric Appliance Co	Electrical supplies	25
190 191		Alexander Lumber Co	Lamps	52 7
192	••	Ella H. Morrison	Expenses	i
193	••	F. K. Robeson & Bro	Napkins and cuspidors	1
194		The Michigan Pipe Co	Pipe	149
195 196	••	W I. Pillshuw	Expenses	29 13
97	••	Ozias Rilev	Stamps	38
198	••	S. B. Hedges	Hauling	10
199	••	E. H. Renner & Bro	Hauling, etc	55
200		T. R. Leal	Grading, etc.	160
$201 \\ 202$	••	A. S. Draper	Salary, April, 1898	583 200
02 03	••	S. W. Shattuck	**	200 166
04		N. C. Ricker.	· · · · · · · · · · · · · · · · · · ·	191
05	•• •	N. C. Hicker. Ira O. Baker. S. A. Forbes. C. W. Rolfe. D. MeIntosh. A. N. Talbot. A. W. Palmer. F. F. Frederick. S. W. Parr. H. J. Barton. C. M. Moss. D. K. Dodge. D. Kinley. D. Kinley. E. Davenport. A. Tompkins. A. Tompkins. A. P. Garman. W. H. Jones. E. B. Greene Geo. E. Gardener. C. C. Pickett. Katharine L. Sharp. George W. Myers. Edgar J. Townsend. J. M. White. L. A. Rhoades. H. H. Everett.	**	187
06		S. A. Forbes	**	
07 08		C. W. Rolfe		175 50
08 09	••	A N Talbot	· · · · · · · · · · · · · · · · · · ·	175
10	••	A. W. Palmer.	6.6 ·····	175
11	••	F. F. Frederick	**	158
12	**	S. W. Parr	6.6 6.6	175
13		H. J. Barton	6.6 ···············	175
14 15	••	D K Dodgo	4 6 · · · · · · · · · · · · · · · · · ·	175 166
16	••	L. P. Breckenridge.	•••	187
17	**	D. Kinley	** **	187
18	••	E. Davenport	6.6 ···································	95
19		A. Tompkins	4.4 4.4	166
$\frac{20}{21}$		W H Jones		187 100
22	••	E. B. Greene	••	141
23	••	Geo. E. Gardener	••	166
24	**	C. C. Pickett	· · · · · · · · · · · · · · · · · · ·	125
25		Katharine L. Sharp		166
26) 27		Geo. T. Kemp	••	166 150
28	• •	Edgar J. Townsend	• •	137
291		J. M. White	**	133
30		L. A. Rhoades	• •	141
1		H. H. Everett		133
32 33		W D Pance	••	137 133
34	••	H. A. Rhoades. H. H. Everett. W. H. VanDervoort. W. D. Pence. H. S. Grindley.	• •	108
351		H. S. Grindley. T. A. Clark. H. S. Piatt. B. V. Swenson. A. H. Daniels. George D. Fairfield. C. W. Tooke. Fred A. Sager. William Esty. Frank Smith. C. D. McLane. P. G. Hulden.	• •	133
86		H.S. Piatt	**	100
37 38		B. V. Swenson	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	108
88 19		A. H. Damers	••	108 108
10		C. W. Tooke	۰۰۰ · · · · · · · · · · · · · · · · · ·	108
1	••	Fred A. Sager	44 44	100
2		William Esty		108
13 14		C D MeLono		100 100
4 5	••	P. G. Holden	**	54
16	••	P. G. Holden. J. E. McGilvrey. Seth J. Temple. J. D. Phillips.	• •	108
<b>7</b>	••	Seth J. Temple		100
18		J. D. Phillips		83
19 50			· · · · · · · · · · · · · · · · · · ·	125 80
50 51	**	E J Lake		70
52	••	Ella H. Morrison		100
53	••	Oscar Quick. E. J. Lake. Ella H. Morrison. George A. Huff.	* *	120
54	••	W.J.Fraser	• •	37
55		C. R. Rose J. C. Blair.		80
56 57		J. C. Blair Margaret Mann Allison M. Fernie	· · · · · · · · · · · · · · · · · · ·	45 75
		maisaice mannessessessessessesses		1 10

[June 30,

о.	Date.		To whom.	For what,		
	1898.					
59		30	Agnes S. Cook	Salary, April, 18	398	\$7
60	••		A. C. Howland		· ·· ····	8
61	• •		Agnes S. Cook. A. C. Howland Chester H. Rowell Geo. H. Meyer. W. H. Kavanaugh. J. P. Hylan.		· · · · · · · · · · · · · · · · · · ·	
62 63			(reo, H. Meyer		· · · · · · · · · · · · · · · · · · ·	7
53 64			W. H. Kavanaugn		····	8
54 65			J. F. Hylan			
56			A C Burnham	••	· ·· · · · · · · · · · · · · · · · · ·	ģ
37			Alice Putnam A. C. Burnham Maude W. Striaght Charles F. Hottes	••		
38	••		Charles F. Hottes	••		
<b>3</b> 9	••		W. C. Brenke	• •		7
70	••		W. C. Brenke. C. T. Wilder. Jessie Y. Fox. J. H. McKee. G. D. Hubbard	••		7
71	••		Jessie Y. Fox	* *		3
72	• •		J. H. McKee			5
13	••		G. D. Hubbard		· · · · · · · · · · · · · · · · · · ·	5
14	••		n. A. webber		· · · · · · · · · · · · · · · · · · ·	5
15	•• •		C. V. Seastone			5
6	••		K. B. Ketchum			5
78	* *		I. v. Carpenter		· ······	55
8 19	* *		M B Hammond	••	· · · • •••••••	5
9			Anna Fossler	•	· · · · · · · · · · · · · · · · · · ·	5
1	••		C. B. Clark.	••	· · · · · · · · · · · · · · · · · · ·	
29			C. V. Seastone. R. B. Ketchum H. V. Carpenter. J. L. Sammis. M. B. Hammond Anna Fossler. C. B. Clark. A. R. Curtiss Heury Jones.	••	•••••••••••••	8
33	••	ļ	Henry Jones	÷ •		7
34			Henry Jones. J. H. Wilson. D. H. Carnaham A. C. Hobart. F. W. Schacht. A. E. Paul. Don Sweeney. A. S. Williamson. E. G. Howe.	* *		6
35	••		D. H. Carnaham	••		6
36	••		A. C. Hobart	••		3
37	• •	1	F. W. Schacht	••		3
38	••		A. E. Paul			3
39	• •		Don Sweeney			3
0	••		A. S. Williamson		· · · · · · · · · · · · · · · · · · ·	1
)1	••		E. G. HOWE			15
)2 )3	• •		Lillie A. Clendenin R. S. Douglass		· · · · · · · · · · · · · · · · · · ·	6
93. 94	**		C B Bandolph	••	··· · ·····	7
<sup>74</sup> )5	••	1	C. B. Randolph C. W. Alvord W. L. Pillsbury.	••		1
96	••		W L Pillehuw		• • • • • • • • • • • • • • • • • • • •	16
97	**		D Melniosh	••		7
98			C. V. Millar	••		1 7
99			R. W. Stark.	4.4		5
00	••		Geo. W. Graham	••		10
)1	• •		Lillie Heath	• •		7
)2	••		W. L. Fillsoury D. McInosh. C. V. Millar. R. W. Stark. Geo. W. Graham Lillie Heath. Sue W. Ford. L. A. Boige			5
)3	• •		L. A. Boice	••		5
)4	••	1	Sue W. Ford. L. A. Boice Jennie M. Laflin. Georgia E. Hopper. Aldelade M. Chase. Mary T. Pierce. W. O. Waters. F. J. Foote			4
)5	**	1	Georgia E. Hopper		· · · · · · · · · · · · · · · · · · ·	3
)6			Aldelade M. Chase		· · · · · · · · · · · · · · · · · · ·	2
)7 )8	• •		Wary T. Flerce	••	· · ·· <b>······</b>	22
)9	••		W. O. Waters		···· •••••••••••	
)9 10	· • •		F. J. Foote	••		1
11	* *		E W Justus	**		5
2	••		Doe Morrow. E. W. Justus W. H. Zimmerman. M. T. Lindsey.	**		6
3	• •		M. T. Lindsev.	• •		4
4	**		R. Uttenweiler	6 <b>6</b>		6
5	••		Fred Atkinson	••		3
6			Chas. B. Ewalt	••		2
7			J. H. Allen	• •		4
8			Henry J. East	· · ·		4
9			Pearl Adams		· · · · · · · · · · · · · · · · · · ·	4
0			W. K. Hoffman			3
1			L. G. Lathrop		·····	3
2			K. Uttenweiler Fred Atkinson. Chas. B. Ewalt. J. H. Allen. Henry J. East. Pearl Adams. W. R. Hoffman. L. G. Lathrop. J. J. Johnson. E. A. Nelson. Elbert E. Pound. A. S. Golden.			3
$\frac{3}{4}$			E. A. NelSoll Filbort F. Pound		·····	33
4 5	••		A S Golden	••	•••••	3
э 6			Allen McGlaughlin	**		3
27	••		Philip Schwehm	* *	••••••	2
8	May, i	4	J. C. Sedgwick	Payment on con	tract	45
29		- 4	E. G. Keith	Clerk services.		15
30	••		James B. Clow & Sons.	Copper floats, et	e	10
31	••		A. S. Golden. Allen McGlaughlin. Philip Schwehm. J. C. Sedgwick. E. G. Keith. James B. Clow & Sons. Whitall, Tatum & Co. Queen & Co. L. E. Knott Appliance Co. Cleveland Public Library	Tincture. etc		1
$\tilde{32}$	••		Queen & Co	Induction oil		3
33						4

•

No.	Date.		To whom,	For what.	Amoun
				······································	1
2335	1898. May	14	The Publishers Weekly	Publication and survey. Stamp. Advertisement. Varnish, etc. Hooks and belts. Typewriting and postage White lead, etc. Coal. Oil and gasoline Wire, etc.	\$1 5
2330			City of Urbana	Publication and survey	100 4
2337			F. A. Sackmann	Stamp.	2 (
2338 2339	••		William Prize Estate	Advertisement	$21 \\ 205 9$
2340	••		Orr & Lockett Hardware Co	Hooks and belts	205 8
2341	••		L. Myrtle Green	Typewriting and postage	3 61 21 1
2342			H. M. Hooker & Co	White lead, etc,	61 0
2343			Fred P. Rush & Co	Coal	21 1
2344			W. S. Royal	Oil and gasoline	19
$2345 \\ 2346$	••		Henry Trevett	Wire, etc	
2347	••		Seth J Temple	Exnenses	94
2348	••		Electric Appliance Co	Electrical supplies	106 9
2349	••		Chas. A. Schieren & Co	Belting	344 8
2350			T. R. Leal	Labor and hauling	105 5
2351			Sehaffer & Budenberg	Tachometer and ejector	63 0 111 5
2352			Thompson & Bushnell	Reducing wheels and indicators	111 5
$2353 \\ 2354$			Alexander Lumber Co	Typewriting and postage White lead, etc Oal Oil and gasoline Wire, etc. Brick Expenses. Electrical supplies Belting Labor and hauling. Tachometer and ejector Reducing wheels and indicators Tumblers, etc. Lumber. Electrical instrument. Slabs. Bulbs. Electrical supplies. Meter Sign writing	58 156
2355	••		The Davis Motor Co. Limited	Electrical instrument	515 2
2356	••		Peoria Steam Marble Works	Electrical instrument Slabs. Bulbs. Electrical supplies. Meter Sign writing Plate, etc. Seeds. Expenses. Blue prints. Blue printing. Paper. Books. etc. Book. Books. Washers, etc. Wire.	170 0
2357	••		The Electric Arc Light Co	Bulbs	3 0
2358	••		Western Electric Co Buffalo Meter Co R. Abernathy. Curtis & Curtis. J. C. Vaughan. E. G. Howe William R. Ware. Blue Print Department. J. W. Butler Paper Co A. C. McClurg & Co West Publishing Co Callaghan & Co The Helman-Taylor Co Ward Bros	Electrical supplies	80 2
2359			Buffalo Meter Co	Meter	85
2360			R. Abernathy	Sign writing	6 9
$\frac{2361}{2362}$	••		Curtis & Curtis	Plate, etc	15 ( 9 1
2363	••		E G Howe	Expenses	48
2364	••		William R. Ware	Blue prints	75
2365	• •		Blue Print Department	Blue printing	33 7
2366	**		J. W. Butler Paper Co	Paper.	13 1
2367	••		A. C. McClurg & Co	Books. etc	114 5
2368			West Publishing Co	Doolo	34 5
$2369 \\ 2370$	••		The Holmen Terler Co	Books	35550
2371	••		Ward Bros	DOORS	59 4
2372	• •		The Chas, A. Strelinger Co	Washers, etc	59 4 10 3
2373	• •		Central Electric Co	Wire.	32 3
2374	• •		Francke Hardware Co	Screws and casters	95
2375			Westinghouse Elect. & Mfg Co.	Punchings	19 4 28 1
$\begin{array}{c} 2376 \\ 2377 \end{array}$			Eimer & Amend	Flasks. etc	28 1     75 1
2378	• •	- 1	Twin City Electric Co	Wire ate	10 0
2379	• •		Champaign Mach & Supply Co.	Machine supplies	67 0
2380	• •		Walch & Wyeth	Magnesia covering	105 0
2381	• •		Neptune Meter Co	Meter	$105 \\ 22 \\ 5$
2382	••	i	Crosby Steam Gage & Valve Co	Indicator, etc	22 8
2383			John B. Bennett.	Masonry and labor	137 8
$2381 \\ 2385$			Thea Wright & Son	Electric supplies	67 1
2386			Liquid Carbonic Acid Mfor Co	Book Books Washers, etc. Wire. Screws and casters. Plunchings. Flasks. etc. Machine supplies, etc. Machine supplies, etc. Magnesia covering. Meter. Indicator, etc. Masonry and labor. Electric supplies. Catch basin. Drum gas. Advertisement. Plates Stamps. Plates. Stamps. Hauling and labor. Freight. Express. Every supenses.	55 30
2387	* *		West Publishing Co	Advertisement	55 0
2388			The 1898 Illio	Plates	20 Ö
2389	••		Eichberg & Baer	Wire mats	50
2390			C. A. Besore	Coal, etc	183 5
2391			w. w. Lindley	Stamps	183 5     116 0     65 0
2392 2393			Uzias Kiley	Postage stamps	65 U
2394	• •		A G Snaulding & Bros	Aumasium enneratus	$53 \ 3421 \ 2$
2395	••		T. R. Leal	Hauling and labor	117 6
2396	••		S. W. Shattuck, business mgr.	Freight	$     \begin{array}{c}       117 & 6 \\       120 & 1     \end{array} $
2397	• •	1		Express	69 5
2398				Petty expenses. Petty expenses. Pay rolls of men, April, 1898 students, Salary for May, 1898	141 4
2399				Pay rolls of men, April, 1898	$1,254 \\ 225 \\ 225 \\ 2$
2400	Morr	01	A S Duonom	Students,	225 2
2401 2402	May,	ът	A. S. Draper	Salary for May. 1898	$583 \ 3200 \ 0$
2402	• •		S W Shattuck	۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰۰	200 0
2403	* *		N. C. Ricker	••	191 6
2405			Ira O. Baker	4.4 · · · · · · · · · · · · · · · · · ·	187 5
2406	••		S. A. Forbes.	• •	187 5     83 3
	••	ł	C. W. Rolfe		175 0
$2407 \\ 2408 \\ 2409 \\ $	* *		A. S. Draper. T. J. Burrill. S. W. Shattuck. N. C. Ricker. Ira O. Baker G. W. Rolfe. D. McIntosh. A. N. Talbot. A. W. Palmer.	•••	50 0 175 0 175 0

[May 31,.

No.	Date.		To whom.			For	what.	Amou
ĺ	1898.		F. F. Frederick S. W. Parr H. J. Barton Oharles M. Moss. D. K. Dodge. L. P. Breekenridge. David Kinley. E. Davenport Arnold Tompkins. A. P. Carman Walter H. Jones. E. B. Greene. Geo. E. Gardener. C. C. Pickett Katharine L. Sharp. Geo. T. Kemp. Geo. T. Kemp. James M. White. Lewis A. Rhoades. Henry H. Everett. W. D. Pence. H. S. Grindley. T. A. Clark. H. S. Piatt. B. V. Swenson A. H. Danlels. George D. Fairfield C. W. Tooke. Fred A. Sager. William Esty. Frank Smith. C. D. McLane. P. G. Holden.					
411 1	м ў.	31	F. F.Frederick	Salary	for	May,	1898	\$158
414	••		S. W. Parr					175
413 414			H.J Barton				•••••	175 175
114	• •	ĺ	D K Dodge			• •		166
116	• •		L. P. Breckenridge	••		••		187
17	••		David Kinley	••		• •		187
18	••		E. Davenport	••		••		נ9
119	••		Arnold Tompkins				•••••	166
120 121			A. P. Carman					187 100
122	٠.		E B Greene	• •				141
23	••		Geo. E. Gardener	• •		• •		166
24	* 6		C. C. Pickett	••		••		166 125
25	••		Katharine L. Sharp	••				166
26	••		Geo. T. Kemp				·····	s 166
$\frac{27}{28}$	••		George W. Myers				••••	150 137
29	• •		L.J. TOWNSENG.	••			· · · · · · · · · · · · · · · · · · ·	133
30	* •		Lewis A Rhoades	••			····· • • • • • • • • • • • • • • • • •	141
31	٠.		Henry H. Everett	• •		••		133
32	• •		W. H. VanDervoort	••		• •		137
33			W. D. Pence					133
34	••		H. S. Grindley.					108
35 36	••		T. A. Clark	••			•••••	133
37	٠.		B V Swenson			••		100
38	••		A. H. Daniels	••		• •		108
39	••		George D. Fairfield	••		••		108
40	••		C. W. Tooke			••		108
41			Fred A. Sager					100
42 43	••		William Esty			• •	·····	108
43	۰.		C D MeLono			• •		100 100
45	۰.		P. G. Holden	**				54
46			Frank Smith         C. D. McLane.         P. G. Holden.         J. E. McGilvrey.         Seth J. Temple.         J. D. Phillips         Violet D. Jayne         Oscar Quick         Edward J. Lake.         Ella H. Morrison					
47	••		Seth J. Temple	••		••		100
48	••		J. D. Phillips					83
49	••		Violet D. Jayne					125
$50 \\ 51$	٠.		Uscar Quick			• •	····· ····· ····	80 70
52	٠.		Ella H, Morrison	••		• •		100
53	••		George A Huff	• •				120
54	••		W. J. Fraser	••		••		37
55	• •		Carlton R. Rose	••		••		80
56			Joseph C. Blair					45
57 58	• •		Margaret Mann				·····	75 100
59	• •		Agnes S. Cook					70
60	۰.		A. C. Howland			••		80
61	٠.		Chester H. Rowell	* •		• •		70
62	••		Geo. H. Meyer	••		••		70
63	••		Carlton R. Rose. Margaret Mann Alison M. Fernie Agnes S. Cook A. C. Howland Geo. H. Meyer W. H. Kavanaugh Maude W. Straight Charles F Hottes W. C. Burnham Maude W. Straight Charles F Hottes W. C. Brenke. C. T. Wilder. Jessie Y. Fox James H. McKee George D. Hubbard H. A. Webber C. V. Seastone R. B. Ketchum H. A. Webber C. V. Seastone R. B. Ketchum H. J. Value M. B. Hammond Anna Fossler C. B. Clark A. R. Curtiss Henry Jones J. H. Carnaham A. C. Hobart. A. C. Hobart.	••				80
64	••		J. P. Hylan	••				80
65 66	••		A C Burnham					80
60 67	٠.		Mande W. Straight			••	· · · · · · · · · · · · · · · · · · ·	90
68	٠.		Charles F Hottes	••		• •		70
69	••	- 1	W. C. Brenke	••		••		75
701	••		C. T. Wilder	••		••		70
71	••		Jessie Y. Fox	••				30
72	• •		James H. McKee	••				50 50
73 74	• •		H A Webher	••		••		50
75	••		C. V. Seastone	••				
76	• •		R. B. Ketchum	• •		••		50
77	••		H. V. Carpenter	••		••		
78	••	ļ	J. L. Sammis	••		**		50
79	••		M. B. Hammond	••				50
80	••		Anna Fossler	••			· · · · · · · · · · · · · · · · · · ·	50
81 82	۰.		O. D. Ulark	••				85 85
64 83	••		Henry Jones				·····	60
84	••		J. H. Wilson	• •				60
85	* *	ſ	D. H. Carnaham	* *		. • •		30
86			A C Hohert	* *		4.4		30

•

١o.	Date.	To whom.	For what.	Amou
	1898.			
487	May 3	F. W. Schacht.	Salary for May, 1898	\$30
488	May, 3	A. E. Paul		30 30
189	••	Don Sweeney		30
<b>190</b>	**	A.S. Williamson		10
191		Edward G. Howe. Lillie A. Clendenin. R. S. Douglass C. B. Randolph. C. W. Alvord W. J. Billohoww		150
192		Lillie A. Clendenin		65
193		R. S. Douglass	•• •• ••	75 70
194 195		C W Alword		70
190		W L. Pillsbury	•• ••	169
97		D. McIntosh. C. V. Millar. R. W. Stark. George W. Graham.	•• •• ••	102 75 75 50 100
98		C. V. Millar	•• •• ••	75
99		R. W. Stark	•• ••	50
600		George W. Graham		100
01	• •	Lillie Heath Sue W. Ford	•••	1 75
02		Sue W. Ford		55
03	••	L. A. Boice		55 45
04		Jennie M. Lafiin		45
505 506		Adolaido M. Chago		30 25
00		Mary T Pierce		25
08		W. O. Waters	•• ••	20
09	••	Sue W. Ford L. A. Boice Jennie M. Laflin Georgia E. Hopper	** **	20 40
10	••	Pearl Adams	** **	40
11	" "	Pearl Adams W. R. Hoffman. L. G. Lathrop. J. J. Johnson. E. A. Nelson Elbert E. Pound A. S. Golden. Allen McGlaughlin Philip Schwehm F. J. Foote. Joe Morrow	· · · · · · · · · · · · · · · · · · ·	37
12	••	L. G. Lathrop		32
13	••	J. J. Johnson		32
14	• •	E. A. Nelson		32
$\frac{15}{16}$	**	Elbert E, Pound		32 32
17		Allen McClenchlin		34 99
18		Philip Schwehm	•• ••	32 27
19		F. J. Foote		75
20	••	Joe Morrow	4.4 4.4	75
21	• •	E. W. Justus	4.4 . 4	50
22		W. H. Zimmerman		60
23	• •	F. J. Foote Joe Morrow. E. W. Justus W. H. Zimmerman. M. T. Lindsey. J. H. Allen R. Uttenweiler. Fred Atkinson		40
24	• •	J. H. Allen		40
25	۰ ۰	R. Uttenweiler		60
26	••	Fred Atkinson		35
$\frac{27}{28}$	• •	Champeign M. & Supply Co.		25 5
$\frac{20}{29}$	• *	D H Llordo & Sons	Note books namer of	14
30		Hubbard & Sons	Sower nine etc	89
31		Mittendorf & Kiler	Picture frames. etc	49
321		Chas. F. Witt	Rings, straps, etc.	12
33		H. Swannell	Toilet paper. etc	27
34		A. S. Nelson & Son	. Butter	1
35!	. •	Champaign County Herald	. Printing	60
36	. •	Champaign County Ptg. Co	etc	67
37	• •	E. Barr	Brick	1
38 39	• •	Sholdon Priek Co	. [Sana	$\frac{1}{2}$
$\frac{39}{40}$	••	Twin City Electric Co	Valves, etc. Note books, paper, etc. Sewer pipe, etc. Picture frames, etc. Toilet paper, etc. Butter. Butter. Brick. Sand Switches. Filter. Acid, bottles, and cans. Copies of paper. Copies of paper. Copies of paper. Recorder, gauge, etc. Coasting brushes Bolts and screws. Spring brass, etc. Brick. Leather belting. Econometer. Fee. Castings. Pinno box. Regulation paper. Books. Books. Books. Books. Expenses.	2
41	••	Baker & Adamson Cham Co	Filter	7
421		The Indiana Chemical Co	Acid, bottles, and cans	13
13		Fuller & Fuller Co	Chemicals.	19
14		Falls Rivet & Machinery Co.	. Pulleys	2
451		The Watson-Stillman Co	. Cup packings	6
46	. •	American Society of M.E	. Copies of paper	4
17		Crosby Steam Gauge&Valve C	o Recorder, gauge, etc	96
18	• •	Machinists' Supply Co	. Uasting brushes	2
49 50	٠٠	Ches H Booly & Co	Spring brass etc.	$\frac{2}{4}$
51	• •	Chicago Retort & Fire R. Co	Briek	110
52		Chas. A. Schieren & Co	Leather belting	136
53		Joseph Wilckes	Econometer	81
541		North Central Association	Fee	3
551		Kinsey & Mahler Co	.Castings	ž
56		Edwin H. Pierce	Piano box	2
57		Eugene Dietzgen Co	. Regulation paper	7
58		Library Bureau	Book supports, etc	58
59		Callaghan & Co	- Books	2
60	• •	Houghton, Mittlin & Co	. Воок	25 47
61				

# Warrants-Concluded.

. Date	•	To whom paid.	For what.	Amour
1898.				
3 May	. 31	W. T. Harris John B. Bennett W. Z. Wiley T. E. Howard L. J. Hackney Geo. B. Wilson C. V. Millar	Expenses Brick, etc Expenses	\$48
	01	John B Bennett	Brick etc	37
5		W Z Wiley	Exnenses	9
6		T E Howard	14 CALCERT	9
7		L J Hackney	••	) ğ
8 **		Geo B Wilson	4.4 · · · · · · · · · · · · · · · · · ·	53
9		C V Miller	**	10
0		Eimer & Amond	Chamicals	81
1		C. V. Millar. C. V. Millar. Odin Coal Co. Illinois Agriculturist.	Chemicals Coal Publication Expenses on <i>Technograph</i>	401
2		Illinoia Agnigultumist	Publication	50
3		I H Voung	Exponses on Tachmonranh	100
4 **		J. H. Young Max, Kaehler & Martini E. H. Renner & Bro	Appenders of reconceptup	560
5		F U Donnon & Dro	Apparatus. Hauling	46
		Debingen & Dunn	Hauffing contracts of	652
6		Robinson & Burr	Heating contracts, etc Printing, etc	152
7		The Gazette Tower Mfg & Novelty Co		154
8		Tower Mig & Novelty Co	Adders	195
9		The Illini	Advertisement	125
0		A. E. Wuesteman	Pins and medals	50
1		Katharine L. Sharp	Expenses	18
2		W. H. Uwens	Expenses Mimeograph copies Payment on contract	14
٥		2. U. Seagwick	rayment on contract	500
4 June	15	The Tillini A. E. Wuesteman Katharine L. Sharp W. H. Owens. J. C. Sedgwick B. A. Bullard Alex McLean N. B. Morrison	Expenses	40
5		Alex McLean		59
6		N. B Morrison Isaac S. Raymond		58
4		Isaac S. Raymond	• • • • • • • • • • • • • • • • • • • •	20
8		A. S. Draper	Water service Part sal. quarter ending May 31, '98 Engraving and printing. Hauling and labor. Coal. Photos. Printing. Model of brain. Expenses. Chinaware, forks, etc. Part salary for June Services. Provisions. Provisions. Prainting President's house. Instruments.	88
9		wm. H. Maxwell		100
0		L. A. Rhoades		51
1		J. E. McGilvrey		8
2		Union Manufacturing Co	Water service	500
3		A. W. Palmer	Part sal. quarter ending May 31, '98	25
4		Inland Publishing Co	Engraving and printing	638
5		T. R. Leal	Hauling and labor	135
6		John B. Bennett	Materials and labor	326
7 **		The Chesapeake & Ohio Co	Coal	214
8		Thomas Naughton	Photos	38
9		Champugn Co. Herald	Printing	36
0		The Kny-Scheerer Co	Model of brain	70
1		J. E. Armstrong	Expenses	39
2		Pitkin & Brooks	Chinaware, forks, etc	255
3		Miles Newberry	Part salary for June	25 26
4		L. Goodman	Services	26
D		C, H. Baddeley	Provisions	42
0		J. M. Chase	Painting President's house	131
1		Wm. H. Armstrong	Instruments	22
5		Bausch & Lomb Optical Co	Instruments, etc	32
9		P. Blakiston Son & Co	Books	11
0		The Gazette	Instruments. Instruments, etc. Books. Printing Oil	350
1		W. S. Royal	Qil	2
z		Standard Oil Co	Nails, etc Tile	21
ฮ.		H. M. Shuck & Co	Nails, etc	4
4		Champaign Tile Co	Tile	82
5 **		Acadomy of Nat Science Phile	Publication	1 P
6 ''		The Burrows Bros. Co	Book Pipe and fittings. Governor shaft Recording gauge, etc	1 7
7		N. O. Nelson M'f'g Co	Pipe and fittings	17
8 **		Murphy Iron Works	Governor shaft	2
9 **		Schaffer & Budenberg	Recording gauge. etc	190
0 **		Falls Rivet & Machinerv Co	Pulleys	139
1		Illinois Electric Co	Battery cells	21
2 **		Machinists Supply Cc	Waste	1 7
3		Wadham's Oil and Grease Co.	Oil	12
4 ''		Callaghan & Co	Book	
5 **		The Lukenheimer Co	Indicator cock, etc.	1
6 ''		Chas. Strelinger Co	Tools, etc.	1
7		Adam Cook's Sons	Recording gauge, etc. Pulleys Battery cells Waste. Oil Book. Indicator cock, etc. Tools, etc. Oil and grease. Tubes, etc. Plates and diplomas.	5
8 **		Eimer & Amend	Tubes, etc.	40
9				0.00
ŏ 📫		J. W. Olcott & Co.	Induction coil	
1		Corning & Co	Alcohol	3
2	•	Lawton & Co	Duplicator and refilling	
3		Miller & Leming	Trinod legs an i etakas	
3		A F. Wuesteman	Oil ote	
4		F S Goldon	Plates and diplomas Induction coil Alcohol Duplicator and refilling Tripod legs an $\iota$ states Oil, etc Labor and materials Frames. Expenses. Advertising	4
6		W I Soffall & Co	Frames	
		E G Howe	Evnances	
		12. Q. IIOMG	mybenses	

No.	o. Date.		To whom.	]	For what.	Amour	
630	June	15	C. W. Bolfe	Camera		\$7	
640	5 uno	10	A W Mumford	Advertising			
641	••		Ozias Riley	Stamps	••••••	220	
$\overline{42}$		- 1	W. W. Lindley E. H. Renner & Bro S. W. Shattuck, business mgr.	Postage		125	
43			E. H. Renner & Bro	Hauling		66	
44	••		S. W. Shattuck, business mgr.	Expressage		53	
45						41	
546			** **	Freightage		143	
47				Sundry items		59	
48			C. T. Wilder S. W. Shattuck, business mgr.	Photos and P	aper	3	
49			S. W. Shattuck, business mgr.	Pay rolls of n	ien, May, 1898	1,305	
50	June	30	A C Durn	Pay rolls of s	aper nen, May, 1898 tudents, May, 1898 1898	790	
51			A. S. Draper T. J. Burrill S. W. Shattuck, business mgr. N. C. Ricker	Salary, June,	1898	585 200	
52 53	••	1	S W Shottnelt huginogg man	÷ (		166	
	•••		N C Bigkor	••		191	
54 55	••		Ira O. Baker	4.4		187	
56	• •		S A Forbes	• •		83	
57	••	- 1	S. A. Forbes C. W. Rolfe	٠.		175	
58	••			* *		50	
59	••		D. McIntosh A. N. Talbot	* *		175	
60	••	- 1	A. W. Palmer.	••		175	
61			F. F. Frederick	••		158	
$6\hat{2}$	••		S. W. Parr.	• •		175	
$6\overline{3}$	••		H. F. Barton	• •		175	
64	••		A. N. Talbot A. W. Palmer F. F. Frederick B. W. Parr H. F. Barton. C. M. Moss D. K. Dodge	••		175 175	
65			D. K. Dodge	••	· · · · · · · · · · · · · · · · · · ·	166	
66			D. K. Dodge L. P. Breckenridge D. Kinley E. Davenport A. Tompkins A. P. Carman W. H. Jones	• •		187	
67			D. Kinley	••		187	
68			E. Davenport			95	
<u>69</u>			A. Tompkins	••	•••••	166	
70			A. P. Carman	••	•••••	187 100	
71			W. H. Jones	• •	•••••	100	
72 73			Coo E Condonon	٠.	•••••	166	
74			C (1 Pickott	• •		125	
75	••		A. F. Carlman W. H. Jones E. B. Greene. Geo. E. Gardener. C. C. Pickett. Katharine L. Sharp.	**	··· ··· ··· ··· ··· ··· ··· ···	166	
76	••		Geo T Kemp	÷ i		166	
77	••		Geo. T. Kemp, Geo. W. Myers, E. J. Townsend. J. M. White.	••		150	
78		i	E. J. Townsend	• •		137	
79	••		J. M. White	••		133	
80	••			• •		141	
81	••		H. H. Everett	• •		133	
82			H. H. Everett. W. H. Van Dervoort W. D. Pence. H. S. Grindly. T. A. Clark.		···· ·· ······	137	
83			W. D. Pence		···· ··· ·· ······	133	
84			H. S. Grindly	••		108	
85		1	T. A. Ulark	••		133	
86	••	- 1	H. S. Piatt.	••	·····	100 108	
$\frac{87}{88}$			A H Domiola	• •	·················	108	
	• •		G D Foirfold	••	···· ···········	108	
89 90			H. S. Platt B. V. Swensen A. H. Daniels G. D. Fairfield F. A. Sager William Esty Frank Smith C. D. McLane P. G. Holden I. E. McGilvrey	• •		108	
90 91	•••		F A. Sager	• •	· ···· · ·· ···	100	
91 92	٠.		William Esty	••	···· ··· ··· ··· ··· ···	108	
93	••		Frank Smith	• •		100	
94	••	- 1	C. D. McLane.	* *		100	
95	••		P. G. Holden.	* *		54	
96	••		J. E. McGilvrey Seth J. Temple. J. D. Phillips	••		108	
97	••		Seth J. Temple	••		100	
98	••		J. D. Phillips	••		83	
99	••		Violet D. Jayne	••	·····	125	
00	••		Oscar Quick	••		80	
01			E. J. Lake			70	
02			Ella H. Morrison	••	····	100	
03		- 1	Uscar Gutek E. J. Lake Ella H. Morrison Geo. A. Huff Wm. J. Fraser C. R. Rose			120	
04			wm. J. Fraser		· · · · · · · · · · · · · · · · · · ·	37	
05			U. K. Kose		·····	80	
06			J. U. Blair			45	
07			Margaret Mann			75	
08			Amon S. Cook			100 70	
09		- 1	A C Howland	••		80	
10 11			Chester H Rowell	••		70	
19			Geo H Mever	••		70	
13	••		C. R. Rose. J. C. Blar. Margaret Mann . Alison M. Fernie. Agnes S. Cook A. C. Howland Chester H. Rowell Geo. H. Meyer. W. H. Kavanaugh J. F. Hylan. Alice Putnam	••		80	
14	••		J. P. Hylan	• •		80	
		1				80	

16 17 18 19 20		Date. To whom.		For what.		Amou	
18 19	1898.						
18 19	June	30	A. C. Burnham Maude W. Straight C. F. Hottes W. C. Brenke C. T. Wilder. Jessie Y. Fox. J. H. McKee G. D. Hubbard H. A. Webber C. V. Seastone R. B. Ketchum. H. V. Carpenter. J. L. Sammis M. B. Hammond. Anna Fossler. C. B. Clark A. R. Curtiss	Salary, June	, 1898	\$9	
18 19	**		Maude W. Straight			7	
19			C. F. Hottes			7	
2111			W. C. Brenke			2	
	4.4		C. T. Wilder.			7	
1			Jessie Y. FOX			5	
$\frac{2}{3}$	• •		G D Hubbard			5	
4	• •		H A Webber			5	
5			C. V. Seastone	• •		5	
6	6 4		R. B. Ketchum	••		5	
7	••		H. V. Carpenter	••		5	
ø			J. L. Sammis			5	
9	4.4		M. B. Hammond			5	
0			Anna Fossier			5	
12	• •		A P Cuntige	• •		8	
ŝ	• •		I H Wilson			6	
4	٠٠		Henry Jones	• •		Ğ	
5	• •		D. H. Carnahen	• •		3	
6	* *		A. C. Hobart	••		3	
7	**		F. W. Schacht	••		3	
3	**	1	C. B. Clark A. R. Curtiss J. H. Wilson Henry Jones D. H. Carnahen A. C. Hobart F. W. Schacht A. E. Paul Don Sweeney A. S. Williamson E. G. Howe	**		3	
2			Don Sweeney			3	
)	• •		A. S. Williamson	• •		1 15	
	4.		Lillio A. Clandenin	• •			
3			R S Douglas	••		7	
i	• •		A. S. Williamson. E. G. Howe. Lillie A. Clendenin R. S. Douglas. C. B. Randolph. C. W. Alvord W. L. Pillsbury S. W. Shattuck. D. McIntosh. C. V. Millar. R. W. Stark Geo. W. Graham Lillie Heath			7	
51	**		C. W. Alvord	• •		7	
5	••		W. L. Pillsbury	• •		16	
1	••		S. W. Shattuck	Salary, 3 mor	nths, tc June 30, 1898 , 1898	10	
3			D. McIntosh	Salary, June	, 1898	7	
			C. V. Millar	••	· · · · · · · · · · · · · · · · · · ·	7	
			Goo W Groham	٠.		5 10	
į	• •		Lillie Heath	4.6		7	
3	• •			••		5	
1	• 4		Sue W. Ford L. A. Boice Jennie M. Lafin Georgia E. Hopper Adelaide M. Chase Mary T. Pierce W. O. Waters F. J. Foote Joe Mocrow	• •		5	
5	• •		Jennie M. Laflin	• •		4	
51			Georgia E. Hopper	••		3	
7	••		Adelaide M. Chase			2	
3	• •		Wary T. Pierce				
j	* *		F J Foote	• •		7	
í	• •		Joe Morrow	• •		7	
			E. W. Justus	• •		5	
3	* *		W. H. Zimmerman	• •		6	
	••		M. T. Lindsey	**		4	
	••		Doe Morrow. Doe Morrow. E. W. Justus W. H. Zimmerman. M. T. Lindsey J. H. Allen. B. Uttorweilow	••		4	
			R. Uttenweiler Fred Atkinson			6	
	• •		Chas B Ewalt			3 2	
			Chas. B. Ewalt Henry J. East Pearl Adams	* *			
			Pearl Adams	* *		4	
			W. R. Hoffman	**		3	
			L. G. Lathrop	• •		3	
	**		V. R. Hoffman L. G. Lathrop. J. J Johnson. E. A. Nelson. Elbert E. Pound A. S. Coldon	• •		3	
		l	E. A. Nelson			3	
	••		Elbert E. Pound			3	
			A. S. GOIGER	• •		3	
	••		Philip Schwehm			2	
			Lucy L. Flower	Expenses	••••	3	
	• •		L. P. Breckenridge	110000000000000000000000000000000000000		1	
1	• •		J. T. Wolcott	Services		7	
	**		Westinghouse Elec. & Mfg. Co.	Generator		10	
	••		J. Manz & Co	View		:	
Ŀ			Engineering News Pub. Co	Advertiseme	nt		
5			west Publishing Co	Rook		-	
3			Edward Thompson Co				
3			The Florence Co	••	••••••	ė	
3	••		Elbert E. Pound A. S. Golden. Allen McGlaughlin Philip Schwehm Lucy L. Flower. L. P. Breekenridge J. T. Wolcott. Westinghouse Elec. & Mfg. Co. J. Manz & Co. Engineering News Pub. Co. West Publishing Co. Callaghan & Co. Edward Thompson Co. The Florence Co. F. F. Frederick.	Expenses			
ő	• •		Library Bureau J. C. Sedgwick	Account bool	c and slips		

'No.	Date.	To whom.	For what.	Amount.
2792 2793 2794 2795 2796 2797 2798 2799 2800	••	Garden City Sand Co Bickford Drill & Tool Co Keuffel & Esser Co J. D. Green Chas. A. Schieren & Co A. C. McClurg & Co.	Books Quartz Attachment Measuring tape, etc Labor and material Extracting oil from belting Envelopes, etc Fittings	6 27 20 00 10 02 51 67 8 87 16 93

# STATE LABORATORY OF NATURAL HISTORY WARBANTS.

0.	Date.		To whom.	For what.	Amour
	1897.				]
1	July	15	S. A. Forbes	Expenses	\$34
123456789			Clauser Bros	Photographs.	10
3			O. D. Havard	Labor.	9
4			W. C. Brenke	Work	7
5			Ed Gill.	Coal. Subscriptions.	4
6			Ginn & Co	Subscriptions.	9
4	••		H. W. Rokker	Printing and binding	64
5			E. H. Sargent & Co	Corks Boxes	2
18			Bausch & Lomb Opt'l Co	Boxes	1
10	• •		Unaries A. Hart	Expenses	2
11			E. V. Bronson.	Work Printing circulars, etc Railway Guide. 1897	10
$\frac{12}{13}$	• •		The Gazette	Printing circulars, etc	9 5
	••		National Ry Pub. Co	Railway Guide, 1897	2
14 15	• •		Goug Lithographing Co	Petty expenses Printing warrant book	
15 16			Librory Burger	Cummed labels	82
			W H Allon	Gummed labels Paints, oils, etc	27
18	• •		Miles Newherry	Lahon	1
19	• •		D S Howard	Labor. Repairs and labor	6
zol	* *		Mat Farman	Labor	2
21	••		Starr & Cogswell	Fittings ate	5
$\mathbf{\overline{2}}$			Charles T Wilder	Fittings, etc Blue prints.	9
3	July	31	Frank Smith	Salary, July, 1897.	100
4	ours.	01	Charles A. Kofoid	Salary, 5419, 1851	100
$\overline{5}$	* *		H. C. Forbes.	**	91
26	• •		Charles A. Hart	••	75
27	••		Mary J. Snyder	••	75
28	••		C. C. Adams.	÷ •	50
29	••		Harlen Scott	••	15
30	••		Frederic W. Schacht	44	60
31	••		Miles Newberry	44	50
32	••		V Zmrhal	**	30
33	••	1	Lydia M. Hart	Drawings	12
34	• •		Marjorie D. Forbes	Work in library. Vials, circles, etc	20
35	• •		Bausch & Lomb Opt'l Co	Vials, circles, etc	13
36	••		C B. Holzgrafe	Refrigerator, etc.	17
37			Richards & Co	Tubes	3
38			C. H. Besly & Co	Copper letters, etc	1
39			Macmillan & Co	Tubes Copper letters, etc Subscription	6
10	Aug.	14	Franklin Eng. and Electro. Co.	Zinc cuts	25
11			Pantagraph Pr'ting and Sta. Co	Paper boxes	7
12	••		Montgomery Ward & Co	Curtains Bicycle	13
13	••		A. R. Curtiss	Bicycle	26
14	• •		S. A. FORDES.	Expenses	25
15			Faul AlmcKsleck	Publications. Sundry items	5
16 17	••		J. W. Ghattuck, business mgr.	Sunary items	38
18	••		Pontograph Priting and Sto Co	Pins	6
10	••		E H Sargont & Co	Gummed paper Corks and vials	1
19 50	••		D Appleton & Co	Book.	14
51	Aug.	21	George F Lasher	Subgarintian 1907	1 2
52		41±	American Entom Society	Subscription, 1897 Subscription	
52 53			I M Schilling	Grogorias	4
54	••		Charles Foster	Groceries. Lettering. Mounting board.	11 6
55	••		The Gagette	Mounting hoard	1
56			- ne Guselle	Bottle racks, etc.	20

Dat	Date. To whom.		For what.	Amoun	
1	_			1	
1897	7	C A Device			
Aug.	31	S. A. Forbes H. C. Forbes Charles A. Hart Mary J. Snyder C. A. Kofoid. Frank Smith C. C. Adams F. W. Schacht Y. Zmrbal	Salary, 3 months, to date	\$62	
		Charles A Heart	Salary, August, 1897	91	
••		Mary I Snydor	••	75 75	
••		C A Kofoid	••	108	
••		Frank Smith	· · · · · · · · · · · · · · · · · · ·	100	
		C. C. Adams.	· ·	50	
• •		F. W. Schacht	·· · · · · · · · · · · · · · · · · · ·	1 00	
••		Y. Zmrhal.	and expenses	53	
		Miles Newberry	44	50	
		Harlen Scott	Work in library	15	
		Marjorie D. Forbes.	Work in library	9	
S	45	E. V. Bronson	Labor.	8	
Sept.	15	R. Freidlander & Son	BOOKS	105	
••		S W Shattuck business man	Expenses. Miscellaneous items	25 40	
••		Champaign (Jounty Horald	Printing	13	
••		Keene & DeLang	Conv book	2	
••		A. C. McClurg & Co.	Books.	5	
••		Bausch & Lomb Opt'l Co	Forceps, etc	10	
••		Heliotype Printing Co	Copies of plate	41	
		J. W. Critchley	Insect pins	6	
		J. C. Winship Co	Printing bulletins	133	
		Lydia M. Hart	Drawings	39	
	00	H. U. Forbes.	Expenses Morkel and expenses Morkel and expenses Expression and expenses Balary and expenses Balary September, 1897. Balary September, 1897. Balary September, 1897. Balary and expenses Salary September, 1897. Balary Septem	6	
Sept.	30	H. U. Fordes	Salary, September, 1897	91 108	
		C A Hort	**	108	
		Mary I Snyder		75	
••		C C Adams		50	
••		Harlen Scott	4.4	15	
••		R. W. Braucher	Work	33	
	1	D. S. Howard	Row boat	23	
		Yaroslav Zmrhal	Salary and expenses	27	
1		B. Zelle	Linoleum	2	
		Miles Newberry	Salary, September, 1897	50	
		Mirs. Milles Newberry	WORK.	2	
		F W Wheeler	Guide book	7	
		W H Meyer	Monte		
		J. M. Schilling	Sunnlies	12	
••		Macmillan Co	Book.	15	
••		Frank Smith	Expenses	Ğ	
••		Fred Atkinson	Labor.	3	
Oct.	15	D H. Lloyd & Son	Letter files, etc	8	
		E. F. Hartman	Letter heads	5	
		Open Court Pub Co	Publications	1	
		Control Union Tolonhone Co	Subscription	25	
••		R S Wilher	Drevege	2	
••		S. A. Forbes	Expenses	25	
		Starr & Coggswell	Labor and materials	11	
		Western Electric Co	Bunsen jars	3	
••		Maltby & Wallace Co	Work on gear patterns, etc	9	
		Brown & Sharpe Mfg Co	Book Labor. Letter files, etc Letter files, etc Letter files, etc Publications Subscription Services to January 1, 1898. Drayage Expenses Labor and materials. Bunsen jars. Work on gear patterns, etc Bevel gears Labor and material on centrifugal. Binding books Salary, October, 1897. to Sept. 30, 1897. Oct., 1897.	6	
		Mechanical Engineering Shops	Labor and material on centrifugal.,	100	
	00	Montgomery Ward & Co	Binding books	67	
Oct.	30	U. A. A01010	Salary, October, 1897	108	
		Mary I Snudor		91	
		C A Hart		75 83	
		Lydia M. Hart	"to Sept. 30, 1897	12	
••		Miles Newberry.	to Sept. 30, 1897 Oct., 1897	25	
•••		Harlen Scott		15	
••		R. W. Braucher		27	
		The Gazette	Printing circulars	1	
		Houghton, Mifflin & Co	Books	50	
		S. Raymond Roberts	Manual of Conchology	6	
		watson Faulkner	Alconol	2	
		Raugust Goese	Apparatus	2	
		Wm Wesley & Son	Books	• 5	
		H E Summers	Propering exhibit of	6 46	
••		James Ingis	to Sept. 30. 1897 Oct., 1897 Manual of Conchology Alcohol Scissors, pipettes, etc. Books. Preparing exhibit, etc. Photographs Expenses Petty expenses. Labor Negative and print.	35	
••		S. A. Forbes	Expenses	33	
•••		H. C. Forbes	Petty expenses	5	
••		W. D. Burton	Labor.	1	
			Negative and print	1	

o. Date.		To whom.	For what.	Amou
1897.			1	 
Oct.	30	S W Shattuck, Business M'g'r	Sundry items Remodeling case . Picture frames, etc Salary, 3 months, to date Nov., 1897 Oct., 1897 Nov., 1897  Photographs Bottles, oils, chemicles, etc	\$15
1	00	Geo. W. Parker & Son	Remodeling case	9
•••		Mittendorf & Kiler	Picture frames, etc	32
••		Franklin Engr'v'g & Electo, Co	Zinc cuts	46
		S. A. Forbes	Salary, 3 months, to date	62
		H. C. Forbes	Nov., 1897	91
		C. A. Hart		83
		Mary J. Snyder		75
		Lydia M. Hart	Oct., 1897	25
		C A Kafaid	NOV., 1897	15
		Milon Nowhorm	" " and next of Oat	$\begin{bmatrix} 108 \\ 29 \end{bmatrix}$
		Clauser Bros	Photographs	3
		W H Allen	Bottles oils chemicles etc.	35
••		G. W. Geary	Copper tank, etc	2
		Geo. E. McHose	Labor	$\overline{2}$
		Montgomery Ward & Co	Book binding	86
••		W. H. Rokker	Printing and binding	58
••		W. W. Lindley	Stamped envelopes	10
		Franklin Engr'v'g & Electo. Co	Zinc cuts	13
		Lydia M. Hart.	Drawings.	25 2
		western Bank Note Engrav.Co	Faichment paper	2
•••		H. U. FOrbes	Photographs Bottles, oils, chemicles, etc Copper tank, etc Book binding Printing and binding Stamped envelopes Zinc cuts Drawings Patchment paper Expenses Blank book	$2 \\ 6$
		H. C. Portozang. Bausch & Lomb Optical Co W. W. Lindley Henry M. Skinner J. M. Dent & Co.	Blank hook Brass discs, etc Stamps Subscription	16
		W W Lindler	Stowng	8
••		Honry M Skinner	Subscription	1
		I M Dent & Co	Subscription.	3
••		Ginn & Co	••	
••		Library Bureau	Labels and cards Drayage	Ğ
		R. S. Wilber	Dravage	8
••		August Geise	Filter	31
		Esty Wire Works Co	Wire cloth	6
		Univ. of Illinois repair shop	Labor on centrifugal	17
		S. W. Shattuck, business m'g'r.	Sundry items	17
		H. C. Forbes	Salary for Dec., 1897	91
		C. A. Kotoid		108
		Chas. A. Hart		83
		C. A. Adams. Mary J. Snyder. Miles Newberry. Harlen Scott.	Labels and cards Drayage Filter Wire cloth Labor on centrifugal Sundry items Salary for Dec., 1897.	25
		Mary J. Snyder	** ** ***	75 25
		Harlen Scott	•• ••	
1898.				10
Jan.	15	W. W. Lindley	Postage stamps	36
·		D. H. Lloyde & Son	Ink. pens. etc	1
••		W. T. Falconer Mfg Co	Blocks for mounting insects	33
••		Montgomery Ward & Co	Registers	11
• •		Geo. W. Parker & Son	Bottle racks	13
••		Western Union Telegraph Co	Telegrams for Dec., 1897	4
	i	Chas. W. Smiley	Subscription	1
		Wm. Wesley & Son	Foreign publications	4
		K. Freidlander & Son	Duintin a halloting	47
		J. C. Winship Co	Printing bulletins	215
	•	V W Shuck	Postag- stamps. Ink, pens, etc Blocks for mounting insects. Registers. Bottle racks. Telegrams for Dec., 1897. Subscription	15 2
		V. W. Olluck	Cark slobs	
		Cambridge Botanie'l Supply Co.	Labole	1
		L S Poster	Copy of the Auk	3
٠.		C A Hart	Expenses	19
Jan.	31	C. A. Kofoid	Salary for Jan. 1898.	19 108
ouni,	-	H. C. Forbes		91
• •	- 1	C. A. Hart.	•• ••	83
• •		Mary J. Snyder	•• ••	75
••		C. C. Adams	• • • • • • • • • • • • • • • • • • • •	25
**		Miles Newberry	•• ••	25
••		Lydia M. Hart		5
		Harlen Scott		25
Feb.	14	Phillips Bros	Labor	
		Lydia M. Hart	Drawings	27
		Bausen & Lomb Optical Co	Subcription	1
		Unicago Legal News Co	Revised statutes of lillinois	4
••	}	Liea Dros. & U0	Subscription for 1898	4
••		Champaign County Hardld	Labor Drawings. Subcription Revised statutes of Illinois Subscription for 1898 Cutting frames (Jards and paper Rugs, matting, etc Coal	6
••		F K Robeson & Bro	Rugs matting etc	36
			10450, ILUCULE, CLU	00

—21 U. I.

0.	Date.		To whom.	For what.	Amour
	1898.			For what. Envelopes. Expenses. Cleaning furniture Salary, 3 months to date. for Feb. 1898.  Publications Books. Proceedings Zoölogical Society. Periodicals Expressage, etc. Filters. Printing Expenses. Catalogne case, etc. Eve shades, etc. Catalogne case, etc. Eve shades, etc. Catalogne case, etc. Eve shades, etc. Catalogne case, etc. Salary, March, 1898.  Hennicals. Publications Chemicals. Publications Chemicals. Publications Chemicals. Manila paper and envelopes. Stamps. Reproductions of diagrams, etc. Paper. Welsbach lamps, tubing, etc. Haling, etc. Salary, April, 1898.  Salary, April, 1898. 	
10	Feb.	28	Geo. W. Parker & Son	Walnut box.	\$1
			W. W. Lindley	Envelopes	\$1 11
12			H. C. Forbes	Expenses	4
13			Walker & Mulliken	Cleaning furniture	1
4			S. A. Forbes	Salary, 3 months to date	62 108
5			C. A. Kofoid	for Feb., 1898	108
67	1		Chas A Haut		91
8			Mary I Snyder	** **	83 75
9	••		C C Adams	••• ••	25
ŏ	••		Miles Newberry	•• ••	25
ĩ	**		Harlen Scott.		20
<b>2</b>	**		R. Friedlander & Son	Publications	67 10
3	**		Karl J. Trubner	Books	10
4			Wm Wesley & Son	Proceedings Zoölogical Society	3
5			K. F. Koehler	Periodicals	1 3
6			Bernard Quaritch	Publications	12 13
$\frac{7}{8}$	Manah	15	S. W. Shattuck, business m'g'r	Expressage, etc	13
8 9	March	79	Philling Bros	Printing	9
9			S A Forbes	Expenses	93
ĭ	••		Western Union Telegraph Co	Telegrams.	7
$\dot{2}$	••		E. H. Sargent.	Öxide	i
3	••		Bausch & Lomb Optical Co	Eye shades, etc	$\hat{2}$
4			G. W. Parker & Son	Catalogue case, etc	47
5			W. W. Lindley, P. M	Envelopes and stamps	29
6			Ginn & Co	Journal of Morphology	9
7			The Entom Society of Ontario.	Canadian Entomologist	1
8	••		The Cyclopedia Pub. Co	Cyclopedia of Am. Biographies,	7
9 0			Lydia M. Hart	Banloak withon	28
1			H C Forbes	Atomizers book etc	1 2
$\frac{1}{2}$	March	31	C A Kofoid	Salary March 1898	108
3	hini on	01	Chas A Hart	Salary, 141011, 1000	108 83 91
4	••		H. C. Forbes	**	91
Ð	••		Mary J. Snyder	••	75
6	••		C. C. Adams	44	25
7			Harlen Scott		20 25
8			Miles Newberry	··· ·······	25
9	April	15	Ginn & Co	Book	4
0			Bernard Quariten	Publications	9 26
$\frac{1}{2}$	••		M l'Administratour dog Arab		20
-			ives de Parasitologie		6
3	••		H. W. Bokker	Printing	51
4	••		The Gazette	and binding	8
5	**		E. H. Sargent & Co	Chemicals	2
6			Champaign County Herald	Manilla paper and envelopes	18
7			W. W. Lindley	Stamps	13
8			Blomgren Bros. & Co	Reproductions of diagrams, etc	
9 0			Bugene Dietzgen & Co	Wolchoch lamps traking oto	1 15
1			R S Wilhor	Hanling etc	15
$\frac{1}{2}$	• •		Columbia Typewriter Mfo Co	Ribbons	4
3	••		J. M. Chase	Renairing	42
4	••		Knowlton & Bennett	Glass, pins	2
5	••		C. A. Hart	Dip-nets	2
6	••		Walker & Mulliken	Chairs	11
7			Western Union Telegraph Co	Telegrams	1 108
8	April	30	U. A. Kofoid	Salary, April, 1898	108
9 0			H. U. Forbes.		91
1			Maries A. Hart.		83 75
2	••		Charles C. Adams	Salary, half March and April, 1898. Labor and material. Salary, April, 1898. Vials. Labor. Putty Rental and services Laboratory expenses. Expenses, etc. Petty expenses.	10 69
3	••		E B Forbes	Salary half March and April 1909	62 105
4			Lydia M. Hart	Labor and material	40
$\overline{5}$	••		Harlen Scott	Salary, April, 1898	20
6	••		Miles Newbery	,,	25
7	••		E. H. Sargent & Co	Vials	6
8	••		R. W. Mills	Labor.	3
9			H. D. Oldham	Putty	5 11 6
0			Central Union Telephone Co	Rental and services	11
1			E. E. Forbes.	Laboratory expenses	6
2			S. w. Shattuck, business mgr	Expenses, etc.	15
33	May	91	H. U. FORDES	Petty expenses. Salary, May, 1898	$\begin{vmatrix} 1\\ 37 \end{vmatrix}$
4	DTSP A	31	U. U. Auams	Oalary, May, 1000	· 51

	Date.		To whom.	For what.	Amoun
1	1898.		· · · · · · · · · · · · · · · · · · ·	Salary, May, 1898 Salary, quarter ending May 31 Services Postage. Postage. Paty expenses. Carboleum. Hardware. Copy book. Tire. Sook. Bulbs and powder. Pins. Salary, May, 1898 Hose, coupling and clamps. Expenses. Funnel. Expenses. Bubber cans.	1
5 Ma	1090.	21	Ludia M. Hort	Salary May 1898	\$36
5 Ma	y.,	91	Harlen Scott	Salary, may, 1000	20
7	• •		Mary I Snydov	· · · · · · · · · · · · · · · · · · ·	75
8	• •		Chas A Hart	•••	83
9	<b></b>		H C Forbes	••	91
ŏ			S A Forbes	Salary quarter ending May 31	62
1			H E Summers	Services	75
2	* *		W W Lindley	Postage	19
3			H C Forbes	Petty eynenses	3
4	• •	1	The Prescott Chemical Co	Carholeum	2
5	<b>6 6</b>		T. H. Trevett	Hardware	$\overline{2}$
6	<b>6 6</b>		Keen & De Lang	Conv book	4
ž	• •		Champaign Cycle Co.	Tire	$\hat{4}$
8	••		S E Cassino	Book	$\hat{2}$
9	4.4		Bausch & Lomb Optical Co	Bulbs and nowder	ī
ŏ	* *		J. W. Critchley	Pins	3
1	* *		Miles Newhorry	Salary May 1898	25
$\frac{1}{2}$	* *		C A Kofoid	Salary, 112, 1000	108
3	* *		Centrel Rubbor Supply Co	Hose coupling and clamps	100
4	* *		Chas A Hart	Expenses	6
5	* *	•	J D Broone	Funnal	2
6	* *		E B Forbes	Expenses	18
7	* *		E H Sargant & Co	Ruhhar cans	2
8	••		E B Forbes	Funnel. Expenses. Rubber caps. Salary, May, 1898. Subscription Books. Bookbinding. Papers (Nat. Hist.) Books. Expenses. Bottle racks, etc. Publication Books. Subscription	64
9	••		E O Vaile	Subscription	1
0	••	1	The Nantilus	Cassofi puon	1
1	• •		H E Hooner	Books	19
$\overline{2}$	• •		Chas F Hottes.	1	20
3	• •		Ward Bros	Bookbinding	54
4	• •		Dulan & Co	Paners (Nat. Hist.)	20
5	• •		William Wesley & Son	Books	14
6	* *		S A Forbes	Expenses	253
7	4 4		H E Parkor	Bottle racks etc	13
8			William Wood & Co	Publication	15
9	• •		A C McClurg & Co	Books	2
0			Daniel Appleton & Co	1000A8	1
1	• •		Seimen	Bothe racks, etc. Publication. Books. Subscription Laboratory furnishings. Brass rings Instruments Glue, etc. Rubber tubing Pins Labor Ribbon, etc Anatomical jars. Stationery, etc Pins and postage Printing, etc. Corks. Publications Books. Publications Books. Thermometer case. Expenses. Stamps Alcohol. i and chemicals. Expenses. Letter heads. Chairs and door mats Labor. Railway guide Labor.	5
2	• •		Domalan Soiman North	Conscribtion	
3	• •		Bougah & Lomb Opticel Co	Laboratory furnishings	6
4			Robinson & Burr	Brace minor	
5			Honry J. Green	Instruments	28
e l	••		H Swennell	Glue etc	20 1
6	* *		TH Trovott	Rubber tubing	1
8	" "		I W Critablor	Pine	13
9			Hubbard & Sona	Labor	13
0	••		Franklin Educational Co	Ribbon ota	1
1	• •		Whitell Teture & Co.	A notomical jara	23
	• •		D H Llordo & Son	Stationory ata	$2\hat{3} \\ 7$
2	* *		I. II. LIOYUE & SOIL	Ding and postage	16
3			The Carette	Printing etc	10
4	* *		Alfred I Date		25
5			Alfred L Butz	UOTKS	3 26
6			S. W. Shattuck, Business Mgr.	Dapressage, etc	26
7			P Friedlander & Par	DUUKS	121
8	••		R. Friedlander & Son	Publications	121
			wumam westey & Son	DOOKS	18
0			John wheldon & Co		22
1			1. II. Trevett	Thermometer case	2
2	4		S. A. FOrbes	Lxpenses	22
3	1.		w. w. Linaley	Stamps	12
4			Corning & Co	Alconol	16
5	••		Unemical Dep't U. of 1	and chemicals	16
6			<b>H</b> . U. Fordes	hxpenses.	1
7	••		Ed. F. Hartman	Letter neads	7
8	••		Muttendorf & Kiler	. Unairs and door mats	2
9			H. E. Parker	. Labor	2
0			National Railway Pub. Co	. Railway guide	5
1	••		J M. Fisher	. Labor	1
2	••		E. O. Vaile	Chairs and door mats Labor Railway guide Labor Publication Subscription Books Foreign literature Salary, June, 1898.	1
3	•••		The Entomological News	. Subscription	1
4	**		J. H. Studer	Books	17
5	•••		S. Raymond Roberts		6 129
61	••		Gustav E. Stechert	Foreign literature	129
7 Ju:	ne	30	H. C. Forbes. C. A. Kofoid E. B. Forbes. H. E. Summers	. Salary, June, 1898	91
ð	• •		C. A. Kofoid		108
	4 4		E B Forhes	• • • • • • • • • • • • • • • • • • • •	70
9 0			<b>1</b> 2. <b>D</b> . <b>P</b> . 01 <b>2</b> 03		

Warrant	s—Con	tinued.

No.	Date.	To whom.	For what.	Amount
361 362 363 364 365 366 367 368 369 370 371 372 373 374 375	1898. June 30        	Harlen Scott. H. E. Parker. Hubbard & Sons Cunningham Bros. H. J. Green. Central Rubber Supply Co. B. F. Gump. Geo. B. Holzgrafe Kny-Scheerer Co.	Salary, June, 1898. Part salary for June, 1898. Salary, June, 1898. Repairing insectory Couper tank Books. Merchandise Bolting cloth. Hardware Chemicals. Labor and materials.	$\begin{array}{c} 20 \ 0 \\ 13 \ 4 \\ 9 \ 7 \\ 42 \ 1 \\ 2 \ 0 \\ 7 \ 0 \\ 11 \ 9 \\ 9 \ 9 \\ 5 \ 0 \end{array}$

#### AGRICULTURAL EXPERIMENT STATION WARRANTS.

No,	Date.	To whom.	For what.	Amount
Permanent	1897.	1		
1	July 3	T.J. Burrill	Salary for July, 1897	\$50 00
$\hat{2}$	ours, o	W. L. Pillsbury		25 00
3	••	E. Davenport.		91 6
4		D. McIntosh.		
5		P. G. Holden.		50 00
		G. P. Clinton		83 3
7		C. G. Hopkins		125 00
6 7 8	••	J. C. Blair	** **	41 60
- õ	••		** ** ***********	
10	• •	W. J. Fraser		50 00
	••	Kate McIntyre		
11 12	• •	S. W. Shattuck		16 66 33 33
		T. J. Mairs.	Hardware	
13				67 3
14				1 75
15		E. Henry	Soda	1 50
16		Creamery Package Mig. Co	Jars, etc	17 50
17		Knowlton & Bennett	Leads, oils, etc	6 65
18		Walker & Mulliken	Chairs, tables	3 30
19		[ <u>T. 丑</u> . Trevett	Hardware	86
20			Brooms. etc	4 65
· 21		J. F. Miller	Whips, etc	5.80
22			Horse-shoeing, etc	32 20
23		H. Swannell	Drugs, etc	20 93
<b>24</b>		C. H. Baddeley	Sauce dishes,	5 50
25			Galvanized iron, etc	4 30
26 27			Lumber	36 97
27		Wm. Price	Paints, oils, etc	760
- 28		H. McFadden & Bros	Straw, hay, etc	10 60
29	••	The Gazette	Printing, etc	20 36
30	••	F. K. Robeson & Bros	Matting	3 00
- 31	••	Ferguson & Craig	Clock	1 00
- 32	••	C. J. Sabin	Bolts, blocks, etc	5 25
- 33	••	Henry Trevett	Hardware	15 20
- 34	• •	Wm. Miebach & Co	Apparatus	490
35	••	Bevis & Co	Lumber	2 35
- 36	••		Curry combs, brushes, etc	8 50
37	* *	Ed Lasell		2 75
- 38	**		Plants	13 15
39	••		Services	10 00
40	••	Goes Lithographing Co	Printing warrant book	8 34
	August 2		Expense	3 20
42	••	Samuel Barthey	Plowing and planting corn	5 50
$\overline{43}$	••	Watson Faulkner	Sponges	1 50
44	••		Hardware	25 17
45			Adjusting typewriter	4 69
46	••	John F. Miller	Harness, etc.	20 55
47	••	Frison Bros.		1 00
48			Printing	6 50
49			Locks, etc	3 97
- <del>.</del>			Galvanized iron, etc	4 55

Warrants—Continued.
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0	Date.		To whom.	. For what.	Amou
	1897.			1	1
51		20	Twin City lee & Cold St'ge Co	Ice	\$14
52	August	40	C. J. Sabin	Scraper seeds etc	15
53	••		Knowlton & Bennett	Scraper, seeds, etc Records and journals	13
54	••		Robinson & Burr	Pulley Lumber, coal. Old pipe	1
55			Charles A. Besore	Lumber. coal	9
56	••		Abe Selicovitz	Old pipe	1
57			J. G. Mosier	Expenses	9
58			S. W. Shattuck, Business Mgr.	Sundry items	16
59				Old pipe Expenses Sundry items Pay rolls for July, 1997, etc. Salary for August, 1897	475
50	August	31	T. J. Burrill	Salary for August, 1897	50
31			T. J. Burrill W. L. Pillsbury E. Davenport.		25
2			E. Davenport		91
3			D. McIntosh		25
45	••		G P Olipton		50
6	• ••		C G Henking		83 125
7			L C Bloin	** ** ***	41
78			W I Engon	** ** ***	33
ğ	••		Kate MeIntyre		50
9012345678901234567	• •		S. W. Shattuck	•• •• ••	16
ĭ	* *		T. I. Mairs		33
ŝ	Sept.	15	A. C. McClurg & Co	Shuttle	3
ş	~~~	-0	P. G. Holden	Expenses	11
i	* *		Eimer & Amend	Flasks, etc.	9
5	••		Richards & Co	Chemicals. etc	85
3l	••		H. N. Woodward	Shuttle Shuttle Expenses Flasks, etc Cotting samples Cider mill, etc Postal guide Linoleum, etc Hardware, etc Pine lumber Paints, oils, etc Lumber and coal Pay rolls, etc Lumber and coal Pay rolls, etc Salary for September, 1897 Salary for September, 1897	44
7	••		E. A: Riehl	Cutting samples	3
31	••	1	Montgomery Ward & Co	Cider mill. etc	11
9	••		George F. Lasher	Postal guide	2
)	••		F. K. Robeson & Bro	Linoleum, etc	37
ų	••		Hubbard & Sons	Hardware, etc	12
2	••		Miller & Leming	Pine lumber	1
3	••		H. Swannell	Paints, oils, etc	14
1	••		Charles A. Besore	Lumber and coal	19
5			S. W. Shattuck, Business Mgr.	Pay rolls, etc., August, 1897	404
j	Sept.	30	<u>T. J. Burrill</u>	Salary for September, 1897	50
7	••		W.L. Pillsbury		25
3			E. Davenport		91
3			D. McIntosh		25
		. !	P. G. Holden		54
			J. C. Blair		45
		1	W. J. Fraser. C. G. Hopkins G. P. Ulinton		37
			G P Clupton	••• •••	125 83
			Reto MaInturo		55
			S W Shattuck	•• •• ••	16
1			Kate McIntyre S. W. Shattuck. T. I. Mairs. Henry Trevett. Campbell & Spalding. P. Durgoment	•• •• •••	41
;	4 •		Henry Trevett	Hardware	13
	••		Campbell & Snalding	Shoeing etc	10
			E. Davenport	Expenses.	4
	••		Ottenheimer & Co	Overalls	Î
	October	15	Vermont Farm Machine Co	Babcock heater, etc	12
			Twin City Ice & Cold St'r'ge Co	Hardware. Shoeing, etc. Expenses. Overalls Babcock heater, etc. Ice. Supplies. Rings. Blankets, collars, etc. Galvanized iron'etc Brooms, buckets, etc. Lumber. etc.	12 26
1	••	- 1	A. P. Cunningham & Son	Supplies	10
	••		De Laval Separator Co	Rings	1
	••		John F. Miller	Blankets, collars, etc	6
			Т. <u>H</u> . Trevett	Galvanized iron.°etc	8
		- 1	E. Henry	Brooms, buckets, etc	5
		j	U. A. Besore	Lumber, etc	12
1	4.4		Gustav E. Stechert	BOOKS	4
ł			Debingen County Herald	necord books, etc	6
		- 1	W W Walla & Oc	Drass fillgs	3
			$\mathbf{N}$ , $\mathbf{N}$ , $\mathbf{N}$ alls $0$ U0	Pooka nona ota	1
1	••		Alexander Lumber Co	Lumbon	5
		1	G C Willia	Flannel toweling ote	11 6
	• •		Hubbard & Song	Looke fittings ate	. 14
J	* *	ļ	George Besore	Dote hran ate	14
3	••	1	Knowlton & Bennett	Paints oils etc	14
1		- 1	Martin Ribbius	Sand	
1	••		Eimer & Amend	Repuirs of polariscope etc	51
	• •		George A. Garrison	Oats.	17
3	Oct.	30	T. J. Burrill	Salary for October, 1897	50
í		~	W. L. Pillsbury	Shoeing, etc. Expenses. Overalls. Babcock heater, etc. Ice. Supplies. Bings. Blankets, collars. etc. Galvanızed iron.*etc. Brooms, buckets, etc. Lumber, etc. Books, etc. Brass rings. Lumber. Flannel. toweling, etc. Locks, fittings, etc. Oats, bran. etc. Paints, oils, etc. Sand. Repairs of polariscope, etc. Oats. Salary for October, 1897.	25
5	••	- 1	E. Davenport	** **	<b>91</b>
şI.		- 1	D Maturial	** **	25

### UNIVERSITY OF ILLINOIS.

## Warrants-Continued.

Date	э.	To whom paid.	For what.	Amount
1897	,			
Oct.	· 30	P. G. Holden	Salary for October, 1897	\$54 1
••		<u>J. C. Blair</u>		45 8
		W.J. Fraser	** ** **	37 5
		C. G. Hopkins		120 0
		G. G. Hopkins. G. P. Clinton Kate McIntyre S. W. Shattuck		83 5
		S W Shottuak	··· ··· ····	55 0
			** ** **	1 41 6
••		S W Shattuck Business Mor	Pay rolls, men, September, 1897, etc.	544 2
Nov.	15	S. E. Ball	Expenses for board of men	7
		G. C. Willis	Blankets. etc	17 4
		Pantagraph Print. and Stat. Co	Letter books, etc	7 2
		George W. Parker & Son	Wood specimens	2 5
		William Roysden	Moving safe	. 25 0
		Samuel Bartley	Labor, cutting corn, etc	10 0
		Richards & Co	Condenser tubes	12 (
		Fuller & Fuller Co	Acius	
		Torrey Reterical Club	Subscription	
••		George Besore	Pay rolls, men, September, 1897, etc. Expenses for board of men Blankets, etc. Letter books, etc. Wood specimens. Moving safe. Labor, cutting corn, etc. Condenser tubes. Acids. Lumber. Subscription. Oats and feed. Mattress. etc. Twine, etc. Buggy, etc. Wheelbarrow, pipe, etc. Jars, brushes, etc. Lumber. Chemicals, light, water, etc. Freight, express, etc.	11 (
		Mittendorf & Kiler	Mattress. etc	
		C. J. Sabin.	Twine, etc.	87
		John F. Miller	Buggy, etc	48 5
••		Hubbard & Sons	Wheelbarrow, pipe, etc	16 4
		A. H. Barber & Co	Jars, brushes, etc	6 7
		C. A. Besore	Lumber	18
		W. W. Lindley	Postage	20 (
		S. W. Shattuck, Business Mgr.	Chemicals, light, water, etc	122
			Preight, express, etc Pay roll of men, October, 1897 Salary for November, 1897	81 9 505 1
Nov.			Salary for November 1897	50 0
100.	0	T. J. Burrill W. L. Pillsbury		25 (
••			•• ••	
••		D. McIntosh P. G. Holden J. C. Blair W. J. Fraser.	44 64	25 (
		P. G. Holden	4.6 6.6	<b>54</b> 1
••		J. C. Blair	** **	45 8
		W. J. Fraser		. 37 8
		C. G. Hopkins		125 (
		G. P. Clinton		. 83
		Kate McIntyre		55 (
Dea	ณ	S. W, Shattuck	(Jam.	16 6 40 (
Dec:	20	N B Morrison	Evnonses	17 8
••		Hubbard & Sons	Milk con	
		Bevis & Co	Lumber.	2
• •		C. & U. Phoenix Telephone Co.	Services to December 15, 1897	. 50
••		Champaign County Herald	Printing	44 (
Nov.	30	Gustav E. Stechert	Books	. 61
		Charles A. Besore	Lumber, etc	35 3
		S. W. Shattuck, Business Mgr.	Pay rolls, men, November, 1897, etc.	388
Dec	31	T. J. Burrill	Cow. Expenses. Milk can. Lumber. Services to December 15, 1897. Printing Books. Lumber, etc. Pay rolls, men, November, 1897, etc. Salary for December, 1897.	50 (
		E Devenport		25 0
		D MaIntosh		
		P G Holden		54
••		J. C. Blair	· · · · · · · · · · · · · · · · · · ·	45 8
		W. J. Fraser	** ** ** *****************************	37
		C. G. Hopkins		125
		G. P. Clinton	•• ••	83 3
		Kate McIntyre	** **	55 (
		S. W. Shattuck	·· ·· ······	16
5	5	Isaac S. Raymond	Expenses	. 50
1898	· ,		Emponese	10 (
Jan.		D. A. Kleni	Expenses.	13 9 13 0
		P. G. Holden	• •	63 8
		E. Davenport.	• •	2
		C. H. Baddelev	Lamp, etc	1
		C. & U. Phœnix Telephone Co	Services to March 15. 1898	3
· · ·		A. C. McClurg & Co	Ribbons	3
		Henry I. Green	Lamp, etc Services to March 15, 1898 Ribbons Thermometer Lumber, etc Straw and milk Ice Board	6 (
••		Charles A. Besore	Lumber, etc	45 4
		S. B. Hedges	Straw and milk	22 2
)				. 15 (

### Warrants—Continued.

о.	Date.		To whom.		For what.		Amou
1	1898.			1			1
02	Jan.	7	Hubbard & Sons Kariher Grocery Co William Price Estate Creamery Package Mfg Co Stern Bros Knowlton & Bennett Frison Bros Kariher Grocery Co W. W. Lindley S. W. Shattuck, Business Mgr. T. J. Burrill W. L. Pillsbury Davenport. D. McIntosh P. G. Holden J. C. Blair C. G. Holden J. C. Blair. W. J. Fraser G P. Clinton Kate McIntyre	Hay carrier.	etc		32
03		'	Kariher Grocery Co	Salt. etc		•••••	1
04	• •		William Price Estate	Paints, oils.	etc		1€
)5	••		Creamery Package Mfg Co	Jars. etc			42
06			Stern Bros	Rubber coat			5
)7			Knowlton & Bennett	Glass, etc	••••••••••••••••••	• • • • • • • • • • •	11
)8	Ton	15	Kariban Graceny Co	Repairing si	ea	•••••	5
0	Jan.	15	W W Lindley	Postago	• • • • • • • • • • • • • • • • • • • •	•••••	3 10
1	• •		S. W. Shattuck, Business Mgr.	Pay rolls. De	cember, 1897.	etc.	406
21.	Jan <sub>i.</sub>	31	T. J. Burrill	Salary for J	anuary, 1898.		50
31	••		W. L. Pillsbury				25
4			E. Davenport		· · ·		95
5		1	D. McIntosh				25
6	••	1	P. G. Holden			•••••	54
8			C G Honking		•• ••	• • • • • • • • • • •	45 125
9	• •		W.J. Fraser	••	•• ••	•••••	37
ŏ	••	1	G P. Clinton	••	•• ••		83
1	••		Kate McIntyre	••	••		55
2	••		S. W. Shattuck	_ **	**		10
3	• •		McFadden Bros	Bran			4
4 5			W. J. Fräser Kate McIntyre S. W. Shattuck. McFadden Bros. Swannell Mfg. Co. Mittendorf & Kiler Bausch & Lomb Optical Co Ft. Wayne Electric Corporatin. Phœnix Nursery Co. D. H. Lloyde & Son. C. H. Baddeley. G. C. Willis. Creamery Package Mfg Co L. K. Howse & Co Champaign County Herold. J. Manz & Co. J. C. Blair. Chicago Produce Co Thomas Meehan & Sons. Register Co. Gustav F. Stechert. The Gazette.	Linseed cake	e, etc	•••••	29
5	• •	- 1	Mittendorf & Kiler	Picture tram	es	• • • • • • • • • • •	2
7	••	- 1	Et Wayna Elastria Connoration	Objective, m	ateriais, etc	•••••	61 4
ŝ	••		Phoenix Nursery Co.	Apparatus.			1
9	• •		D. H. Lloyde & Son.	Detail naner	ete.		14
0	••	- 1	C. H. Baddeley	Lantern, gol	d dust. etc		6
1	••	- 1	G. C. Willis	Toweling, etc	3		12 17
2	••	1	Creamery Package Mfg Co	Bottles, etc.			17
3		1	L. K. Howse & Co	Baskets	• • • • • • • • • • • • • • • • • •		4
4	••		Samuel Barti-y.	Services.			25
5	• •	- 1	L Mang & Co	Printing circ	eulars, etc	•••••	31 27
7	• •	- 1	J. C. Blair	Expenses	••••••	•••••	21
3	• •	- 1	Chicago Produce Co	Subscription	to January 22	. 1899	1
9	* *		Thomas Meehan & Sons	110 000 000 000	to December	31, 1898	$\hat{2}$
0	••		Register Co	Book			5
1			Gustav E. Stechert		••••••••		1
2			The Gazette	Printing you	chers	• • • • • • • • • • •	3
4		- 1	U. A. Hullt,	Hardwaro	•••••	• • • • • • • • • •	4 38
5	4 4	1	John F. Miller	Bridle etc	••••••	•••••	7
5	4.4		J. C. Blair. Chicago Produce Co. Thomas Meehan & Sons. Register Co. Gustav E. Stechert. <i>The Gazette</i> . C. A. Hunt. Hubbard & Sons John F. Miller Champaign Mach. and Sup. Co. John B. Bennett. J. W. Spaulding & Son. W. J. Fraser.	Pulley, etc	• • • • • • • • • • • • • • • • • • • •		2
7	••	1	John B. Bennett,	Cement. san	d, plastering,	etc	23 *3
3		- 1	J. W. Spaulding & Son	Rubber boots			•3
)			W. J. Fraser	Stove	•• •••••		ž
)  	Joh	90	S. W. Shattuck, business mgr.	Sunary item	S	•••••	3
	Feb:	20	$\mathbf{N} \cap \mathbf{N}$	Robeto	eriment neids	•••••	17 3
3	• •		Champaign Mach. and Sup. Co. John B. Bennett. J. W. Spaulding & Son W. J. Fraser. B. W. Shattuck, business mgr. H. N. Woodward N. O. Nelson. H. Leiber Co. Richards & Co. Montgomery Ward & Co. Holstein Friesian Ass'n of Am. G. E. Stechert. Hubbard & Sons. S. B. Hedges S. W. Shattuck, business mgr. T. J. Burrill. W. L. Pillsbury E. Davenport. D. McIntosh. P. G. Holden	Photographic	a materials		20
LÍ -	• •		Richards & Co	Nessler tube	s, etc		13
5	**		Montgomery Ward & Co	Ducking			3
	**		Holstein Friesian Ass'n of Am.	Set of herd b	ooks		25
			G. E. Stechert	Subscription	S		150 47
3			nuevara & Sons	Rooning, linit	ugs, etc	•••••	47
j.	• •	Ì	S. W. Shattuck husiness man	Pay-rolls los	1W 1802		24 335
1			T. J. Burrill	Salary for Pa	bruary, 1000, etc		330 50
			W. L. Pillsbury	Number of the			
1	••		E. Davenport	• •	· · ·		25 95
	••		D. McIntosh	• •			25
			P. G. Holden	••			54
		ľ	D. McIntosh P. G. Holden J. C. Blair C. G. Hopkins.				45
3	٠.		W J Freen	••	•• ••	• • • • • • • • • • •	125 37
	•• *		G. P. Clinton	**	•• ••		83
	••		Kate McIntyre	••	•• ••		55
L	••		S. W. Shattuck, business mer.	• •	••		16
210	March	15	Gustav E. Stechert	Herd registe	rs		54
3	**		American Jersey Cattle Club	Subscription			1
1			W. W. Lindley	Postage stan	nps	• • • • • • • • • •	20
5	••		C. G. Hopkins. W. J. Fraser. G. P. Clinton Kate McIntyre S. W. Shattuck, business mgr. Gustav E. Stechert. American Jersey Cattle Club. W. W. Lindley. Eichberg & Baer. C. H. Baddelv. A. E. Wuesteman R. S. Wilber.	Rugs		•••••	1
6		- [	$\mathbf{A} \in \mathbf{W}$ uesteman	Liamp, chimp	leys, etc	•••••	6
		1		Q100A	• • • • • • • • • • • • • • • • • • •		16

# UNIVERSITY OF ILLINOIS. [March 15

# Warrants-Continued.

No.	Date.		To whom.	For what.	Amount
	1898				
279	March	15	Charles A. Besore	Lumber Kerosene, cotton, etc Hardware Welsbach lights, etc. Note books, etc. Salt, soda, soap, etc. Brushes, pails, etc. Plates, films, hypo, etc. Bran, oats, etc.	\$93 0
280 281			Henry Swunnell	Korosono actton ota	61 4 4 9
282	••		T. H. Trevett	Hardware	42 4
283	••		Hubbard & Sons	Welsbach lights, etc	10 8
284	••		H. Swannell	Note books, etc	40
285			E. Henry.	Salt, soda, soap, etc	13 6
$\frac{286}{287}$	••		Cunningham Bros	Plates films hypo etc.	58 101
288	••	i	George Besore	Bran, oats, etc.	151 2
289	• •		Edward B. Voorhees	Bran. oats. etc Membership, A. A. A. C. and M. S	10 0
290	••		The Gazette	Labels	10
$\frac{291}{292}$			Henry Hell Chemical Co	Tubes, forceps, etc	11 1
292			Robinson & Burr	Relting nulleys etc	45 5 26 7
294	**		J. B. Ellis	Book.	7 1
295	**		Hubbard & Sons	Hardware	11 6
296			Morrill & Morley	Bran, oats. etc Membership, A. A. A. C. and M. S Labels Tubes, forceps, etc. Centrifuge Belting, pulleys, etc. Book. Hardware. Pump, etc. Acid, etc.	37 4
$297 \\ 298$			J. B. Ellis Hubbard & Sons Morrill & Morley Fuller & Fuller G. A. Garrison. Knowlton & Bennett. Isaac S. Raymond	Pump, etc. Acid, etc. Oats Qil, shellac, etc.	39 760
299	••		Knowlton & Bennett	Oil, shellac, etc.	16 0 5 2
300	••		Isaac S. Raymond	Expenses	40
301	**		E. A. Riehl	**	14 0
302			S. W. Shattuck, business mgr.	Express, freight, etc	48 8
$303 \\ 304$		31	T. J. Burrill	Pay-roll, men, February, 1898 Salary March 1808	$349 \ 0 \\ 50 \ 0$
304	• •	91	<ul> <li>W. Shattler, busiless mgr.</li> <li>T. J. Burrill</li> <li>W. L. Pillsbury</li> <li>E. Davenport.</li> <li>D. McIntosh</li> <li>P. G. Holdon</li> </ul>	Expenses. Express, freight, etc Pay-roll, men, February, 1898. Salary, March, 1898.	25 0
306	* *		E. Davenport		95 8
307	• •		D. McIntosh	••• ••	25 0
308 309					54 1
$\frac{309}{310}$			J. C. Blair. <u>C.</u> G. Hopkins.	** **	45 8 125 0
311	• •		W. J. Fraser	** **	37 5
312	• •		G. P. Clinton. Kate McIntyre S. W. Shattuck.		83-3
313			Kate McIntyre		55 0
$\frac{314}{315}$			S. W. Shattuck	rinting, etc	10 6 707 7
	April	15	Hack & Anderson. William Price estate. C. E. Chapman. Farmers Handy Wagon Co	Oil, paint, etc	15 6
317	••		C. E. Chapman	Painting and papering rooms	49 0
318	**		Farmers Handy Wagon Co	Extra parts for wagon Hardware. Wagon parts and repairing Oats	26 5
319		1	Hubbard & Sons	Hardware	379
$\frac{320}{321}$			Frison Bros Charles Lundley C. & U. Phœnix Telephone Co. V. W. Shuck Eugene Dietzgen Co <i>Champaign County Herald</i> E. Davenport	Wagon parts and repairing	3 7 25 8
322	••		C. & U. Phœnix Telephone Co.	Telephone services Shears, stone, etc Slide rule Printing Expenses, etc	3 0
323	**		V. W. Shuck	Shears, stone, etc	19
324			Eugene Dietzgen Co	Slide rule	36
$325 \\ 326$			E. Davenport	Frinting	195 178
327			P G Holden	Expenses, etc	18 6
328			P. G. Holden G. P. Clinton	4.6	47
329	••		J. A. Campbell & Co	Chop	23
330 331	••		J. C. Vaughan	Seeds	42 78
332	••		J. A. Campbell & Co. J. C. Vaughan H. M. Simpson & Sons A. C. McClurg & Co Max Kaehler & Martini. Del aval Sonawton Co.	Chop Seeds Seeds and plants Multiplication book	$25^{+0}$
333	••		Max Kaehler & Martini	Chemicals	16 2
334	••		DeLaval Separator Co	Separator parts	14
335			DeLavai Separator Co The Gazette. W. W. Lindley Manhat'n Dyeing and Cl'g W'ks Charles A. Besore. Mittendorf & Kiler Bausch & Lomb Optical Co A. S. Nelson & Sons Walker & Mulliken. S. W. Shattuck. husiness mer	Book	$29 \\ 100$
336 337	**		Irbana Planing Mill	Stamps Sawing wood Dyeing blankets Lumber, etc.	10 0
338	• •	1	Manhat'n Dyeing and Cl'e W'ks	Dyeing blankets.	15
39			Charles A. Besore	Lumber, etc	38 6
840	••	1	Mittendorf & Kiler	Chiffonier, etc Thermometer and razor	14 8
41 42	••		Bausch & Lomb Optical Co	Thermometer and razor	$     3 4 \\     2 0 $
42		- ]:	Walker & Mulliken	Sacks and seeds Chair, curtains, etc	13 8
44			S. W. Shattuck, business mgr.	Express and freight	26 2
45			S. W. Shattuck, business mgr.	Express and freight. Pay-roll, men March, 1898. Bottle racks, etc. Grain bags	472 4
46	April	30	S. W. Shattuck, business mgr.	Bottle racks, etc	13 5
347	••		C. H. Baddeley		22 45
848 849	• •		Jos. Kuhn & Son	Seeds	4 D 5 0
50	* *	1	Walker & Mulliken	Repairing chair	10
51	••	ŀ	H. C. Porter C. H. Baddeley Jos. Kuhn & Son Walker & Mulliken F. J. Burrill W. I. Pillsbury	Rubber coat. Repairing chair. Salary, April, 1898	50 0
52	••		W. L. Pillsbury		25 0
53	••		I. J. Burrill W. L. Pillsbury E. Davenport D. McIntosh P. G. Holden		95 8 25 0
354 155	• •	H	P. G. Holden	** **	25 U 54 1
			J. C. Blair	•• ••	01 1

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Warrant	s-Cont	inned.
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).	Date.		To whom.	For what.	Amo
Ī	1000			1	
_	1898.		1177 T 17-1	C. Laure Amuil 1900	6
7	April	30	W. J. Fraser G. P. Clinton	Salary, April, 1898	\$
8	1		G. P. Clinton	Salary, April, 1898	
9			Kate McIntyre	** **	[
0].	May .	14	Hammond & Willard J. W. Griesemer	Stock Stock	[ :
11			Hammond & Willard	Stock	
2	••		J. W. Griesemer	**	
3	••		Hiram Howard	Seed	
4	• •		Silas Wilson Co	Stock	
5	••		Augustine & Co	•• •• •••	
6	* *		Phœnix Nursery Co	**	
ž			T V Munson & Son	••	
8	• •		A W Livingston's Sons	Seeds	
9			J W Kerr	Stock	
0			J C Suffern	Corp	
ĭ			Willott & Chor	Sooda	
2			Tohnson & Stellog	Seeus	
			The Storne & Hamilton Os	1000A	1
3			The Storrs & narrison Co		
4			W. A. Watson & Co		
5			Enwanger & Barry		
6			Stark Bros. N rseries&Orch. Co	Seed Stock Stock Corn Seeds Stock Stock Oil Rugs	:
7			Standard Qil Co	QII	
8	••	- 1	Eichberg & Baer	Rugs	
9		- 1	A. M. Woodward & Co	Pear stock	
0	••		Iowa Seed Co	Corn	
1	* *		A. M. Woodward & Co Iowa Seed Co J. B. Purrows	Rugs Pear stock Corn Seed	
2	* *	1	C. A. Besore	Coal	1
3	••	1	Meyer & Raapke	Seed	
1	• •	1	J. C. Vaughan	**	
5			S. B. Hedges	Straw and hay	1
6	* *		R. T. Robinson	Grinding, etc.	1
ž	4 4		Pattengale Bros	Hav	- 1
3			Philadelphia Book Co	Book	
j.	4.4		J. F. Miller	Harness, etc.	2
j			Knowlton & Bennett	Sponges, etc.	Ĵ
í		1	Wm. Miebach & Co	Mitre box, etc.	1
2	۰.		J. B. Eurrows C. A. Besore Meyer & Baapke J. C. Vaughan S. B. Hedges R. T. Robinson Pattengale Bros. Philadelphia Book Co. J. F. Miller Knowlton & Bennett Wm. Miebach & Co. J. C. Sedgwick	Sect. Seed. Seed. Straw and hay. Grinding, etc. Hay. Book. Harness, etc. Sponges, etc. Mitre box, etc. Carpenter work. Advertising. Frinishing desk Laboratory supplies. Freight, express and drayage. Pay roll for April, 1898. Salary, May, 1898.	1
3	••		The Sanders Publishing Co	Advertising	
i	• •		G R Potty & Co	Law of thome deek	
5	**		Richards & No	Lehoretory supplies	22
3		- 1	S W Shattuck Busin's Mar	Enought wyprose and dramage	22
íln	May.	31	N. 11: SHALLUCK, DUSILLESS Mgr.	Pay roll for April 1909	68
3	ay	91	T I Burnill	Solovy May 1808	08
			T. J. Burrill W. L. Pillsbury	Salary, May, 1898	5 2
3		1	E. Davenport		4
ľ.			D. Mainteah	•••••••••••••••••••••••	
5		- 1	D. Melntosh. D. Melntosh. P. G. Holden. J. C. Blair. W. J. Fraser. G. P. Clinton.	•••••••••••••••	2
			r. G. nolden	· · · · · · · · · · · · · · · · · · ·	5
		- I	ม. 0. Blau	•••••••••••••••••	4
			w. J. Fraser		3
			g. P. Quinton		8
3	••		Kate McIntyre		5
1		_ 1	S. W. Shattuck	Printing Vitriol	1
J	lune	15	The Gazette	Printing	
1	•••	- 1	Fuller & Fuller Co	Vitriol	1
	* *		G. P. Clinton. Kate McIniyre	Expenses	
	••	- I.	Isaac S. Raymond	***	
2			N. B. Morrison	"	1
			W. W. Lindley	Postage	ī
	* *		Fred'k L. Houghton	Book	•
	4.4	Ŀ	Holstein-Friesian Asso. of Am	Publication	
	••	- 1	Dr. Giovanni Briosi	Parasitic fungi.	2
	• •		L Manz & Co	Diagram	-
	••	1	Champaian County Hamald	Printing	
		1	Mathews Bros	How and hran	
	* *	- 1:	Miller & Loming	Shavinge	
1	••	- 13	Chao Lindlor	Onte	1
	••		Duas. Linutey	Oats and grinding	
	**	H	Estate of LA Company of	Uais and grinding	2
	••		Estate of J. A. Campoeil & Co.	nay, etc	1
			H. McFadden & Bro	Bran, etc	1
1			5. Donalas	Hay	
	••		Ureamery Package Mfg. Co	Milk Jars	
	••	[]	L. C. Garwood	Book         Publication         Parasitic fungi         Diagram         Printing         Hay and bran         Shavings         Oats         Oats         Oats         Oats         Bran, etc         Hay, etc         Bran, etc         Hay, setc         Bran, etc         Hay, setc         Stock         Harness         Waste and glasses         Steel tape         Chemicals         Lumber	1
	••	- 1'	The Miller Harness Co	Harness	1
		]	Robinson & Burr	Waste and glasses	
	••	1	Eugene Dietzgen Co	Steel tape	
					1

### UNIVERSITY OF ILLINOIS.

[June 15,.

lo.	Date.		To whom.	For what.	Amoun
	1000				
199	1898. June	15	I () Wanghan	Seeds	\$2
134	anne.	19	Goo A Sweet Nurserry Co	Plums	2
135	••		T Palph Minor	Plum trees	1
136			Creenia Nargent Co	Nursery stock	· 1
137				Labor, oats, etc	3
138			P Abarmothy	Painting signs	16
139			R. Abernathy	Chemicals ate	10
			Danach & Lamb Ontical Co	Chemicals, etc	10
140	••		Bausch & Lomb Optical Co	Apparatus	
141			S. W. Shattuck, Business Mgr.	Freight, drayage, etc	11
142				ray rolls for may, 1695	658
43	<b>T</b>	~~		Express. etc.	36
	June	30	T. J. Burrill	Salary, June, 1898	50
145			W. L. FIIISDUry		25
46			E. Davenport		95
47			D. McIntosh		25
48			P. G. Holden		54
49			J. C. Blair		45
50			W. J. Frazer		37
51			G. P. Clinton		83
52			C. G. Hopkins		125
53	••		Kate McIntyre		55
54	• •		S. W. Shattuck		16
55				Making cider, barrels, etc	85
56	• •		F. M. LeRoy	Hay and stray	77
57	• •		Thomas Naughton	Toning and mounting prints Milk jars	4
58	••		Chreamery Package & Mfg. Co.	Milk Jars	9
59	••		Samuel Bartley	Labor	8
60	•• •		H. N. Woodward	Labor and material	50
61	• •		Ed. Ford	Hay	3
$\tilde{62}$	• •		C. A. Percival	Pasturing cattle	30
63	**		Hubbard & Sons	Labor and material	51
64	••		S. W. Shattuck, Business Mer.	Sundry items	1
65	••		R. S. Wilber	Freight and drayage	8
66	••		H. Swannell	Sponges oil etc	8
67	••		Kariber Grocery Co	Sponges, oil, etc Sacks and lye	2
68	••		Knowlton & Bennett	Paint etc	5
69	••		Alevender Lumber Co	Paint, etc Lime, lumber, etc	23
70	• •		I C Venghen	Sood ate	
71	••		The Carotte	Seed, etc Printing, etc	2
72			C A Hunt	Class oil oto	12
			U, A. HUILL	Glass, oil, etc Peptone	12
73			ы. п. sargent & Co	reptone	17
174			Unaries A. Besore	Lumber, etc	17

# SCHOOL OF PHARMACY WARRANTS.

No.	Date.	To whom.	For what.	Amount.
	1897.			
1	July 10	J. H. Clough	Rent, April, 1897 Salary, May and July, 1897 Petty expenses Rebates on deposit	\$300.00
$\overline{2}$		W. B. Dav	Salary, May and July, 1897	150 00
3	• •	Henry Eulert	Salary, filly and o ary ( 100000000000000000000000000000000000	100 00
Ă	• •	W B Day Actuary	Petty exnenses	36 16
5	• •	D. Pus, Horan J.	Rebates on denosit	199 69
6	••	H Swannell	Expenses.	16 66
7	• •	H H Rogers	13xponsos	4 75
ģ		Theo C Loohr	**	20 10
8 9		Chas. A. Kofoid	• • • • • • • • • • • • • • • • • • • •	8 38
10		W M Goodman	Printing questions	4 50
11		F T Anthony	Pamphlets, envelopes, etc	68 75
10		Lohn Malagan & Co	Dimphing	1 10
12 13		Turner & Long Co	Plumbing	18 00
14	1	Lurney & Jones Co	10081	5 25
		J. C. Craig, Superintendent	Water Medals	5 25 30 00
15			Telephone charges	30 00
16 17		S. W. Shattuck, business mgr	Telephone charges	31 40
17			Ribbons	
18		H. S. Cooper	Calcimining, etc	116 00
19	July 3	w. в. Day	Salary, July, 1897	75 00
20		Henry Eulert	······	50 00
21		W. B. Day, Actuary	Petty expenses	70 92
22		J. W. Wilson	Cabinet	l 38-00

# Warrants--Continued.

<b>D</b> .	Date.		To whom.	For what.	Amour
1	1897.				1
23	July	31	W. T. Keener Co	Directory. Printing warrant book. Cuts. Expenses. Legal services Curtains. Matting, etc. Printing. Envelopes and printing. Filter, pump, etc. Paints, ammonia, etc. Postage stamps. Expenses to September 15, 1898. Salary, August and September, 1897	\$5
24 25 26 27 28 29	-4.4		Goes Lithographing Co	Printing warrant book	8
25			Pontiac Eng. & Pub. Co	Cuts	9
6	Oct.	2	A. W. Palmer	Expenses	10
7			S. A. Reynolds	Legal services	30
ğ			Mondol Prog	Curtains	
0	••		C P Englobert & Co	Printing, etc	6
1			Donohue & Henneberry	1 Inting	279
2	• •		E. J. Anthony	Envelopes and printing	14
3			Richards & Co	Filter. pump. etc	4
4			Fuller & Fuller Co	Paints, ammonia, etc	29
5			S. W. Shattuck, Business Mgr.	Postage stamps	185
6 <u> </u>			W. B. Day, Actuary	Expenses to September 15, 1898 Salary, August and September, 1897	81
7			W. B. Day	Salary, August and September, 1897	150
8	Oct.	15	Henry Eulert Druggists' Ci <sup>r</sup> cular Deutsch-AmerikanischeApoth-		100
sΙ	Jet.	15	Druggisis Circular	Advertisement	00
ol	• •		eker Zeitung		15
1			eker Zeitung Pharmaceutical Rev'w Pub. Co.	× •••	
2	••		Merck & Co	· · · · · · · · · · · · · · · · · · ·	40
8	••		American Druggist Pub. Co	44	21
4	••		D. O. Hynes & Co	Chairs, etc. Asphaltum, etc. Plumbing, gas fittings, etc. Repairing set of tubes, etc. Ammonia. Wire cloth. Balance, tubing, chemicals	36
5			J. S. Ford Johnson & Co	Chairs, etc	23
6			Fuller & Fuller Co	Asphaltum, etc	4
7			John McLogan	Plumbing, gas fittings, etc	34
8			Western Steam Boller Works	Repairing set of tubes, etc	37 1
9			Gilbert & Bonnett Mfg Co	Wire eloth	5
1	••		Richards & Co	Balance tubing chemicals	444
2			E. J. Anthony	Printing invitations	24
3	••		P. F. Pettibone & Co	Supplies, etc.	3
1	••		Chicago Telephone Co	Services to January, 1898	31
5	••		F. W. A. Rowles	Supplies	2
6	••		W. B. Day, Actuary	Petty expenses to Oct. 15, 1897	48
710	Oct.	30	W. A. Puckner	Aepairing set of tubes, etc. Ammonia. Wire cloth. Balance, tubing, chemicals. Printing invitations. Supplies, etc. Services to January, 1898. Supplies. Petty expenses to Oct. 15, 1897. Salary, October, 1897	150
5			C. S. N. Hallberg		142
9			F. M. Goodman		135 71
1			L. I. Schreiner		57
2			E. N. Gathercoal		50
3			G. E. Chase	•• ••	14
L	••		W. B. Day	** **	96
5	••		Henry Eulert	\ \ \ \	50
31.			J. H. Clough	Rent, 6 months, to November, 1897.	1,200
7 2	Nov.	15	G S N Hereth	Balance salary, June 30, 1897	23
3	* *		W A Pueknor		45 59
5	* *		F M Goodman		59
0	* *		Fuller & Fuller Co.	Chemicals	151
	* *		Searle & Hereth Co	Drugs	7
3	* *		Registered Pharmacist	Advertisement	15
1	••		Meyer Bros. Druggist	**	15
5			Pictorial Printing Co	Labels, etc	12
j	••		Urr & Lockett Hardware Co	Files	11
3			reabody Coal Co	Hara coal	312
3			A 0. MCOlurg & U0	Printing	3 5
			R W McCready Cork Co	Corke	
í	* *		Mandel Bros	Cloth	5
2		i	Lehn & Fink	Specimens of drugs	22
3	••		E. J. Anthony	Cards	6
L			A. M. Foster & Co	Prescriptions, boxes	22
5	**		Richards & Co	Chemicals	276
5	••		Donohue & Henneberry	Paper	6
4	••		Thayer & Jackson Station'y Co	Stencils, etc	3
<u>۶</u> ],	Jor	00	S. B. Frank	Galvanized iron, labor, etc	31
	Nov.	30	W. A. FUCKNET	Salary, November, 1897	150
í	••		F M Goodman		142 135
2	٠.		Frank S. Hereth		135
	• •		L. I. Schreiner.	• • •	57
3					1 50
	••		E. N. Gathercoal	•• •• •• ••	່ວບ
3 4 5 6	••		E. N. Gathercoal Geo. E. Case. W. B. Day Henry Eulert	Ammonia Wire cloth Balance, tubing, chemicals. Printing invitations Supplies. Petty expenses to Oct. 15, 1897. Salary, October, 1897 	50 14

### UNIVERSITY OF ILLINOIS.

# Warrants-Continued.

[0.	Date	•	To whom.	For what.	Amour
	1007				1
98	.1897. Nov.	- 90	J H Clough	Rent of building, November, 1897 .	. \$200
<b>9</b> 9		00	J. H. Clough H. W. Ralph. Agent	Typewriter and case	. 75
00	• •		W. B. Day, Actuary	Petty expenses. Petty expenses. Castings for stove. Advertisement. Envelopes. Paper. Chemicals. Tablets. Tubing, flasks, etc. Chemicals. Salary, December, 1897.	. 32
01	Dec:	20	S. B. Traub	Castings for stove	. 7
04			Henry R. Strong	Advertisement	. 25
$     \begin{array}{c}       03 \\       04     \end{array}   $	••		E. J. Anthony	Envelopes.	. 2
04			A. M. Foster	Chemicals	. 14
06	••		A. C. McClurg & Co	Tablets	2
07	••		Richards & Co	Tubing, flasks, etc	. 13
08			Fuller & Fuller Co	Chemicals	. 19
09	Dec.	31	W. A. Puckner	Salary, December, 1897	. 150
$10\\11$			U. S. N. Hallberg	4 44	. 142 . 135
12	• •		Frank S. Horeth		. 71
13	• •		L. I. Schreiner	** **	57
4	• •		E. N. Gathercoal		. 50
15	* *		Geo. E. Case	44 44	. 14
16	**		W. B. Day	Rent of building, December, 1897.	. 21
17			Honey Enlant	** ** ***	. 75
18			L H Clongh	Ront of huilding December 1907	50 200
	1898.		o, 11, 0100gu	ment of building, December, 1897	- 400
20	Jan;	15	E. J. Anthony	Printing Sprinkling Expenses, gas, water, etc. Paper and stencils. Advertisement. Glass, labels, etc. Rubber tubing Services. Chemicals. Petty expenses. Salary, January, 1898	. 3
<u>1 1 1</u>		10	T. P. Brankin	Sprinkling	. 10
2	**		W. B. Day, actuary	Expenses, gas, water, etc	. 61
3	**		Thayer & Jackson Station'y Co	Paper and stencils	. 3
4			Nebraska State Phar. Ass'n	Advertisement	. 5
56	4.6		C. P. Englenard & Co	Close labele etc.	. 35 . 18
7			Richards & Co	Bubber tubing	. 10
8	* *		Chicago Tel. Co	Services	31
9	* *		Fuller & Fuller Co	Chemicals	. 17
01	• •		W. B. Day, actuary	Petty expenses	. 38
31	Jan.	31	W. A. Puckner	Salary, January, 1898	. 150
4			C. S. N. Hallberg		. 142
33			F. M. Goodman. Frank S. Hereth L. I. Schreiner E. N. Gathercoal	•• ••	. 135
34 35			L I Schreiner	•• •• •••	: 57
36	• •		E. N. Gathercoal	•• ••	
37	••		Geo. E. Case		
8	• •		W. B. Day	•• ••	. 96
9	••		Henry Eulert	Rent, January, 1896 Salary, February, 1898	. 50
0	••	-	J. H. Clough	Rent, January, 1896	. 200
$\frac{1}{2}$	Feb.	28	W. A. Puckner	Salary, February, 1898	150
3	• •		F M Goodman	•• •• ••	135
4	• •		Frank S. Hereth	** ** ***	71
5			L. I. Schreiner	** **	. 57
6	••		E. N. Gathercoal	** **	.) 50
7	• •		Frank S. Hereth L. I. Schreiner E. N. Gathercoal Geo. E. Case. W. B. Day. Henry Eulert. J. H. Clough W. B. Day, actuary. Ebert's Pharmacy. Western Union Tel. Co. A. W. Palmer.		
8	••		W. B. Day		
9 0			I H Clough	Bont Fohrmory 1909	. 50 200
1	* *		W. B. Dav. actuary	Rent, February, 1898 Expenses to February 19, 1898 Powder boxes Time service to March 31, 1898 Expenses	48
2	* *		Ebert's Pharmacy	Powder boxes	. 8
3		1	Western Union Tel. Co	Time service to March 31, 1898	. 3
4	* *		A. W. Palmer	Time service to March 31, 1898 Expenses. Tin boxes. Paper Beakers. filters. etc. Chemicals. Salary, March, 1898. 	. 11
5	**		Pictorial Printing Co	Tin boxes	. 2
6			Donohue & Henneberry	Paper	• 4
7	• •		Fuller & Fuller Co	Deakers, filters, etc	$\frac{4}{62}$
	March	31	W A Puckner	Salary March 1898	150
0	••	01	C. S. N. Hallberg	Natur J , 11 at 011, 1000	142
í	* *		F. M. Goodman	•• • • • • • • • • • • • • • • • • • • •	135
2	• •		Frank S. Hereth		
3	**		L. I. Schreiner	**	. 57
4			E. N. Gathercoal	**	. 50 . 14
5	**		W B Dow	•••	
6 7			Henry Eulert	••	50
8	• •		J. H. Clough	Rent, March, 1898 Salary, April, 1898.	200
	April	30	W. A. Puckner	Salary, April, 1898	150
9	April				
9 0 1	Abili		Frank S. Hereiner         L. I. Schreiner         E. N. Gathercoal         Geo. E. Case.         W. B. Day         Henry Eulert.         J. H. Clough         W. A. Puckner         C. S. N. Hallberg         F. M. Goodman.         Frank S. Hereth	4.	. 142 . 135

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No.	Date.	To whom.	For what.	Amount
	1898.			1
173		L I Sabasinan	Salary April 1909	\$57 1
		E N Cotherent	Salary, April, 1898	
174		E. N. Gathercoal		50 0
175		Geo. E. Case		14 2
176		W. B. Day		96 4
177		Henry Eulert		50 0
178		J. H. Clough	Rent, April, 1898	200 0
179			Petty expenses	35 8
180		The Neostyle Co	Paper	1 78
181	••	The Inter Ocean	Advertisement	5 00
182	••	The Chicago Telephone Co	Service	31 2
183	••	E. J. Abel & Co	Chemicals	18
184	••	Clark Bros.	Chloroform	4 4
185	••	Fuller & Fuller Co	Chemicals, etc.	27 9
186	••	Goes Lithographing Co	Čhemicals, etc Diplomas	12 5
187	٠.	Theyor & Jackson Station'y Co	Ink, etc	3 6
188	••	Donohuo & Hounohommy	Pads and paper	67
100	Mor 14	W P Dev estrem	Laboratory deposits refunded	67 4
190	May, 14	E I Amthone	Daboratory deposits refunded	
		E. J. Allinony	Printing Stencil paper	112
191		Thayer & Jackson Station y Co	Stench paper	1 5
192		The Neostyle Co	Paper and ink	1 1
193		W. B. Day, actuary	Expenses	112 1
194		Wendell & Co	Medals Time service	20 0
195		Western Union Telegraph Co	Time service	3 0
196		H. Swannell	Expenses	15.6
197	May 31	W. B. Day	Salary, May, 1898	75 0
198				50 0
199	* *	Goes Lithographing Co	Diplomas	13 5
200	••	W. B. Dav. actuary	Expenses	39 2
	June 30			71 2
$\bar{2}0\bar{2}$	0 un;, 00	Theo. C. Loehr	••	18 6
203	• •	H. H. Rogers	٠٠ · · · · · · · · · · · · · · · · · ·	4 7
204		Grimes & Sheehan	Replacing water pipe	4 50
205	••	Fullon & Fullon Co	Point etc	21 3
205		Funer & Funer OU	Paint, etc Plastering and calcimining	21 5 53 0
	••	$\mathbf{D} \cap \mathbf{H}$	Dimentering and calcinining	5 0
207			Directory	
208		E. J. Antnony	Envelopes, etc	54 0
209		S. W. Shattuck, business mgr.	Sundry items	14 6
210		<u>w</u> . В. Day	Salary, June, 1898	75 00
211		Henry Eulert	•• •• •• •• •• •• •• •• •• •• •• •• ••	50 00

Warrants-Continued.

### SCHOOL OF MEDICINE WARRANTS.

2       W. A. Evans,       50         3       W. T. Eckley.       50         4       A. Gehrmann.       25         5       E. G. Barle       25         6       W. A. Pusey       41         7       J. S. Tomlinson       76         8       Miss E. M. Heelan       60         9       Geo. Johnston       40         10       Theo. Tieken       30         12       John McClain       30         13       University of Chicago Weekly       Advertisement.       12         14       Journal of Am. Medical Ass'n.       16         15       West Side Hospital       50	No.	Date.	To whom.	For what.	Amount.
18       "Goes Lithographing Co	$\begin{array}{c} 1\\ 2\\ 3\\ 4\\ 5\\ 6\\ 7\\ 8\\ 9\\ 10\\ 11\\ 12\\ 13\\ 14\\ 15\\ 16\\ 17\\ 19\\ 19\end{array}$	1597. July     Aug.  Sept.	<ul> <li>31 J. A. Wesner.</li> <li>W. A. Evans,</li> <li>W. T. Eckley</li> <li>A. Gehrmann.</li> <li>E. G. Earle</li> <li>W. A. Pusey</li> <li>J. S. Toml mson</li> <li>Miss E. M. Heelan</li> <li>Geo. Johnston</li> <li>Theo. Tieken</li> <li>W. S. Royce</li> <li>John McClain</li> <li>University of Chicago Weekly</li> <li>Journal of Am. Medical Ass'n.</li> <li>West Side Hospital.</li> <li>31 Wm. A. Pusey</li> <li>D. A. K. Steele</li> <li>Goes Lithographing Co.</li> <li>S. W. Shatuck, business mgr.</li> <li>S. M. Shatuck, business mgr.</li> </ul>	Salary, July, 1897   Advertisement Board. Petty expenses Printing warrant book, etc Gas Assessment No. 9.	$\begin{array}{c} 75 & 00 \\ 50 & 00 \\ 25 & 00 \\ 25 & 00 \\ 41 & 66 \\ 75 & 00 \\ 60 & 00 \\ 40 & 00 \\ 60 & 00 \\ 36 & 00 \\ 36 & 00 \\ 25 & 00 \\ 12 & 00 \\ 12 & 00 \\ 12 & 00 \\ 58 & 25 \\ 100 & 00 \\ 58 & 25 \\ 100 & 00 \\ 58 & 25 \\ 100 & 00 \\ 58 & 25 \\ 100 & 00 \\ 58 & 25 \\ 100 & 00 \\ 58 & 25 \\ 100 & 00 \\ 58 & 25 \\ 100 & 00 \\ 58 & 25 \\ 100 & 00 \\ 58 & 25 \\ 100 & 00 \\ 58 & 25 \\ 100 & 00 \\ 58 & 25 \\ 100 & 00 \\ 58 & 25 \\ 100 & 00 \\ 58 & 25 \\ 100 & 00 \\ 58 & 25 \\ 100 & 00 \\ 58 & 25 \\ 100 & 00 \\ 58 & 25 \\ 100 & 00 \\ 58 & 25 \\ 100 & 00 \\ 14 & 84 \\ 42 & 20 \\ 63 & 00 \\ 63 & 00 \\ 100 & 0$

### UNIVERSITY OF ILLINOIS.

[Sept. 24,

# Warrants-Continued.

D	ate.		To whom.	For what.	Amou
18	397.	1			]
Sept	. 2	4	Winkle	Advertisement	\$5
	•	1	McDonough & Co	••	25
	•		Wesleyan Argus		3
	•	1	Chicago Clinical Review P. Co.		18
		1	Arbutus.		25 33
	•	1	R. L. Polk & Co	Addressing envelopes	2
	4	11	$I \land W_{osonor}$	Salary August 1897	75
	•		W A Evans	Datal y, August, 1031	50
	•	h	W. T. Eckley	••	50
•	•		A. Gehrmann	••	25
	•		E. G. Earle		25
	•		W. A. Pusey		41
	•	٩	J. S. Tomlinson		75
		1	Miss E. M. Heelan		60
	•	1	Theo Tieken	•••	40
	•	1	$W \in Row $	•••	36 30
6	•		John McClain	•••	25
Sent	. 9	0	Wm. A. Pusey.	Addressing envelopes. Advertisement. Salary, August, 1897.  Expenses of stenographer, etc. Petty expenses. Advertisement. Circulars Coal. Toilet paper. Raising walks, etc. Materials. Benzine. Sugar. Advertisement. Chairs, settees, etc.	65
Sept	•	1	D. A. K. Steele	Petty expenses	56
•	•		University of Chicago Weekly.	Advertisement	12 87
•	•	0	Cameron, Amberg & Co	Circulars	87
			Brazil & Chicago Coal Co	Coal	20
		- 10	Heo. T. Johnson	Toilet paper	9
	-	alf	Anchor Porti'd Cement Pav. Co	Kalsing walks, etc	29
Oct.		2 1	Marshall Fleid & Co	Rongino	28 2
	•	H	H Ahrone	Sugar	ĩ
	•	li	H. C. Hall	Advertising in periodicals	390
•	•		lewish Herald Publishing Co.	Advertisement.	12 86 2
•	4	j	Brunswick-Balke Collender Co	Chairs, settees, etc	86
•	•	0	Otto Chellberg	Repairing bells	2
•	•		Red Cross Hygienic Co	Phenosote	6
	•		P. F. Pettibone & Co	Paper	17
			Samuel I. Pope & Co	Pipe and fittings	74
			K. T. Jones	Painting, calcimining	336
	•		H. M. Hooker Co	Benzine	3 30
	"	Н	Expands Cotoming Co	Catoring	60
	•	10	Orr & Lockett Hardware Co	Frames and nlates	9
	•	li	E Baggot	(las fixtures	32
	•	1.	Journal of Am. Medical Ass'n.	Advertisement	16
•		11	Medical Recorder Pub. Co	••	16
		- [0	<b>G. L. Harvey</b>	Architect's services	60
•		14	Knox College Coup d'Etat	Advertisement	3
			A. Wesener	Salary, Sept., 1897	75
			W. A. Evans		50 50
			Adolph Gohrmon		25
	•	í	E. G. Earle.	• •	25
•	6		W. A. Pusev	···	41
•	6		J. S. Tomlison	**	75
Oct.	•	j	Elizabeth M. Heelan	Sugar. Advertising in periodicals. Advertisement. Uhairs, settees, etc. Repairing bells. Phenosote Paper. Pipe and fittings. Painting, calcimining Benzine. Music furnished. Catering. Frames and plates. Gas fixtures. Advertisement. Architect's services Advertisement. Salary, Sept. 1897.	60
•	•	0	Jeorge Johnson	•••	40
		1	Theo. Tieken		36
			w. S. Royce		30
0			Bishanda & Co	Chemicala	25
Oct:	, 1	10	2 D Evens	Chemicals Labor and material on building Painting Door holders	1,154 269
		1	John Parsons	Painting.	209
•••	•	1	John G. Bentler	**	7
••	•	Ĭ	Orr & Lockett Hardware Co	Door holders	$\dot{2}$
	•	Ĭ	W. A. Pusey	Expenses of stenographer and rent	65
		1	University of Chicago Weekly	Advertisement	6
		10	hicago Addressing Co	Addressing envelopes	5
			J. R. Grant.	Lockers	15
		ļļ	Jolumbia Typewriter Mfg Co	Door holders. Expenses of stenographer and rent Advertisement. Addressing envelopes. Lockers Ribbons. Printing, etc. Palms. Surgical supplies. Drugs, etc. Chairs. Contract gas fixtures, etc.	4
		ŧ	Rogers Pitkin & Hell	r muing, etc	32 14
• •		H	J Schiller	Palms	14
		1	Physicians Supply & Drug Co	Surgical supplies	10
••		ŝ	harp & Smith	CarBroar pappinos	81
••		è	Searle & Hereth Co	Drugs, etc	20
• •		12		a	31

### Warrants-Continued.

No.	Date.	To whom.	For what.	Amoun
	1897.			,
101		College of Physicians and Surg	Rent 6 months to Oct. 21, 1897 Salary 6 months, Oct. 31, 1897 Advertisement. Services to Jan. 1, 1898. Advertisement. Inspection of boilers. Printing, etc. Sugar, etc. Drugs Typewriter Advertisement.	\$6,000 (
102	**	S. W. Shattuck	Salary 6 months, Oct, 31, 1897	200 (
103		Harvey Bogarth, Business Mgr	Advertisement	6 (
104		Rogers, Pitkin & Hall	Printing	42 4
105		Chicago Telephone Co	Services to Jan. 1, 1898	31 2
106 107	• •	Inte P. & S. Plexus	Advertisement	26 6
108		Cameron Amborg & Co	Printing of	8 0 54 2
109	٠.	H Abrens	Sugar ofe	98
110	* *	Fuller & Fuller Co.	Drugs	119 7
111	• •	United Typewriter & Sup. Co	Typewriter	75 0
112	• •	The Gale.	Advertisement. Salary, October, 1897	4 (
113	Oct. 30	T A TAT	Galaria Ostobor 100	75 (
114		W. A. Evans		50 0
115		W. T. Eckley	** **	50 0
116		Adolph German	** **	25 0
117		E. G. Earle	•••••••	25 0
118		W. A. Pusey		41 6
$\frac{119}{120}$	••	<ul> <li>J. A. Wesener.</li> <li>W. A. Evens.</li> <li>W. T. Eckley</li> <li>Adolph German.</li> <li>E. G. Earle</li> <li>W. A. Pusey.</li> <li>J. S. Tomlinson.</li> <li>Elizabeth M. Heelan.</li> <li>George Johnson.</li> </ul>	•• ••	75 ( 60 (
120	••	George Johnson	••• •••	40 (
122	••	Theo. Tieken.	** **	· 36
123	* *	Mrs. F. A. Grubb	** **	30
124	••	George Johnson. Theo. Tieken. Mrs. F. A. Grubb. Grace M. Bryant. C. H. Kuby. C. A. Albright. C. C. Hummel.	** **	28 8
125	**	C. H. Kuby		20 8
126	••	C. A. Albright		15 (
127		C. C. Hummel		15
128		hobert mininerson	•••••••••••••	6
129	35	John McClain		25
101	Nov. 15	J. N. Hostetter	Coal	31
$\frac{121}{132}$	• •	Win A Brook	Flumoing, etc	152 75
132		S I Stopping Co	Expenses and rent, Oct., 1897	10
134		Wm J Bohm	Tubos etc	12
135	••	West Side Hospital	Roarding and nursing patients	24
136	**	Sharp & Smith	Table and chair	22
137	••	S. U. A. Bulletin	Coal Plumbing, etc Expenses and rent, Oct., 1897 Door holder, etc. Tubes, etc. Boarding and nursing patients Table and chair. Advertisement Brooms, etc.	4
138	••	The Student		6
139	• •	Chi. Clinical Review Pub. Co	· · ·	18
140	**	M. Bondy	Brooms, etc	7 (
141		Fuller & Fuller Co	Drugs	1
142	••	S. W. Shattuck, Business Mgr	Gas and alcohol	88
143	••	Lawrentian Paper Association.	Advertisement	2
144		The P. & S. Plexus		53 5
$\frac{145}{146}$		Chas. Traux, Greene & Co	Surgical supplies	5
140		Coontrop & Bogonnog		61 80
148	· · ·	Robert Emmorgen	Lohon	88
149		J N Hostetter	Coal	66
150	• •	Fuller & Fuller Co	Drugs	36
151	Nov. 30	J. A. Wesener	Salary, November, 1897	75
104	••	W. H. Evans		50
153	••	W. T. Eck ey	** **	50
154		Adolph Gehrman	44 44	25
155	••	E. G. Earle		25
156		W. A. Pusey		41
157		J. S. Tomlinson		75
158	**	Cas Jahratan	44 44	60
$159 \\ 160$		Geo. Jonnston		40
$160 \\ 161$		Mrs A F Grubbs	** **	36 30
$161 \\ 162$	• •	Grace W Bryant		30 32
163	••	C. H. Kuby		25
164	• •	C. A. Albright.	••• ••	15
165	••	Geo. Johnston Theo. Tieken Mrs. A. E. Grubbs Grace W. Bryant C. A. Albright C. A. Hubright Robert Furmercon	Door holder, etc. Tubes, etc. Boarding and nursing patients. Table and chair. Advertisement.  Brooms, etc. Drugs Gas and alcohol. Advertisement. Surgical supplies. Cloth. Coil, manometers, etc. Labor. Drugs. Salary, November, 1897.       	15
166	* *	Robert Emmerson	** **	8
167	• •	John McClain	** **	25
168	Dec. 20	Felix Lang, Superintendent	Repairs on meter	2
103	••	G. D. Evans	Dissecting table, windows, etc	29
170	**	F P. Smith Wire & Iron Wks	Wire guard	14
171		Brunswick-Balke Collender Co	Qak pulpit	11
$172 \\ 179$		Sharpe & Smith	Surgical supplies	35
$173 \\ 174$	••	Searle & Hereth Co	Drugs	4
$174 \\ 175$		runer & runer Co	Repairs on meter Dissecting table, windows, etc Wire guard. Oak pulpit. Drugs Drugs, etc. Pail of Kleansall. Boarding and care of patients	$\overline{7}$
		Orerar, Adams & Co	r an or mieansam	23

## UNIVERSITY OF ILLINOIS.

[Dec. 20,.

# Warrants--Continued.

o.	Date.		To whom.	For what.	Amour
	1897.				
77 L	Dec.	20	J. N. Hostetter	Coal Advertisement Gas Services' Register, books. etc Expenses of stenographer Petty expenses Subscription Gas fixtures	\$122
10	••		P. & S Plexus Medical Recorder Pub. Co	Advertisement	26
79			Medical Recorder Pub. Co	·· ·······	10
80			Geo. T. Butler Cameron, Amberg & Co	Gas	78 200
31			Geo. T. Butler	Services'	200
32	• •	× .	W A Pusor	Fynansos of stonographer	21 75
34			D A K Steele	Potty ovnenses	56
5			Editors Index Medicus	Subscription	25
6	• •		E Baggot	Gas fixtures Absorbent cotton, etc	12
7			Physicians' Supply & Drug Co.	Absorbent cotton, etc	7
8			The Illini	Advertisement	20
9			Richards & Co	Sterilizers, tubes, etc	181
0   E	Dec:	31	J. A. Wesener	Salary, December, 1897	75
1			W. A. Evans	**	
2	••		W. T. Eckley	· · · · · · · · · · · · · · · · · · ·	50
3	••		Cameron, Amberg & Co W. A. Pueey D. A. K. Steele Editors Index Medicus Physicians' Supply & Drug Co. The Illini Richards & Co J. A. Wesener W. A. Evans W. T. Eckley Adolph Gehrmann E. G Earle.		25
4 5			W. A. Pusey. J. S. Tomlinson . Elizabeth M. Heelan.		25
	••		W.A. Fusey		41
6			J. S. LUMIIIISOII	•• ••	
3	•••		George Johnston	•• ••	
	4 4		George Johnston Theo. Tieken Mrs. A. E. Grubbs Grace W. Bryant C. As. H. Kuby C. A. Albrecht. C. C. Hummel. Robert Emmerson John McClain	** **	
5	• •		Mrs. A. E. (Frubbs		
í	••		Grace W. Bryant	•• ••	
2	٠.		Chas. H. Kuby		
3			C. A. Albrecht.	•• ••	15
1	••		C. C. Hummel	•• ••	15
5	• •		Robert Emmerson		8
3	• •		John McClain		25
_	1898.				10
ĮJ	an.	15	Richards & Co	Repairing microscopes, etc	18
2			West Side Hospital	Board and care of patients	65 2
2			Sharp & Smith	Cat gut	2 45
2			Chicago Engineen Supply'Co	Values of	15
2			F I Nime	Repairing microscopes, etc Board and care of patients Cat gut Chemicals Valves, etc Repairs on telephone, etc Advertisement	5
3			T L Flood	Advortisement	2
í			Toumal of Amar Mad Ace'm	Adverui, ement	15
5	* 4		P & S Plerus	**	26
6	4.6	i	J. N. Hostetter	Coal	182
7			Varty Oil Co	Boiler compound	5
8	* *		Goodhart's New Method L'ndry	Laundry work	22 31
91	4.4		Chicago Telephone Co	Telephone services	31
)	•••		W. A. Pusey	Advertisement.  Coal. Boiler compound Laundry work Telephone services. Expenses for stenographer, etc Gas	75
			S. W. Shattuck, Business Mgr.	Gas	114
2			Demonstrators Ass'n of Illinois	Assessment No. 2	77
3J	an.	31	W. A. Pusey	Salary for January, 1898	41 75
5			J. S. TOIMINSON	Laundry work. Telephone services Gas Assessment No. 2. Salary for January, 1898	60
3			Geo Johnston	• • • • • • • • • • • • • • • • • • • •	40
7			Theo Tieken	• • • • • • • • • • • • • • • • • • • •	36
			Mrs. A. E. Grubbs	** **	30
śl.			Grace W. Bryant	• • • • • • • • • • • • • • • • • • • •	40
			Chas. H. Kuby	** **	25
	••		C A. Albrecht	** **	15
	• •		C. C. Hummel		15
	**		Robert Emmerson		8
	**		John McClain.		25
			J. A. Wesener	•• ••	75 50
			W. A. Evans	** ** ***	50 50
	••		A Gohrmann	** **	25
			A. Ochrmann E. G. Eorlo	•• ••	25
	••		S W Shattuck	Salary, three months	100
1	• •		J. N. Hostetter	Coal	162
	• •		Geo. T. Johnson	Toilet paper	7
			Chicago Clinical Rev'w Pub. Co	Advertisement	18
	* *		P. & S. Plexus	• •	26
5	• •		Richards & Co	Apparatus	192
j	••		Fuller & Fuller Co	Chemicals	47
7	**		West Side Hospital	Board and care of patients	22
3	••		Searle & Hereth Co	Drugs	10
	••		W. A. Pusey	Expenses of stenographer	78
1		- 1	S. W. Shattuck, Business Mer.	Gas	107
1		00	O. I. Olavouoli, Duomeoso mgi I	10 1	
	eb.	28	J. A. Wesener	Salary, three months. Coal. Toilet paper. Advertisement. Board and care of patients. Drugs Expenses of stenographer. Gas. Salary for February, 1898.	75 50

No.	Date.		To whom.	For what.	Amount.
	1898.				
254	Feb.	28	A. Gehrmann	Salary for February, 1898	\$25 00
200			E. G. Earle		25 00
$\frac{256}{257}$			W. A. Pusey		41 66 75 00
258			Elizabeth M. Heelan	** **	60 00
259	••		Elizabeth M. Heelan Geo. Johnston. Theo. Tieken Mrs. A. E. Grubbs Grace W. Bryant Chas. H. Kuby C. A. Albrecht. C. C. Hummel Robert Emmerson John McClain. W A. Pusey.	••• •• •••	40 00
260			Theo. Tieken		36 00
261			Mrs. A. E. Grubbs		30 00
262 263			Chag H Kuby	•• •• ••	40 00 25 00
263	••		C. A. Albrecht.	· · · · · · · · · · · · · · · · · · ·	15 00
265	••		C. C. Hummel	•• ••	15 00
265	••		Robert Emmerson	· · · · · · · · · · · · · · · · · · ·	8 00
267	Manah	15	John McClain		25 00
269	March	19	Fuller & Fuller Co	Chemicals	80 50 76 63
270	••		Marshall Field & Co	Cloth. pins. etc	70 63
270 271			Richards & Co	Caustic, pepsin, etc	11 74
272			The West Side Hospital	Boarding and nursing patients	34 50
273 274	••		Sharp & Smith	Nail files, etc	$\begin{array}{c} 3 & 25 \\ 10 & 13 \end{array}$
275	••		P & S. Plexus	and copies of paper.	26 66
276			The Northwestern	Expenses Chemicals Cloth, pins, etc Caustic, pepsin, etc. Boarding and nursing patients. Nail files, etc  Advertisement.  and copies of paper. Repairing buildings. Gas bills. Soap, brooms, etc. Case Laundry. Coal Gas bills. Examination paper. Salary, March, 1898  	6 00
277			B D. Evans	Repairing buildings	26 10
278 279			Geo. L. Lenham Hardware Co.		4 85
279	••		S. W. Snattuck, Business Mgr.	Soan brooms ate	111 80 14 00
280	••		Library Bureau	Case	2 50
282	••		Goodhart's New Method L'ndry	Laundry	41 51
283	••		J. N. Hostetter	Coal	205 07
284 285			People's Gas Light & Coke Co.	Gas bills	77 40 8 50
286	March	31	I A Wesner	Salary March, 1898	75 00
287		-	W. A. Evans		50 00
288	••		W. T. Eckley	••	50 00
289 290			A. Gehrman		$   \begin{array}{c}     25 & 00 \\     25 & 00   \end{array} $
290	••		K. Geninal E. G. Earle. W. A. Pusey J. S. Tomlinson . Elizabeth M. Heelan. Geo. Johnston	·• ······	41 74
292	••		J. S. Tomlinson	**	75 00
293			Elizabeth M. Heelan	**	60 00
294 295			Geo. Johnston	••	40 00
295 296	••		Theo. Tieken Mrs. A. E. Grubbs Grace W. Bryant. Chas. H. Kuby C. A. Albrecht. C. C. Hummel. Boht Emergen	۰۰۰ · · · · · · · · · · · · · · · · · ·	30 00
297	••		Grace W. Bryant	**	40 (0
298			Chas. H. Kuby	<b>6 6 6 6 6 6 6 6 6 6</b>	25 00
299 300			C. A. Albrecht		15 00
301	• • •		Robt Emerson	**	15 00 8 00
302	· ••		John McClain		95 00
303			D. A. K. Steele	Petty expenses	50 00
304			John McClain D. A. K. Steele Richards & Co	Crayons, centrifuge, etc	4 75
305 306			Donohuo & Honnohomy	Petty expenses Crayons, centrifuge, etc. Eggs, flour, etc Advertisement.	1 13 15 00
307	••		The Illini		20 00
308	••		Dohn G. Beutler. John G. Beutler. James Clancy & Sons. Miller Chemical Engine Co	Expenses of foot ball team, 1897 Repairing	800 00
309			John G. Beutler	Repairing	5 15
$310 \\ 311$			James Clancy & Sons	Fire ortinguishors reuberged	6 31 1 50
312	••		E. Baggot	Electric lights and renairing	4 70
313	••		Armour & Co	Pepsin	4 50
314	••		Fuller & Fuller Co	Chemicals	23 06
315	Amil	15	E. L. Nims.	Battery service	2 00 100 00
310	April	19	W. A. Pusev.	Rent and expenses	85 00
318			M. J. Corboy	Repairing	171 15
319			College Physicians & Surgeons	Rent, 6 months	6,000 00
320			Sharp & Smith	Instruments	1 80
321 322			E. Baggot Fartus & Son	Filters and fitting	$     17 00 \\     5 00   $
323	••		Rogers & Hall	Printing and envelopes	30 25
324			Cameron, Amberg & Co	Book, etc	2 03 7 50
325			Gas Consumers' Ass'n	Dues	7 50
326 327			The Searle & Hereth Co	Tablets	80 00 5 66
328	••		Richards & Co	Gelatine	16 90
329	1		Demonstrators' Ass'n of Ill	Repairing         Fire extinguishers recharged.         Electric lights and repairing         Pepsin         Chemicals         Salary, 3 months         Rent and expenses         Reparing         Rent, 6 months.         Instruments         Filters and fitting         Letter heads and envelopes         Book, etc.         Dues         Preparing skeletons.         Tablets         Gelatine         Assessment	77 00
		ດດ	TT T		

## Warrants-Continued. ī

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### UNIVERSITY OF ILLINOIS.

[April 15,

# Warrants—Continued.

Date	•	To whom.	For what.	Amou
1898.				
April	15	Fuller & Fuller Co	Chemicals . Advertisement. Telephone service.	\$32
		Journal of Am. Medical Ass'n	Advertisement	16
		P. & S. Plexus	**	26
••		University of Chicago Weekly.	······································	6
••		Chicago Telephone Co	Telephone service	31
••		Geo. Richards Parr Goodhart's N. M. Laundry Chicago Addressing Co J. N. Hostetter.		3
		Goodhart's N. M. Laundry	Laundry work	18
1		Chicago Addressing Co	Addressing envelopes	5
		J. N. Hostetter	Laundry work. Addressing envelopes Coal.	126
		People's Gas Light & Coke Co.	Gas	59
		West Side Hospital	Boarding and nursing patients	38
		West Side Hospital Western Bank Note & Eng. Co.	Gas Boarding and nursing patients Diploma plate and diplomas Salary, April, 1898.	512
April	30	J. A. Wesener	Salary, April, 1898	75
		W. A. Evans		50
		W. T. Eckley		50
		A. Gehrman	• • • • • • • • • • • • • • • • • • • •	25
		J. A. Wesener W. A. Evans. W. T. Eckley A. Gehrman E. G. Earle J. S. Tomlinson	**	25
		J. S. Tomlinson	**	75
				60
		A. E. Grubbs Grace W. Bryant W. A. Pusey Theo. Tieken		30
		Grace W. Bryant		40
		W.A. Pusey	**	41
		Theo. Tieken		36
		George Johnston Charles H. Kuby John McClain C. A. Albrecht	**	40
		Charles H. Kuby		1
		John McClain	**	25
			**	15
		C. C. Hummel	**	15
Mam	14	Robert Emerson	Chemieala	8 29
May	14	Piehenda & Co	Chemicals	29 2
		The West Side Heapitel	Casseroles	9
		Sharp & Smith	Lare of patients	1
		I N Hostottor	Cool	90
		The D & S Diaman	Advertisement and copies of paper	26
		Miller Chemical Engine Co	Instruments. Coal Advertisement and copies of paper Recharging extinguisher Boxes. Paper.	20
		Goo F Colo & Co	Power	1
		G T Johnson	Panar	7
••		H Ahreng	Brooms ote	3
		Auditorium Hotel	Banquet	267
		Lyon's Orchestra	Service of orchestra	70
		Goodhart's N. Method Laundry	Laundry work	14
••		D. A. K. Steele	Brooms etc Banquet Service of orchestra Laundry work Petty expenses.	50
••		W. A. Pusey	Expenses	90
		R. R. Donnelly & Sons Co	Programmes	13
••		Rogers & Hall	Printing	27
		C L. Ricketts	Engrossing parchments	53
•••		People's Gas Light & Coke Co.	Gas	45
		A. H. Revell & Co	Desk and chair	43
		Ass'n of Am. Medical College	Dues	5
		Unicago Clinical ReviewPub.Co	Advertisement	18 20
		J. Milnening.	Petty expenses. Expenses. Programmes Printing Engrossing parchments Gas Desk and chair Dues. Advertisement. Medals. Salary, May, 1898.	20
May .	31	J. A. Wesener. W. A. Evans. W. T. Eckley A. Gehrman. E. G. Earle. J. S. Tomlinson F. M. Huchese.	Salary, May, 1898	75 50
		W. A. EValls	44	50
		A Gohrmon	••	50 25
		E G Forlo	**	40
		I S Tomlingon	••	40
			**	75
			••	60 30
		Grace W. Bryant	٠٠٠ · · · · · · · · · · · · · · · · · ·	40
				40
		Theodore Tieken		36
		George Johnston		40
••		John McClain.		25
••		C. A. Albrecht.		15
••	1	C. C. Hummel.	**	15 15 15
		Robert Emmerson		. 8
		D. A. K. Steele	Deposits refunded	1 271
		Fuller & Fuller Co	Deposits refunded Chemicals	18
	- 1	Sharp & Smith	Benairing.	9
		The Ranger	Advertisement	1 5
••		The Wesleyan Argus The Voice Publishing Ass'n The Delphic Publishing Ass'n. Knox Coup d'Etat		$  1,271 \\ 18 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ $
••		The Voice Publishing Ass'n	4.4	10
	1	The Delphic Publishing Ass'n		2 1
			6 4 · · · · · · · · · · · · · · · · · ·	-

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o. Date.		Date. To whom.		For what.	Amo
	Mar	94	The Normal Advance	Adventigement	\$
ю )7	Мау	91	The Kansas University Weekly	Advertisement	4
8			The Chi. High School Review	**	
$\frac{9}{9}$	••		The Unit. High School Leview	44	
0	44 7		The Vidette Reporter Ægis Association	** *	
1			The Jenson and Angel Ang	•••	
$\frac{1}{2}$			S IT I Quill	···	
3			The Damioonian	4.4	
4			Collagy Indus	· · · · · · · · · · · · · · · · · · ·	
5			The Stadent	• •	
5			The Student	•••	
7	* *		The Archaean Union	••	
3			The Student	**	
9			The Student. The Oberlin Review	**	
3			A. A. Stratford	٠٠٠ · · · · · · · · · · · · · · · · · ·	
í			The Wabash	• •	
2	••		The Wabash	4.4 ·····	
3			The Adelbert The Hiram College Advance	4.4 ·····	
1			The Oracle Co	٠٠	
5	* *		The Oracle Co The Wooster Voice	44	
5	* *		Hohand's Wareh'se and Van Os	Howling	
7	June	15	Imit Typownit's and Add 20	Hauling. Typewriting, addressing, etc Postage Advertisement.	18
3	anne.	19	D A K Stoolo	Destage	1,33
3			The loo Sullabue	rostage	1,00
5	• •		Modical Possedor Publish's Co	Advertising	1
i	••		The D and S Diamie	Advertising	2
2	••		The Hilledale Collegian	and copies paper	
			Goorge E Colo & Co	Drinting	2
ì			Library Burger	Frinding	2
5	••		I N Hostotton		4
3			Goodbart's N. M. Lounday	Lounday mont	1
7	• •	i	Columbus Road Laboratory	Daunury work	1
3	* *		Moraball Field & Co	Danquet	7
	• •		Dispersional Field & Co		
Ð			Physicians' Sup, and Drug Co.		
2	••		Richards & Co		4
Ĺ			Sharp & Smith	Instruments	_
2			Demonstrater's Ass'n of 111	Assessment	7
3	• •		F. F. Fellione & Co	Rulea sneets	1
I		1	William Aller Deser	Chemicals	9
51			William Allen Pusey	Cnemicals. Expenses. Gas. Salary, June, 1898. 	9
3	T	90	Feople's Gas L't and Coke Co	Gal	3 7
51	June	90	W A Frong	Satary, June, 1898	é
31	• •		W. A. Evans	**	5
2			W. I. Eckley		5
			A. Genrinan		2
		- 1	A. Genrman E. G. Earle. J. S. Tomlinson E. M. Heelan A. E. Grubbs Grace W. Bryant W. A. Pusey Theodore Tieken George Johnston Lobp MaClain	**	2
			J. S. LOMINISON	••	7
			$\mathbf{E}$ , $\mathbf{M}$ , $\mathbf{\Pi}$ eeian	•• •• •• •• •• •• •• •• •• •• •• •• ••	6
			A. E. Gruoos	••• •••••••••••••••••••••••••••••••••••	3
				••	4
		- 1	W. A. FUSEY	**	4
			Coorde Lieken		3
3			George Jonnston		4
	••				2
			U. A. Albrecht	•••	1
		- 1	U. U. Hummel.	**	1
		1	runer & Fuller Co	· · · · · · · · · · · · · · · · · · ·	4
		- 1	C. A. Albrecht C. C. Hummel Fuller & Fuller Co George Richards Parr	Kleansall	
			John G. Beutler.	Oil, etc	
			The P. and S. Plexus	Advertisement	2
		- 1	The Univ. of Chicago Weekly.		1
1	••	- 1	The Proctor & Collier Co		1
3		1	The Searle & Hereth Co	Oil, etc. Advertisement.  Chemicals. Laboratory supplies. Advertisement. Name service. Postage. Binding. Advertisement. Expenses.	
)	••		Richards & Co	Laboratory supplies	55
)	••		Cap and Gown Co	Advertisement	1
l	••		Western College Magazine	Name service	2
2	••		The P. and S. Plexus	Postage	
3	••		George E. Cole & Co	Binding	
1	**	1	Journal of Am. Medical Ass'n	Advertisement	1
5	6.6		W A Pusor	Expenses	10

# Warrants-Concluded.

# BIENNIAL REPORT OF THE ILLINOIS STATE LABORA-TORY OF NATURAL HISTORY.

#### Io the Trustees of the University of Illinois.

GENTLEMEN: In pursuance to your general instructions as contained in your proceedings for 1892 (June meeting), I submit the following report of operations of the State Laboratory of Natural History for the past two years.

These operations have been connected almost wholly with the work of the State Entomologist or with that of the Biological Station. As the State Entomologist's operations will be reported, under the law, to the Governor previous to the next session of the Legislature, I will only say with regard to them here that they have been directed mainly to the study of the life histories of some of the insects injurious to corn, to an examination of the shade trees and other ornamental vegetation of several of the larger towns of central Illinois, and to work on the San José scale, distributed throughout the State.

Further investigation of the corn insects was undertaken with a view to preparing for my next biennal report a second installment of a monograph upon that subject. The study of the insects injurious to shade trees is the beginning of what I intend to make an exhaustive survey of that topic in this State; and the work on the San José scale has taken the form of a further examination of suspected premises with a view to the possible occurrence of hitherto undetected colonies of that insect in the State, a very thorough and careful spraying with insecticide solution of premises known to harbor the scale, the introduction of two fungus parasites of the scale obtained by me on a personal visit to Florida last spring, and several lines of experimental work undertaken in the hope of finding some cheaper and more effective insecticide than the one now generally in use. In this same connection I have provided for a general inspection of nurseries throughout the State, made at the expense of the nurserymen. Upon receipt of the report of the condition of these nurseries from my inspectors, I have given to nurserymen official certificates setting forth the facts as to the existence on their premises of insects likely to be conveyed in trade to the injury of their customers.

The operations of the Biological Station have been carried on during the past two years along lines practically the same as those previously reported upon, except that we have done much more during the last two years with fishes than previously, with the expectation of completing a formal report upon the fishes of Illinois on which considerable progress had been made by me long before the opening of the Station.

This study of the fishes of the Station field was taken up systematically in July, 1897, by Prof. Frank Smith, and continued by him without interruption until September 1 of that year. In the summer of 1898 this was passed over to Mr. Wallace Craig, assigned to the Biological Station as its resident naturalist, and he will make this his principal occupation during this entire year. He has been handsomely provided with various kinds of apparatus for the collection of fishes in all the Station situations, including seines of all sorts, fish traps of various size and construction, set nets, and trammel nets. This work is being so conducted as to give us correct indeas not only of the species occurring at the Station, but of their relative abundance and local distribution, their haunts, their habits, their regular migrations and irregular movements, their breeding times and places, their rate of growth, their food, their diseases and their enemies, and, in short, the whole economy of each kind there represented and of the whole assemblage, taken together as a community group. '

Extensive studies of the aquatic entomology of the situation have also been made, and an elaborate paper on ephemerids and dragon-flies, the joint contribution of Messrs. Hart and Adams, of the laboratory staff, and of Professor J. G. Needham, who worked with us during a part of the summer of 1897, is now nearly ready for the press.

The so-called plankton work, the systematic study, that is, of the minuter forms of plant and animal life suspended in the water, has gone steadily forward under Dr. Kofoid's immediate care. Refinements and improvements of method, new forms of apparatus, and a vast mass of material which has been largely identified and studied by him are some of the more obvious results of our recent work in this field. No part of the work of the Station attracts more general attention among scientific men or is likely to lead to more interesting and important results.

By the Chemical Department of the University regular analyses of the waters of certain selected localities have been made during the entire two years, including one series of analyses of the gaseous contents of the water, made at Havana, one for each of twenty-four consecutive hours. This chemical work combined with the continuous biological work of the Station will, when generalized, furnish a most substantial authoritative body of knowledge of the conditions of the waters of the middle Illinois previous to the opening of the Chicago drainage canal which can scarcely fail to have a high utility for comparison with the results of similar studies made after that event.

Our main equipment—the cabin boat, the launch, and the smaller boats has served our purpose perfectly, and the Station property is in good order and condition in all respects.

The summer school for 1898, for whose expenses you voted a guarantee fund of \$300, proved a disappointment only in the number in attendance, a deficiency easily accounted for in part by the lateness of the period at which we were able to announce our session, and in part by the fact that we'could not offer last year certain local and personal inducements which may easily be provided for another session. Authority to advertise the school was not given until the March meeting of the Board this year, too short an interval thus remaining before our opening in June. For want of any special building of our own we were obliged to resort to the village school building at Havana, generously placed at our disposal without compensation by the school trustees, and students of the school were thus compelled to live in the town. Vacation life in a village boarding house with work in a school room offers too little relief from the ordinary experience of the student or teacher to be especially attractive in itself. If the school is to be maintained—and I sincerely hope that it may be we should have a plot of land on the banks of Quiver lake, two miles and a half above Havana, should have erected there a building suitable for summer use as a students' laboratory, should provide facilities for life in camp to those who prefer them, and should also make it possible for students to live either at that place or in town.

Fifteen students were in attendance throughout our term of four weeks. The only instructors regularly engaged were Assistant Professor Frank Smith, of the Department of Zoölogy, and Instructor C. F. Hottes, of the Department of Botany. The work was carefully planned and very thoroughly and efficiently done, and was received very cordially by all in attendance.

Publication of papers has been made by the State Laboratory to the full limit of our appropriation for this purpose, nine articles of our Laboratory Bulletin, comprising four hundred and thirty-eight pages of text and sixty plates, having been printed and distributed during the last two years. They set forth mainly the general results of our Biological Station work combined with the results of studies by advanced students and the Station staff upon other collections of the State Laboratory. but include also an article on scale insects of the State and one on insect disease. The influence of the State Laboratory upon the Department of Zoölogy is shown by the fact that three of the above papers, each a valuable contribution to science, have been prepared by University students in the course of their work for first and second degrees. Such work would have been entirely beyond their reach except for the materials, equipments, and literature provided by the Laboratory, which has also borne the expense of their publication and illustration.

With respect to the future of this work I am strongly of the opinion that a decided advance should be made in the Natural History Survey, for which the Laboratory is responsible under the law of its establishment. The annual appropriations made of late have been too small to provide for more than the necessary operations of the entomologist's office, which they are made to cover, and those of the Biological Station, with some incidental general work naturally growing out of the operations of these two establishments. I see no reason why the State of Illinois should not provide in a suitable manner for the energetic prosecution of this survey work which it long ago authorized, and I propose, consequently, to ask of the next Legislature a suitable sum for this purpose and a separate sum for the economic investigations for which the State Entomologist is responsible. I think, also, that the Legislature might well be asked to enlarge the field of the State Laboratory of Natural History to include an economic geological survey, with such topographical work as this might require, and a biological survey of the water supplies of the State, conducted with special reference to sanitary interests, a subject which is certainly not less important in some of its aspects than that of their chemistry.

For details respecting the various departments of the work of the Biological' Station you are respectfully referred to the appended reports of the Station Superintendent, Dr. C. A. Kofoid, or Prof. A. W. Palmer, Director of the Chemical Survey, of Mr. Chas. A. Hart, Entomologist of the Station, and of Prof. Frank Smith, who served for a time as its Assistant Zoölogist and as principal instructor in the summer school.

Respectfully submitted,

S. A. FORBES, Director.

#### REPORT OF THE SUPERINTENDENT OF THE BIOLOGICAL STATION.

#### To the Director of the Laboratory.

SIR:—The past two years have offered new and interesting conditions in the environment in which the work of the Illinois Biological Station has been prosecuted. The period of 1894 and 1895 was one of typical low water, without an extensive rise of the river during the spring and early summer, when such floods usually occur. On the other hand, these years were not marked by long uninterrupted periods of very low water. Under these conditions of two years of generally low water, without marked fluctuations, the lakes were thoroughly choked with vegetation, and even the banks of the river itself became fringed with a rank aquatic growth. A rise of 12.6 feet, culminating January 6, 1896, was succeeded by a series of minor floods at intervals of about two months throughout the year. The net result was an increase in the average height of the river for the year, which was 6.87 feet above the lowwater mark—fully two feet above that of the average for the two years preceding. This was, then, a high-water year, without marked fluctuations, and the result was that the vegetation remained to a considerable extent in the lakes and the river. The year 1897 opened with rising water, which culminated January 23 at 12.9 feet, while a subsequent rise on March 27 reached a height of sixteen feet—the highest point attained since 1892. From this maximum the river fell slowly through the four months that followed, reaching a minimum early in August. From this time until the close of the year, in consequence of a general drought throughout the State, low water persisted, their being only a slight rise as evaporation was checked during the cooler weather of Autumn. In spite of the long-continued low 1898.]

water the average height for the year was 6.9 feet—a slight increase over the preceding year. There was thus present the somewhat unusual condition of the continued high water during the first half of the year followed by an uninterrupted period of unusually low water in the second half, the change from the one to the other being quite abrupt. Under these circumstances the vegetation was largely removed or its excessive growth prevented. This long-continued low water worked marked changes in the topography of the bottomlands adjacent to Havana. Phelps lake dried up earlier than it did the preceding year, Thompson's lake showed a marked diminution, principally at the northern and southern ends, long stretches of soft mud or matted vegetation in which dead fish were abundant being exposed. This mud, after a few weeks' exposure, hardened and cracked open to a depth of a foot or eighteen inches, and a growth of shore grasses began to spring up on it. Quiver lake, especially along the west shore and in the region known as Dogfish lake, was considerably reduced in area, and in the absence of any considerable amount of vegetation its depth was decreased more than usual. Flag lake, which in most years is a marsh with one to four feet of water filled with rushes, arrow leaves, water smartweed, water-lilies, and the lotus, dried up early and a wagon road was established across its bed. Havana lake, the expanse of the river above the mouth of Spoon river, presented the unusual appearance of a narrow river channel flanked on either side by a broad mud bank. The filling in and extension of these banks by the deposit of silt during recent years has been very marked, and is followed by an extension of the swamp willows over the rising banks.

In a general way the hydrological conditions of 1898 resembled those of 1897. The rise of the river began in January and continued through the winter, culminating April 2 at eighteen feet, a point equaled or exceeded but twice since 1879, at which time records were begun at the Government dam at Copperas Creek, eighteen miles above the location of the Station. As in 1897, the high water continued during the early summer, dropping rapidly in August to the minimum stage. It did not, however, reach the extreme condition of the previous year, several minor, fluctuations having occurred at frequent intervals during the fall months. The reduction in the acquatic vegetation begun in the previous year has continued. The increased activity in the fishing industry has also contributed largely to the removal of the vegetation from the lakes and the river on the fishing grounds, so that the river is now practically free from vegetation, as is also the main body of Quiver lake and almost the whole of Thompson's lake, only a restricted area at the southern end retaining its former condition.

In previous years the field headquarters of the Station have been on Quiver lake, either at Foster's Landing or at the Indian mounds. In the fall of 1896 the new laboratory boat was brought down to town and was stationed at the public landing along the river front. This location has been retained during the last two years with the exception of a week in August, 1898, when the boat was moved up to the Twin Mounds during some continued work upon the plankton and gas analyses in the Illinois river near that point. The advantages of a location at town are the saving of the time required for transit to and from headquarters in the field and the expense of running the launch on these trips, and the ready access to the Station from living quarters at all times, while the distance from the collecting grounds is not greatly increased. Some disadvantages attend this location. The sheltered situation and the close proximity to the sand bluff increase the heat in the boat during the hot days in summer, and the nearness to the steamboat landing greatly increases the risk of damage to the boats and launch by the disturbance in the water caused by incoming and outgoing steamboats. Ropes and cavils are frequently broken, and boats are torn loose by the swells which follow in the wake of the larger steamers. On three separate occasions a steamboat in the

hands of an old and experienced pilot collided with our flotilla, resulting in the crushing and sinking of the steam launch in one instance, and in the breakage of glassware aboard the laboratory boat at another time. With the considerable and now increasing number of river craft of all sorts seeking temporary or permanent anchorage on the river front, we have been gradually crowded to the least desirable location, where the shore is somewhat springy, and where at low water access to our boat is possible only by means of a dike of sand or a trestle-work of planking, owing to the soft mud which is rapidly filling in the river front at this point. At such times our location is neither inviting nor salubrious. The crowding of the boats and the lax care usually given to such property in this locality greatly increase our danger of loss by wreck or fire while we remain in our present location. The experience of the past two years has only emphasized the necessity of the location of the Station at some suitable point—if at Havana, on Quiver lake where we can control property which will afford us an abundance of room, freedom from disturbance, facilities for carrying on the shore operations that pertain to our work, and the location of breeding ponds. The Station was occupied by the Station staff and in full operation in 1807

The Station was occupied by the Station staff and in full operation in 1897 during the months of July, August, and September, and in 1898 from June 13 to October 1. In addition to this, monthly visits were made to it for plankton work during the winter and spring of 1897, and beginning with the autumn of 1897 visits were made for the same purpose until the full opening of the Station in June, 1898. As a result of these visits a very full series of winter collections has been accumulated. Since September 1, 1898, Mr. Wallace Craig, resident assistant at the Station, has been in charge during my absence. Previous to this time the property of the Station was cared for at such times by Mr. Miles Newberry, who has been in our employ as general collector, janitor and engineer for the past four years. His service has been efficient and faithful in all the manifold and varied tasks which fall to his hands.

The work of the Station has been in the main prosecuted along the lines established in previous years, with a few expansions in some directions and curtailments in others. The primary purpose of the Station, that of investigation, has been carried on along three principal lines: entomology, ichthyology, and the quantitative investigation of the minute life of the water. The entomological work has been in the hands of Mr. C. A. Hart, who was at the Station during considerable intervals in 1897 and 1898.

Investigation of the fishes was taken up in July, 1897, by Prof. Frank Smith, and was continued by him until September 1 of that year. In the summer of 1898 this work was taken up by Mr. Craig, and additional equipment has been provided. The Station was equipped with a hundred-yard river seine of an inch-and a halt mesh, hung to fish eight feet; a forty-yard minnow seine of one-fourth inch mesh, hung to fish five feet; a thirty-foot minnow seine, hung to fish four feet; a Baird seine of the same dimensions; and a trammel net thirty yards in length and five feet in depth. The additions to the equipment consist of two set nets, one of three-fourths inch mesh and eighteen-inch hoops, the other of an inch-and-a-half mesh and four-foot hoops. Thirteen fish traps of quarter-inch galvanized wire netting were constructed especially for the work in deep water and in places where a minnow seine could not be used. They consist of a cylinder of netting ten inches in diameter, one end of which is closed by a circle of wood and the other by two successive funnels sloping inward, each with an opening three inches in diameter. For the capture of the smallest fish the nets are covered with fine wire cloth, and their efficiency is also increased by the use of wings of the same material or of minnow netting.

The plankton operations of the last two years have been carried on with increased regularity and greater attention to the correction of possible sources of error. The number of stations subject to regular examination at the beginning of the period covered by this report was seven; viz., the Illinois river two and a half miles above Havana, Quiver lake, Dogfish lake, Thompson's lake, Flag lake, Phelps lake, and Spoon river, the latter having been added to the list in August, 1896. The Illinois river Station was visited at intervals of one month until July, 1896, in which month a number of examinations were made at frequent intervals during a remarkable development of a filamentous diatom, *Melosira*, in the plankton, and in correlation with gas analyses conducted by Professor Palmer. Weekly collections upon Tuesdays were begun August 3, 1896, and have since been maintained except when the condition of the ice or sickness necessitated a slight shifting of the day of collection.

Sight shifting of the day of collection. The station in Quiver lake was visited during intervals of one month during the first half of 1897, but during the latter part of July and the month of August and September the interval was reduced to a week. In October fortnightly visits were commenced, and have since been maintained. In the summer of 1895 a plankton station had been established in the west arm of Quiver lake, known as Dogfish lake. Examinations were continued in this locality for two years at intervals of a month or less, but were discontinued in July, 1897. During much of the year the conditions at this station differed but slightly from those in Quiver lake. Vegetation is a trifle more abundant and its duration is more extended. Except at times of high water there is no current passing through this arm of the lake. The difficulty of access to this station at times of low water—due to the dense mat of *Ceratophyllum* through which the plankton boat must be rowed—were increased by the erection of a fence of wire netting across the mouth of the lake in the construction of a fish pond. In view of the similarity to Quiver lake and the difficulty of access, it seemed desirable to drop this station from the regular list, especially as the two years' collections of micro flora and micro-fauna will suffice for detailed comparison with the plankton of the plankton of the lake.

Monthly plankton collections were made in Thompson's lake during the first half of 1897, but in July of that year a fortnightly interval was adopted and has since been maintained. This station is, next to the river, the most important one on our list, being located in the largest permanent body of water within the field of our operations. During the period of high water (three to four months of the year), it is of easy access, as it is possible at such times to run the launch through the "cut road" across the bottom lands to the south end of the lake. As the water falls access may still be had for some time with a'rox boat through the "cut road;" or at still lower water, through the "swale," a tortuous channel through the bottom land underbrush from the foot of Flag lake to Thompson's lake. When, however, the river falls below six feet, the only approach to this station is *via* Thompson's lake slough, a bayou connecting the lake with the river, leaving the latter at a point about six miles above Havana. Shallow water and a rank growth of aquatic vegetation found in some years at the northern end of the lake soon render it impossible to enter from the slough with the launch, and when the water falls below three feet a mud bar at the northern end of the slough the lake was drained to the lowest limit reached since our operations were commenced at Havana. Its bed at the north end, for a distance of about three quarters of a mile, was exposed, leaving an expanse of the softest black ooze, through which a narrow, winding channel several feet in width, containing several inches of water, was kept open by our boats and those of occasional sportsmen. When winds from the north prevailed, even this insignificant highway was left bare. Under these conditions ingress and egress over and through this bed of ooze became a task of no small difficulty.

Owing to these two routes of approach to the lake, two points of collection have been established; one off Sand Point, in the northern half, and one about half a mile below Prickett's Landing, in the southern half. Both are in open water and at a considerable distance from vegetation, and are equally typical locations. Access to one of these two places is always possible during the period of open water, or when the lake is covered with thick ice, but when the ice is thin or rotten, it is at times only possible to work out a few rods from the shore with the aid of ax and ice-hook.

Plankton operations were not carried on in Phelps' lake in 1895, owing to the failure of the river to overflow the bottomlands sufficiently to invade and fill the lake. During this year a heavy crop of corn was raised in its fertile bed, but before it was harvested the following winter the water asserted its claim to this territory and has since held possession. The rise which culminated January 1, 1896, filled the lake, and the water slowly decreased until November, when the few shallow pools that remained were frozen solid. Water again entered the lake January 6, 1897, and the last pool was dried up about September 1 the same year. Toward the last of February, 1898, rising waters again poured into the lake, and owing to the high water of the past spring continued to occupy it and the adjacent territory until the middle of July. Since that time the depth of the water has decreased rapidly and by the middle of September the lake was reduced to a few large pools. During the first half of 1896 monthly collections were made, and since that date the interval has been reduced to a fortnight.

During the past year a drainage district has been organized in the territory including and adjacent to Phelps lake. The object of this organization is the reclamation of the fertile bottom south of Spoon river. A large dike is being built along the north limit of the district, reaching the river a short distance above the north end of Phelps lake. From this point it passes southward along the river bank for several miles to a point some distance below the mouth of Phelps lake slough, and then turns westward to the west bluff. The drainage of the enclosed area will be accomplished by several large ditches leading to the southeast, where pumping works are planned to insure the removal of the water when the surrounding country is flooded. Owing to the drainage of this lake our operations in this locality must cease with the present season, which leaves us in possession of quantitative collections extending through three years, in each of which the water entered in the winter or spring overflow, and was slowly removed by evaporation and seepage throughout the summer months, the catastrophe culminating in the late fall. We have thus in our possession a basis for a tolerably complete record of the seasonal fluctuations and changes in the fauna and flora incident to the drying up of this ephemeral body of water.

Since September, 1896, collections have been made in Spoon river at intervals of a month or less, and during this time a number of qualitative towings have been taken for us by Mr. W. R. Deverman, of Topeka, Ill., from the waters of Quiver creek. We have thus a good series of collections from tributary streams of the river for a comparison with those of the river itself.

A plankton station was established in September, 1895, in Flag lake, a large marsh between Thompson's lake and the Illinois river. Collectionshave been made here from that time at intervals of a month or less and were continued in 1897 until July. Owing to the abundance of vegetation in Flag lake this station was extremely difficult of access during the summer months, and owing to the abundance of flocculent debris of vegetation it was at all times difficult to secure a satisfactory quantitative collection from this body of water. As it was necessary to reduce the amount of field work, it seemed best for these reasons to drop this station permanently from the list of places subject to regular visitation. During the summer of 1898 plankton collections have been made from time to time at the mouth of Flag lake slough in the hope of finding here *Trochosphæra*, as in former years. None, however, could be found in this locality, or, indeed, in any other in our field of operations during the past summer.

As a rule the collections made at the plankton stations above enumerated included a vertical one, one from the surface, and one from the bottom water, all made with a pump and a net of No. 20 silk bolting cloth. In addition to these a catch from a liter of water from a vertical sample at each station was made with filter paper, and from five liters with the Berkefield filter, the first method of filtration being introduced in September, 1896, and the second in November, 1897. The total number of bottles in the regular series for the years 1897 and 1898, each representing a different catch, is 1,075.

The collections above mentioned belong to the chronological series whose purpose is to afford a quantitative and qualitative representation of the changes through which the life in the water of the streams and the lakes examined passes during the course of a term of years. In addition to this series a considerable number of other catches have been made with a view to securing data upon certain allied and important phases of the plankton work. 1898.]

The relation of the dissolved gases of the water to the amount and constitution of the life therein contained is an important problem, and an attempt to collect data has been made in connection with the chemical survey of the waters of the State. In July, 1897, Prof. A. W. Palmer, Director of this Survey, visited the Station and made a number of analyses of the oxygen dissclved in the surface and bottom waters in the lakes and river. In 1898 his visit was repeated, with Mr. R. W. Stark, assistant on the survey, and a number of similar analyses were made, the carbon dioxide being also determined. A series of collections extending throughout twenty-four hours was made from the surface and bottom waters of the Illinois river with a view of determining the diurnal fluctuation in the amount of the dissolved gases. In all these operations parallel collections of the plankton have been made at the same time and from water collected in the same manner, the plankton pump being used for the collection both of the plankton and the water for gas analysis. The twenty-four-hour series collected in 1898 can be brought into correlation with the movements of the water bloom, which is a marked feature of the plankton of the river during the warmer months of the year. About one hundred bottles are comprised in the collections belonging in this series.

The serial plankton work rests upon the supposition that a single catch made in a typical locality of a lake or river will give a fair sample of the microscopic life of the water, both as to its quantity and constituent organisms. With a view of testing the validity of this supposition, Thompson's, Quiver, and Mantanzas lakes and the river have in previous years been subject to extended examinations, collections being made on the same date at a considerable number of localities at regular intervals throughout the body of water examined. In 1897 Thompson's lake was re-examined on this plan and a biographical cross section of the river was made at Harvard. The series of collections has been increased by twenty-five bottles during the period covered by this report.

The tests looked toward the detection and correction of sources of error in the plankton method and the justification of changes in it which we have made, have been continued during the past two years. Of the collections made in these tests about one hundred and fifty have been preserved. Tests have been made of the errors resulting from leakage, from the progressive clogging of the drawn net and the consequent variable coefficient, and from the active escape of the larger organisms of the plankton. Several types of funnels for the in-take of the plankton plump have also been devised and Tests of the leakage through the silk and efforts to correct it by some tested. form of micro-filter or precipitation method have also been continued. A variety of filters have been examined, including the Sedgwick-Rafter sand filter, using sharp Berkshire sand according to the directions of Calkins,\* Jackson<sup>+</sup>, and Whipple<sup>‡</sup>. The loss by leakage from this filter was so great that we abandoned it and have been using filter paper as a supplementary method of collection since September, 1896, in all regular plankton examina-tions. For a short time ordinary filter paper was used, but owing to the looseness of its texture and consequent entanglement of the plankton and shedding of lint we rejected this paper and have since used the "hardened filter paper," No. 575, Schleicher & Schull. The water from which the sample for filtration is taken has been obtained by means of the pump. It was often necessary to take a much larger amount than was used filtration in order to secure a vertical collection. To obviate this and also to secure greater accuracy in the collection of a vertical sample, a vertical water-trap was devised, which consists of a light brass tube three inches in diameter and eight feet long, at whose lower end is a sliding brass gate by which the bottom of the tube can be closed after it is lowered to the desired depth.

Although the filter paper collections served to correct the loss by leakage in

<sup>\*</sup>Calkins, G. N.—The Microscopical Examination of Water. Rep. Mass. State Board of Health, 1891, pp. 396-421. 2 folding tables.

<sup>&</sup>lt;sup>†</sup>Jackson, D. D.—An improvement in the Sedgwick-Rafter Method for the Microscopical Examination of Water. Tech. Quart, Vol. ix, pp. 271-274. 1896.

Whipple, G. C.--Experience with the Sedgwick Rafter Method at the Biological Laboratory of the Boston Water Works. 1 bid. pp. 275-279. 1896.

an important degree, the method was defective in that a small portion of the catch, varying with the amount and character of the plankton, remained on the filter paper, entangled in the fibres of its surface. To obviate this difficulty and to secure, if possible, a method which would be effective and permit the handling of a large quantity of water, experiments were made with the centrifuge. The small machine described in the last report and adopted by us for use in the measurement of plankton collections was found to precipitate a large per cent of the organisms present in the water, accordingly a larger machine was devised and built at the mechanical shops of the University for this purpose. It consisted of a hollow cylinder axis of gun-metal with two returning arms, each bearing at the elbow a detachable receptacle which receives the solid matter precipitated from the water, which last passed through the revolving axis and out to the tips of the elbows before it returns to the axis for discharge at the lower end. This machine is geared to give, with power, 8,000 revolutions per minute. When fitted with eranks for two men, four to five thousand revolutions can be obtained. This apparatus was tested with water from the river at a time when it was full of water bloom,—formed principally of *Carteria*,—and also with water from the lakes in varying kinds and amounts of plankton. It proved to be more effective in the removal of the plankton than any method previously tried, but the operation of the machine by hand was extremely laborious, and the precipitation of the plankton was very slow. Furthermore, a variable and oftentimes considerable amount of the plankton—especially that found in the water-bloom—is at times lighter than the water, and thus can not be removed by centrifugal force with the heavier constituents.

In November, 1897, a Berkefeld army filter (system Bruckner), was added to the plankton equipment. It is very efficient in removing all the solid matter from the water, and its operation with ordinary samples is quite rapid. It consists of a force pump and a cylinder of diatomaceous earth, upon which the plankton and silt contained in the water are collected. This is removed by washing with a brush, but in the process a part of the substances of the cylinder is brushed off. This debris is added to the silt of the water and renders subsequent microscopic examination more difficult. The brushing is also disastrous to some of the more delicate organisms, but leaves by far the greater part of the minute forms which escape the silt intact and in suitable condition for enumeration.

During the past two years some progress has been made with an examination, measurement, and enumeration of the plankton of the regular series, though much of the time has been given to the preparation of plankton apparatus and the improvement of the method. In this work the examination of the test collections by the enumeration method has been particularly time-consuming. The work of enumeration has been facilitated by the use of a set of six counting machines, which enable the observer to keep a record of six different species at once without the mental effort of carrying the count in the mind. An extended amount of this work remains to be done before we shall utilize to any considerable extent the collections now accumu-lated. This work will be necessary to the full confirmation of the results of our investigation, and will also be very valuable in suggesting new fields for development, especially along experimental lines. The present provision for this work is quite inadequate to a prompt return for our present investment in this department of the operations of the Station. The enumeration of the smaller organisms, especially under the higher powers of the microscope, is particularly taxing upon the eyes, and long continued application is a severe strain upon the nerves of the plankton statistician. I believe it to be possible by the expenditure of a small amount of money to secure student aid for some of this work in such a way as to render promptly available a considererable portion of the now latent results of our plankton work.

The sanitary analysis of the water in connection with the chemical survey of the waters of the State have been continued. Weekly samples have been collected through the two years from the Illinois river and from Spoon river on days when plankton examinations have been made. Similar regular collections were commenced in Thompson's and Quiver lakes in September and October of 1897, and have been continued in connection with the fortnightly 1898.]

plankton work. The total number of samples for sanitary analyses collected at the Station and shipped to Champaign during the two years is two hundred and eighty. As these analyses include the determination of the free and albuminoid ammonia, the nitrites and nitrates, the chlorine, and the oxygen consumed, they will furnish data of great value for a comparison with those derived from the plankton work.

The shipment of samples to Champaign for an analysis of the gases dissolved in the water was begun July 23, 1897, samples being sent from the surface water of the river for the determination of the oxygen. In August forthnightly surface samples from Thompson's and Quiver lakes were added to the shipments, and in November additional samples were sent from each of these localities for an analaysis of the carbon dioxide. With the beginning of 1898 samples were collected from both the surface and the bottom waters of the three localities above mentioned for the determination of both the oxygen and the carbon dioxide. This involves the collection and shipment of eight bottles of water from each of the three stations—a total of about nine hundred and fifty samples being shipped in 1897 and 1898. The water was collected with the plankton pump by means of a small pet cock inserted in the discharge pipe. A rubber tube is fastened upon this and inserted in the bottle and water sufficient to fill the bottle three times is pumped through it. The bottle is then closed, the sample being collected with a minimum contact with the air. If the change in the water between the time of collection and the time of analysis does not vitiate the results, we shall find these gas determinations of great importance in the discussion of the plankton data.

The equipment has been maintained in first-class condition so far as the wear and tear of property subject to the vicissitudes of an aquatic environment will permit. The hull of the laboratory boat has been provided with salt shelves and its bottom thoroughly salted to insure its preservation. The decks and guards have been painted repeatedly, and the canvas roof has received a heavy coat of paint. The floors have also been treated with several coats of oil. Three years experience in our floating laboratory has only increased our satisfaction with its fitness and convenience for the work of a biological station.

The steam launch, with the new equipment of machinery described in the last report, has been of great service. A few repairs have been made from time to time upon the engine, and the boiler and stack have been provided with a shield to decrease heat in the launch. New tubes have also been placed in the boiler. In 1897 the steamer "Josie Sivley" collided with the "Illini" while she was at anchor on the river front, and crushing her against the guard of the laboratory boat opened a seam up the larboard side and broke several ribs and a staunchion. The launch sunk in shoal water and was easily raised, the damage being subsequently thoroughly repaired. In the spring of 1897 Mr. Newberry secured an engineer's license, and has since cared for the launch.

During the session of the summer school the carrying capacity of the launch is severely taxed in providing transit for the field excursions of the classes. At no time is the speed very great, seven miles an hour being the maximum maintained. Furthermore, the draught of the boat interferes with its greatest usefulness in the shoal waters in which at times our work compels us to go. It is only a question of time when extensive repairs will be necessary upon the hull. I would therefore recommend that an effort be made to secure a larger boat with more powerful machinery so as to carry more passengers and, if necessary, to tow a barge. Greater speed and less draught can be secured with such a boat. It would also enable us to considerably extend the field of our operations. Such a launch will be a prime necessity when the work of the Station is extended to the Mississippi river.

The outfit of small boats, which consist of two lap-streak lake-boats, one lapstreak river boat, and an Illinois river skiff, has been supplemented by the addition of a large flat-bottomed seine boat twenty feet in length with five-foot beam for the plankton work. The increasing complexity of this work and the variety of apparatus necessary for its performance has made the load required for a plankton trip too cumbersome for an ordinary boat. The total weight of the boat when manned and loaded with the outfit and water samples is not less than one thousand pounds. The increased attention given to winter work has necessitated the adaptation of the boat to the exigencies of that season. The bow and sides are protected with a sheath of zinc, and while the ice prevails the bottom is shod with two steel runners. With the boat thus equipped it is usually possible by rocking the boat and skillful manipulation of the icehooks to beat a way through the thin and rotten ice which will not carry the weight of the load, while the runners allow the boat to slide easily over the surface of the smooth ice wherever this is strong enough to bear the weight. The greatest difficulty attending transit in the field in the winter occurs at times when the river is low and access to Thompson's lake must be had by portage across the bottomlands at the southern end of the lake. A pair of wheels has been rigged up for this work, but in wet weather or after heavy snows they are hardly adequate to the task.

In the fall of 1896 the rented quarters which the Station had occupied in town were given up, and the property there accumulated was placed on board the laboratory boat. When the Station was opened the following summer it was necessary to secure storage elsewhere for property of a bulky nature or that for which there was only occasional use, and by the courtesy of the Illinois State Fish Commission we utilized a corner of their warehouse on the river front until the burning of the building in September. We suffered no loss of consequence, and our property, some of it in a damaged condition, was then returned to the laboratory boat for the winter. In 1898 the problem of storage was temporarily solved by the purchase of a cheaply constructed eabin boat twelve by twenty feet.

Although no formal opening of the Station to students was made during the summer of 1897 and no advertisements of its facilities was undertaken, a few applicants for places were accommodated under the conditions attending the opening of the Station to such persons in previous years. The following is a list of those in attendance and the lines of work pursued.

H. C. Beardslee, A. B., Instructor of Science, University School, Cleveland, Ohio. Fleshy fungi and Mycetozoa.

Miss Bertha V. H. Forbes, B. S., Teacher of Biology, High School, Austin, Ill. General biology.

H. M. Kelly, A. M., Professor of Biology, Cornell College, Mt. Vernon, Iowa. Trematoda parasitic in Unionidæ.

S. D. Magers, B. S., Principal of High School, Houston, Texas, Algæ and general biology.

H. L. Roberts, Superintendent of Schools and Principal of High School, Farmington, Ill. General biology.

The following year a summer school of biology, with regular courses in botany and zoology and offerings of advanced work in zoölogy was planned, and authorized at the March meeting of the Board of Trustees. The school was well advertised in the educational journals, and preliminary and final circulars were distributed as far as possible among the teachers of the State. Extended advertising in the neighboring states was not attempted. The Station staff was mainly responsible for packing and shipping the equipment sent over by the University and the State Laboratory and for its return, for the registration of students, and for the financial management of the school. No effort was spared to make the equipment of the Station of use to the school. The board of education of Havana placed the high school building at our disposal for the summer school, and the teachers' institute in session during the opening days was transferred to one of the churches by the county superintendent, Mr. M. Bolan.

The following is a list of the persons in attendance and their present positions:

Miss Anna L. Baldwin, Science Teacher, High School, Pittsfield, Ill. T. L. Cook, Superintendent of Schools, Mt. Pulaski, Ill. 1898.]

ISTORY. E

Wallace Craig, B. S., Assistant of the Illinois State Laboratory of Natural History, Havana, Ill.

Miss Louise S. Dewey, B. S., Fellow in Physiology, University of Illinois, Urbana, Ill.

C. C. Faust, Superintendent of Schools, Mansfield, Ill.

J. F. Garber, A. B. Instructor in Biology and Mathematics, High School, Houston, Texas.

J. T. Johnson, Teacher of Biology, High School, Galesburg, Ill.

Miss Nellie I. Kofoid, B. S., Science Teacher, High School, DeKalb, Ill.

J. E. Meharry, Student, University of Illinois, Tolono, Ill.

Mrs. Sara E. Pierce, Principal of High School, Havana, Ill.

W. E. Praeger, Student, University of Illinois, Keokuk, Ia.

L. H. Pratt, Teacher, Clear Creek, Ill.

F. W. Schacht, M. S., Principal of High School, Chicago Heights, Ill.

Otto Widmann, Student, University of Illinois, Old Orchard, Mo.

C. W. Youngs, B. S., Assistant in Botany, University of Illinois, Urbana, Ill.

The total number enrolled in the School was fifteen. Of these nine are teachers of natural science in this and other states. Three of those in attendance are now connected with the University as assistants or fellows. Nine of the fifteen students of the school have been or are connected with the University, three are now undergraduates, and six have received their diplomas, two of them remaining as graduate students. This summer school of biology might be made a very efficient means of attracting attention to the facilities which the University offers for instruction in the sciences, since students availing themselves of the opportunities of the summer school are apt to be drawn to the University for further work.

Although the number in attendance was not so large as had been expected, still certain features of the enterprise are encouraging. Among these is the cordial response of the eitizens of Havana to those needs of the school which can be supplied only by local support. There was no difficulty in securing pleasant and comfortable accommodations for all in attendance; and a much larger number would not have exhausted the facilites offered. From its beginning the Station has received generous treatment at the hands of the business men of the town. Indeed, the granting of a site for a Station building upon the public river front on the bluff overlooking the river has been urged in the local press. A second encouraging feature is the satisfaction expressed by those in attendance with the work they have been able to accomplish in Havana, and the frequently repeated desire to continue it when opportunity offers.

Very respectfully yours,

### C. A. KOFOID,

Superintendent of Biological Station.

#### REPORT ON WATER ANALYSES.

#### To the Director of the Laboratory.

SIR: During the two years just passed the number of water samples, from the streams and lakes in the vicinity of Havana, Illinois, which were examined by the State Water Survey as conducted by the department of Chemistry of the University, were as follows: Illinois river and Spoon river 102 samples from each, these being regular weekly collections from each of these sources. The collections from Quiver lake number, all told, 28. and a like number has been taken from Thompson's lake. The waters from these different sources have been subjected to the regular sanitary analysis and there has been in the different seasons of the year considerable variation in the quantities of organic matters contained, but it is to be noted that the quantities of organic matters in the water of the Illinois river and in the lakes adjacent thereto are ordinarily very high even for surface waters. During the last twelve months the average in the river and also in the lakes shows that the quantity of sewage contained has been considerably less than it was during the preceding twelve months, due of course to the fact that there have been repeated periods of high water and a more generally distributed rainfall during the year of '97-'98 than was the case during '96-'97.

Attempts have also been made during the last year to determine the quantity of dissolved oxygen and of dissolved or free carbonic acid gas in the waters of the Illinois river and the lakes at Havana. We have met with considerable difficulty in making these determinations because of the necessity of doing most of the work here at Champaign. The conditions are particularly unfavorable for work at a distance because of the large quantities of organic matters contained in the water, and, further, because these matters are in a state of putrefactive change, that is, are undergoing somewhat rapid decomposition. The determinations of dissolved oxygen, consequently, commonly give us figures somewhat too low. Tests made on the spot at the time of collection show that the quantity of dissolved oxygen is ordinarily diminished very quickly on standing a few hours, particularly when the vessels containing the water are exposed to the light. Our results, however, have been obtained under practically similar conditions throughout the season and they show considerable variation, at times the quantity of dissolved oxygen being exceedingly low, while at other times the quantity reached the approximate maximum figure. This is true not only of water contained in the river, but also of the water of the lakes. The data which we have in hand have not yet been digested and can not be until the work has been carried on somewhat more extensively. The free carbonic acid,—that is the carbonic acid which exists not in combination with the bases in the water, but as gas merely dissolved in the water—varies yet more greatly than does the dis-solved oxygen. At times there seems to be none present; at other times the quantity present is quite considerable; but these determinations are even more greatly influenced by permitting the samples to stand, or by the time which elapses during their transportation to the laboratory, and we can not at present attach very great importance to the results which have hitherto been obtained.

We expect soon to be able to extract gases from water by means of an air pump, and then we shall be in a position to obtain results which will not be influenced by the conditions mentioned above, and, provided we shall be able to have collections carefully made at Havana, the work can very easily be continued and completed here at the University.

Since early in the summer of 1897 we have made regular determinations of dissolved oxygen and of carbon dioxide in samples taken from the Illinois river and from Thompson and Quiver lakes, but the earlier results are less reliable than those obtained during the last six months, and these later results are themselves not sufficiently reliable to be made at present the basis of any general conclusions.

Yours very respectfully,

ARTHUR W. PALMER, Professor of Chemistry.

#### REPORT OF THE ENTOMOLOGICAL ASSISTANT.

#### To the Director of the Laboratory.

SIR:—During the season of 1897 I was in the field, primarily for entomological observation and collection, from June 29 to August 13, giving attention particularly to the gathering of information and material for use in completing our work on *Odonata* and *Mollusca*. In 1898 two visits to the field were made for work on *Odonata*, *Ephemerida* and *Mollusca*; a week in spring, from April 19 to 25, and two weeks in midsummer, from June 21 to July 7.

1898.7

The accumulations of material and notes were already sufficiently large for group studies at the beginning of the two year period covered by this report. Every opportunity has been taken to make desirable additions to them, and they now stand as a superb basis for the study of any group of aquatic forms. The material is all arranged by orders, and consists of about 4,250 vials and bottles of specimens.

There are now in various stages of preparation four papers, mainly on the entomology of the biological station field, one each on the Odonata, the Ephemerida, the fresh water Mollu3ca and the aquatic Coleoptera. The order of procedure which I have endeavored to pursue in the preparation of these papers, and which seems to lead to the most satisfactory and accurate results, is as follows: First, the collection of a large quantity of material and data under the greatest possible variety of conditions as to locality, surroundings, stage of water, season and time of day; then the careful study of these, in connection with the literature, and the making of copious notes and sketches preliminary to the preparation of manuscript, all evident deficiencies either in material or data being carefully noted down; next, a return to the field at times and places indicated by the previous collections for the special purpose of supplying, as far as possible, these deficiencies, and finally, after further study of the literature, the writing of the manuscript.

In the preparation of the paper on the Odonata I have had the valued assistance of Prof. J. G. Needham and Mr. C. C. Adams, who have furnished the systematic work on the nymphs and adults respectively, while it has been my part to discuss the biology and œology of the group and its species and to combine the several manuscripts into a single paper—now nearly ready for the press. Under Mr. Adams' supervision the State Laboratory Artist, Miss Hart, has prepared a valuable series of 134 drawings illustrating the abdominal structures of nearly all our Illinois species, and a series of general drawings of the nymphs and their distinguishing structures is well under way.

For the article on Ephemerida, the Station collections and notes have all been examined and the results are nearly ready to be put in manuscript form. It would add greatly to the usefulness of the paper, however, if a study of the large series of nymphs of this order in the general collections of the State Laboratory could be made before the article is completed.

Much time and labor have been spent on the *Mollusca* in the endeavor to place the study of this group on a truly scientific basis. Not merely the shell but all parts of the animal were studied, full use being made of the unusual facilities at the Station for work of this kind. The univalves of the Station collection have been determined by Mr. H. A. Pilsbry, of the University of Pennsylvania, and the *Sphærium* and *Pisidum* by Dr. V. Sterki. More time could profitably be spent on the biology of the University of the notes are ready to go into manuscript form.

The collections of water beetles have been exhaustively studied and determined, but the systematic examination of the immature stages has not yet been reached.

Respectfully submitted,

C. A. HART, Etomological Assistant.

#### REPORT ON THE SUMMER SCHOOL OF 1898.

#### To the Director of the Laboratory.

SIR:—Of the fifteen persons in regular attendance at the summer school twelve were either teachers or preparing to teach, in our public schools. Five of them had received training in the laboratories of the University of Illinois, but nearly all of them were without any considerable experience in fieldwork or in the methods of collecting and preserving aquatic organisms. On this account especial prominence was given to tri-weekly excursions for collecting and field observation, and these furnished probably the most important ele ments in the work of the session. With the steam launch, row boats, and

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needful collecting equipment of the Biological Station the entire party made trips to Matanzas, Thompson's, and other lakes within reach of Havana. The use of the Station launch made the excursion highly enjoyable, and by reducing to a minimum the time *en route* gave the party ample opportunity for observing, collecting, and preserving such animals and plants as would best repay further study, or would be useful in the laboratories or museums of the high schools in which the various teachers present were interested. The work done in the laboratory by the several members of the school was largely determined by their past experience and the application to be made of of the knowledge acquired.

Soon after the opening of the session it became evident that the needs of the students would be best met by dividing their time equally between the zoology and botany; the forenoons were accordingly given to the former, and the afternoons to the latter.

In the department of zoology emphasis was given to the lines of work most useful to teachers. Material collected on excursions was used in various ways. For correct methods of dissection as well as better knowledge of anatomical details some work in dissection was done. Time was also given to acquiring the best methods of preserving specimens of various kinds of animals. as *Hydra*, worms of various groups, mollusks, *Crustacea*, insects both larval and mature—and fishes. The identification of annelid worms, insects, mollusks, and fishes received due attention, and was aided by named collections belonging to the State Laboratory, and also by literature and by a number of synoptic keys to these groups prepared by members of the State Laboratory staff. As a result of this part of the work, teachers were enabled to take home with them properly preserved and named collections of various kinds of animals. All persons not already familiar with the ordinary methods of section cutting and the making of permanent microscopic preparations had practice in such work.

The work in botany consisted of as thorough a study of the aquatic and terrestrial flora of the surrounding region as the time would allow. The algæ of the Illinois river and connected waters were studied with special reference to their morphology and reproduction. The relation between land and water plants, both as to their differences in morphology and distribution, was observed and discussed on the field trips.

The phanerogams of the vicinity were treated with special reference to the ir adaptation for protection and cross fertilization. Instruction in the methods of the collection and preservation of herbarium material was given to those who desired it. The systematic work on the higher plants was in the nature of a study of the characteristics of orders from different representatives rather than by following an artificial key.

General plant physiology was illustrated by demonstrations with apparatus such as can be employed in laboratories of limited equipment. In the field special attention was paid to the movements of plant parts as influenced by light, temperature, and progress in seed development. Time at the end of the month was devoted to a discussion of the matter presented and its adaptation to the needs of the secondary schools, with which most of those present were connected.

Each student was provided with a first-class compound microscope for use in both botany and zoology and had also the use of a microtome and an abundance of apparatus, reagents, and general laboratory equipment from the zoological, botanical, and entomological laboratories of the University. An abundance of literature for general reading as well as for work on special groups was provided from the libraries of the University and the State Laboratory.

The instruction in field and laboratory was supplemented by lectures on special forms and groups of animals, and by others, of general biological interest on cell division, development, parasitism, cross-fertilization of plants, adaptive modifications for protection, etc.

Very respectfully yours,

FRANK SMITH, Assistant Professor of Zoölogy.

### AGRICULTURAL EXPERIMENT STATION.

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

GENTLEMEN:—By action taken by your honorable body at your meeting held June 9, 1896, the organization of the Agricultural Experiment Station was changed so that instead of a Board of Direction, to which the staff of Station officers were responsible, the office of Director was established, and this officer was charged with the entire responsibility for the work and business of the Station. By your appointment I was made Director of the Station and have continued in charge.

#### PRINCIPAL LINES OF WORK.

The energies of the Station have been directed principally to experiments in cattle feeding to determine variations in animals; variations in milk; production of pure milk; breeding of Indian corn; methods of cultivation of Indian corn; chemistry of the corn kernel; testing different treatments on permanent plats of prairie soil; the white clay soils of Southern Illinois; the sugar beet for Illinois; spraying for insect and fungus enemies of fruits; observations on varieties of apples, pears, and grapes; smuts and their prevention; the smut of broom-corn, sorghum, and Indian corn.

I beg leave also to refer you to reports in detail made in March, of 1897, and March, of 1898.

#### PUBLICATIONS.

Eight regular bulletins, Nos. 45 to 52, inclusive, and one special bulletin, and the tenth and eleventh annual reports have been published and distributed during the two years at an expense of \$2,065.32. The bulletins contained in all 252 pages. The annual report for the years 1896-7 and 1897-8 contained 18 and 16 pages respectively. One thousand copies of each were printed.

Besides these eight circulars were published. The articles contained in the bulletins and circulars were as follows:

Bulletin No. 45, 17,000, July, 1896, 32 pp. Varieties of Apples.

Bulletin No. 46, 17,600, January, 1897, 24 pp. Experiments with Corn. Attempts to grow Crimson Clover. On the Improvement of Retentive Clays; Drainage of the So called "Hard Pan" Lands of Southern Illinois. On the Importance of Physiological Requirements of the Animal Body; Results of an Attempt to Grow Cattle Without Coarse Food.

Special Bulletin, 2,500, March, 1897, 4 pp. Smuts and Their Prevention.

Bulletin No. 47, 17,000, March, 1897, 48 pp. Broom-Corn Smut.

Bulletin No. 48, 17,000, April, 1897, 16 pp. The San José Scale in Illinois. Bulletin No. 49, 18,000, January, 1898. The Sugar Beet in Illinois, 52 pages, 13 illustrations.

Bulletin No. 50, 17,000, February, 1898. Cost of Production of Corn and Oats in Illinois in 1896, 24 pp.

Bulletin No. 51, 17,000, May, 1898. Variations in Milk and Milk Production, 28 pp.

Bulletin No. 52, 17,000, June, 1898. Orchard Cultivation, 24 pp., 13 illustrations.

Annual Report, 1896-7, 1,000, 18 pp. and cover.

Circular No. 3, October, 1897, 1,000. Instructions for Taking Samples of Sugar Beets for Analysis, 2 pp.

Circular No. 4, December, 1897, 1,000. Alfalfa, 4 pp.

Circular No. 5, December, 1897, 1,000. The Cow Pea and the Soja Bean, 4 pp.

Circular No. 6, December, 1897, 1,000. The Sugar Beet in Illinois, 4 pp.

Circular No. 7, January, 1898, 1,000. Sugar Beet Convention, 2 pp.

Circular No. 8, March, 1898, 1,000. Spraying Fruit Trees, 3 pp.

Circular No. 9, April, 1898, 1,000. Instructions for Growing Sugar Beets.

Circular No. 10, May, 1898, 1,000. Experiments in Corn Cultivation.

Respectfully submitted,

EUGENE DAVENPORT,

Director of Agricultural Experiment Station.

### SPECIAL REPORT OF THE SCHOOL OF PHARMACY.

Io the Trustees of the University of Illinois.

Gentlemen: The Chicago College of Pharmacy, now the School of Pharmacy of the University of Illinois, was founded in 1859 by a number of pharmacists of Chicago and vicinity for the purpose of affording to their apprentices and to others a course of pharmaceutical instruction,—a course not then to be had at any school or university in the West.

At its inception, the course consisted entirely of lectures, given during the evening hours, when the clerks could best be spared from their duties in the drug stores.

As the institution grew, the scope of the course was extended, laboratory instruction was introduced and made a feature, day classes replaced those which had been conducted in the evening, and an excellent equipment was gradually provided.

At the time of its union with the University, the course given by the School, and leading to the degree of graduate in pharmacy or pharmaceutical chem ist, embraced instruction covering a period of two school years of seven months each and amounting to seven hours daily for three days each week. The annual attendance at this time was 160 and the total number of graduates nearly 900. The College possessed a serviceable equipment and occupied a leased building, which had been erected especially for its use. Chicago real estate, amounting to a little more than two acres, also formed a part of the college property.

Until this time, the College had been governed by an association of which any graduate of the school or pharmacist of the state might become a member. Under this government all receipts in excess of the running expenses were used in adding to the equipment of the school.

The trustees of the corporation had long been of the opinion that the college should be made a part of some university, and as the State. through the pharmacy law, demanded a pharmaceutical training of those desiring to qualify for the practice of pharmacy, it was the unaminous opinion of the members of the college association that the school should preferably be joined to the State University.

This union was effected upon the first of May, 1896.

At the session following, the attendance showed a decided increase, the number of matriculants being I81. A year later, however, the school felt the effects of the business depression, very marked in drug lines particularly, and the attendance decreased to 140. During these two years 80 students were graduated.

At the request of the President of the University, the state pharmaceutical association at the annual meeting held in July, 1896, nominated ten phar macists, from whom the president was to select five, to constitute an advisory board, whose aim would be to aid the University management in an advisory capacity, in the government of the school. It was further arranged that these first members should serve for one, two, three, four and five years respectively, new members to serve five years, and that one new member should be selected annually from among three names submitted, these three being nominated, by ballot, by the pharmacists of the state. This arrangement was perfected and the Advisory Board, so created, has held two annual meetings and has, at each meeting, presented to the Trustees a report embodying suggestions touching the School of Pharmacy.

The course of instruction now given at the school, is such as is, in the opinion of the faculty, best fitted to impart to the student a thorough and practical knowledge of pharmacy and of the the sciences intimately related. It includes a careful exposition of the principles of pharmacy; ample practice in pharmaceutical manipulations; the manufacture of many typical galenical preparations, and drill in the compounding of prescriptions; as well as a thorough consideration of theoretical chemistry; laboratory practice in qualitive and quantitive analysis, especially with reference to the identification and valuation of drugs and medicines, and a presentation of the salient facts of inorganic and organic chemistry, from a pharmaceutical standpoint; also such instruction in botany and microscopy as may best prepare the student for the ensuing study of the various crude drugs, these being considered with reference to their identification, purity, chemical constituents, physiological effects and therapeutic uses.

At a meeting of the School of Pharmacy Committee of the University Trustees, together with the Faculty of the School, which meeting was held September 2nd, 1897, it was decided to recommend to the Board of Trustees of the University that the course for the degree of Pharmaceutical Chemist be lengthened so as to require a school-year of post-graduate work after the completion, by the student, of the two year course. It was further recommended that the advanced work consist chiefly of chemistry and be of such nature as to qualify the student for expert work, in this line, such as might fall within the province of the pharmacist to perform. A third recommendation was that a special laboratory and equipment be provided for this course. These recommendations were adopted by the Board of Trustees at the meeting held September 21st, 1897, and it is expected that the extended course will be put in operation during the coming year.

The diploma of this school, conferring the degree of Graduate in Pharmacy, entitles the recipient to registration in twenty-two states of the Union, but it does not do so in our own State, the pharmacy law of which recognizes no diploma whatever and obliges all candidates for registration to come before the State Board of Pharmacy for examination. While a graduate of any first-class school of pharmacy should not fear an examination before any state board, yet it would seem inconsistent that the State, through its pharmacy law, should not recognize the instruction given under its own supervision.

Another feature of our pharmacy law, and one that is unjust to the schools of pharmacy generally, is that the time spent by the student at a school of pharmacy is not recognized as "experience." For this reason, the young man who has worked in a drug store for four years and who has not attended a school of pharmacy, is eligible for examination before the Board of Pharmacy, while the young man who has been engaged in pharmaceutical practice for the same period, but who has devoted a part of his time to attendance at a school of pharmacy, is not eligible and becomes so only when he has had four years of actual drug store experience. Evidently, some provision should be made, such as the pharmacy laws of many other states contain, which would provide that the time spent at a school of pharmacy should count as "experience," with the provision, preferably, that such credit should not exceed two years. As the law stands at present, a young man is temporarily disqualified for registration because he has attended a school of pharmacy.

A feature of the course at this school, is that opportunities are provided for students to earn their living expenses while attending, by devoting a portion of their time to drug store practice. The facilities in this respect afforded by a large city, enable many young men to gain an education in their chosen profession, who would not otherwise, for financial reasons, be able to do so. The indications for the coming session point to a larger attendance, and with the propective establishment of the post-graduate course and the additions to the equipment of the school, the prospects for the future are bright.

Excepting only the physician, there is no person who holds such a responsible position, in regard to the public health, as does the pharmacist. To fit him for the assumption of this responsibility, a special training, such as is afforded by the best schools of pharmacy, is necessary. The scope of his training must be continually extended to keep pace with new duties and increasing demands upon the pharmacist's knowledge and skill. The University is to be commended for its efforts toward providing better facilities for the acquisition of this knowledge and skill and toward the elevation of the standard by which these attainments are judged.

Respectfully submitted,

W. B. DAY.

Secretary of the Faculty.

### THE SCHOOL OF MEDICINE.

To the Trustees of the University of Illinois.

GENTLEMEN:—Since the absorption of the College of Physicians and Surgeons of Chicago by the University, the number of students attending that institution has increased from 308 to 510.

The comparative thoroughness of its curriculum is set forth in the recently issued decennial report of the Minnesota State Board of Examiners. In Minnesota all applicants for license to practice medicine are required to pass the examination of the State Board, no matter how many diplomas they have.

Of the graduates of the School of Medicine of the University of Illinois who have taken this examination, fifteen per cent have failed; whereas, twenty-two per cent of the graduates of the Northwestern University Medical School and thirty and one-half of the graduates of the Rush Medical College, subjected to the same ordeal, failed.

Our School of Medicine includes a well organized and well sustained Medical Society, under the control of students, which meets bi-weekly, and has an average attendance of forty.

The Quine Library now contains 2,500 standard medical treatises and a wealth of periodical medical literature. It is believed to be the most active medical library in Chicago, the average daily attendance being 85.

Co-education in medicine, a problem that was regarded with much anxiety by the medical faculty, has proved a gratifying success. There are now thirty ladies in the classes and they sustain themselves very creditably in every department of work. Separate parlor and dressing rooms are provided for them and they are treated with every consideration by the young gentlemen of the school. They have just organized a Greek letter society.

The College Gymnasium is, as yet, somewhat primitive as to quarters and equipment, but it is none the less appreciated and used by the students of both sexes. It is the only medical school gymnasium in Chicago. Bath rooms are connected with it.

The Y. M. C. A. parlors in the school are comfortable and commodious and not equaled by any like institution in the Mississippi Valley.

The College Museum is growing vigorously and the equipment of the school is rapidly enlarging in every direction.

The enthusiasm of students and harmonious coöperation of teachers make a cheering prophecy of the future of the school. A little more than one-third of the students have degrees on admission, and the number of these has noticeably increased of late years. It is expected that arrangements will be made before the opening of another session, whereby the entrance requirements of the School of Medicine will be exactly the same as those of other departments of the University, and students may obtain a degree in science and a degree in medicine, on six years of work—three of which shall be done in Urbana and three in Chicago.

The Football Team is the champion medical team of this section of the country.

The College Glee and Mandolin Club recently organized, is in the throes of preparation for its first public performance in Studebaker Hall, February 15th, proximo.

For competitive examinations, for hospital appointments, participated in by the students of all the medical colleges of Chicago, the students of the School of Medicine of the University of Illinois may be confidently depended on to sustain the credit of their *alma mater*.

Respectfully submitted,

W. E. QUINE, Dean.

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