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## BOARD MEETING, DECEMBER 5, 1877.

The board met in the University parlor, at 4 o'clock p. m. President Cobb in the chair.

Present, Messrs. Cobb, Gardner, Mason, McLean, Pickrell and Sabin.

Absent, Governor Cullom, Hon. Gillham, Messrs. Byrd, Brown and Flagg.

The record of last meeting was then read and adopted.

The regent, Dr. J. M. Gregory, then read the following report :

### REGENT'S REPORT

#### *To the Trustees of the Ill. Industrial University:*

I am glad to be able to report a healthful and prosperous condition of the institution under your charge. The number of students in actual attendance is larger than in any former term, though less, of course, than the total attendance of last year. The total attendance shown on the catalogues always includes all who have been in attendance any term of the year. The total number of this will doubtless exceed those of any former year. Those already enrolled for this year, number 386 ; males 313, and females 73.

The work of the term has gone on happily and successfully.

Of the new students admitted at the opening of this term, —entered the preparatory classes, —entered the first year or freshmen classes, —entered the second year or sophomore classes, and —entered special courses, such as the farmer's or the builder's.

Our work is steadily increasing in nearly all directions, and if this increase goes on, there will be no need for additional help in some of the departments. By hard labor I have thus far been able to provide for the instruction in the two important branches of social science,

including history and political economy, and that of philosophy, including mental science, and logic. With the increase of executive work, it will be impossible for me to do this much longer. The best interests of the University will demand that these departments shall be each provided with its separate teacher.

Of the work ordered by the board, much has been accomplished, or is in progress. Some has been necessarily delayed, either because the shops have been otherwise employed, or because the appropriation was found inadequate.

1. The renovation in the chapel has been delayed for want of time to undertake it. I trust it may be reached during the coming term.

2. The work on the library cases has gone forward as fast as the shops could accomplish it. Some delay has occurred from failure to receive the castings for the railings. It will now soon be finished, at least as far as the appropriations of this year will allow.

3. The appropriation for whitewashing the walls of the carpenter shop was found insufficient. I present the estimates of Prof. Ricker for ceiling, whitening the walls, and painting the wood work of the shop, and for putting some coils in the lumber room, now used for a model room and private shop for the work on the models. As the shop has a considerable sum to its credit from its past earnings, I hope the improvements asked for may be ordered. The light and comfort for the shopwork and instruction will be greatly enhanced by these improvements.

It is found that the large electric coil can be rewound in Chicago, but as there is some doubt whether the old wire will make a good coil, it seems to me best policy to increase the appropriation to the amount necessary to have the work done in the best manner with the best materials.

5. Prof. Robinson also asks the usual appropriations for the shop practice classes, and also some appropriations for the necessary materials, and for some additional apparatus for the lectures in physics to be given during the next term. Both of these will come properly from the state appropriation.

6. The appropriation for the purchase of a papyrograph has not yet been expended. On enquiry and personal examination of the two instruments, I conclude that the electric pen will prove best adapted to our work, and I respectfully ask that the appropriation be increased to fifty dollars—the price of the pen and the press accompanying it. I am confident that it will be found of great use in our work, and will save its cost in our printing bills within a year or two, besides giving the advantage of the printing press, in many cases in which we now forego from motives of economy. It will also save to my office a large amount of clerk work in making copies of letters, etc.

7. The work on the laboratory is now so far advanced that the gas and water pipes and the heating apparatus will demand immediate attention. In anticipation of your meeting I have asked Professors Robinson and Ricker to prepare plans to submit to your inspection. These gentlemen believe that the work can be done in your own shops as well and as cheaply as by any other parties, and as we are constantly in want of work, I would earnestly ask your attention to their plans and statements.

8. The library expenditures have been made according to your di-

rection, as will be seen by the librarian's report. The pamphlet cases mentioned in his report, are needed at once, as we have already a large accumulation of valuable pamphlets which can be made available only by classification and arranging them in such cases. The expense of these cases will properly be charged to the state appropriation for library cases.

9. The subscription for our periodicals needs to be renewed at once that there may be no delay in their reception.

10. It is found that the appropriation for the counter, etc., in the book-keeping department will fall a little short of the cost. I recommend that twenty-five dollars be added to the appropriation.

11. The expenditures authorized by the board to be made by the regent and Prof. Taft, from the state appropriation for the cabinets, have been accomplished, in part, with gratifying results, giving to the departments of mineralogy and natural history much new and valuable material for their work. The taxidermist, whose employment you authorized, has not yet begun his work, but is under engagement to begin as soon as his other engagements will allow. I feel much gratified to see this department of our institution at length taking the rank its importance demands.

#### DEGREES.

In compliance with the direction of the board, I opened a correspondence with the several institutions organized under the congressional grants, sending to each a copy of the report of your committee, and inviting a conference. This correspondence has resulted in the calling of a convention of the presidents, or other representatives, of the several state universities and colleges, endowed wholly or in part by congressional land grants. It was found impracticable to limit the conference to the purely agricultural or technological institutions, as the grant went, in many, to state universities or state colleges already in existence when the grant was made, and as the state universities are very generally organizing technological and scientific departments, they are interested as much as we in the question of proper degrees to be given to the graduates of the scientific and technical courses. Besides this, their co-operation is desirable to secure some uniformity of usage, so important to the institutions themselves and to the public at large.

The proposed convention is to be held at the mechanical and agricultural college, of Ohio, at Columbus, December 27 and 28. It will be expected that this university will be represented, as it was on our suggestion the meeting was called.

It is known to the members of the board, that under the appointment and request of the governor of the state, who is also a member of the board, I accepted, the last summer, a position on the state board of health. This is one of those places which civilized states are accustomed to ask good citizens who may be found competent, to fill for the public good and without compensation, and which, therefore, I have not felt justified in declining, especially as so many assurances have been given me from high sources, that my stay on the board is important to the public weal. Thus far the duties involved have called me away only twice, and for short intervals, from my work at home. The calls in the future are not likely to be more frequent than in the past. I do not, however, desire to hold a position which will involve

any interruption of my work here, without the full consent of the trustees.

In this connection, I wish to ask the use of the parlor of the university, for a meeting of the state board of health, the 20th of December, inst.

Very respectfully,

J. M. GREGORY, *Regent.*

The report was received.

The treasurer, J. W. Bunn, Esq., then presented his report.

#### TREASURER'S REPORT.

*John W. Bunn, Treasurer, in acc't with Illinois Industrial University.*

1877.	Dr.		
Sept. 11	To balance .....		\$43,224 28
Oct. 8	" am't rec'd on acc't Burnett's note .....		450 00
Nov. 5	" " " Burton's judgment .....		28 65
30	" " " agricultural department .....	\$3,980 03	
30	" " " horticultural .....	137 51	
30	" " " mechanical .....	586 15	
30	" " " architectural .....	540 90	
30	" " " chemical .....	7 25	
30	" " " fuel and lights .....	62 61	
30	" " " buildings and grounds .....	20 30	
30	" " " Microscopes .....	16 27	
30	" " " library and apparatus .....	31 17	
30	" " " Preparatory department .....	960 00	
30	" " " fees and room rents .....	2,474 50	
30	" " " Illinois Central R. R. freight .....	683 45	9,500 14
			\$53,203 07

*John W. Bunn, Treasurer, in acc't with Illinois Industrial University.*

1877.	Cr.		
Nov. 30	By am't paid board expense .....	\$ 75 75	
30	" " " for salaries .....	7,302 48	
30	" " " fuel and lights .....	832 98	
30	" " " stationery and printing .....	110 43	
30	" " " buildings and grounds .....	4 40	
30	" " " incidental expenses .....	43 33	
30	" " " on acc't agricultural department .....	2,690 98	
30	" " " horticultural .....	152 09	
30	" " " mechanical .....	830 34	
30	" " " architectural .....	632 93	
30	" " " chemical .....	84 56	
30	" " " military .....	39 93	
30	" " " book keeping .....	34 65	
30	" " " green house .....	39 14	
30	" " " Chicago exposition .....	64 19	
30	" " " court charges .....	7 05	
30	" " " engineer's transit .....	30	
30	" " " microscopes .....	12 31	
30	" " " library and apparatus .....	11 59	
30	" " " preparatory department .....	645 00	\$13,614 43
30	" " " chemical laboratory .....	12,383 73	
30	" " " green house .....	1,260 81	
30	" " " cabinets .....	250 65	
30	" " " buildings and grounds .....	526 53	
30	" " " mechanical shops .....	395 38	
30	" " " cabinet cases .....	56 60	
30	" " " library cases .....	257 60	
30	" " " books and publications .....	279 99	
30	" " " physical and chemical laboratories .....	80 74	15,492 03
30	" Balance .....		24,096 61
			\$53,203 07

Urbana, December 5, 1877.

JOHN W. BUNN, Treasurer.

The report was accepted.

A communication from adjutant general H. Hilliard to Col. E. Snyder, was referred to Mr. J. B. Brown, with instructions to report at the next meeting.

Recess taken till 7:30 p. m.

#### EVENING SESSION.

The board met on time.

The following amounts were assigned to be expended from state appropriations :

\$ 25 00 for tools, appropriation for shop practice.  
 15 00 for chemicals, appropriation for physical laboratory.  
 25 00 for hydraulic apparatus, app. for " "  
 125 00 for Rumkorff coil, app. for " "  
 100 00 for acoustic and electrical apparatus, app. for phys. laboratory.  
 50 00 for printing apparatus for regent's office, from current funds.

The following report of the architect, Prof. N. C. Ricker, in regard to progress of work on the new laboratory building, also recommendations for heating apparatus for same, was then read.

#### REPORT OF ARCHITECT.

*To the Building Committee of the Hon. board of trustees, of the Illinois Industrial University:*

GENTLEMEN: I have the honor to present to you my quarterly report, as architect of the chemical laboratory, as follows:

As you have already observed, the contractors have not been able to comply with that part of their contract requiring the building to be fully enclosed on November 15th, chiefly on account of delay in the stone masonry of the basement story. Still, I believe that so far no damage has occurred to the building. To settle any dispute which might arise on final settlement, as to the actual condition of the building on November 16th, I requested Prof. Webber to take a photographic negative of it, which he did on November 20th.

I have found it necessary to make a few changes in the building, to better adapt it to its purposes, or improve its appearance, which will, I believe, meet your approval. In each case where any extra expense was required, except for ground glass skylight, the cost has been fixed beforehand by agreement between Mr. Terrell and myself, and at very reasonable figures.

1st. Window and door caps are of Joliet limestone instead of Ohio sandstone, and changed design. They look much neater, and better agree with the brick walls. No extra cost.

2d. Two flues 12x12 inches from basement were put in north east part of the building, instead of one flue 4x12 inches from second story, by request of Prof. Webber, to provide for a possible need of placing a furnace in the milling room. Extra cost \$52.

3d. Hot air flues in interior walls. Provision was made in the specifications that the University would furnish, and the contractors set, hot air flues of tin where required. I obtained bids for the tin pipes from four parties in Urbana and Champaign, and at the lowest price, they would cost about \$125.

After thinking over the matter a while I concluded to omit the tin, forming the flues in the wall and plastering the flues with plaster of paris. This is much cheaper, less heat is transmitted from the air to the wall, though there is more friction in the flues.

To remedy this I put in a larger number of flues, and made about half of them 8x16 in. Extra cost \$25 00.

4th. Two dormer windows on east side—the two in center of building were put in extra. Four wood columns in mansard story were omitted, the weight of roof being thrown on partitions.

Expense of difference between the charges \$20 00.

5th. The chimney caps were drawn to extend about 3 feet above the edge of deck roof, which would probably be sufficient; but to make sure, they have been carried 3 feet higher, or 1 foot above the central ridge.

Additional cost \$35 22.

6th. It will be best to substitute ground glass for the double thick glass in skylight for photographic atelier. This has not been ordered yet, and the cost of the change not been agreed upon. Mr. Terrell can furnish this, or the business agent can purchase it, and we can then deduct from the amount due under the contract, the cost of the double thick glass, as you may think preferable.

7th. Ornamental slating.—It is purposed to put in ornamental slating, using about one square of red and two of gray, forming diamond figures where there is space for them.

Cost not to exceed \$40 00; but Mr. Terrell says that if you object to paying for this ornamental work, you need not do so.

Total cost for changes,

Extra flues .....	\$ 52 00
Dormer windows .....	20 00
Hot air flues .....	25 00
Extra height of chimneys .....	35 22
Ornamental slating .....	40 00

\$172 22

Extra in skylight not included.

8th. If the south room in mansard is ever to be used as a drawing or modeling room, or for any similar purpose, it would be well to put in a skylight in the roof above it. The probable expense would not be very great; would depend on you.

9th. It will be best to put in partition between agricultural and quantitative laboratories, now, making it partly of glass and so light as possible. It was omitted from the drawings by request of Prof. Weber.

For the amounts paid the contractors and other persons on account of the laboratory, reference is made to the books of the business agent.

I submit herewith to you, plans of the building showing its proposed internal arrangements.

1. Arrangement of furniture, such as desks, sinks, gashoods, tables, &c. These are outlined in red lines.

2. The proposed mode of heating and ventilating the building.

3. The mode of getting rid of all noxious vapors arising from chemical manipulations. Pipes outlined in orange.

4. The water supply and distribution pipes, drawn in blue.

5. The waste water system. Not shown in plans.

6. The gas supply and distribution pipes drawn in green, except those serving to light mansard story, which are red.

#### 1.—THE FURNITURE, ETC.

The desks in the laboratories of qualitative and quantitative analysis are 4 ft. 3 in. by 16 feet placed 4 ft. 6 in. apart, each accommodating 8 students, and in general form similar to those now in use, but should be built of hard wood, best of ash, and finished in oil and shellac. Each desk is fitted with two wash bowls 16 inches in diameter, with water and waste pipes, and with two gas hoods, with gas flues, and gas pipes and burners. Each laboratory is also fitted with large gas hoods, sinks and with water and waste pipes, and blow pipes, which are furnished with pipes conveying compressed air and also gas. Store rooms have a lift, counter, shelves and drawers, and an apparatus for making distilled water, with steam and water pipes. Class and lecture rooms have platforms with water, gas and waste pipes.

Pharmacy room will have a prescription counter and desk with gas pipes, sink with water and waste pipes, and wall cases with shelves and drawers.

Laboratory of Prof. Weber will have working desk, with one gas hood and wash bowl, with water, waste and gas pipes, and gas flues, sink, balance shelf and gas hood.

Ladies' and gentlemen's clothes rooms will have wash bowls, with water and waste pipes, clothes hooks, &c.

Gas analysis room will have table with water, waste and gas pipes, and sink with water and waste pipes.

Balance room will have balance shelf and an apparatus case.

Tank room in mansard will have a 100 barrel tank of boiler iron, supported on trusses resting on brick walls, filled by pipes from pump in basement, and by down spout from deck roof, with overflow pipe discharging into main gutter of the building.

Dark room will have sink, shelves and drawers, table with gas, water and waste pipes. Toning room same.

Water pipes will also be laid into each room in mansard story to provide for any possible use of the unappropriated rooms.

#### 2.—PROPOSED METHOD OF HEATING AND VENTILATION.

To be done by forcing air past steam coils in hot air chamber in basement, thence through ducts to each room. All the heating surface will be placed in hot air chamber except a few radiators which may be necessary in halls. Fan to be placed where indicated, in engine room, forcing air into hot air chamber. This is driven by an engine, of 8-horse power, which will be sufficient to drive fan and milling machinery, and pumps. This engine to be driven by a small separate boiler, as it will require to be run whenever building is used. Main boiler used for heating the steam coils alone.

Both discharge smoke into large smoke flue, and the waste heat assists in producing draft in ventilating shaft. Steam coils to be arranged in sections so that any injured pipe can be shut off, without interfering with the others, and arranged so that any section can be drawn out for repairs.

By tin pipes in basement, and flues in walls, the warmed air is conducted to the various rooms.

Valves will be arranged at the lower ends of flues, so that the janitor can turn on or off the hot air from any room without going to that room.

The maximum amount of air required for the whole building, is about 250,000 cubic feet per hour. 13,000 lineal feet steam pipes will be necessary to heat this, and a No. 6 or 7 Sturtevant blower to furnish it. By experiment, the openings into flues are to be made of proper size so as to supply each room equally, and under uniform pressure. I have ar-

In the laboratories, the gas hoods draw off the foul air, and it will pass off through gas flues, so that these rooms will not require any other provision for their ventilation, but I have put in some registers in addition which can be used if necessary.

A small blower will be needed to furnish air under greater pressure to forge, furnaces and blow pipes.

Prof. Robinson has obtained most of the data for this estimate, and we have made it out together.

Large Sturtevant blower .....	\$ 100 00
Small .....	25 00
Piping to do .....	100 00
Large Root's safety boiler .....	1, 150 00
Small .....	250 00
Setting boilers .....	250 00
8-horse power engine .....	500 00
Pump .....	100 00
Heater for taking lime out of water for boilers .....	150 00
Smoke pipe .....	40 00
Steam pipe 13,000 feet .....	700 00
Fittings and valves for do .....	200 00
	<u>\$3,565 00</u>

Work putting up probably not to exceed \$500 00.

Water of condensation in pipes will be returned to boiler without pumping.

I believe this method of heating and ventilation will be most economical and the best in all respects, though any other system, if preferred by you, can be adopted without trouble.

As shown in plans and previously stated, these gases are drawn off from the place where produced, without being allowed to escape into the rooms at all, and the atmosphere of the laboratory should be as pure and healthy as that of any other building, much more so than of the main University building.

There should be a 500 barrel cistern constructed in the ground and supplied from the down spouts of the roof. This should then be connected by pipes with the pumps, and thence with main vertical pipe in corner of store room, which extends up to the tank room in the mansard story.

On each floor from this point, extend distributing pipes, which are shown by blue lines on plans, to supply each wash basin and sink, and desk. These distributing pipes can be put between the floors, as they will outlast the floor unless frozen, and as the laboratory must be kept above the freezing point which would destroy the solutions &c., there will be no difficulty from the same.

It will be necessary to put in these very soon. The main vertical pipe also serves to fill tank in mansard whenever it is necessary, from the cistern outside.

Ordinarily this tank will be filled from the deck roof without pumping.

It will be necessary to run a small tell tale pipe  $\frac{3}{8}$  inch bore, down to engine room from tank, to show the janitor when tank is full. Overflow pipe from tank discharges into main gutter of the building.

These pipes cannot be put in floors as they are liable to get choked, and will be best set vertically, to join horizontal pipes below basement story ceiling, which run into the ends of drains, formed in basement walls. Prof. Weber says these should be made of lead to resist chemical action; perhaps it would be cheaper to use iron, renewing it oftener.

The gas main enters building on north end, east of steps, then under brick paving to connect with main vertical gas pipe in angle of store room, near water pipe. Gas pipes are shown in green, excepting those serving to light mansard story, which are in red.

On each floor the main pipe sends distributing pipes which carry the gas to each desk, gas hood, blow pipe and burner or ceiling of the story beneath.

These burners for the story immediately below are marked "G" on plans.

These gas pipes will need to be put in at once, or before the floor is laid, at least those which are put in the floor.

The gas and water can be shut off from each story where desired, for repairs, &c., without interfering with those of the rest of the building.

I submit these plans for heating, gas and water, to your consideration, requesting you to make such modifications or changes as you deem necessary, if they meet your approval.

al. I will then prepare the working drawings and specifications ready for the contracts, or such as you think proper to let at present.

The gas and water put in floors and a part of tin air flues will be needed very soon.

Very respectfully submitted,

N. CLIFFORD RICKER,  
Prof. of Architecture, and Architect Chemical Laboratory.

Report referred to building committee.

On motion, the purchase of pamphlet cases for library was referred to Mr. Gardner and the regent, with power to act.

Upon a report from the librarian, the periodicals for next year were ordered to be continued the same as this year. A request for repairs of bindings was referred to Mr. Gardner and the librarian, with power to act.

An amount of \$25 00 was added to a former appropriation for counter, etc., in bookkeeping room.

On motion, Dr. Gregory, Messrs. Sabin and McLean were appointed delegates to a convention at Columbus, Ohio, December 27th, 1877.

Dr. Gregory was authorized to attend the meeting of the state board of health, and an invitation was extended to said board, to use the university parlor for their meeting here on December 20th, 1877.

Authority was given to the regent and faculty to have the annual catalogues printed during winter term, 1878—cost not to exceed \$200.

The farm committee made the following report, which was received:

CHAMPAIGN, December 5th, 1877.

*To the Chairman and Trustees of the Industrial University of the State of Illinois:*

The undersigned committee, appointed by your body, at the September meeting of your board, to examine and report relative to the working and condition (financially) of the farms belonging to the University, would beg leave to report that we have examined the accounts and statements of Mr. E. L. Lawrence, head farmer, and herewith submit his reports, accounts, etc., and desire the same may be made part of this report, the same being marked "A, B, C, D, E, F and G," respectively.

Your committee would also recommend that the stock farm, including the Busey and Griggs farms, should be under the control and superintendency of the head farmer, and that he be responsible for their proper management, and disposal of the products of the same, and that said head farmer shall, when called upon and when practicable, be subject to the orders of the professor of agriculture in the experimental farm, in furnishing horses, implements and labor for experiments in his department, and further, that the professor of agriculture shall, with the assistance of the head farmer, decide as to the manner or mode of treatment of all blooded stock belonging to the University. The purchase or sale of such stock shall be under the control of the board of trustees, or such committee as they may appoint for that purpose.

We would also recommend that proper books be obtained, opened and kept by the head farmer, wherein shall be entered each and every article, implement, stock or other property belonging to his department, together with the cost thereof (keeping such accounts separately, to-wit: stock, implements, products, labor and such other accounts as are necessary); also items of every name or nature sold from the farms, giving date and price of same, and to regularly charge all moneys for repairs, new implements and labor made or incurred during the year, and to render his account of same, when called upon by the board of trustees, and at the regular meeting of said board in the month of December of each year, showing in itemized form what property, stock, etc., with fair estimate of value of same on hand, together with statements of income from all products or other property sold from the farms during the year ending November 30, of each year hereafter.

And further recommend, that the head farmer shall keep an account of all such labor as he may furnish the several departments of the University, charging the same to the proper department, separate accounts of such labor, a statement of the same to be rendered to the board of trustees at their December meeting.

And further, that all field crops, fruits and other products raised on the experimental or horticultural farms, shall be sold by the head farmer, who shall account for the same in the manner and form designated and provided for in the stock farms.

We would further recommend, that the professor of agriculture shall designate what particular part or parts of the experimental farm he may desire for his use in his de-

partment, the remainder of said farm to be under the care and superintendency of the head farmer, who shall account for all produce raised on same in manner as provided on stock farms.

All of which is respectfully submitted.

D. D. SABIN,  
ALEX. MCLEAN, } *Committee.*  
JOHN W. BUNN. }

Adjourned, to meet at University building at 8:30 a. m.

#### SECOND DAY'S SESSION.

The board assembled as per adjournment.

Prof. Ricker's request for fitting up carpenter shop was referred to executive committee, with power to act.

The bill of Mr. Hambugher, clerk of supreme court of the state, to the amount of \$25, was audited and allowed.

It was decided that the caps for the University battalion be changed from the present "navy" pattern in dark blue,—to the regulation cap of the U. S. infantry, same cloth and trimmings as the uniforms.

The committee on purchase of Durham cattle made the following report which was accepted:

#### *Chairman Board of Trustees of Illinois Industrial University:*

Committee to purchase Durham heifers, beg leave to report that we visited and examined the herds of Messrs. Winslow Sons, Kankakee, and J. G. Clark, Champaign, and corresponded with other parties, and after careful examination we purchased from Mr. J. G. Clark, Champaign, five two-year-olds and one yearling, for the sum of six hundred dollars, and from Messrs. Winslow Sons, Kankakee, four two-year olds, for \$386 50, making the cost of the ten \$986 50, being within the limit of price we were permitted to pay. Your committee further report that we deemed it inadvisable to purchase grade heifers at this time, as requested, or until we are further instructed by the board.

All of which is respectfully submitted,

D. GARDNER,  
EMORY COBB, } *Committee.*  
G. E. MORROW. }

The following report from the business agent was read and received, the bills presented for audit were audited and ordered to be paid:

#### BUSINESS AGENT'S REPORT.

ILLINOIS INDUSTRIAL UNIVERSITY, CHAMPAIGN, ILLS., Dec. 5, 1877.

*Hon. Emory Cobb, President of Board of Trustees of Illinois Industrial University:*

SIR:—I have the honor to make the following financial report, for the three months ending December 1st, 1877. Paper A is a statement of the current appropriations, including receipts and expenditures made under the same. Paper B gives the present condition of the state appropriations. Paper C is a list of warrants drawn in the three months, those from 162 to 220, inclusive, have not been issued, and are presented with vouchers for auditing. A few additional bills for auditing are presented in the same connection.

Respectfully submitted,

S. W. SHATTUCK, *Business Agent.*

## "A."

## STATEMENT of Current Appropriations and Receipts, Nov. 30, 1877.

ON ACCOUNT OF	APPRO- PRIATED.	RECEIPTS.	EXPEND- ED.	UNEX- PENDED.
Board expense.....	\$ 200 00		\$ 75 75	\$ 124 25
Salaries.....	16,300 00		7,302 48	8,997 52
Fuel and lights.....	2,000 00	62 61	832 98	1,229 63
Stationery and printing.....	200 00		110 43	89 57
Buildings and grounds.....	100 00	20 30	4 40	115 90
Incidental expense.....	200 00		43 33	156 67
Agricultural department.....	2,331 33	3,980 03	2,690 98	3,620 38
Horticultural ".....	213 84	137 51	152 09	199 28
Mechanical ".....	207 78	586 15	830 34	36 41
Architectural ".....	402 28	540 93	632 93	310 25
Chemical ".....	151 95	7 25	84 56	74 64
Military ".....	50 00		39 93	10 07
Special appropriations—				
Bookkeeping—checks, samples, etc.....	35 00		34 65	35
Plants and seeds for greenhouse.....	50 00		39 14	10 86
Chicago exp. Baker's exp.....	20 64		64 19	43 55
Court charges.....	11 55		7 05	4 50
Advertising, unexpended.....	69 50			69 50
Papyrograph for regent's office.....	35 00			35 00
Engineer's transit.....	550 00		30	549 70
Model of horse (state appropriation).....	786 43			786 43
Microscopes, unexpended.....	17 57	16 27	12 31	21 53
Library and apparatus.....		31 17	11 59	19 58
Preparatory department.....		960 00	645 00	315 00
State appropriation.....			15,492 03	
Fees and room rents.....		2,474 50		
Illinois Central Railroad—freights.....		683 45	236 69	

## "B."

## STATEMENT of State Appropriations, November 30, 1877.

	APPRO- PRIATED.	EXPENDED.	UNEXPENDED.
Taxes on lands.....	\$6,000 00	\$2,194 24	\$3,805 76
Repairs, etc.—buildings and glass.....	5,000 00	1,923 38	3,076 62
Current expenses—chem. and phys. lab'tories.....	2,000 00	396 10	1,603 90
"    "    and instruction in shops.....	3,000 00	470 16	2,529 84
Library cases.....	2,000 00	604 17	1,395 83
Books and publications.....	3,000 00	531 09	2,468 91
Cabinet cases.....	4,500 00	1,031 07	3,468 93
Cabinets.....	2,000 00	496 08	1,503 92
Chemical laboratory.....	40,000 00	14,341 21	25,658 79
Greenhouse.....	2,500 00	1,915 57	584 43
	\$70,000 00	\$23,843 07	\$46,156 93

No.	TO WHOM.	FOR WHAT.	AMOUNT.
1	R. B. Mason.....	Expense to meeting.....	\$ 10 00
2	Alex. McLean.....	" ".....	46 85
3	D. D. Sabin.....	" ".....	18 90
4	I. O. Baker.....	" " to Chicago Exposition.....	20 64
5	N. C. Terrell & Co.....	Extra work on chemical laboratory.....	300 69
6	N. C. Ricker.....	Expense on plans ".....	21 90
7	Architectural Department.....	Work and material ".....	6 53
8	W. A. Balcom.....	" on plans ".....	5 00
9	Mary L. Page.....	" ".....	23 37
10	Seeley Brown.....	Services as superintendent engineer.....	100 00
11	J. M. Gregory.....	Expense on chemical laboratory.....	14 60
12	E. T. Whitcomb.....	Charges as clerk of court.....	7 05
13	N. A. Williams.....	2 bbls. cement.....	10 00
14	J. M. Gregory.....	Salary, Sept, 1877.....	300 00
15	S. W. Robinson.....	" ".....	150 00
16	T. J. Burrill.....	" ".....	150 00
17	S. W. Shattuck.....	" ".....	150 00
18	E. Snyder.....	" ".....	150 00
19	D. C. Taft.....	" ".....	150 00
20	J. B. Webb.....	" ".....	150 00
21	J. C. Pickard.....	" ".....	150 00
22	N. C. Ricker.....	" ".....	125 00
23	H. A. Weber.....	" ".....	150 00
24	J. D. Crawford.....	" ".....	125 00
25	G. E. Morrow.....	" ".....	150 00
26	E. L. Lawrence.....	" ".....	83 33
27	L. C. Allen.....	" ".....	100 00
28	F. W. Prentice.....	" ".....	100 00
29	F. A. Parsons.....	" ".....	75 00
30	I. O. Baker.....	" ".....	75 00
31	M. A. Scovell.....	" ".....	65 00
32	C. I. Hays.....	" ".....	75 00
33	P. Baumgras.....	" ".....	100 00
34	Chas. E. Pickard.....	" ".....	45 00
35	J. C. Lewellyn.....	" ".....	40 00
36	J. E. Gregory.....	" ".....	25 00
37	A. B. Baker.....	" ".....	40 00
38	C. W. Williams.....	" ".....	30 00
39	E. A. Kimball.....	" ".....	83 33
40	Seeley Brown.....	" ".....	100 00
41	N. C. Terrell & Co.....	Work for September.....	4, 639 71
42	Trevett & Green.....	Hardware.....	14 74
43	A. E. Footo.....	Collection of minerals.....	137 50
44	G. E. Morrow.....	Chemicals and hardware.....	3 15
45	W. A. More.....	Hardware.....	2 00
46	Jones & Laughlins.....	" ".....	6 25
47	Crane Bros. Mfg. Co.....	" ".....	73 42
48	" ".....	" ".....	35 80
49	Amos Beard.....	Work on hay forks.....	6 40
50	J. J. Spaulding & Co.....	4 M. circulars.....	32 00
51	C. D. Webster.....	500 ft. ash lumber.....	15 00
52	The Victor S. M. Co.....	1 micrometer caliper.....	4 50
53	E. B. Benjamin.....	50 nests beekers.....	49 25
54	F. W. Christern.....	Books.....	3 12
55	American Library Journal.....	" ".....	5 00
56	W. F. Pratt.....	Repairs on roof.....	6 50
57	E. A. Robinson.....	Work on heating apparatus.....	41 65
58	Crane Bros. Mfg. Co.....	Hardware.....	3 30
59	E. A. Pratt.....	Setting glass.....	3 00
60	C. & U. Gas Co.....	Gas bill July and August.....	19 20
61	Agricultural Department.....	Farm expense September.....	700 29
62	Andrew Barr.....	Lumber and work, green house.....	53 50
63	Thomas Parks.....	Cleaning well.....	5 00
64	Fuller & Fuller.....	1 bbl. oil.....	25 72
65	L. W. Walker.....	Lumber.....	2 75
66	American Unitarian Ass'n.....	Express on books.....	2 25
67	Thos. Wright.....	1,371 lb castings.....	68 55
68	U. S. Patent Office.....	6 volumes reports.....	15 60
69	I. B. & W. R. W. Co.....	Freights.....	4 72
70	Darling, Brown & Sharp.....	Implements and tools.....	7 48
71	George Ely.....	½ ton Blossburg coal.....	5 00
72	Fuller & Fuller.....	Glass.....	23 48
73	John Hensel.....	17½ days work on boiler.....	22 24
74	Workmen's pay roll.....	Green house.....	99 15
75	Baldwin Bro's.....	Freight on books.....	14 51
76	Students' pay roll.....	September 1877.....	304 23

## LIST OF WARRANTS DRAWN.—Continued.

No.	TO WHOM.	FOR WHAT.	AMOUNT.
77	C. & U. Gas Co.	Gas bill September	41 70
78	Goodnow & Wrightman	Tools	19 81
79	John G. Clark	6 short horn heifers	600 00
80	U. S. Express Co.	Express on castings	2 65
81	W. A. Moore	Hardware	3 39
82	C. E. Roberts	Screws	3 03
83	W. M. Kennedy	Advertising	12 50
84	I. O. Baker	Expense to Ohio exposition	13 75
85	Stock Journal Co.	Advertising	25 00
86	Cleveland Paper Co	Paper for com'l dep't, currency	12 65
87	Hubbard & Sons	Iron	2 98
88	Enterprise Coal Co.	7 cars coal	101 40
89	Richmond & Sons	1 bushel wheat	1 50
90	Brown Bro's	Hardware	10 30
91	C. & U. Gas Co.	Gas bill for May	36 60
92	L. V. Manspeaker	Soda, brushes etc.	20 05
93	Backus Oil Co.	1 bbl. Oil	23 20
94	J. M. Gregory	Salary, Oct., 1877	300 00
95	S. W. Robinson	" " "	150 00
96	T. J. Burrill	" " "	150 00
97	S. W. Shattuck	" " "	150 00
98	E. Snyder	" " "	150 00
99	D. C. Taft	" " "	150 00
100	J. B. Webb	" " "	150 00
101	J. C. Pickard	" " "	150 00
102	N. C. Ricker	" " "	125 00
103	H. A. Weber	" " "	150 00
104	J. D. Crawford	" " "	125 00
105	G. E. Morrow	" " "	150 00
106	E. L. Lawrence	" " "	83 33
107	Lou. C. Allen	" " "	100 00
108	F. W. Prentice	" " "	100 00
109	P. Baumgras	" " "	100 00
110	F. A. Parsons	" " "	75 00
111	I. O. Baker	" " "	75 00
112	M. A. Scovell	" " "	65 00
112	C. I. Hays	" " "	75 00
113	Chas. E. Pickard	" " "	45 00
114	E. A. Kimball	" " "	83 33
115	J. C. Lewellyn	" " "	40 00
116	C. E. Gregory	" " "	25 00
117	A. B. Baker	" " "	40 00
118	C. W. Williams	" " "	30 00
120	Champaign Gazette	15 thousand impressions currency	15 00
121	C. G. Carleton	Files	17 84
122	G. E. Morrow	Books	3 50
123	C. G. Carleton	Hardware	25 22
124	James Ralph	Mason work and repairs	79 62
125	Walker & Mulliken	1 doz. office chairs	17 00
126	Luddington, Wells & VanSchoick	Lumber	153 43
127	Bott, Hammersley & Co.	Flower pots	33 85
128	G. Deuerlich	Books and publications	223 96
129	Seelye Brown	Sup't service chemical laboratory, Oct.	100 00
130	Chicago Floral Co.	Boiler & pipes for green house	677 25
131	N. C. Terrell & Co.	Material & work, laboratory, Oct.	3, 856 85
132	Student's Pay Roll	October, 1877	278 30
133	Agricultural Department	Farm expense, Oct.	353 44
134	Winslow & Son	Fine stock	386 50
135	Labor Pay Roll	Work on green house	111 80
136	J. M. Gregory	Salary, Oct., 1877	300 00
137	S. W. Robinson	" " "	150 00
138	T. J. Burrill	" " "	150 00
139	S. W. Shattuck	" " "	150 00
140	E. Snyder	" " "	150 00
141	D. C. Taft	" " "	150 00
142	J. B. Webb	" " "	150 00
143	J. C. Pickard	" " "	150 00
144	N. C. Ricker	" " "	125 00
145	H. A. Weber	" " "	150 00
146	J. D. Crawford	Salary, Nov., 1877	125 00
147	G. E. Morrow	" " "	150 00
148	E. L. Lawrence	" " "	83 33
149	L. C. Allen	" " "	100 00
150	P. Baumgras	" " "	100 00
151	F. A. Parsons	" " "	75 00
152	I. O. Baker	" " "	75 00
153	M. A. Scovell	" " "	65 00
154	C. I. Hays	" " "	75 00

## LIST OF WARRANTS DRAWN.—Concluded.

No.	TO WHOM.	FOR WHAT.	AMOUNT.
155	C. E. Pickard.....	" "	\$45 00
156	E. A. Kimball.....	" "	83 33
157	J. C. Lewellyn.....	" "	40 00
158	J. E. Gregory.....	" "	25 00
159	A. B. Baker.....	" "	40 00
160	C. W. Williams.....	" "	30 00
161	F. Braum & Co.....	10,000 geological specimens.....	100 00
162	R. J. Halliday.....	Plants.....	25 79
163	R. A. Sutton.....	Brick.....	37 60
164	H. Peddicord.....	Plaster and lumber.....	21 00
165	Smith, Vail & Co.....	Packing, rubber, etc.....	1 50
166	N. A. Williams.....	Drain tile.....	92 92
167	Crane Bro's. Manuf'g Co.....	Hardware.....	15 10
168	Jno. Wilkinson.....	Paper, etc.....	3 10
169	Webster & Wallace.....	Lumber.....	47 80
170	W. F. Pratt.....	Repairs on roof.....	11 40
171	Jones & Laughlins.....	Hardware.....	6 05
172	Goodnow & Wightman.....	" "	6 83
173	The Illini.....	Notices and cards.....	3 00
174	J. P. Daig & Co.....	Hardware.....	15 98
175	Amos Beard.....	Forging hay forks.....	4 50
176	Champaign County Gazette.....	4,000 samples & checks for book page.....	7 00
177	Sylvester Ogg.....	Brick.....	5 47
178	Jno. Knight.....	Sheet lead.....	7 37
179	Hubbard & Son.....	Hinges.....	3 30
180	Champaign County Gazette.....	Periodicals.....	4 25
181	A. P. Armstrong.....	Geological specimens.....	3 00
182	Backus Oil Co.....	50 gallons Oil.....	20 00
183	J. O'Neil.....	Plumbing and soldering.....	29 73
184	S. B. Davis.....	Sand and gravel.....	16 00
185	E. E. Pratt.....	Glazing.....	2 00
186	U. S. Patent Office.....	Reports.....	7 80
187	Loecke & Saxton.....	Paper.....	9 58
188	C. H. Cady.....	Hardware.....	9 20
189	Walker & Mulliken.....	20 stools.....	17 00
190	Crane Bro's Manuf'g Co.....	Packing.....	87
191	Thos. Wright.....	Castings.....	21 10
192	Trevett & Green.....	Hardware.....	3 10
193	Fuller & Fuller.....	Vitriol and insulators.....	7 03
194	Thos. Franks.....	Plants.....	13 35
195	I. B. & W. R. W.....	Freight.....	7 04
196	C. & U. Gas Co.....	Bill for October, 1877.....	49 50
197	Mason & Davis.....	Castings.....	10 45
198	Trevett & Green.....	Hardware.....	16 60
199	Mechanical Department.....	Work for other departments.....	200 25
200	Agricultural Department.....	" "	107 20
201	Agricultural Department.....	" on grounds.....	56 42
202	George Hanks.....	Sand.....	2 25
203	H. A. Brown.....	Boarding workmen.....	2 50
204	Agricultural Department.....	Labor and material, laboratory.....	158 52
205	Trevett & Green.....	Hardware.....	28 07
206	Jno. B. Weeks.....	Drayage.....	9 00
207	Enterprise Coal Co.....	16 cars coal.....	234 00
208	Lyon & Healy.....	Band instruments.....	30 00
209	I. C. R. R. Co.....	Freights advanced.....	4 80
210	Agricultural Department.....	Work for other departments.....	485 95
211	E. W. McAllister.....	Postage, Oct. and Nov.....	26 00
212	I. C. R. R. Co., Donation.....	Sept., Oct. and Nov., freights.....	683 45
213	D. C. Taft.....	Expense for cabinets.....	5 35
214	Brown & Henderson.....	Plastering green house.....	56 00
215	J. B. Sober.....	Carpenter work on green house.....	17 60
216	S. W. Shattuck.....	Petty expense, Nov. Oct. & Sept.....	45 18
217	Seely Brown.....	Salary, sup't chemical laboratory.....	100 00
218	Student's Pay Roll.....	November, 1877.....	278 13
219	N. C. Terrell & Co.....	Work on laboratory, Nov.....	2,860 25
220	Agricultural Department.....	Farm expense.....	236 69

Prof. Burrill's report on the construction of new green house was read and referred to the building committee.

A committee consisting of Messrs. Pickrell, McLean and Gardner, were appointed to report on the future management of the University farms and lands.

Recess taken until 3 p. m.

#### AFTERNOON SESSION.

Board met as by adjournment.

Mr. P. N. Endsley's bill for reporting (short hand) certain court proceedings, amounting to \$6. was allowed.

A request from Mr. Canady to erect a temporary blacksmith's shop on University grounds was not granted.

Dr. Gregory nominated Mr. E. L. Lawrence, to be continued head farmer for next year, which was confirmed.

The regent and Prof. Morrow were authorized to correspond with the state board of agriculture in regard to a contemplated trial of agricultural implements on University farm.

Dr. Gregory was authorized to apply to the chief signal officer for the establishment of a station at the University.

Mr. McLean, chairman of the building committee, presented the following report upon Prof. Ricker's recommendations in regard to the heating apparatus for the new laboratory building:

CHAMPAIGN, Dec. 7th, 1877.

*To the Chairman and Board of Trustees of the Illinois Industrial University:*

The undersigned, laboratory building committee, would beg leave to report that we have carefully examined the plans made by Profs. Ricker and Robinson, relative to heating apparatus for laboratory building; also gas and water piping, and from information given us by said Robinson and Ricker, we would recommend as follows:

1st. That Profs. Ricker and Robinson make out full and complete plans and specifications for the heating apparatus, so that we can solicit bids for putting in the same according to the plans and specifications submitted to us, and that their report be acted on by the board or such committee as they may select.

2d. We would also recommend that said Profs. Ricker and Robinson be requested to submit a bid or estimate for said work, also estimate for heating by steam radiators as in main building, from our own mechanical department.

3d. We would recommend that gas and water piping be at once commenced and finished by our mechanical department, under superintendence of Profs. Robinson and Ricker, and according to plans as submitted to your committee, authorizing them to make such changes as may be thought advisable and prudent. We would also recommend that Prof. Ricker be requested to furnish tracings of plans for heating apparatus, for heating the laboratory, and submit the same to Crane, Breed & Co., of Cincinnati, Ohio, for their estimate and bid on said work.

Respectfully submitted,

A. McLEAN, }  
D. GARDNER, } Committee.  
R. B. MASON. }

The report was adopted and the building committee instructed to carry out its provisions.

A request from Mr. E. A. Robinson, late foreman of the shops, for additional pay, amounting to \$45, was not granted.

The chairman of the building committee then submitted the following report in regard to the new greenhouse:

CHAMPAIGN, Dec. 6th, 1877.

*To the Trustees of the Illinois Industrial University:*

Your committee to whom was referred the building and completion of the green house, beg leave to report that:

The state appropriation for that purpose was.....		\$2,500 00
There has already been expended as per Prof. Burrill's report..	\$2,364 71	
There is still required for some petty expenses.....	15 00	
For furniture for north-east room and apparatus for botanical investigation and experiments .....	75 00	
For painting outside brick work.....	30 00	
	<hr/>	2,484 71
		<hr/>
		\$ 15 29

Your committee would recommend the additional expenditure mentioned above, amounting to one hundred and twenty dollars, and the balance of the appropriation may be used in painting the roof, if sufficient to do so, but on no account to exceed the entire appropriation.

Respectfully submitted,

A. McLEAN,	} Committee.
D. GARDNER,	
R. B. MASON.	

The report was accepted, and its recommendations agreed to.  
Adjourned.

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