

Illinois State University

ISU ReD: Research and eData

Proceedings of the Board of Education of the
State of Illinois

Dr. Jo Ann Rayfield Archives

1880

Proceedings of the Board of Education of the State of Illinois, 1880

Illinois State Board of Education

Follow this and additional works at: <https://ir.library.illinoisstate.edu/univpubs>



Part of the [Higher Education Commons](#)

Recommended Citation

Illinois State Board of Education, "Proceedings of the Board of Education of the State of Illinois, 1880" (1880). *Proceedings of the Board of Education of the State of Illinois*. 23.
<https://ir.library.illinoisstate.edu/univpubs/23>

This Article is brought to you for free and open access by the Dr. Jo Ann Rayfield Archives at ISU ReD: Research and eData. It has been accepted for inclusion in Proceedings of the Board of Education of the State of Illinois by an authorized administrator of ISU ReD: Research and eData. For more information, please contact ISURed@ilstu.edu.

PROCEEDINGS

OF THE

BOARD OF EDUCATION

OF THE

STATE OF ILLINOIS.

REGULAR MEETING,
HELD AT NORMAL, JAN. 21, 1880.

SPRINGFIELD:
ILLINOIS STATE JOURNAL PRINT.
1880.

STATE BOARD OF EDUCATION.

NAME.	EXPIRATION OF TERM.	RESIDENCE.
HON. S. W. MOULTON,	1881.	Shelbyville.
HON. R. S. CANBY	1881.	Olney.
H. H. HILL	1881.	107 Madison St., Chicago
ISAAC LESEM	1881.	Quincy.
H. L. BOLTWOOD	1881.	Ottawa.
J. A. ENANDER	1883.	6 S. Clark St., Chicago.
B. G. ROOTS	1883.	Tamaroa.
E. L. WELLS	1883.	Oregon.
HON. J. C. KNICKERBOCKER	1883.	160 LaSalle St., Chicago.
HON. WM. H. GREEN	1885.	Cairo.
E. A. GASTMAN	1885.	Decatur.
HON. MICHAEL DONAHUE	1885.	Clinton.
B. F. BARGE	1885.	Geneseo.
THOMAS SLADE	1885.	Normal.
JAMES P. SLADE (ex-officio)		Springfield.

OFFICERS OF THE BOARD.

B. G. ROOTS,	President.
JAMES P. SLADE,	Secretary.
THOS. F. MITCHELL,	Treasurer.

STANDING COMMITTEES.

<i>Theory and Art of Teaching, and Mental Science</i> —Barge, Enander, Hill.
<i>Text Books and Course of Instruction</i> —Boltwood, Wells, Enander.
<i>Language, including Reading and Elocution</i> .—Hill, Lesem, Moulton.
<i>Buildings and Grounds</i> —Thos. Slade, Donahue, Lesem, Moulton.
<i>Natural Science and Mathematics</i> —Gastman, Wells, Boltwood.
<i>Auditing and Finance</i> —Knickerbocker, Donahue, Thos. Slade.
<i>Teachers and Salaries</i> —Green, Boltwood, Barge.
<i>Training School</i> —Wells, Thos. Slade, J. P. Slade.
<i>Rules and Regulations</i> —Donahue, Moulton, Green.

ORDER OF BUSINESS.

1. Reading, Amending and Adopting Minutes.
2. Election of Officers.
3. Report of the President of the University.
4. Treasurer's Report.
5. Reports of Standing Committees.
6. Reports of Special Committees.
7. Communications.
8. Motions and Resolutions.
9. Unfinished Business.
10. General Business.

Proceedings Board of Education,

HELD JAN. 21, 1880.

NORMAL UNIVERSITY,
NORMAL, ILL., Jan. 21, 1880. }

The BOARD OF EDUCATION met in the Reception Room of the Normal University at 10 o'clock A. M., the President, B. G. Roots, in the chair.

MEMBERS PRESENT—Messrs. B. G. Roots, W. H. Green, E. A. Gastman, E. L. Wells, H. H. Hill, H. L. Boltwood, B. F. Barge, Thomas Slade, M. Donahue, James P. Slade and J. A. Enander.

ABSENT—S. W. Moulton, R. S. Canby, Isaac Lesem, J. C. Knickerbocker.

Mr. J. A. Enander, newly appointed member, was sworn in, the oath being administered by the President.

The report of the Treasurer, Thos. F. Mitchell, was read and referred to the Auditing Committee.

REPORT.

BLOOMINGTON, Jan. 21, 1880.

To the Honorable Board of Education of the State of Illinois:

GENTLEMEN—I herewith submit my semi-annual report, showing the money received and paid by me since June 25th, 1879. For specifications and details you are respectfully referred to accompanying sheets and vouchers.

Respectfully yours,

THOMAS F. MITCHELL,

Treasurer.

STATEMENT.

June 25, 1879—Balance on hand,	\$3,523 52
“ 30, 1879—To amount received from E. C. Hewett,	600 00
July 10, 1879— “ “ “ State Treasurer,	1,000 00
“ 11, 1879— “ “ “ “ “	5,623 39
Sept. 6, 1879— “ “ “ E. C. Hewett,	229 03
Oct. 3, 1879— “ “ “ State Treasurer,	6,623 39
Nov. 8, 1879— “ “ “ E. C. Hewett,	706 00
“ 29, 1879— “ “ “ “ “	300 00
Dec. 29, 1879— “ “ “ “ “	500 00
Jan. 13, 1880— “ “ “ “ “	401 02
Jan. 20, 1880— “ “ “ Thos. Slade,	34 74
Total amount received,	\$19,541 09
Orders paid as per vouchers,	16,717 14
Jan. 21, 1880—Cash balance on hand,	2,823 95

The following report of the Auditing Committee was adopted:

NORMAL, January 21st, 1880.

To the State Board of Education:

Your Auditing Committee beg leave to report that we have carefully examined the report of the Treasurer, and the accompanying vouchers, and find the same correct; and your committee recommend that said report be approved and placed on record.

THOS. SLADE,

MICHAEL DONAHUE,

Of the Auditing Committee.

President E. C. Hewett read the following report, which was accepted:

To the Honorable Board of Education of the State of Illinois:

GENTLEMEN:—It is with much pleasure that I lay before you my semi-annual statement of the condition and progress of the Institution under your care. Thus far, during the present year, our work has been most prosperous; teachers and pupils, with very few exceptions, have enjoyed uninterrupted good health, our work has gone on harmoniously, earnestly and successfully, and nothing worth mentioning has occurred to cause us any disturbance.

OUR ATTENDANCE

has been very large, nearly or quite unprecedented, as will appear from the following tables:

NORMAL DEPARTMENT.

Fall Term—

Ladies,	206
Gentlemen,	89—295

Present Term—

Ladies,	240
Gentlemen,	99—339

HIGH SCHOOL.

<i>Fall Term—</i>	
Ladies,	20
Gentlemen,	54 —74
<i>Present Term—</i>	
Ladies,	27
Gentlemen,	63 —90

GRAMMAR SCHOOL.

<i>Fall Term—</i>	
Females,	68
Males,	48—116
<i>Present Term—</i>	
Females,	58
Males,	57—115

PRIMARY SCHOOL.

<i>Fall Term—</i>	
Girls,	20
Boys,	19— 39
<i>Present Term—</i>	
Girls,	20
Boys,	21— 41

TOTAL ENROLLMENT.

<i>Fall Term—</i>	
Normal Department,	295
Model Department, all grades,	229—524
<i>Present Term—</i>	
Normal Department,	339
Model Department, all grades,	246—585

This shows a remarkable increase over the attendance for the corresponding terms of last year. For the fall term, the increase in the Normal Department was 53, or 22 per cent.; in the model department, the increase was 46, or 25 per cent. The increase in the winter term, as compared with the same term last year, is even more marked. In the Normal Department, the increase is 76, or 29 per cent.; in the Model Department, it is 77, or nearly 40 per cent.

In fact, we are full to overflowing in all our rooms; and the question of accommodating our pupils begins to be a serious one. About 60 pupils in the Normal room are obliged to occupy temporary seats; and it is very difficult to find places in which to hear all the classes from the Model School recite. Besides, with our present teaching force, many of our classes are too large for the most effective teaching. It would seem that the attendance has about reached its utmost limit, unless some means can be devised to furnish both more room and more teachers.

REPRESENTATION.

During the fall term, fifty-nine counties, and seven States besides our own, were represented, as the following table shows:

Adams	1	McLean	90
Boone	3	Macon	7
Calhoun	1	Madison	6
Carroll	1	Mason	2
Cass	8	Montgomery	2
Champaign	3	Morgan	8
Christian	2	Moultrie	3
Clark	1	Ogle	4
Clay	2	Peoria	4
Clinton	1	Piatt	1
Coles	5	Pike	1
Cook	5	Putnam	2
DeWitt	4	Rock Island	1
Douglas	2	St. Clair	1
Edgar	1	Sangamon	2
Effingham	4	Scott	2
Ford	2	Shelby	4
Greene	3	Stark	1
Grundy	2	Stephenson	2
Hamilton	1	Tazewell	7
Hancock	1	Vermillion	2
Henderson	1	Warren	3
Iroquois	4	Will	9
Jackson	1	Winnebago	2
Jo Daviess	12	Woodford	14
Kankakee	2		
Knox	1		
La Salle	4		
Lawrence	3		
Lee	2		
Livingston	6		
Logan	8		
McDonough	5		
McHenry	1		

OTHER STATES.

Arkansas	1
Indiana	1
Maryland	1
Missouri	2
Nebraska	4
Ohio	2
Pennsylvania	1

Sixty counties and seven states other than Illinois are represented this term, as the following table will show:

Adams	1	Cook	4
Boone	5	DeWitt	9
Brown	1	Douglas	2
Calhoun	1	Edgar	1
Cass	10	Effingham	6
Champaign	3	Ford	2
Christian	2	Fulton	1
Clark	1	Greene	5
Clay	1	Grundy	2
Clinton	1	Hamilton	1
Coles	5	Hancock	1

Henderson.....	2	Pike.....	2
Iroquois.....	5	Putnam.....	3
Jackson.....	1	Rock Island.....	1
Jo Daviess.....	13	St. Clair.....	1
Kankakee.....	2	Sangamon.....	1
Knox.....	2	Scott.....	2
La Salle.....	6	Shelby.....	4
Lee.....	4	Stark.....	1
Livingston.....	11	Stephenson.....	3
Logan.....	11	Tazewell.....	6
McDonough.....	4	Vermilion.....	2
McHenry.....	3	Warren.....	3
McLean.....	102	Will.....	9
Macon.....	8	Winnebago.....	2
Madison.....	7	Woodford.....	12
Mason.....	2	OTHER STATES.	
Montgomery.....	2	Indiana.....	1
Morgan.....	10	Maryland.....	1
Moultrie.....	3	Minnesota.....	1
Ogle.....	4	Missouri.....	1
Peoria.....	5	Nebraska.....	4
Perry.....	2	Ohio.....	2
Piatt.....	2	Pennsylvania.....	1

THE NEW CLASSES.

During the fall term, 182 candidates presented themselves for admission to the Normal Department, being an increase of 86 per cent. over the number applying during the corresponding term of last year.

	Ladies.	Gentlemen.	Total.
Applied.....	184	48	182
Rejected.....	29	12	41
Received.....	105	86	141

The comparatively large number rejected was due, I think, to an elevation of the standard required for admission. A large proportion of those rejected joined the preparatory class in the Grammar School. Forty-five counties and four other States than our own were represented in this class, as the next table will show:

Adams.....	1	Grundy.....	3
Calhoun.....	1	Hamilton.....	1
Cass.....	4	Henderson.....	1
Champaign.....	1	Iroquois.....	2
Christian.....	1	Jackson.....	1
Clark.....	1	Jo Daviess.....	4
Clay.....	1	Knox.....	1
Coles.....	3	La Salle.....	2
Cook.....	5	Lawrence.....	3
DeWitt.....	4	Lee.....	1
Edgar.....	1	Livingston.....	1
Effingham.....	2	Logan.....	7
Ford.....	1	McDonough.....	2
Greene.....	1	McHenry.....	1

McLean	37	St. Clair.....	1
Macon	5	Stark.....	1
Madison	4	Vermilion	1
Marion	1	Warren	1
Montgomery	2	Will.....	6
Morgan.....	6	Woodford	5
Ogle.....	2	OTHER STATES.	
Peoria.....	3	Indiana.....	1
Putnam	2	Nebraska.....	1
Scott.....	1	Ohio.....	1
Shelby.....	1	Pennsylvania	1

Of the 141 who were admitted, nine left before the end of four weeks, and consequently were not enrolled.

Thus far in the present term, eighty-six have applied for admission, a number 65 per cent. greater than applied during the corresponding term of last year.

	Ladies.	Gentlemen.	Total.
Applied.....	57	29	86
Rejected.....	7	12	19
Received.....	50	17	67

Seven of those received left before the end of four weeks. Twenty-six counties and two States besides our own were represented by those admitted, as appears below:

Brown.....	1	McHenry.....	2
Cass	2	McLean	20
De Witt.....	5	Madison	3
Edgar.....	1	Morgan.....	1
Effingham	2	Ogle.....	1
Ford	3	Peoria	1
Fulton.....	1	Perry.....	2
Grundy.....	1	Stephenson.....	1
Henderson.....	1	Tazewell	1
Iroquois.....	1	Winnebago.....	1
Jo Daviess	3	Woodford	1
La Salle	2	OTHER STATES.	
Lee.....	1	Minnesota	1
Livingston.....	4	New York.....	1
Logan	3		

THE SENIOR CLASS.

Notwithstanding our large number of students, our Senior Class is unusually small. For this, there are several reasons: A large number of students who might have graduated this year are obliged for pecuniary reasons to be in active duty as teachers, instead of being here to complete their course of study; an unusually large number who began the year's work with the expectation of graduating this year have been compelled to relinquish their purpose, from their own ill health or the sickness of friends, or other adverse circumstances beyond their control.

It has seemed to me, for some time, to be a question well worth your consideration whether it would not be advisable to give diplomas of two grades, one for a completed two-years' course, and one for a course of four years. I think this would increase the number of our graduates; which is a desirable thing, in view of the fact that so many base their estimate of the success of the school upon the number of its

graduates. Besides, I think that quite a good many who leave at the end of a year or a year and a half would complete two years, if they could obtain the honor of graduation by so doing; while some who now graduate and leave us at the end of three years would add another year if they could thereby be advanced further and receive a diploma of a higher grade. I would not advise any hasty change in this respect, but I think the scheme is worthy of thought.

TEACHERS.

At your last meeting, you appointed Mr. Edmund J. James as Principal of the High School. So far as I am able to judge, the results of his labors up to the present time seem fully to justify the wisdom of your action. Shortly after your last meeting, Miss Paddock resigned her place as First Assistant Training Teacher. Your committee on teachers filled the place by the temporary appointment of Miss Julia E. Kennedy, a former graduate of the Normal School. Miss Kennedy entered upon the duties of her difficult position, at the beginning of the fall term; and up to the present time she has discharged them with unusual energy, fidelity and success. The other teachers have gone on in the discharge of their various duties with their usual harmony and faithfulness.

FINANCES.

Owing to the increased attendance in the Model Department, and the special appropriation for the expenses of the Zoölogical Laboratory, our financial condition appears unusually good. We have a considerable balance of funds on hand.

The piano in the Normal room has been in constant use for more than twenty years, and as a consequence is now in a condition very unfit for its purpose. A glance at the carpet and furniture in this room will show their condition and need of improvement. With your approval, I propose to use a part of our present surplus funds to replace the piano and to re-furnish the reception room.

You will see that the contingent fund is considerably over-drawn. Some of the bills that I have paid might have been postponed till the present meeting of the Board. But, as the money was owing to persons who needed it, and was justly due, I thought best to pay them, even though I exceeded the amount in my hands. As the time is short before the next meeting of your Board, I think, however, that the usual appropriation will make up the deficiency, and meet all necessary calls until that time.

It will appear that but a small part of the appropriation for the library has been expended. But some bills for books bought are now due and unpaid; while negotiations for further purchases are in progress.

The contract for furnishing coal for this year was closed on very favorable terms; but, owing to a prolonged "strike" at the coal-shaft, the full amount has not yet been furnished; and no part of the contract price has yet been paid.

THE SPECIAL SUMMER TERM.

In my opinion, the most important question that will come before you for settlement, at this meeting, has reference to the work of the special term to be held in August next. At your last meeting it seemed to be a question in the minds of some of your number whether it is best to concentrate the entire force of the Faculty on the work to be done here, or to attempt some Institute work in distant parts of the State at the same time.

It seems to me that the work to be done here should be something quite different from the ordinary Institute work of the State; it should not be of the same grade; it

should not come in competition with that work. It should not be Institute work at all, but Normal School work; carefully planned, vigorously prosecuted, and adapted to the wants of those actual teachers who have had considerable experience and are now filling responsible and important positions. My hope is, that if we issue circulars announcing this kind of work, and if we prepare to do it effectively, we shall draw in a respectable number of teachers of this kind, who will thus become identified with us in sympathy and interest, who will become familiar with our work, will be enrolled in our catalogue, will receive great profit from a month's stay with us, and will aid us largely by their influence, when they return to their several fields of labor.

I highly estimate the benefits that would accrue to the State and to the Institution by the labors of the members of our Faculty in the county Institutes; but I think they will cost more than they will be worth, if they are purchased by any considerable weakening of the work done here. Besides, if this outside work is attempted, it will be a very difficult matter to arrange. At best, we could visit but a few counties of the State; and the result might well be jealousy and a charge of favoritism. Nor could we do the best even of Institute work by going into the county Institutes and working for a few days, as these Institutes are generally managed. If we were to attempt such work, I should say decidedly that it ought to be in Institutes wholly under our control and direction, and to be held at points where they would serve the teachers of more than one county. But it is a doubtful question whether arrangements could be made for Institutes of such a character. I have several applications for help in Institutes; but in all cases, it has been for the service of one or more persons in the county Institutes. In no case has anything been said looking to an Institute such as I have indicated.

On the whole, it seems to me, after careful thought and deliberation, that we shall do best to concentrate our energies on a short term of special, Normal School work, here at the Institution. And I think that the opinions of the Faculty are almost or quite unanimous in agreement with mine.

Although I have spoken thus freely and earnestly, of course we defer to the wisdom of your honorable body, in deciding what course shall be taken in conducting this important experiment.

All of which is respectfully submitted.

EDWIN C. HEWETT.

Normal, Jan. 20, 1880.

On motion of B. F. Barge, that part of the report which relates to two courses of study was referred to the Committee on Text Books and Course of Instruction; and on motion of E. L. Wells, that part regarding the special term was referred to the Special Committee appointed at the last meeting to report upon this subject. On motion of E. A. Gastman, it was voted to refer that part relating to the purchase of a piano, and of carpet and furniture for the reception room, to the Committee on Buildings and Grounds, with power to act.

Thos. Slade presented the following report:

BLOOMINGTON, ILL., January 21, 1880.

To the State Board of Education:

The undersigned, one of your members, who was authorized and directed by your honorable body at its last meeting to visit and make a personal examination of the

forty-acre tract of land, owned by the Board, and located in Woodford County, in this State, and to report at this meeting in reference to its condition, and as to the advisability of its sale, or as to what action, if any, the Board had better take in respect thereto, would respectfully report that he visited the premises early in October last and found the tract considerably hilly and somewhat broken, and covered with a second growth of hard-wood timber of considerable variety, and crossed by a small stream of running water, along whose banks is a narrow strip of grass land. I found the tract partly enclosed by an adjoining land owner and pastured and an acre or two in corn. Several offers have been made for the tract, ranging from \$400 to \$500. There seems to be a lively competition between bidders that gives assurance of an enhanced bid in case the Board should decide to put the land upon the market for sale. All of which is respectfully submitted.

THOS. SLADE,
Special Committee for this work.

On motion, the report was accepted.

On motion of Mr. Donahue, Thos. Slade was authorized to sell the forty-acre tract referred to in his report, at public auction, after giving twenty days' notice, upon the following terms: One-third of the purchase money to be paid down in cash, and the balance on a credit of one and two years, at eight per cent. interest per annum, the deferred payments to be secured by notes and a mortgage on the premises sold.

On motion of H. L. Boltwood, the Secretary and President were directed to issue an order for \$200.00 in favor of Thos. F. Mitchell as Treasurer.

The following resolutions were, on motion, adopted:

Resolved, That the President and Secretary of the Board be and hereby are authorized to draw orders on the Auditor of Public Accounts for the third and fourth quarterly installments of the appropriation for the ordinary expenses of the Normal University, at Normal, for the current year; each installment being the one-eighth part of the aggregate amount of the whole of the annual interest on the College and Seminary Fund, together with the one-fourth part of the sum of sixteen thousand (\$16,000) dollars, as said installments become due and payable as provided by sections one and two of "An act making an appropriation for the ordinary expenses of the Normal University, at Normal, and for additions to the Library, Museum and apparatus thereof," approved May 21, 1879, and in force July 1, 1879; and that the Treasurer of the Board is hereby authorized to receive and receipt for the same.

Resolved, That the President and Secretary of the Board be and hereby are authorized to draw orders on the Auditor of Public Accounts for the third and fourth quarterly installments of the appropriation for the ordinary expenses of the State Laboratory of Natural History, at Normal, and for the improvement of the Library thereof, and for the increase of the Natural History collections of the State Historical Library and Natural History Museum, at Springfield, for the current year, as the same become due and payable as provided by sections one and two of "An act making an appropriation for the ordinary expenses of the State Laboratory of Natural History, at Normal, and for the improvement of the Library thereof; and for the increase of the Natural History collections of the State Historical Library and Natu-

ral History Museum, at Springfield," approved May 27, 1879, and in force July 1 1879; and that the Treasurer of the Board is hereby authorized to receive and receipt for the same.

It was moved and carried that the fitting up of the gymnasium for a drawing room be referred to the Committee on Buildings and Grounds, with power to act.

Prof. S. A. Forbes read the following report, which was accepted:

To the Board of Education of the State of Illinois:

GENTLEMEN—The operations of the State Laboratory of Natural History are now included under the following heads:

By the law of 1877, it was charged with providing, for the State Museum, as soon as possible, a series of the plants and animals of the State: and an appropriation of \$1,000 a year was made for this purpose. This appropriation was repeated last winter, and the maintenance of that work is thus provided for.

We were also required, by the above law, to furnish, as far as practicable, all zoölogical and botanical material needed by the State Educational Institutions for the proper performance of their work; but, no appropriation being made at the time for that purpose, but little could be done in that direction.

This omission was corrected, however, at the last session of the Legislature, and the supply of these institutions is, consequently, a regular part of our work. An appropriation was also voted to the Laboratory, last winter, for the supply of the public high schools, and illustrative collections must therefore be prepared for distribution to these.

We are also directed to investigate the large and intricate subject of the food of birds, in the interests of agriculture and horticulture, and suitable provision is made for the expenses of this undertaking.

A similar research was directed and provided for respecting the food and habits of fishes,—a question of vital importance to scientific fish culture, and one upon which very little accurate information is now to be had.

The other appropriations of the law under which we are now working (those for the library, for assistance, and for the publication of bulletins) were all made in pursuance of the ends above mentioned.

It will be seen that the operations of the Laboratory may be conveniently and accurately described as constituting a zoölogical and botanical survey of the State, conducted with reference to its scientific, educational and economical interests. Although not formally so termed in the laws relating to the institution, this is what those laws necessarily result in when their directions are carried out, and this is the point of view which I shall take in reporting on our work.

FIELD WORK.

Since July 1, the period at which the present appropriation became available, the field work, apart from almost continuous collecting going on in this vicinity, has included five expeditions made to more distant points. The first was made with a party of four to the Illinois and Fox Rivers, at Ottawa and Peru, in July, at the time of the field meeting of the State Natural History Society. This resulted in fair additions to the collections of fishes—especially of the young of various species,

taken for a study of their food—and a very good collection of fishes' stomachs. A second trip was taken, in August, to extreme Southern Illinois, with two assistants. We established ourselves on the south bank of the Ohio, opposite Cairo, and worked steadily for nearly three weeks in the Ohio and Mississippi, and in the lakes and small streams in the bottoms of those rivers. Large numbers of duplicates of the common fishes of that region were preserved in alcohol, for the State Museum, the State Educational Institutions and the public schools, a good set of fish skeletons and a few skeletons of birds were obtained for the Museum, fair collections of material for the study of the food of fishes and birds were made, and especially good collections of mollusks and insects. Many facts of scientific interest were accumulated, of which those relating to the distribution of species were the most important. We were particularly impressed, however, with the present poverty of the fish fauna of that region, not only in species but in specimens,—a marked contrast, we were told by the oldest fishermen, to the former condition of these streams. It is evident that, while the soil of the State is becoming every year more productive, through more extended and more careful culture, the great waters which traverse and nearly surround it are being reduced to the condition of aquatic deserts. It is my opinion, based upon several years' work and observation upon these rivers, that this process can only be arrested by taking measures to increase and maintain the numbers of our best native species,—those whose power to live and thrive in our peculiar streams is certain, and not, as in the case of shad, salmon, etc., an open and doubtful question, to be decided only by tedious and costly experiment. It is worth while to point out that any such restocking of our rivers involves an exhaustive knowledge of the fishes themselves, of their habits, their food, at all seasons of the year and all times of their lives; of their enemies and competitors, and the food and habits of these also,—it involves, in short, a thorough scientific acquaintance with the fauna and flora of our waters,—for want of which, practical measures must be little better than empiricism and blind experiment.

On our return from this trip, one of my assistants, Mr. Garman, was sent to Spring Lake, in Peoria county, where, by working with the fishermen, he secured a sufficient number of specimens of such species as we found scarce in Southern Illinois, and continued with success the various kinds of field work above mentioned. Casts of nine additional species were secured on these expeditions, for the State Museum, at Springfield.

In December I went to Southern Illinois and Kentucky, for the purpose of studying, for a week, the food of the species of birds wintering in that region. Stomachs of one hundred and thirty specimens, representing twenty-six species, were preserved for future examination.

Another assistant, Mr. A. B. Seymour, was sent, during the months of July and August, to the western part of the State, near Quincy, to collect the leaf-blight and other fungi of that region. He also collected in the same department at Normal, and has added about two hundred species of these plants to the collection, besides a small set of flowering plants and insects.

The importance of an intimate knowledge of the plants parasitic upon vegetation, can hardly be over-estimated, since some of these species inflict annually hundreds of thousands of dollars of damage upon the industries of the State. Nevertheless, no provision whatever has been made by the State for the investigation of this subject, and what little we know of it we have learned from private workers, and

from the researches conducted under the auspices of the governments of other states. I respectfully suggest the propriety of asking the legislature to appropriate for this purpose, at its next session. Believing it to be one of the leading economical questions of the future, and desirous that Illinois should contribute her share to its solution, I have used every opportunity to form a collection of specimens, authoritatively named, and to gather up the literature of this department.

LABORATORY WORK.

At the Laboratory, besides the usual preparation, determination, labeling and cataloguing of new material, work for the State Museum has been carried on continuously, and an elaborate study has been made of the food of the Thrush Family among birds.

Mr. Cyrus Butler, an expert at the preparation of skeletons, has been with us since August, and has prepared for the Museum skeletons of four mammals, seven birds, five reptiles, one amphibian and fourteen fishes. The plan of this work is to prepare a good mounted specimen to illustrate each order of the higher vertebrates of the State, and each sub-order of fishes. We have improved the opportunity to secure for the Laboratory an excellent series of disarticulated skeletons of fishes representing each Illinois genus. Mr. Butler has also mounted for the Museum a number of skins of mammals and birds, fifteen of the former, (including an elk and a buffalo), and two of the latter. The casts of fishes for the Museum, now wholly finished, number 29 species,—of which a few have been added during the past six months. We have on hand moulds or unpainted casts of twelve additional species, besides about a dozen duplicates. I believe it is the general testimony that for accuracy and beauty this work has not been surpassed anywhere in this country.

We have also mounted and sent to Springfield seven hundred and fifty species of the flowering plants of Illinois, and have made arrangements to supply by purchase five hundred or six hundred species more. A full series of our cryptogams, most of which have been named by Prof. Peck, of the New York State Museum, will be mounted and sent down during the winter.

A large part of my own time has gone to an elaborate study of the food of birds. In connection with this research, a large amount of detailed entomological work has been found necessary, some of it of an original character. As aids to the determination of the fragments of insects found in the stomachs of birds, we have dissected about four hundred insects, and have mounted slides of their most characteristic structures, especially the appendages of the mouth. Upon these, various synoptical tables have been based, which have been found very useful. The accurate estimate of the benefits or injuries attributable to insects, has required a thorough scanning of the important parts of the literature of economical entomology in this country, and a careful index to this literature has been undertaken, and is well under way. This index is so constructed as to serve also as a compendium of the whole subject, and, when completed, will be published in the forthcoming bulletin of the Laboratory.

Besides a full report upon the food of the Thrush Family, (based upon the study of the contents of one hundred and fifty stomachs), read at the last meeting of the State Horticultural Society, and now in the printer's hands, I have prepared during the summer an article on this subject, published in the *American Entomologist*, have written a paper on "Some Sensory structures of Young Dog-fishes," published in the *American Quarterly Journal of Microscopy*, one on Developmental Characters of the Pirate Perch, a Synopsis of the Genera, and a List of the Species of Illinois

Carabidae, and a paper on the classification of the Aselli. My assistant, Mr. Garman, has prepared a paper giving the results of his own observations on the life-history of a new species of mite found injuring the *arbor vitæ*.

Other incidents of the season's work, are the complete revision and re-arrangement of the entomological collections of the Laboratory, the dissection and mounting of about fifty slides of the mouth parts and appendages of copepoda (a group of minute crustaceans), the preparation of about one hundred slides of natural and morbid tissues,—chiefly of the human body, and the mounting, for the Laboratory, of about fifty specimens of flowering plants.

A most welcome and profitable task, has been that of purchasing new books for the library. For the first time we are able to pursue original works on a few of the most important subjects, without being forced presently to suspend or abandon it, for want of the necessary literature. The greater part of the books purchased have been imported directly from Berlin, to save the payment of duty. Recent additions number three hundred and forty-three volumes and pamphlets, including twenty-two on ornithology, twenty-one on conchology, sixteen on coleoptera, twenty-nine on hemiptera, four on hymenoptera, four on lepidoptera, twenty-six others on entomology, sixteen on mites, eighty on crustacea, and one hundred and twenty-five of a more miscellaneous or general character. Among the more important works added, I may mention the three quarto volumes of the great work on our birds, by Baird, Brewer and Ridgway; a full set of Lea's works on the genus *Unio*; the monographs of Haldeman and Conrad, in Conchology, the works of Stal and Reuter on hemiptera, and the British Museum Catalogues of this order and of hymenoptera, Lacordaire's Genera of Coleoptera, complete, Chaudoire's Monographs of the Chlænii and other groups of Carabidae, the works of Milne-Edwards on Crustacea, a set of the twelfth edition of Linnaeus' *Systema Naturae*, &c., &c.

While these books are held, primarily, for use at the Laboratory, we also send them to outside workers, if it is possible to spare them without inconvenience.

FINANCIAL.

To avoid all possibility of future misunderstanding, I wish to call the attention of the Board to the difficulty of a strict distribution of the appropriation, according to the terms of the law. While the appropriation is divided into specified sums for various purposes, most of the expenditures must be made for several purposes conjointly. The cost of apparatus and material, the expenses of the field work, the miscellaneous assistance, the office expenses, &c., are not properly chargeable to any of the funds alone, since the benefits resulting accrue in part to the State Museum, in part to the State Institutions, in part to the public schools, and so through the list. Neither is it possible to tell, if an attempt is made to divide each item of the above expenditures among the various accounts, how much of a barrel of alcohol, for example, or the cost of a seine, or of a pound of powder, should be charged under each of these heads. The only practicable way has been to charge to each account such expenditures as properly belong there and nowhere else, and to divide the expenditures made for two or more purposes among the corresponding accounts, according to the condition of the funds and the necessities of the work. Really it is impossible to divide the appropriation; and we have been compelled to administer it chiefly as a single sum, making a division of the *results* of the work rather than

of its expenses. This difficulty is an unnecessary one, and should be avoided by specifying in the appropriation bill the services expected of the Laboratory, and naming a gross sum for the expenses of its work.

Respectfully submitted,

S. A. FORBES,

Director of Laboratory.

Prof. Forbes' account current, with the Illinois State Laboratory of Natural History with accompanying vouchers, showing the use made of the first and second quarter's appropriation, was examined and approved.

On motion of B. F. Barge, it was

Resolved, That the President and Secretary of this Board are directed to draw upon the Treasurer of the Board monthly, in advance, orders in favor of the Director of the State Laboratory of Natural History, for such installments of the quarterly appropriation for said Laboratory, as said Director may deem to be necessary for the month.

On motion of B. G. Roots, the following was adopted:

WHEREAS, the action of the Board at its last meeting, authorizing the President and Secretary of the Board to draw orders on the Treasurer, for the payment to Prof. S. A. Forbes of the first and second quarter's installment of the appropriation for the State Laboratory, etc., as authorized by an act approved May 27, 1879, is omitted from the minutes of said meeting, therefore, be it

Resolved, that the minutes be amended to show such action.

Prof. M. L. Seymour made a detailed report of the expenditure of the \$382 granted him at the June Meeting, for the purchase of apparatus and chemicals for students in Chemical Laboratory. The report and accompanying vouchers for the expenditure of \$384.01, after having been examined by the Auditing Committee, and reported to be correct, were, on motion, approved.

W. H. Green offered the following resolutions, which were, on motion, adopted:

Resolved, That the President of the University be requested to report to the Board, in detail, the extent to which instruction is given in the following studies, to-wit:

1. Agricultural Chemistry; 2. Animal and Vegetable Physiology; 3. The Fundamental Laws of the United States and of the State of Illinois, in regard to the rights and duties of citizens.

Resolved, That all reports by Professors in the University be made direct to the President of the University, and by him referred to the Board with his report.

On motion, the Board adjourned till two o'clock, P. M.

AFTERNOON SESSION.

Board met pursuant to adjournment.

The appropriations recommended in the following report of the Committee on Natural Science and Mathematics were, on motion, voted:

Your Committee on Natural Science and Mathematics hereby respectfully recommend that the sum of \$200 be appropriated to the use of the Chemical Laboratory; and that the sum of \$50 be appropriated to the Department of Physics.

E. A. GASTMAN,
E. L. WELLS,
H. L. BOLTWOOD.

The following report was made by the Auditing Committee:

NORMAL, January 21, 1880.

To the State Board of Education:

We, the undersigned, your Auditing Committee, respectfully report that we have examined bills numbered one to twenty-two inclusive, amounting to \$532.60, and find the same correct. We recommend that orders be drawn for the payment of the several sums named in the respective bills. All of which is respectfully submitted.

THOS. SLADE,
MICHAEL DONAHUE,
Auditing Committee.

On motion, the report of the Auditing Committee was accepted, and the bills ordered to be paid.

The Auditing Committee reported that they had examined the report and vouchers of Prof. Cook, for the expenditure of the Physical Apparatus Fund, and those of President Hewett for the expenditure of the Library Fund and of the Contingent Fund, and that they find the same correct, there being \$21.51 of the Physical Apparatus Fund, and \$231.11 of the Library Fund, unexpended.

The following resolution, offered by W. H. Green, was, on motion, adopted:

Resolved, That the Auditing and Finance Committee, and the Committee on Teachers and Salaries, and the Committee on Buildings and Grounds, shall meet at the University at 9 o'clock on the day before each semi-annual meeting of the Board, in January and May, and all bills and all matters properly coming before any one of said Committees shall be submitted to the appropriate committee before ten o'clock of the day of the meeting of said committees. That no bills of any character will be considered by the Board unless presented to the Auditing and Finance Committee on the first day of its semi-annual session.

The Chairman of the Committee on Buildings and Grounds, Thomas Slade, made a report, showing the collection of rents—

Amounting to	\$50 99
And the payment of bills, amounting to.....	\$16 50
And the payment to the Treasurer of	34 74
	<hr/> 51 24

Balance due Thomas Slade, overpaid by mistake..... 25

The report was examined and approved by Mr. Donahue, of the Auditing Committee, and, on motion, the report was received and placed on file.

The following report of Prof. L. L. Burrington was approved, and the balance due, four dollars and ninety cents, was paid to the Principal of the High School to pay for advertising said school.

NORMAL, ILL., June 25, 1879.

To the Board of Education:

GENTLEMEN; I hereby offer the following report of money expended for advertising:

Received in September, 1877, for advertising,.....	\$50.00
Amount previously accounted for,	39.10
	<hr/> 10.90
Amount remaining in my hands,.....	10.90
January 18, 1879, paid W. O. Davis,.....	\$3.00
“ “ “ “ M. F. Leland,	3.00
	<hr/>
Total paid for Advertising,	\$6.00

Balance due, \$4.90

Inclosed please find the above amount.

Respectfully submitted,

L. L. BURRINGTON.

The following communications, and the above report, from Prof. Burrington, were prepared for presentation to the Board at its June meeting:

NORMAL, ILL., June 25, 1879.

To the Board of Education:

GENTLEMEN—I hereby resign my position as Principal of the High School, to take effect at the close of the present school year. My stay here for the past six years has been very pleasant, and I leave behind me only good wishes for the continued prosperity of the School.

L. L. BURRINGTON.

NORMAL, ILL., June 25, 1879.

To the Board of Education:

GENTLEMEN—I respectfully request that my salary for the months of July and August be paid at the close of this month; also, that the three hundred dollars (\$300.00) due me from excess of tuition, according to the vote of the Board at the close of last year, be paid at the same time. You will see, by consulting the books of the University, that my school year begins Sept. 14.

The amount of money received for tuition during the present school year has been as follows:

Received in the Fall Term,.....	\$605 00
“ “ Winter Term,	613 75
“ “ Spring Term,.....	704 99
Tuition unpaid (but good).....	31 63
Tuition remitted by vote of the Board,	78 50
Tuition from Normal Department credited to High School.....	152 25

Total receipts for the year.....\$2,186 12

All books and records in my hands belonging to the University, will be delivered to the President when the records and the accounts for the present term are completed.

Respectfully submitted,

L. L. BURRINGTON.

The following letter was read:

To the Board of Education, State of Illinois:

GENTLEMEN: I hereby tender my resignation as first Assistant Training Teacher in the State Normal University, to take effect Sept. 1st, 1879.

AMANDA G. PADDOCK.

The following, offered by W. H. Green, was adopted:

WHEREAS, The number of pupils in the State Normal University, from McLean County, is greater than said county could legally claim: and Whereas, the University is crowded with pupils; therefore,

Resolved, That after the present term, no pupils be received from McLean County, in addition to the number to which said county is entitled by law, except such as exhibit superior scholarship, at least to the extent of receiving a standing of eighty-five per cent. upon their entering examination.

On motion, the Chairman of the Committee on Buildings and Grounds, was authorized to use the rents he may collect, in liquidating small bills.

On motion of H. L. Boltwood, the Board authorized the Committee on Buildings and Grounds to have such repairs and improvements made as to them seem imperatively necessary.

On motion of E. A. Gastman, the Committee on Buildings and Grounds was authorized to use a sum not exceeding \$100, for securing telephonic communication with Bloomington.

The following resolution, offered by W. H. Green, was adopted:

Resolved, That it is the sense of this Board that there should be no division of the Faculty during the summer term of four weeks.

The Committee on Teachers and Salaries reported that they had employed, as successor to Miss Paddock, in the Training School, Miss Kennedy, at a salary of \$850. On motion, the report of the Committee was approved.

The Committee on Buildings and Grounds was instructed to ascertain the cost and desirability of purchasing rubber covering for the stairs.

On motion, it was voted that the second regular meeting of the Board be held the Wednesday preceding Commencement.

On motion, Miss Hobbs was appointed to have charge of the Book Store of the University, for the ensuing year.

The President appointed J. A. Enander a member of the Committee on Theory and Art of Teaching and Mental Science, and on Text Books and Course of Instruction.

The Secretary called attention to an omission in the record of proceedings of the last meeting, by reading the portion omitted, and asked permission to supply the omission. On motion of E. L. Wells, the Secretary was authorized to have the minutes amended as read.

The following minutes constitute the portion of the record referred to:

Prof. S. A. Forbes' Account Current of the Illinois State Laboratory of Natural History, accompanied by vouchers numbered from one to sixty-one inclusive, and showing the expenditure of \$1,755, was referred to the Auditing Committee. This Committee examined the report, and, finding it correct, reported, recommending its approval.

Prof. Cook's account, with the Physical Apparatus Fund, showing a balance on hand of \$30.73, was approved by the Auditing Committee.

President Hewett's report of the expenditure of the Contingent Fund, and one showing the use made of the Library Fund, were also approved by the Auditing Committee. The first showed \$8.08 due Mr. Hewett, and the second 19.89 due him.

On motion, the Board adjourned.

JAMES P. SLADE,

Secretary.

B. G. ROOTS,

President.