

## FOURTH ANNUAL MEETING.

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URBANA, ILLINOIS, *March 8, 1870.*

The Board of Trustees met at 4 o'clock P. M., in the chapel of the University, and was called to order by the Regent. After reading of the Scriptures, and prayer by the Rev. Mr. Riley of Urbana, the roll was called and the following members were found to be present: Messrs. Bateman, Blackburn, Brayman, E. L. Brown (of Chicago), A. M. Brown (of Pulaski), Burroughs, Cunningham, Dunlap, Edwards, Galusha, Goltra, Griggs, Kile, Johnson, Lawrence, Pearson, Pickard, Pickrell, Pullen, Scroggs, Slade, Van Osdel, Wright and the Regent—24.

The Regent stated that he had letters from Messrs. Emory Cobb and I. S. Mahan, expressing their regret that they could not be present; and a letter from Mrs. Edward Kitchell advising him of the death, in July last, of her husband, Mr. Edward Kitchell, a member of this Board.

On motion, the reading of the minutes of the last meeting was dispensed with.

Mr. Pickard was invited to come forward and take the oath, which was administered by Judge Cunningham.

Judge Lawrence took the chair by request of the Regent, who proceeded to read his report.

### ANNUAL REPORT.

*To the Trustees of the Illinois Industrial University :*

GENTLEMEN—According to your requirement, I present the following report of the progress of the University, and of its desires and needs:

#### DOINGS OF THE EXECUTIVE COMMITTEE.

The Executive Committee, with one or two failures, has held regular monthly meetings, on the first Wednesday of each month. The proceedings

of the April, May and June meetings are already published in the Second Annual Report. The minutes of the other meetings will be communicated herewith.

#### THE ATTENDANCE AND INSTRUCTION.

There have been in actual attendance during the year, since your last meeting, one hundred and ninety-six students. Of the students now here, fifty-one reported themselves as candidates for the Agricultural Course, forty-three for Mechanical and other Industrial Courses, and eighteen for Military Course. The others entered without fully deciding on their course. These are generally the younger students, who have not yet decided upon their aims or pursuit for life, but whose friends generally express the choice for some practical course.

There were present in the Spring Term one hundred and ten students, in the Fall Term one hundred and thirty-two, and in the current Winter Term one hundred and fifty-seven, showing a steady increase in the attendance.

The requirements for admission have been simply those prescribed by law—the ability to pass, satisfactorily, an examination in the branches ordinarily taught in the common schools. This low grade of qualifications compels many of the students to spend a year mostly in preparatory studies; and thus it happens that many who are truly in the industrial courses, do not appear at once in the special industrial classes. But much general instruction, by lectures and practical exercises, can be given to all, in the fields of industrial knowledge; and all have in this way been enabled, it is hoped, to gain much useful information.

It has been the constant aim of the Regent and Faculty, in obedience both to the laws and to the wishes of the Trustees, to give the University the bent and direction indicated in its name, and in the grant by which it was endowed. Without refusing instruction in other scientific and classical studies to such students as required it, all have taken some of the branches of learning related to Agriculture and the Mechanic Arts; and the record of our classes shows conclusively that the tide of sentiment in the University sets strongly towards the great Industrial pursuits. It is a significant fact that, while no instance is known of any student of the Industrial courses being diverted to the professions, several marked cases have occurred in which candidates for the law have been attracted, by the general influence prevalent here, to relinquish their plans and enter the Agricultural course. I mention these facts with great satisfaction, not in reply to the senseless charges so often made against us, and which I have learned to disregard as nearly harmless ebullitions of a toothless malice or pitiable delusion, but as evidence of the success of our plans and of the brightening future before us. If already, while only in our second year, and with our farms, gardens and shops only half developed, and our classes still mainly in the preparatory and elementary studies, so much attraction can be given to the Industrial courses, how surely will these courses hold their predominating position as “the chief object” of the University when all our forces shall be brought into full power and play?

It adds assurance to our hopes, that even our critics recognize the steady advance of the University to the position it is designed to occupy ; and though they mistake the natural progress of our plans for a beneficial change in the plans themselves, we may still welcome their testimony, as a confirmation of our just expectations. Personally, I may say, "With charity towards all, with malice towards none," I am deeply grateful to Almighty God for the marked success which has attended our work, and for the fresh assurance that the grand hopes for learning and for mankind which induced my acceptance of this most difficult position, and which I expressed in the first words I had the honor to utter in the presence of this Board, are not to prove Utopian dreams, but blessed facts and bright realities. Industrial education is fast being proved a glorious possibility. We shall in due time exhibit it as a most benign and useful accomplishment.

The teachers who have been employed during the year are :

Wm. M. Baker, Professor of English Language and Literature ;

W. F. Bliss, Professor of Agriculture and Superintendent of the Farms ;

A. P. S. Stuart, Professor of Chemistry ;

S. W. Robinson, Professor of Mechanical Science ;

T. J. Burrill, Assistant Professor of Botany, etc. ;

S. W. Shattuck, Assistant Professor of Mathematics and Civil Engineering ;

Ed. Snyder, Assistant Professor of Book-Keeping, Military Tactics and German ;

James Belanger, Teacher of Architectural and Mechanical Drawing ;

H. M. Douglass, Assistant Teacher of Language, and Librarian ; and

Robt. Warder, Assistant in Laboratory.

I should be unjust, alike to them and to my own feelings, if I did not express to you my profound sense of the ability and earnestness with which these gentlemen have performed their duties, and the zeal with which they have labored for the good of the students and the interests of the University. I must also mention my great satisfaction with the valuable course of twelve lectures given by Dr. J. A. Warder, your Lecturer on Pomology ; and the course of thirty lectures now being delivered by Professor Sanborn Tenney, on Zoology and its relations to the pursuits of mankind. These lectures have been attended by large numbers of citizens, and have been highly appreciated.

There have also been employed as foreman and assistants, J. S. Searfoss, in the carpenter shop ; Thos. Franks, on the gardens and ornamental grounds ; H. K. Vickroy, in the nurseries and orchards ; and Geo. S. Upstone, on the farm. I have reason to believe that all these gentlemen have performed their duties with fidelity, and with a praiseworthy regard to the best interests of the University. Mr. Searfoss and Mr. Franks were employed by the Board, and Mr. Vickroy and Mr. Upstone by Prof. Bliss, under authority given by the Board.

#### LECTURE COURSES.

Besides the ordinary University Lectures, there have been three courses of lectures given during the year to the farmers and fruit-growers of the State.

The first course was delivered at the University, during the week beginning January 10th, and embraced the following topics:

Introductory, by Dr. Warder;  
 Entomology, by Dr. H. Shimer;  
 Breeds of Cattle and Feeding of Cattle, by Prof. M. Miles, of Michigan Agricultural College;  
 Dairy Farming, by C. W. Murtfeldt;  
 Veterinary Science, and Pleuro-Pneumonia, by Dr. H. J. Detmers;  
 Rural Literature, by Hon. W. C. Flagg;  
 Drainage, by Prof. S. W. Shattuck;  
 Manures, by D. Gore, Esq.;  
 Ornamental Grounds, by the Regent;  
 Rural Economy, by Hon. W. C. Flagg and Prof. W. F. Bliss;  
 Laws of Highways and Inclosures, by J. O. Cunningham, Esq.;  
 Rural Architecture, by J. M. Van Osdel.

The second course was held at Centralia, January 24th, and the three days following. Lectures were given by the Regent and Professors Stuart, Shattuck and Snyder, of the University; by C. W. Murtfeldt and C. V. Riley, of St. Louis; H. C. Freeman, Assistant State Geologist; J. S. Taylor, of Centralia; A. M. Brown, of Villa Ridge; and Dr. E. S. Hull, State Horticulturist.

The third course was held at Rockford, the 21st, 22d, 23d and 24th of February. Lectures or addresses were delivered by Hon. Anson Miller, of Rockford; by the Regent and Professors Stuart and Shattuck, of the University; Hon. Elmer Baldwin, of Ottawa; Hon. J. G. Knapp, of Wisconsin; O. B. Galusha, of Morris.

These lectures were well received, and their general effect was to awaken fresh interest in the University and in the cause of Agricultural Education. I have no hesitation in recommending the repetition of the experiment at other points the next winter.

#### THE NATURAL HISTORY EXCURSION.

Provision was made at your last annual meeting for an excursion, to be conducted by Prof. Burrill, and to embrace such members of his classes as he might select. His report, which I append, will give you the history and results of the excursion. I think much good was done in collecting specimens, awakening an interest in the University, and in affording the most valuable instruction to the students engaged. I hope that in coming years similar excursions may be enjoyed by the successive classes. Much of the expense incurred was for outfit, which will be valuable for future service.

#### LIBRARY AND APPARATUS.

The University now embraces 3,480 bound volumes, classified as follows: Agriculture, 352; Mechanics, Engineering, etc., 158; Natural Science and Travels, 360; History—American 136, English 168, European 208, Asiatic 31, General 121; Biographical—American 81, English 61, General 121; Biographies and Works—American 49, English 149, French and German 182, Gen-

eral 98; Law and Political Science, 56; Military, 25; Philosophy and Education, 119; Cyclopedias, 72; General Periodicals, 351; Scientific Periodicals, 176; Public Documents, 457.

The Library Hall, which has been kept open daily to students, is also well supplied with the best Agricultural and other Scientific papers and periodicals.

The apparatus of instruction embraces, besides that in the Department of Natural Philosophy and Chemistry, a well mounted skeleton, a manikin, and preparations in *papier mache* exhibiting a horse's leg and foot (which can be dissected to show the parts), several sets of the jaws and teeth of the horse to exhibit the appearance of the mouth at different ages; also, greatly magnified preparations of flowers, fruits and grain, which can be taken to pieces to exhibit all parts of the flower and fruit, including envelopes, pulp and starch formations, and germs with pluma and radical. There is also a fine pair of magic lanterns, with apparatus to exhibit dissolving views; and sets of views in Geology, Natural History, Astronomy and History. Mechanical apparatus and models, and Agricultural implements of many varieties, are also accumulating to aid the practical instruction in these departments. Collections of seeds, soils, woods, minerals, insects, and other Zoological specimens are constantly gathering, and large additions are soon to be made from the collections made by the Powell Scientific Expedition.

#### THE FINANCES.

The Annual Report of the Treasurer and the list of warrants drawn, with their dates, objects and amounts, will give you full information concerning the receipts and expenditures for the year.\* The statement of the Book-keeper, which I append, shows the following items of income and expense:

#### INCOME.

Balance from last year.....	\$1,324 59
Interest from bonds.....	24,390 00
Farm produce on hand, March, 1839.....	1,760 31
Fees, for tuition, etc.....	2,670 50
Receipts from farm for 1869.....	1,181 76
Rent of lands.....	246 45
Coal sold students.....	404 81
Garden—net proceeds.....	73 47
Carpentry, chairs, etc., sold.....	31 81
Total.....	\$32,083 70

These do not embrace any part of the receipts from the State appropriations.

#### EXPENDITURES.

The appropriations made by the Board at the last annual meeting amounted to \$36,044 00. The total expenditures, under these appropriations, have been \$34,628 66. Some of the appropriations were found to overrun our needs, while others fell short. By the authority of the Executive Committee the deficiency of the latter was made up, as far as practicable, by the surplus of the former. The year's expenses, though less than the estimate, have never-

\* See Appendix A and B.

theless exceeded the income, though when the amounts due for rent of the Griggs farm shall be collected and the sales of farm produce on hand shall be effected, the deficiency will be more than covered.

The Board provided for meeting any deficiency which might occur, by the sale of Champaign County Bonds. As these bonds constitute now a very important part of our permanent fund, I respectfully submit whether our expenditures ought not to be so regulated as to be met without any further sacrifice of these bonds. Our ultimate success will depend upon the sufficiency and certainty of our annual income. I am confident that the work of the University can be carried forward the coming year without at all exceeding the year's revenue, if due care be taken not to enter upon unnecessary expenditures, and not to load our funds with the payments of unnecessary salaries. Let every man be employed whose services are actually needed, but let no expensive supernumeraries be saddled upon us. The inevitable increase of the teaching force of the University which cannot be longer delayed will compel us to avoid, with the most careful attention, the diversion of our funds to mere outside work.

The items of the annual expenditure are given by the Bookkeeper's statement as follows:

Expense of Board and Committee Meetings .....	\$1,011 28
Building account—for roofing, painting, alterations, repairs, cleaning, etc.....	2,575 00
Salaries—including Lecturers' fees.....	18,345 95
Fuel and lights, including coal sold students.....	1,180 56
University Grounds, labor, drainage, seeds, etc., including expense of propagating house .....	1,039 26
Mechanical Department—salary of carpenter and pay for labor, material and tools.....	1,358 97
Military Department—to be refunded from buttons sold.....	50 00
Agricultural Department—for labor, etc.....	4,212 50
Purchase of two lots .....	425 00
Salary of Treasurer.....	500 00
Salary of Corresponding Secretary.....	200 00
Geological excursion.....	200 00
Meteorological Instruments .....	81 50
Taxes on lands in Minnesota and Nebraska.....	988 48
Stationery and printing.....	179 33
Incidental expenses—insurance, postage, express, letters, advertising, etc.....	1,657 79

The details of the expenditure in the Agricultural Department will be found in the Bookkeeper's statement from Farm books.

#### STATE APPROPRIATIONS.

The appropriations voted by the State Legislature, amounting to the gross sum of \$60,000, were made for the two years, '69 and '70, and it was found that only one-fourth of that designated for the Agricultural and Horticultural Department was available the first year. The expenditures under this appropriation are as follows:

On Farms.....	\$1,778 02
In Horticultural Department .....	5,359 69
Chemical Laboratory .....	1,135 56
Library and Apparatus.....	6,247 26
Total.....	<u>\$14,520 53</u>

This leaves a large balance of this appropriation to meet the projected improvements of the coming year. A statement will be found appended, of the several items of expenditure from these appropriations :

The total amount of warrants drawn for the year is.....\$48,036 59  
 Receipts of I. C. R. R. donation..... 1,162 60

Total expenditures for year\* .....\$49,199 19

The report of Prof. Bliss and the Bookkeeper will present you, in detail, the work accomplished on the farm and experimental grounds. It is due to this important department of our work, and to those who have it in charge, to state that the chief stock farm came into possession of the University in a very dilapidated condition. The former owner says that his chief motive for selling, was that the land was no longer in a state to pay for the labor expended upon it. The buildings and fences were also in a ruinous condition, and a heavy expenditure was necessary before the farm could be brought into a state of proper tillage.

Almost every rod of fence on both farms has been either rebuilt or thoroughly repaired during the past year. Nearly five miles of hedges have been planted, completely inclosing the farms, except some short spaces, where the condition of the ground would not permit it. The farm house has been repaired and a well dug.

In pursuance of the plans adopted at the last annual meeting, the stock farm is being laid down to grass, as the easiest and most profitable mode of culture for our purposes.

Among the crops raised are the following :

Ten acres of common yellow corn. Five acres of mammoth corn. One-fourth acre of mammoth white corn. Fourteen acres of small, early white corn. Six acres of strawberry corn. Burr's mammoth sweet corn—one oz. seed. One-fourth acre extra early sweet corn. Brill's extra early sweet corn. Boston late sweet corn—one oz. seed. Pop corn—one-third acre.

#### POTATOES.

Early York, eight acres. Early Goodrich, one-half acre. Peach Blows, one-half acre. Shaker Blue, two quarts seed. Neshannock, three quarts seed. White Sprout, three quarts seed. Early Rose (garden), one pound seed, Garnet, Chili (garden). Rusty Coat Pink-eye. Harrison, one and one-half bushels seed. Sebee.

#### WHEAT.

Forty acres Fife spring wheat, sixty bushels of seed. Four acres of Mammoth spring wheat, six bushels of seed. Little May, White May, Alabama White and Genesee Red—two bushels of each.

Besides these, there were forty-five acres of Surprise oats, which yielded 1,204 bushels by measure, weighing thirty-eight pounds to the bushel.

One hundred and twenty acres of meadow were mowed, producing 175 tons of hay. One hundred and twenty-five acres were fallow plowed, and a large amount of labor was expended in the general improvement of the ground.

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\* See Appendix C.

A large and substantial advance was made in bringing the farm into such condition as it ought assume, to be worthy the University and to fit it for its peculiar uses in illustrating and advancing Agricultural science.

#### HORTICULTURAL DEPARTMENT.

This Department is now understood to embrace the Ornamental Grounds around the University buildings, the Vegetable Gardens, the Orchards, Small Fruit Plantations, Nurseries and Forest Tree Plantations. There were planted the last spring in the apple orchard 2,193 trees, of about 1,200 varieties, and about 600 trees were set in the nursery till the drainage of some wet places will permit them to be planted in the orchard. Not more than one-half of one per cent. of these trees died, and in most a very large growth has been made. The statement of Mr. Vickroy, the Orchardist, which I append,\* will give you the particulars of this plantation, as also of the nurseries, shelter belts and hedges planted under his care. Shelter-belts of maples on the north and south, and of Norway spruce and Austrian pine on the west were set about the orchard, and every tenth row in the orchard was left vacant for planting an evergreen wind-break. In the nurseries were gathered, during the year, for the forest plantations and shelter-belts, 3,000 green ash, 1,000 white elms, 1,000 American arbor vitæ, 1,000 balsam fir, 1,000 red pine, 2 Austrian pine, 100 Scotch pine, 18 varieties of pears, several varieties of cherries, some tulip and sycamore trees, and also 1,300 small evergreens from forest. A large amount of nursery stuff was also propagated from seeds and from cuttings.

The work on the Vegetable Gardens and Ornamental Grounds were done chiefly by the Gardener, Mr. Franks, and the students. The lack of a team, and of sufficient help in the summer, together with the unfit condition of the ground, prevented any great success in the market garden, though a considerable quantity of vegetables was marketed both in Chicago and the cities of Urbana and Champaign.

The Ornamental Grounds were blooming with flowers in their season, and attracted universal admiration for their beauty and order.

A portion of the gardens is now under-drained, and the remainder will be under-drained during the current year. With proper facilities, this department may hereafter attain a success much more complete and useful.

It is proposed to occupy during the present season less breadth of ground with vegetables raised for market, and to try some experiments in seed-raising.

We have already growing several varieties of small fruits, and it is proposed to add largely to these in order to test, as accurately as possible, their relative value. Arrangements are also in progress to test a large number of culinary vegetables, of a wide range of varieties; careful reports of which will be made.

The gardens and nurseries will furnish us some of our best and most instructive illustrations of plant growth and fine culture, and will also afford us no small share of the labor for the students.

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\* See Appendix D.



The new green-house, for which the materials are already on the ground, will add largely to our apparatus of illustration, and also to the attractions of the Horticultural Department.

A gardener's house was built last summer, and there should be erected immediately a barn for the garden teams, and also to afford seed-packing and tool rooms and root cellars. A building 24x30 feet will be sufficient for present use.

A good horse team, with wagon, plows, and a one-horse wagon or cart, seem indispensable. This team will serve also for the work on the University grounds, and, when not otherwise in use, can always be profitably employed in hauling manure from the town.

#### THE GREEN-HOUSE.

The material is already purchased, except the glass, and the carpenter's work nearly done, for a new green-house ordered by the Executive Committee, to cost \$1,000. This building is much smaller than our need, and smaller than the green-houses provided for the Michigan and Massachusetts Agricultural Colleges; but the plan admits of extension hereafter, when our funds will permit. An additional appropriation will be needed to furnish a good heating boiler and pipes. A small appropriation will be also desirable to procure some seeds and house and bedding plants for propagation. The green-house will not only furnish some useful illustrations in an important branch of horticulture, but may be a source of some profit.

#### GENERAL VIEWS.

The management of the University farm and gardens will always be one of the most difficult parts of our enterprise. It will require constant vigilance from all who have the control of them to prevent their becoming a very onerous charge on the funds of the University. And yet, with skillful management, they may be made, all except the experimental grounds, to yield a revenue to the University. It is believed by some that in the end the two hundred acres of the experimental farm and gardens will be as much land as the University will need to retain for its immediate use. An arrangement might be made to place the large farm under the care of a competent overseer or lessee, who should employ his own assistants and receive a reasonable share of the proceeds for his pay. This would secure the same sort of personal and pecuniary interest in all the work which is so necessary to the success of every farmer, and would insure us a balance on the right side of our ledger. An arrangement might be made so that all the value of the farm for the purposes of experiment and instruction would remain unimpaired; it would still be a part of the University, and would lose none of its value as an illustration of scientific farming. The rotation of its crops and the general system of culture might still be prescribed so far as to secure it from degenerating in condition, and instead of an annual loss by its culture, it would return an annual profit to its manager and to the University.

This arrangement would greatly simplify our work, and would relieve the Professor of Agriculture from that endless detail of supervision which must necessarily detract from his strength and usefulness as an instructor. The two hundred acres which are nearer at hand are ample for all valuable experiments in scientific agriculture, as these owe their value to their scientific accuracy, not to their great extent.

Several of the Agricultural Colleges of Europe, after several years of costly trial, have found themselves compelled to adopt some plan similar to this to secure an efficient and economical management of their farms. It is not because scientific farming is unprofitable, but because the very nature and extent of a farm offers opportunities for so many leakages, which will only be properly guarded against by one whose personal interest renders him sharp-sighted to see and eager to stop all such leaks. I most earnestly commend this whole subject to your thoughtful consideration.

#### THE FOREST PLANTATIONS.

Many of the trees are already gathered into our nursery for the projected forest plantations, and the plantations themselves may soon be begun. Dr. Warder and some other experienced gentlemen have carefully looked over the plans, and have suggested some alterations, both in the varieties of trees to be planted, and in the grounds selected for the plantations. These suggestions are already in the hands of the Horticultural Committee, and will doubtless receive earnest attention at their hands. I only add that it has always seemed to me unadvisable to occupy with these plantations any part of the two hundred acres of our experimental grounds, as these are the only lands we have sufficiently near to be used in the practical illustration of agriculture to our students. The proper extent of these plantations has also engaged the attention of some experienced men, and it is questioned whether one acre of each species of tree is not as good as four to test the value of such plantations, especially when it is considered that the entire forest taken together will occupy many acres, and that the conditions of your single acre of oaks or maples, will be precisely the same as if the entire forest were composed of oaks or maples. The experiment is confessedly one of our most important ones, especially in our great prairie State, and no abatement in extent should be thought of, if it will at all impair the completeness or lessen the value of this experiment. What we want to determine is the actual cost and profit of artificial forests, and the relative values of timber trees which may be grown in Illinois. If necessary, let one hundred acres be given to this important problem; but let us not burden our too limited funds—already full small for our current expenses—with plantations not only larger than are necessary for our object, but whose very size will render them unwieldy, and so endanger their real success and utility. I would suggest also, for the wise consideration of the Board, whether these tree plantation may not best be made through successive years, so that the experience gained in planting the first may be used to improve the second plantations, and so on? Instead of planting at once, as proposed, four full acres each, with the leading sorts of timber trees,

suppose that only one-half an acre each be planted this year, and after a year or two, another half acre be added—all the plantations of one year making a compact body, and thus giving all the conditions of a continuous forest. The experiment thus made under the varying conditions of successive seasons, will throw a more conclusive light upon the whole question, and will lead to results much safer and more satisfactory. I commend the whole subject to the wisdom of the Board.

#### THE MECHANICAL DEPARTMENT.

We have had considerable numbers of mechanical students here from the outset, and from the very outset instruction has been given in Mathematics and Mechanical Philosophy, the two main branches of learning relating to the mechanic arts. A shop was opened the first year, in which more or less of the students sought and found employment. A Professor of Mechanical Science was also appointed, but, after a year, he finally declined the appointment. The Executive Committee soon after appointed to the vacant chair Prof. S. W. Robinson, late of the Michigan University, and at the opening of this term, Prof. Robinson entered upon service.

Of the legislative appropriation for books and apparatus, \$2,000 had been set apart for apparatus for the Mechanical Department, and after a full discussion of the matter with the Professor in charge, the Executive Committee decided that it was expedient to allow this sum to be expended for a steam engine, lathes and other tools and materials for a machine shop. These machines themselves are among the most important illustrative apparatus—being working models—and with the shop thus provided, we shall be able to produce for ourselves other apparatus, not only for this, but also for other departments of the University, and at cheaper rates than we can purchase them elsewhere.

But still better, the shop helps us to carry out the great idea of practical instruction which we have sought so steadily to secure in the other departments. It is not to teach boys trades that we intend, but to exhibit to them the practical illustration in the shop of the scientific principles they study in the books or learn in the lecture room. Their science grows luminous under the light of such illustrations, and instead of mere learned theorists, our students will go forth as practical engineers, architects and mechanicians.

On consultation with Prof. Robinson, I consented that he should attempt the manufacture of his engine, rather than purchase it ready made, as he desired one of his own devising, with different sets of valve gears, which would enable him to exhibit several distinct forms of the steam engine, without adding materially to the expense. Prof. Robinson accordingly employed, to assist him, Mr. — Thomson, a skilled and liberally educated mechanic. They, with the assistance of the mechanical students, have made their own patterns, and an engine of ten-horse power is now completed. By raising the roof of the carpenter's shop and adding a second story, a good shop has been secured at slight expense.

Much enthusiasm is exhibited by the students of this department, some of whom are already engaged in making original drawings for machinery, and in learning to make patterns for the moulders. All express great interest in the progress of the shop.

It is reasonably hoped that this department will be able to lend important aid to the agricultural and other departments, in altering, repairing and even inventing and manufacturing tools, machinery and teaching apparatus; and the hope will strike you as well founded, when I inform you that among our students we have several good mechanics who have left their journeymen's place and wages to come here and educate themselves for the higher and more important spheres of their callings. Carpenters, cabinet-makers, blacksmiths, carriage-makers, house-painters, coach-painters and machinists, and even one master mechanic has sold his shop and come to get the benefit of this school of mechanical science. And will not this movement increase, and hundreds of our young mechanics throughout the State, having learned their trades, come here to arm themselves with a knowledge of those great mechanical laws and forces which underlies and explains the magnificent and almost mysterious triumphs of mechanical inventions which have enriched and glorified our country and the century itself?

Prof. Robinson asks that Mr. Thomson be employed for the coming year to aid in the more complete fitting up and development of the department. Mr. T. is a skillful and rapid worker in both wood and iron, and able to save to us his wages. He is, moreover, a graduate from the Scientific Department of the Michigan University, and is an accomplished draughtsman and civil engineer. If it is found that our funds will allow, I should greatly desire that the experiment might be tried. His salary (\$1,000) might be charged to the apparatus account; and Prof. Robinson seems confident that the apparatus and other articles manufactured for sale will cover very nearly, if not quite, the entire expense of the shop.

Machinery can be attached, with slight cost, to the engine for grinding feed for the stock; and if, ultimately, the shops and barns can be brought into nearer neighborhood, the steam can be used here, as at the Agricultural College in England, to thresh and winnow the grain, cut straw, pump water, run grindstones, and the surplus be made available to parboil food and heat drying rooms.

The Trustees will, I doubt not, give very earnest attention to the means necessary for the development of a department so vitally connected with the highest material needs and prospects of our State.

The confirmation of Prof. Robinson's appointment to the chair of Mechanical Science and Engineering is cordially recommended; and I recommend, also, that the Department of Mining Engineering be temporarily intrusted to him.

#### THE MILITARY DEPARTMENT.

A military class has been taught during the year, and the entire body of students, except a few excused for cause, have been drilled in the manual of

arms and in the evolutions of the company. I need not make any new argument in proof of the importance of this department. It is sufficient that it is the requirement of the laws of Congress and of the State, and must, therefore, receive our attention.

It is vital to the usefulness if not to the very existence of this department, that a drill hall be provided for it at an early day. I hope that, at no distant day, Congress may take this matter in hand, and pass a bill, now in the hands of the Military Committee, to give some efficient aid to the several State Institutions required by the law of Congress itself to give military instructions.

#### THE WORK OF THIS YEAR.

No subject connected with the administration of the University affairs has cost me so much solicitude as the improvements to be made this year, under the State appropriation. To secure a careful and economical expenditure of the fund, and to make it as productive as possible in good and valuable betterments, will demand the wisest forecast of the Board, and the most faithful and vigilant efforts of their agents and employees.

The expenditures in the Horticultural Department will embrace the completion of the green-house, the erection of the barn mentioned for the garden, the drainage of the gardens, the purchase of team, wagon, plows, cultivators, a lawn mower, roller, and other necessary tools for this department, together with the fencing of Green streets, the planting of the arboretum, fruit gardens, shelter belts, and forest plantations, and the building up and care of the nurseries and orchards already begun.

The balance of the library fund I recommend be expended under the charge of the Faculty, as they have already, with great care, made lists of books most needed in their several departments.

The Agricultural Committee have already given much and careful attention to the wants of that department. The appropriation for that department was was the largest of all, and scarcely a tenth part of it has yet been expended. Among the most pressing wants to be met by it are the following :

First. A house for farmer on experimental farm.

Second. An ample barn for same, with fruit rooms, root cellars, corn cribs, and with stables and stalls for the fine stock of all sorts, which the University should possess. This stock should be housed at this barn, at least during the winter, to bring it within reach of the students of animal husbandry ; and if the main farm shall ever be disposed of, as proposed, the stock may then find a permanent home at this barn.

Third. A veterinary stable for the use of the Veterinarian in the illustration of his lectures. This must also be on the experimental grounds, to bring it within easy reach.

Fourth. The underdraining of so much of the grounds as may be thought necessary.

Fifth. A large barn on stock farm, with all the apartments and conveniences that any good farmer would need on a farm of the size of that.

Sixth. Some enlargements and repairs of the present farm house, and the repairing or building of one or two tenant houses.

Seventh. Such sheds, cribs, pens, yards and feeding-rooms as may be needed for a first-class stock farm.

Eighth. The purchase of neat cattle, sheep and swine, of such breeds as the Board may determine, shall be kept.

Ninth. The changes and improvements in the existing roads, and the opening of such new ones as may be necessary.

Tenth. A windmill, with tanks, pipes, etc., for watering stock.

Eleventh. The completion of fences, hedges and shelter-belts already begun.

Twelfth. Other purchases and improvements required.

After careful consultation, I am prepared to recommend that the greenhouse, the garden barn, and the farm house on experimental farm, be erected by the carpenter, with such aid as he can have from the students. That the material for the other buildings be purchased by the University, and that proposals be asked and separate contracts be made with responsible parties to lay the stone and brick work, and to do the wood work of the several buildings. That the Executive Committee be instructed to hold regular monthly meetings, or more frequent still, and, if necessary, to send one of their number weekly to aid the Regent to superintend the progress of the work, and to secure the utmost economy in the expenditure of the funds, and the utmost thoroughness in the work done.

I will place in the hands of the Committee on Finance some detailed estimates of the wants of the coming year. There will be needed to pay the salaries of teachers the sum of \$21,000. The other current expenses will be \$12,450. In addition to these expenses there is an urgent demand for some new heating apparatus. Steam or hot water boilers and pipes, etc., can be put in for about \$6,000.

#### DONATIONS.

It is a pleasant feature of our history, that, from the outset, generous friends of education have been found who have made valuable donations to the University. These donations are not yet so large as those received by older institutions, but they will increase as our Institution extends its fame and influence, and many will remember, in their prosperity, this home of learning and education.

The following donations are gratefully acknowledged for the past year :

J. D. PLATT, Warren, Ill.—One Curtis' Patent Fanning Mill. A very excellent machine.

I. H. HALSTEAD, Springfield, Ill.—One Patent Adjustable Harrow, which has worked very satisfactorily.

M. C. GOLTRA, Jacksonville, Ill.—Half bushel large yellow Seed Corn.

NORTHWESTERN FERTILIZING COMPANY.—320 pounds raw-bone Superphosphate, which was used upon the garden.

SAMUEL EDWARDS, La Moille.—10,000 White Pine Seedlings.

W. H. MANN & Co., Gilman, Ill.—20,000 Hedge Plants.

D. B. WEIR, Lacon, Ill.—Specimens of the apple tree Borer; Seeds of the May Screw, an Arizona Hedge Plant.

JOHNSTON & HUNTLY, Chicago, Ill.—Self-Raking Reaper—about \$40 of the prize donated. Also, a Cycloid Mower. These implements have given much satisfaction in their use.

HOL. J. H. MOORE, M. C., Decatur.—Congressional Globe and other valuable documents.

HENRY McAFFEE, through Dr. Warder—A finely mounted collection of the Woods of Stephenson county, Ill.

- D. W. RAMSDALE, Chicago.—One bushel of Norway Oats.  
 C. H. VAN OLINDA, Sandwich, Ill.—One bushel of Surprise Oats.  
 EDWARD LYNCH, student—Two well prepared Skeletons of Birds.  
 Prof. W. F. BLISS—Two bushels of White May Wheat.  
 J. M. GREGORY—An Organ for the Chapel, and a set of Engravings for the Library.  
 SAMUEL NEWBY, student—One bushel Seed Corn.  
 Mrs. — NUNN, Tennessee.—A fine Geode and other specimens, for Cabinet.  
 JOHN DEERE, Moline, Ill.—One Subsoil Plow, which does excellent service.  
 HOVEY & HEFFRON, Seedmen, Chicago—Fifteen varieties of Flower Seeds.  
 Dr. WARDER—400 Grape Cuttings, some Wilson's Blackberry and Everbearing Raspberry bushes  
 MESSRS. PETTIGREW & REED, Chicago—100 Fuchsia Cuttings.  
 HENRY MICHAEL, St. Louis—24 Green-House and Bedding Plants.  
 — CONKLING, Esq., Champaign—One large Oleander and a collection of Summer Flowering  
 Bulbs.  
 J. O. CUNNINGHAM, Urbana—A collection of Dahlias.  
 S. GLAVES & SONS, Jacksonville, Ill.—\$25 off price of turning lathe, and circular and jig saws.

#### PUBLIC OPINION.

Knowing the scrupulous fidelity with which you have sought to obey the laws under which you act, and to conform the University to the declared ends of the statute, I the more cheerfully invite your attention to those expressions of public opinion which concern the University, and which are already known to you through the public press. However unworthy may have been the original source of any sentiment which gains a lodgment in the public mind, and however limited the extent to which such sentiment may prevail, any fairly stated objection to our course and management ought to have our candid and careful consideration. We are all liable to err. No human institution is perfect. Let us profit by all counsels, and thus attain our great end. Let us hear and weigh carefully and candidly every suggestion made for the improvement of the University. Let us correct, patiently, every public misapprehension of our plans and doings; and let us affirm afresh, and with stronger emphasis, our purpose to fulfill the laws under which we act, and to establish and maintain here a true University for the Industries, a school of sound, practical learning.

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### APPENDIX TO REGENT'S REPORT.

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#### APPENDIX A.

*To the Regent of the Illinois Industrial University :*

SIR : At the annual meeting of the Board of Trustees, for 1869, \$300 were appropriated for an expedition of survey and collection in the Department of Natural History. In accordance therewith, arrangements were early made. The Illinois Central and the Chicago, Burlington and Quincy Railroads granted free passes over their entire routes for myself and party. The necessary equipments for camping out were produced, and the following named students of the University selected, each having special charge of the department named : I. S. Raymond, Botany ; W. A. Reiss, Entomology ; S. A. Reynolds, Geology ;

T. E. Rickard, Ornithology; and S. J. Westlake, Zoölogy, as restricted. Mr. A. L. Whitcomb, also a student, accompanied the party, paying his own expenses. A trial camp was made in the woods, near Urbana; after which we went south to Cairo, then north upon the main line of the I. C. R. R. to Galena, back to Mendota, thence to Chicago, and from Chicago to Champaign. Throughout the route, we stopped at every point deemed of special interest to us; but the most valuable collections were made in the vicinity of Villa Ridge, Cobden, DuQuoin, LaSalle and Galena. We were everywhere very kindly received and often greatly aided by persons interested in our labors; but at the risk of seeming invidious, I wish to record the names of Mr. Thomas Tizon of DuQuoin, Mr. J. M. Tracy of Cobden, Deacon Lothrop of LaSalle, and Mr. and Mrs. Danforth of Montgomery—from all whom we received special favors; and of Mr. John Bulmer of DuQuoin and Mrs. Graham of Galena, for specimens presented.

Among the many industrial establishments we visited, the Pottery at Anna, Illinois, and the Glass and Zinc works at LaSalle, Illinois, are particularly mentioned. The former is supplied with excellent potters' clay, a specimen of which was procured, from a bed thirty-three feet in depth and of unknown extent. In the immediate vicinity, a good quality of fire clay is also found. Each of these natural deposits will doubtless prove a source of inexhaustable wealth, now scarcely imagined. Both the glass and zinc works at LaSalle are the result of comparatively recent enterprise. The former is supplied with sand from the St. Peter's sandstone, which here crops out, and with lime from the rocks adjacent; but the soda used is imported. About 500 pounds of sand, washed and sifted, 185 pounds of soda, and 120 pounds of lime are used per week. Their sales for the last year amounted to about \$190,000. The glass is a very superior article. Zinc is made from what had been for years the refuse of the lead mines, and is now brought to LaSalle from Northern Illinois and Southern Wisconsin, instead of transporting the coal necessary for smelting. One firm alone use from ten to fifteen tons of ore per day, and give employment to two hundred and fifty men.

We gave special attention to the growing crops and the soils upon which they were grown. Frequent specimens of the latter were secured, but being in the middle of the summer very few seeds could be obtained.

The collections made and now in the University building may be summed up as follows:

Number of specimens of	plants named	432
" " " "	" not yet named	150
" " " "	birds	42
" " " "	reptiles	32
" " " "	insects	150
" " " "	mammals	5

Besides these, a large number of fossils, of fresh water shells and of minerals, together with some specimens of different kinds of wood, of soils, of materials of manufacture and of manufactured articles, were secured.

Two hundred dollars of the appropriation were drawn and expended as follows:



For camp and collecting equipments .....	\$86 55
“ provisions and board .....	83 99
“ conveyance and express .....	20 00
“ cabinet specimens .....	3 15
“ unavoidable personal expenses .....	6 31
Total value .....	\$200 00

There is on hand, counting the value at two-thirds of cost :

One tent .....	\$19 87
Four rubber blankets .....	6 66
Other camp, collecting and taxidermists' equipments .....	12 33
Total .....	\$38 86

All of which is respectfully submitted.

T. J. BURRILL.

## APPENDIX B.

### STATEMENT OF WARRANTS.

No.	Date.	To Whom.	For What.	Amount.
1	Mar. 11.	Dodson & Hodges.....	Stove for chem. lab; hardware for rep.	\$81 58
2	“ 11.	J. M. Pearson.....	Expenses to board meeting .....	27 45
3	“ 11.	M. C. Goltra.....	“ “ “ .....	18 75
4	“ 11.	James P. Slade.....	“ “ “ .....	26 90
5	“ 11.	L. W. Lawrence.....	“ “ “ .....	26 80
6	“ 11.	S. Edwards.....	“ “ “ .....	26 69
7	“ 11.	A. M. Brown.....	“ “ “ .....	30 90
8	“ 11.	P. R. Wright.....	“ “ “ .....	28 50
9	“ 11.	J. M. VanOsdel.....	“ “ “ .....	25 75
10	“ 11.	Lemuel Allen.....	“ “ “ .....	25 70
11	“ 11.	I. S. Mahan.....	“ “ “ .....	22 15
12	“ 11.	B. Pullen.....	“ “ “ .....	21 20
13	“ 11.	O. B. Galusha.....	“ “ “ .....	21 85
14	“ 11.	Wm. Kile.....	“ “ “ .....	9 50
15	“ 11.	M. L. Dunlap.....	“ “ “ .....	9 75
16	“ 11.	J. C. Burroughs.....	“ “ “ .....	25 70
17	“ 11.	Moulding & Harland.....	Flower pots.....	66 00
18	“ 11.	W. S. Maxwell.....	Half gal. alcohol.....	2 00
19	“ 11.	J. A. Hutchinson.....	Teaming.....	16 00
20	“ 11.	Walker Bros.....	Sash for hot-house.....	9 37
21	“ 11.	Walls Coal Mining Co.....	Two cars, 20 tons coal.....	40 00
22	“ 11.	William Price.....	Painting hot-house.....	27 30
23	“ 11.	O. L. Barber.....	Reporting lectures.....	25 00
24	“ 11.	Doty & Mitchell.....	Hotel bill.....	59 00
25	“ 11.	J. M. Gregory.....	Petty expenses.....	73 72
26	“ 12.	J. V. Peterson.....	Stationery.....	20 90
27	“ 12.	A. P. S. Stuart.....	Purchase of chemicals.....	23 90
28	“ 12.	C. G. Larned & Co.....	Stoves and repairs.....	71 90
29	“ 12.	Trevitt & Green.....	Hardware.....	15 67
30	“ 12.	Jonath. Periam.....	Salary to March.....	375 00
31	“ 15.	R. S. Walker.....	Fence posts.....	51 00
32	“ 15.	J. H. Pickrell.....	Expense to Board meeting.....	19 00
33	“ 16.	Patrick Lamb.....	Wages to March 15th.....	37 00
34	“ 17.	Robert Cole.....	Half month farm work.....	12 50
35	“ 17.	L. W. Smthiey.....	“ “ “ .....	12 50
36	“ 22.	J. W. Bunn.....	Treasurer's salary.....	500 00
37	“ 22.	A. Blackburn.....	Expense to Board meeting.....	28 00
38	“ 23.	J. M. Gregory.....	Purchase of two lots for Un.....	425 00
39	“ 30.	J. M. Gregory.....	Salary, March, 1869.....	333 33
40	“ 30.	W. A. Baker.....	“ “ “ .....	166 67
41	“ 30.	A. F. S. Stuart.....	“ “ “ .....	166 67
42	“ 30.	W. F. Bliss.....	“ “ “ .....	166 67

No.	Date.	To Whom.	For What.	Amount.
43	Mar. 30.	S. W. Shattuck	Salary, March, 1869.	\$125 00
44	" 30.	T. J. Burrill	" "	125 00
45	" 30.	Ed Snyder	" "	100 00
46	" 30.	J. S. Searfoss	" "	83 33
47	" 30.	Thomas Franks	Salary from Jan. 15th to March 15th.	137 50
48	" 30.	Pat. Lamb	Wages from March 15th to 31st.	18 75
49	" 30.	W. C. Flagg	Salary for 1868-9.	200 00
50	" 30.	Ed. Snyder	Purchase Un. Buttons	25 00
51	" 30.	E. T. Fisher	1 month's farm-work	25 00
52	" 30.	James Blakesley	" "	35 00
53	" 30.	S. D. Childs	University seal.	20 00
54	April 8.	Lemuel Allen	Expense to Ex. Com. meeting.	22 00
55	" 8.	Emory Cobb	" several Ex. Com. meeting.	79 75
56	" 8.	M. C. Goltra	" Ex. Com. meeting.	9 50
57	" 8.	J. S. Johnson	" "	33 00
58	" 8.	Fred. Finder	1 month's work on farm.	25 00
59	" 8.	Aug. Shavelan.	" "	25 00
60	" 8.	R. P. Wright	Expense to Ex. Com. meeting.	22 00
61	" 9.	Prairie Farmer Co.	Advertising seeds.	19 20
62	" 9.	Walls Coal Co.	1 car coal.	20 00
63	" 9.	Hurlbud, Herrick & Co.	Hardware.	28 40
64	" 9.	J. M. Campbell	Seed oats.	37 87
65	" 9.	Chas. W. Rolfe	Pump for cistern.	12 55
66	" 9.	Miller & Toll	Muslin for sacks.	2 00
67	" 10.	Dodson & Hodges	Hardware.	32 48
68	" 10.	Hovey & Heffron	Flower and garden seeds.	77 37
69	" 10.	A. F. Childs	Draining tile.	126 00
70	" 10.	Fuller, Finch & Fuller.	Paints and oil.	83 90
71	" 10.	Elisha Eldred.	Lumber.	382 55
72	" 10.	W. F. Bliss	2 sugar hogsheds.	2 00
73	" 14.	J. H. McElwee	Forest trees.	27 00
74	" 16.	Trevitt & Green	Hardware.	9 45
75	" 16.	Irvin Ray	Work on grounds.	25 37
76	" 16.	W. G. Stevenson.	" farm.	15 00
77	" 16.	E. Snyder	Petty expenses	30 87
78	" 21.	E. Snyder	Students' labor	117 60
79	" 21.	Geo. S. Upstone	Work on farm.	15 00
80	" 30.	Patrick Lynch	" grounds.	17 50
81	" 30.	J. M. Gregory	Salary for April.	333 24
82	" 30.	W. A. Baker.	" "	166 67
83	" 30.	W. F. Bliss	" "	166 67
84	" 30.	A. P. S. Stuart.	" "	166 67
85	" 30.	T. J. Burrill.	" "	125 00
86	" 30.	S. W. Shattuck	" "	125 00
87	" 20.	E. Snyder	" "	100 00
88	" 30.	J. S. Searfoss	" "	83 33
89	" 30.	Thomas Franks	" "	75 00
90	" 30.	Pat. Lamb.	" "	37 00
91	" 30.	Charles W. Beyer	Ins. on library and apparatus	21 50
92	" 30.	E. T. Fisher	Farm-work, April.	42 00
93	May. 4.	James Blakesley.	" "	35 00
94	" 4.	Fritz Finder	" "	42 00
95	" 4.	Aug. Shavelan.	" "	42 00
96	" 4.	J. M. Campbell.	" "	50 00
97	" 5.	J. H. Pickrell.	Board expenses.	12 55
98	" 5.	B. Pullen	" "	17 20
99	" 5.	M. C. Goltra	" "	10 70
100	" 5.	Adams, Blackmer & Lyon.	2 doz. pamphlet cases.	21 60
101	" 5.	Geo. R. Hosford	Kerosene oil and lamp chimneys.	7 72
102	" 5.	Trevitt & Green	Farm tools and hardware.	15 00
103	" 5.	Union Coal Co.	1 car coal.	15 00
104	" 5.	A. P. S. Stuart.	Purchase of chemicals for laboratory.	4 57
105	" 5.	G. E. Hessel	Harness and repairs	7 95
106	" 5.	E. T. Whitcomb	Recording deeds.	3 75
107	" 5.	Hibbard & Finch	Seeds and 1 plow.	33 00
108	" 5.	R. B. Musson	Whitewashing and plastering.	25 15
109	" 5.	Johnson, Myers & Co.	Repairing farm tools.	6 45
110	" 5.	C. G. Larned.	Hardware.	33 40
111	" 5.	Moulding & Harland	Flower-pots.	15 75
112	" 5.	F. K. Phoenix	Flowers and seeds.	22 60
113	" 5.	Fuller, Finch & Fuller.	2 boxes window-glass.	8 88
114	" 5.	D. B. Wier.	Trees for nursery.	58 00
115	" 5.	F. M. & A. Avey.	Black-mithing.	12 50
116	" 10.	J. M. Gregory	Salary for May, June, July, August.	1,333 24
117	" 10.	E. Snyder	Pay-roll of students' labor.	235 35
118	" 10.	David Weeks	1 cord wood for hot-house.	7 00
119	" 14.	J. W. Bunn.	Payment of taxes on land.	584 73
120	" 14.	Beidler & Kratz	Lumber for farm.	81 50

No.	Date.	To Whom.	For What.	Am ount.
121	May 21	W. W. Cranston	10 hogs for farm	\$74 00
122	" 21	David Boggies	Work on farm	9 50
123	" 25	T. J. Burrill	Ex. of geological excursion	200 00
124	" 25	Webb, Carstins & Shafer	1 harrow	28 95
125	" 31	Wm. M. Baker	Salary for May, 1869	166 63
126	" 31	W. F. Bliss	" " "	166 66
127	" 31	A. P. S. Stuart	" " "	166 66
128	" 31	Thomas J. Burrill	" " "	125 00
129	" 31	S. W. Shattuck	" " "	125 00
130	" 31	E. Snyder	" " "	100 00
131	" 31	J. S. Searios	" " "	83 33
132	" 31	Thomas Franks	" " "	75 00
133	" 31	Pat. Lamb	Wages as janitor	37 00
134	June 1	E. T. Fisher	1 month's farm-work	42 00
135	" 1	James Blakesley	" " "	35 00
136	" 2	J. H. Pickrell	Expense to Board meeting	7 75
137	" 3	Hubbard & Herrick	Hardware and locks	Canceled.
138	" 3	State Journal Co.	500 memorials for Legislature	16 50
139	" 3	E. V. Peterson	Stationery and crayons	16 33
140	" 3	E. Snyder	Payment of farm hands	48 12
141	" 3	C. W. Rolfe	1 pump for Un. well	15 25
142	" 3	Trevitt & Green	Hardware	9 60
143	" 3	Ill. Cen. R. Co.	Charges for back freight	39 51
144	" 3	Dodson & Hodges	Hardware	13 00
145	" 3	Adams, Blackmer & Lyon	Students' record book and blanks	21 75
146	" 3	E. Snyder	Postage, express and petty ex.	35 72
147	" 3	Hovey & Heffron	Garden lines and hoes	9 25
148	" 3	B. C. Beach & Co.	1 plow and half ton coal	23 10
149	" 3	S. J. Teachner	Plastering chem. laboratory	35 10
150	" 3	S. J. Teachner	" cabinet room	9 60
151	" 3	Angle, Sabin & Co.	1 knife grinder and 2 tons coal	20 00
152	" 3	W. & L. E. Gurley	Engineering instruments	28 90
153	" 3	E. Snyder	Uniform buttons and cap letters	25 00
154	" 3	August Shablon	1 month's farm work	42 00
155	" 3	James Braddock	" " "	35 00
156	" 3	Fritz Finder	" " "	42 00
157	" 3	Martin Clancey	20 days' work with team at \$3 on farm	60 00
158	" 3	H. K. Vickroy	Work in ex. farm orchard	60 00
159	" 3	John Jefferson	" " "	14 00
160	" 3	Wm. Waites	" " " 16½ days	28 57
161	" 3	Geo. Upstone	Work on stock farm	45 00
162	" 3	E. Snyder	Payment of Students labor	312 38
163	" 3	W. W. Cranstone	3 hogs, 345 lbs @ 7½ cents	18 38
164	" 3	J. M. Campbell	Boarding farm hands and work	209 96
165	" 3	F. M. & A. Avey	Blacksmithing	17 70
166	" 15	N. Tanner	Plowing fallow	12 25
167	" 15	W. R. Hough	" " "	19 15
168	" 16	Miller & Toll	Canvass and grain sacks	17 70
169	" 16	G. N. Richards	Advertising proposals for roof	4 00
170	" 16	W. S. McWilliams	14 days carpenter work at \$3	42 70
171	" 16	Tiernan & Call	Repairs of agricultural implements	21 50
172	" 16	W. F. Bliss	Salary for June, 1869	166 63
173	" 16	W. M. Baker	" " "	166 66
174	" 16	S. W. Shattuck	" " "	125 00
175	" 16	T. J. Burrill	" " "	125 00
176	" 16	E. Snyder	" " "	100 00
177	" 16	Thos. Franks	Gardener's salary for June, 1869	75 00
178	" 16	J. S. Searios	Carpenter's " "	83 33
179	" 30	Patrick Lamb	Janitor's wages for " "	37 00
180	" 30	J. H. Pickrell	Expense to board meeting	6 50
181	July 7	Martin Clancey	Work on farm with team	73 93
182	" 7	Jas. Bakesley	" " " 1 month	30 50
183	" 7	August Shablon	" " " "	40 38
184	" 7	Fritz Finder	" " " "	36 23
185	" 7	J. Davies Wilder	Slating blackboards	80 66
186	" 7	D. S. Crandall	Advertising proposals for roof	6 00
187	" 7	S. Edwards	Bill of fruit and ornamental trees	294 80
188	" 7	Dr. J. A. Warder	Lectures at Institute, Jan	100 10
189	" 7	E. Snyder	Payment of farm work and expenses	348 66
190	" 7	J. M. Campbell	Boarding farm hands	55 83
191	" 7	Western Rural Co.	Advertising Farmers' Institute	92 70
192	" 7	Prairie Farmer Co.	" " "	87 00
193	" 7	Norman Coleman	" " "	27 00
194	" 7	Journal of Agriculture	" " "	15 00
195	" 7	Flyen & Scroggs	Printing and advertising	16 00
196	" 7	F. M. & A. Avey	Blacksmithing and repairs	15 00
197	" 7	Park & Royer	Hard lumber	17 58
198	" 7	C. G. Larned & Co.	Hardware	23 05

No.	Date.	To Whom.	For What.	Amount.
199	July 7.	C. G. Larned & Co.	Roofing University building.	\$873 60
200	" 7.	W. F. Bliss.	Salary for July and August.	333 33
201	" 7.	W. M. Baker.	" " "	333 33
202	" 7.	T. J. Burrill.	" " "	250 00
203	" 7.	S. W. Shattuck.	" " "	250 00
204	" 7.	E. Snyder.	" " "	200 00
205	" 7.	T. J. Burrill.	Collection of Minerals and Fossils.	500 00
206	" 7.	A. M. Lawver.	3100 fruit trees.	820 00
207	" 7.	W. H. Mann.	Hedge plants and seeds.	56 00
208	" 7.	Jas. Williams.	1 month's work on University grounds	35 00
209	" 7.	C. S. Emerson.	" " market garden.	35 00
210	" 7.	Jas. Braddock.	" " farm.	19 00
211	" 7.	M. C. Goltra.	Expense attending meeting.	16 75
212	" 7.	P. R. Wright.	" " "	22 75
213	" 7.	A. M. Brown.	" " "	27 35
214	" 7.	Joseph Rolfe.	Mason work on gardener's house.	132 75
215	" 7.	Trevitt & Green.	Hardware.	30 37
216	" 7.	J. A. Hutchinson.	Teaming.	6 00
217	" 7.	H. Jefferson & Son.	" " "	6 00
218	" 7.	E. Snyder.	Payment of hands and expenses.	300 00
219	" 7.	J. M. Campbell.	1 month's farm work with team.	50 60
220	" 7.	Geo. S. Upstone.	1 month's work on farm.	37 00
221	" 7.	E. T. Fisher.	" " "	43 87
222	" 7.	M. T. Burwash.	" " "	28 25
223	" 7.	Wm. Waites.	" " "	33 15
224	" 7.	H. K. Vickroy.	Services on Ex. farm.	76 10
225	Aug. 4.	A. P. S. Stuart.	Salary for June, July and Aug.	500 00
226	" 4.	J. S. Searfoss.	" " July, 1869.	83 33
227	" 4.	Thos. Franks.	" " "	75 00
228	" 4.	Patrick Lamb.	Wages as janitor, July.	37 00
229	" 5.	J. M. Campbell.	Boarding farm hands.	76 83
230	" 5.	Flynn & Scroggs.	Printing letter heads and envelopes.	24 25
231	" 5.	Heath & Milligan.	Paints and putty.	17 29
232	" 5.	W. J. Foote.	3498 bricks for well.	34 98
233	" 5.	J. A. Williams.	1 month's work on University grounds	35 00
234	" 5.	Chas. S. Emerson.	" " market garden.	35 00
235	" 5.	J. K. Engledow.	Plastering gardener's house.	173 10
236	" 5.	S. J. Teacher.	Whitewashing, etc., Un. buildings	190 13
237	" 5.	E. Snyder.	Pay-roll of farm hands.	755 68
238	" 5.	Henry Swannell.	Paints, glass and putty.	32 44
239	" 5.	Jos. McCorkle.	Hardware.	12 20
240	" 5.	A. S. Barnes & Co.	Books for library.	23 20
241	" 5.	F. M. & A. Avey.	Blacksmithing, digging well at gardener's house.	15 15
242	" 17.	Ill. Central R. R.	Advanced charges.	23 05
243	" 17.	G. S. Upstone.	Payment of harvest help.	69 00
244	" 17.	John Bingham.	Digging well at gardener's house.	18 62
245	" 17.	Flynn & Scroggs.	Printing and advertising.	30 75
246	" 17.	August A. Rader.	Work on farms.	37 50
247	" 17.	Johnston, Huntly & Co.	Onereaper.	100 06
248	" 17.	Elisha Eldred.	Lumber.	326 28
249	" 17.	J. M. Gregory.	Purchases for library and cabinet.	1020 93
250	Sept. 1.	E. Snyder.	Payment of labor and expenses.	199 15
251	" 1.	W. F. Bliss.	Expense at board meeting.	55 90
252	" 1.	E. Snyder.	Contingent fund for expenses.	300 00
253	" 14.	Thos. Franks.	Salary, August.	75 00
254	" 14.	J. S. Searfoss.	" " "	83 33
255	" 14.	Pat. Lamb.	Wages " "	37 00
256	" 14.	Geo. S. Upstone.	" " "	30 00
257	" 14.	Halburd, Herrick & Co.	Locks and keys.	76 56
258	" 14.	J. M. Campbell.	Board of farm hands.	65 60
259	" 14.	Elisha Eldred.	Lumber.	174 70
260	" 14.	Heath & Mulligan.	Glass and paint.	22 02
261	" 14.	Webb, Carston & Co.	One sod harrow.	29 00
262	" 14.	Webster & Dunbar.	Fencing (Griggs' farm).	15 28
263	" 14.	F. M. & A. Avey.	Blacksmithing.	11 65
264	" 14.	Trevitt & Green.	Hardware.	Canceled.
265	" 14.	C. S. Emerson.	1 month's work on grounds.	35 00
266	" 14.	W. M. Olcott.	30 tons of hard coal.	345 00
267	" 14.	Wm. Waites.	1 month, 7 days work on Ex. farm.	50 71
268	" 14.	J. M. Gregory.	Library and cab. purchased in England.	1355 65
269	" 15.	J. M. Gregory.	" " " Europe.	1028 09
270	" 16.	W. F. Bliss.	Salary for September.	166 66
271	" 16.	Fritz Flinder.	1 month's work on farm.	42 00
272	" 16.	August Shalor.	" " "	42 00
273	" 16.	Jas. Braddock.	" " "	24 00
274	" 16.	Jas. Blakesley.	" " " less six days.	32 35
275	" 16.	Geo. Lamberger.	23 days work to August 31.	46 00
276	" 18.	Pat. Lynch.	11 " " "	22 09

No.	Date.	To Whom.	For What.	Amount.
277	Sept. 16.	Martin Clancey.....	23½ days work with team.....	\$ 79 50
278	" 16.	Jas. Blakesley.....	Boarding farm hands.....	26 90
279	" 16.	H. K. Vickroy.....	Salary for August.....	60 00
280	" 16.	Geo. Stipe.....	1 month's work on Ex. farm.....	40 00
281	" 16.	M. B. Burwash.....	" " " ".....	33 66
282	" 21.	J. M. Gregory.....	Salary for September.....	333 34
283	" 21.	J. McElvie.....	Threshing oats.....	14 85
284	" 21.	A. S. Barnes & Co.....	Expense on apparatus.....	22 00
285	" 24.	A. L. Rader.....	Work for University during vacation..	84 92
286	" 24.	G. S. Upstone.....	Salary, September, 1869.....	30 00
287	" 25.	J. F. Lupin & Co.....	Chemical Apparatus.....	469 00
288	" 28.	A. P. S. Stuart.....	Purchase of Spectroscope.....	38 15
289	Oct. 2.	W. A. Baker.....	Salary for September.....	166 66
290	" 2.	A. P. S. Stuart.....	" " " ".....	166 66
291	" 2.	T. J. Burrill.....	" " " ".....	125 00
292	" 2.	S. W. Shattuck.....	" " " ".....	125 00
293	" 2.	E. Snyder.....	" " " ".....	1 00
294	" 2.	J. S. Searfoss.....	" " " ".....	83 33
295	" 2.	Thos. Franks.....	" " " ".....	75 00
296	" 2.	Patrick Lamb.....	Wages for September, 1869.....	37 00
297	" 4.	J. T. Feagans.....	Plastering chemical recitation room..	12 00
298	" 4.	J. M. Gregory.....	Salary for October.....	333 33
299	" 4.	Jas. Ballangee.....	" September.....	88 33
300	" 4.	Hibbard & Finch.....	Repair on implements.....	10 00
301	" 4.	A. S. Barnes & Co.....	Expenses on book.....	93 84
302	" 11.	Jas. Green.....	Meteorological instruments.....	61 50
303	" 11.	J. F. Smithey.....	Plowing 11 days at \$3.....	33 00
304	" 11.	R. B. Warder.....	Salary for September.....	33 33
305	" 13.	M. C. Goltra.....	Board expenses.....	10 00
306	" 13.	A. G. Pick ell.....	A pair of maul s.....	475 00
307	" 13.	J. H. Pickrell.....	Board expenses.....	7 90
308	" 14.	Burt Hall.....	8 days work on farm.....	24 00
309	" 14.	W. A. Baker.....	Salary for October, 1869.....	166 66
310	" 14.	W. F. Bliss.....	" " " ".....	166 66
311	" 18.	J. Kelley.....	54 bushels rye and cultivator.....	57 14
312	" 18.	E. Snyder.....	Contingent fund.....	300 00
313	" 18.	H. K. Vickroy.....	Work on Ex. farm.....	60 00
314	" 18.	Wm. Waites.....	" " " ".....	15 37
315	" 18.	George Stipe.....	" " " ".....	37 70
316	" 18.	C. G. Larned.....	Guttering and hardware.....	190 18
317	" 18.	August Shablon.....	1 month's work on farm.....	42 00
318	" 18.	Fritz Finder.....	" " " ".....	42 00
319	" 18.	Jas. Braddock.....	" " " ".....	20 00
320	" 18.	Geo. Lamberger.....	15½ days " " " ".....	19 60
321	" 18.	Martin Clancey.....	1 month's " " " ".....	64 20
322	" 18.	J. H. Blakesley.....	Board of farm hands.....	59 05
323	" 18.	E. V. Peterson.....	2 files and 1 drum cord.....	5 25
324	" 18.	Hovey & Heffron.....	Garden tools.....	6 00
325	" 18.	Wm. Price.....	Painting.....	160 89
326	" 18.	Hubbard & Herrick.....	Tools and hardware.....	101 56
327	" 18.	E. Snyder.....	Petty expense.....	29 08
328	" 19.	A. Avey.....	Blacksmithing, etc.....	20 85
329	" 19.	James Rolfe.....	Mason work.....	23 25
330	" 19.	James Rolfe.....	Building cistern, gardener's house.....	9 00
331	" 19.	E. Snyder.....	Students' labor.....	325 40
332	" 20.	Chas. W. Rolfe.....	1 pump for gardener's house.....	15 40
333	" 20.	Ellimwood & Chaffer.....	Draining tools.....	5 70
334	" 21.	A. H. Andrews.....	Castings for settees.....	87 50
335	" 23.	J. F. Luhme.....	Chemicals and apparatus.....	102 45
336	" 27.	W. Waites.....	1 month's work on experimental farm.	40 00
337	" 29.	W. and L. E. Gurley.....	One engineer's chain.....	16 50
338	" 29.	T. J. Burrill.....	Salary for October.....	125 00
339	" 29.	E. V. Peterson.....	Envelopes, crayons and blank books..	55 35
340	" 29.	A. P. S. Stuart.....	Salary for October.....	166 67
341	" 29.	S. W. Shattuck.....	" " " ".....	125 00
342	" 29.	E. Snyder.....	" " " ".....	100 00
343	" 29.	Jas. Ballangee.....	" " " ".....	83 33
344	" 29.	R. B. Warder.....	" " " ".....	33 33
345	" 29.	Henry Douglass.....	" " " ".....	83 33
346	" 29.	Thos. Franks.....	" " " ".....	75 00
347	" 29.	J. S. Searfoss.....	" " " ".....	83 33
348	" 29.	Pat. Lamb.....	Wages for October.....	37 00
349	Nov. 4.	A. Avey.....	Blacksmithing.....	13 52
350	" 4.	J. M. Gregory.....	Salary for November.....	333 33
351	" 5.	J. Braddock.....	1 month and 2 days work on farm.....	21 50
352	" 5.	G. Lamberger.....	Work on University farm.....	47 75
353	" 5.	Martin Clancey.....	Boarding farm hands.....	56 23
354	" 5.	Martin Clancey.....	1 month's work with team.....	50 00

No	Date.	To Whom.	For What.	Amount.
355	Nov. 5	Wm. Weissgerber	Threshing 1,203 bushels oats, at 3 c.	\$ 36 09
356	" 5	Brazelton & Carr	Painting building	211 60
357	" 6	W. F. Bliss	Visit to nurseries	55 40
358	" 7	H. K. Vickroy	Salary for October	60 00
359	" 8	G. W. Stipe	Wages for October	38 47
360	" 8	D. S. Hefron	Seeds and bulbs	10 78
361	" 8	Union Coal Co.	2 cars of coal	37 00
362	" 8	Elisha Eldred	Lumber for cabinet cases	169 05
363	" 8	Fuller, Finch & Fuller	Glass, putty and oil	91 23
364	" 8	Hulbars & Herrick	Locks for cabinet cases	14 79
365	" 8	C. G. Larned	Hardware	113 38
366	" 8	S. W. Shattuck	Books for military department	18 80
367	" 8	Henry Swannell	Paints and oils	10 70
368	" 15	W. F. Bliss	Salary for November, 1869	166 66
369	" 20	E. Snyder	Pay-roll of students	309 40
370	" 24	Luther Guinness	Plastering farm buildings	14 88
371	" 24	Union Coal Co.	3 cars of coal	40 00
372	" 24	Fuller, Finch & Fuller	Glass and corks for cabinet	17 87
373	" 24	H. K. Hosford	Kerosene and lamp chimneys	16 10
374	" 30	A. P. S. Stuart	Salary for November	166 66
375	" 30	Wm. M. Baker	" "	166 66
376	" 30	T. J. Burrill	" "	125 00
377	" 30	A. S. Barnes & Co.	Charges on books from France	65 17
378	" 30	S. W. Shattuck	Salary for November	125 00
379	" 30	E. Snyder	" "	100 00
380	" 30	J. Ballangee	" "	83 33
381	" 30	H. B. Douglas	" "	83 33
382	" 30	R. B. Warder	" "	33 33
383	" 30	J. B. Searfoss	" "	83 33
384	" 30	Thos. Franks	" "	75 00
385	" 30	Patrick Lamb	" "	37 00
386	" 30	Dodson & Hodges	Hardware and tools	96 61
387	Dec. 1	W. F. Bliss	Salary for December	166 66
388	" 1	W. C. Flagg	Expenses as Corresponding Secretary	51 50
389	" 4	H. K. Vickroy	Salary for November	60 00
390	" 4	G. W. Stipe	Wages for November	40 00
391	" 4	W. Waites	" "	37 70
392	" 6	Union Coal Co.	2 cars of coal	40 00
393	" 8	G. S. Upstone	Wages for Nov., and add'l wages at \$8 for 8 months as foreman	94 00
394	" 8	John Wilson	1 month's work on farm	19 23
395	" 8	Patrick Dunbar	" "	17 70
396	" 8	Martin Clancey	1 month's work with team	48 08
397	" 8	Martin Clancey	Boarding farm hands	62 06
398	" 13	A. M. Brown	Expense at Board meeting	26 90
399	" 13	B. Pullen	" "	14 70
400	" 13	P. R. Wright	" "	21 50
401	" 13	M. C. Goitra	" "	15 50
402	" 13	J. M. Gregory	Traveling expenses	23 20
403	" 14	W. J. Foo'e	15,000 brick for green house	150 00
404	" 14	Ill. Cent. R. R.	Back freight and charges	69 87
405	" 16	Eli & Burt	Implements and repairs	15 45
406	" 16	A. P. S. Stuart	Purchase for Laboratory	11 57
407	" 16	Angle & Sabin	Draining tile and seeds	78 60
408	" 16	C. G. Larned & Co.	Hardware	51 88
409	" 20	W. M. Baker	Salary for December	166 66
410	" 20	J. M. Gregory	" "	533 33
411	" 20	A. P. S. Stuart	" "	166 66
412	" 20	T. J. Burrill	" "	125 00
413	" 20	S. W. Shattuck	" "	125 00
414	" 20	E. Snyder	" "	100 00
415	" 20	J. Ballangee	" "	83 33
416	" 20	H. Douglas	" "	83 33
417	" 20	J. S. Searfoss	" "	83 33
418	" 20	Thos. Franks	" "	75 00
419	" 20	Pat. Lamb	" "	37 00
420	" 20	J. Hessel	Harness and repairs	24 70
421	" 20	Angle & Sabin	1 plow and seeds	10 70
422	" 20	George Eli	Rails and spikes	45 85
423	" 20	Walker Brothers	Sawing and ripping lumber	6 55
424	" 20	G. S. Upstone	Expense to Fairs, etc.	19 20
425	" 20	G. S. Upstone	Petty expense for farm	74 68
426	" 20	A. Bryant	Tree seeds	18 00
427	" 20	G. S. Upstone	Salary for October	30 00
428	" 20	R. B. Warder	Salary for December	33 33
429	" 23	Sweet & Piank	Insurance on University building	180 00
430	" 22	D. Van Nostrand	Books for Library	15 00
431	" 22	J. C. Sheldon	Insurance on University building	135 00

No.	Date.	To Whom.	For What.	Amount.
432	Dec. 22...	W. J. Foote .....	500 bricks for farm well.....	\$ 5 00
433	" 22...	Miller & Thomas.....	Insurance for books and apparatus.....	45 00
434	" 27...	R. Peacock.....	Lumber for cab net cases.....	25 05
435	" 27...	E. Snyder.....	Students pay-roll.....	142 45
436	" 27...	J. M. Gregory.....	Papers and periodicals for library.....	125 00
437	Jan. 8...	A. S. Barnes.....	Duties and charges on apparatus.....	129 00
438	" 8...	Peabody & Ayres.....	Blacksmithing, etc.....	7 05
439	" 20...	Am. Ex. Co.....	Reports from Springfield.....	38 30
440	" 10...	S. M. Hesse.....	Guns for bayonet drill.....	12 00
441	" 7...	J. H. Pickrell.....	Board expenses.....	25 65
442	" 12...	Emory Cobb.....	" ".....	29 25
443	" 12...	P. R. Wright.....	" ".....	28 75
444	" 12...	M. C. Gollra.....	" ".....	9 00
445	" 12...	A. M. Brown.....	" ".....	32 10
446	" 12...	Dr. M. Miles.....	Expense to lectures.....	60 00
447	" 13...	I. Tumell.....	2 infantry bugles.....	17 00
448	" 13...	Wm. Wait's.....	1 mon h's work on farm.....	35 00
449	" 13...	Dr. H. J. Detmers.....	Lectures and expenses.....	35 00
450	" 13...	D. H. Shimer.....	" ".....	35 00
451	" 13...	John Wilson.....	1 month's work on farm.....	20 00
452	" 13...	P. Dunbar.....	" ".....	18 46
453	" 13...	Jesse Leary.....	" ".....	13 00
454	" 13...	M. Clancey.....	" ".....	34 50
455	" 13...	S. Welch.....	5 days' work on farm.....	7 50
456	" 13...	H. K. Vickroy.....	1 month's wages.....	60 00
457	" 13...	G. S. Upstone.....	" ".....	60 00
458	" 13...	G. S. Upstone.....	Boarding farm hands.....	47 38
459	" 13...	W. F. Bliss.....	Petty expenses for farm.....	53 79
460	" 13...	W. F. Bliss.....	Expenses as Recording Secretary.....	10 80
461	" 13...	G. Ely.....	1 spring wagon and repairs.....	163 35
462	" 13...	Fuller, Finch & Fuller.....	Paint, varnish and glass.....	53 46
463	" 13...	Hulburd & Herrick.....	Draining tools.....	11 50
464	" 13...	Union Coal Co.....	3 cars coal.....	60 00
465	" 13...	Park & Royer.....	Lumber.....	67 50
466	" 13...	F. M. & A. Avey.....	Blacksmithing.....	3 68
467	" 13...	W. F. Bliss.....	Salary for January.....	166 66
468	" 14...	W. C. Flagg.....	Expenses to Lectures.....	14 59
469	" 14...	E. Snyder.....	Service as book-keeper.....	100 00
470	" 14...	W. C. Flagg.....	Salary as Corresponding Secretary.....	30 00
471	" 14...	J. M. Van Osdal.....	Expense to Lectures.....	14 59
472	" 18...	J. M. Gregory.....	Salary for January.....	333 33
473	" 22...	A. P. S. Stuart.....	" ".....	166 66
474	" 24...	J. A. Warder.....	For lectures given.....	600 00
475	" 24...	S. W. Shattuck.....	Salary for January.....	125 00
476	" 30...	W. M. Baker.....	" ".....	166 66
477	" 30...	S. W. Robinson.....	" ".....	166 66
478	" 30...	T. J. Burrill.....	" ".....	125 00
479	" 30...	E. Snyder.....	" ".....	100 00
480	" 30...	Henry Douglas.....	" ".....	83 33
481	" 30...	Jas. Ballangee.....	" ".....	83 33
482	" 30...	J. S. Searfoss.....	" ".....	83 33
483	" 30...	Thos. Franks.....	" ".....	75 00
484	" 30...	Pat. Lamb.....	" ".....	37 00
485	" 30...	R. B. Warder.....	Salary for January.....	33 33
486	" 30...	C. W. Murtfeldt.....	Expense to lectures.....	18 00
487	Feb. 1...	W. H. Merritt.....	Work on farm, January.....	18 75
488	" 4...	Elisha Eldred.....	Lumber for shop.....	35 54
489	" 4...	E. P. Miller.....	Insurance on garden house.....	15 00
490	" 4...	J. M. Gregory.....	Purchase of seed.....	14 25
491	" 5...	G. S. Upstone.....	Board of farm hands.....	14 06
492	" 5...	H. K. Vickroy.....	Salary for January.....	60 00
493	" 5...	G. S. Upstone.....	" ".....	60 00
494	" 5...	J. Wilson.....	Wages.....	20 00
495	" 5...	P. Dunbar.....	" ".....	18 45
496	" 9...	J. M. Gregory.....	Salary for February.....	333 33
497	" 9...	Champaign Gas Company.....	Gas bill for University.....	12 24
498	" 9...	Elisha Eldred.....	Lumber for green-house.....	245 93
499	" 12...	Palmer, Fuller & Co.....	Sash for green-house.....	5 04
500	" 12...	J. F. Luhme & Co.....	Chemicals.....	26 35
501	" 12...	G. S. Upstone.....	Payments for shelling corn.....	28 44
502	" 17...	Emmwood, Stafford & Co.....	Draining tools.....	11 00
503	" 17...	F. M. & A. Avey.....	Blacksmithing.....	3 06
504	" 20...	E. P. Miller.....	1 barrel salt.....	3 25
505	" 20...	E. Snyder.....	Students pay-roll.....	351 54
506	" 20...	W. F. Bliss.....	Salary for February.....	166 66
507	" 25...	W. M. Baker.....	" ".....	166 66
508	" 25...	A. P. S. Stuart.....	" ".....	166 66
509	" 25...	S. W. Robinson.....	" ".....	166 66

No.	Date.	To whom.	For what.	Amount.
510	Feb. 25...	T. J. Burrill .....	Salary for February .....	\$125 00
511	" 25...	S. W. Snattack .....	" " .....	125 00
512	" 25...	E. Snyder .....	" " .....	100 00
513	" 25...	Jas. Ballangee .....	" " .....	83 33
514	" 25...	Henry Douglas .....	" " .....	83 33
515	" 25...	J. S. Searfoss .....	" " .....	83 33
516	" 25...	Thos. Franks .....	" " .....	75 00
517	" 25...	Pat. Lamb .....	" " .....	37 00
518	" 25...	R. B. Warder .....	" " .....	33 33
519	" 25...	Union Coal Company .....	3 cars of coal .....	57 00
520	" 25...	H. K. Vickroy .....	Salary for February .....	83 33
521	" 26...	Jared Teeple .....	Funeral expenses, L. C. Warner .....	11 80
522	" 26...	D. M. Ford .....	Machinery .....	31 58
523	March 1...	Champaign Gas Company .....	Gas bill for University, February .....	11 20
524	" 4...	Jones & Laughlin .....	Shafting, etc. ....	19 70
525	" 4...	W. McGregor .....	Boiler, smoke pipe and pump .....	360 00
526	" 4...	Hall, Kimbark & Co. ....	Machinery and tools .....	75 95
527	" 4...	W. A. James & Co. ....	Belting and lathe .....	271 17
528	" 4...	S. W. Robinson .....	Purchase of machinery, etc. ....	136 55
Total .....				\$48,036 59

## APPENDIX C.

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

The first work of importance done on the farms, after the meeting of the Board, in March of last year, was the building and repairing of fences, the building of bridges and the making of farm roads. All the fences on the stock farm, between five and six miles in length, were overhauled, the east line set back two rods, to give room for a road newly opened from Urbana southward, the south line set over on to Mr. Percival's land, with his neighborly aid and permission, to make room to plant a hedge on that side, and the work of removing and re-arranging the interior fences, begun by Mr. Periam, carried still further. A much needed road was made from the barn-house to the tenant-house east of it, and two small bridges thrown across the intervening small streams. The materials of the interior fences removed were used in building temporary cribs and outside fences, some of which needed much additional material after removal. One rail fence removed and re-set, had stood, as I am informed, seventeen years. The Board of Trustees should understand, if they do not already, that when this farm came into the hands of the University it was very much run down, and that a great deal of labor and a great deal of money must be expended on it before it can be brought even into as good condition as a common, well-ordered farm. The former owner informs us that he determined to sell it only after a careful examination had convinced him that it had just reached that point of exhaustion where no further profits could be expected, without the expenditure of considerable money. It was considered a fair subject for the application of agricultural science. Still it is a beautiful farm, and, with the improvements contemplated by the Committee on Agriculture, will answer the purpose it was designed for admirably.



## CROPS.

The crops on the stock farm were 45 acres of spring wheat, 45 acres of Surprise oats, 85 acres of corn, 8 acres of potatoes, and 120 acres of meadow, chiefly timothy and clover. Much of this meadow is badly run out; some of it has been badly injured by the white grub; in the wetter portions red-top is taking the place of the timothy and clover, and in other portions blue or June grass is coming in. If it were not that we already have too much land under plow, it would be advisable to break up the whole or nearly the whole of this meadow; but for the reasons and in pursuance of the plans laid before the Board, last year, we are laying the farm down to grass as rapidly as possible, and propose to defer breaking up this old meadow until the plow-land shall have been sufficiently reduced in quantity.

Owing to late sowing, in consequence of the wet spring, the spring wheat was a light crop of a very inferior quality. The varieties sown were Mammoth and Fife. The oats yielded some 1200 bushels by measure, weighing 38 pounds to the bushel. The main crop of corn was made up of these varieties: a large yellow corn, with very deep grain, sent us by M. C. Goltra of Jacksonville; a white corn; and a calico or speckled corn, which we found on the farm, and which matured early enough to escape injury by the early cold weather last fall. The large yellow and white corn failed to mature perfectly. Besides these, various kinds of corn and other seeds were planted in small quantities. In addition to those mentioned in the Regent's report, the following nine kinds of wheat were sown by Mr. Periam, on the experimental farm, in the fall of 1868:

Red Genesee, seed from S. M. Haywood; White May, seed from W. F. Bliss; Betera, seed from Ferry & Co.; German Red, Mr. Fanqueroth; White Bearded, seed from Mr. Fanqueroth; Alabama White, seed from Mr. Fanqueroth; Polish, seed from Agricultural Department; Talavern, seed from Agricultural Department; Rough Chaff, seed from Agricultural Department.

All these were much injured by the winter. The Red Genesee, the White May, and the Alabama White gave the best results, and we have them sowed again, in our experimental grounds, with Tappahannock and White Winter Towzelle. Of these the White Winter Towzelle, a variety received from the Patent Office, has suffered most from freezing out; the White May least.

The cultivation of the farms, during the past year, has been carried on under many disadvantages, and, consequently, at considerable cost. The heavy and long-continued rains in the spring, with the condition of the farm, made the mere work of cultivation and subduing of weeds a very laborious and expensive one. We had to choose between a shabby culture on one side, and an expensive one on the other. Had the farm belonged to a private individual we might have taken the former method, perhaps justifiably, considering the season; as it was we chose the latter, and no one will wonder at the money spent, considering the disadvantages under which we worked, the peculiarity of the season, the state of the farm in the spring, and its vastly improved condition in the fall. In addition to the crops mentioned above there were raised, on the experimental farm, 440 bushels of oats and some 500 bushels of corn.

## IMPLEMENTS.

The plows used on the farms were Collins' cast-steel plow; the Princeton plow; Moline plow; a plow made at Urbana, by Tiernan & Call.

We used a roller manufactured by Furst & Bradley, Chicago.

We cut our hay with the Bucyrus and the Cycloid mowers—the latter a new machine, from Johnston, Huntley & Co., which did its work remarkably well.

Our wheat was sowed by hand, except some three acres put in with the Statesman drill, which was used also to sow a part of the oats side by side with a broad-cast seed sower and cultivator, made by M. L. Gotham & Co., without any appreciable difference in the crop.

The wheat and oats were harvested with Johnston's Self-raking Reaper, which performed well.

Our corn was planted mostly with the Vandiver corn planter (old pattern), and cultivated with the Hoosier, Frasier, Furst & Bradley and Gopher Two-horse Cultivators, and the common double-shovel plow.

The potatoes were worked first with the Gopher Cultivator, then with the Hoosier double-shovel, and finally with the single shovel plow—after which they were cultivated by hand. The corn was worked four times with the cultivators—a part of it harrowed and worked by hand.

There were raised, on the stock and experimental farms, in 1869, in round numbers—

Oats, (bushels, by measure,) .....	1650
Spring wheat, (bushels) .....	216
Corn, " .....	3200
Potatoes, " .....	1500
Hay, (tons) .....	175

There were five and one-half miles of hedge set, and six or seven miles of fence either re-set, repaired or built anew, four bridges built, great and small, a well dug, some repairs made upon the farm house, and between 300 and 400 loads of manure hauled on the land—either from the town or made on the the farm.

In addition to the duties of an instructor, the Professor of Agriculture has had charge of the execution of the plans of the Committee on Horticulture, during the past year, and the superintendence of the farms. As either one of these is enough to fully occupy the time and thoughts of one man, he would respectfully request that he be relieved from the charge of the Horticultural Department and from the active superintendence of the farms.

Respectfully submitted,

W. F. BLISS,  
*Prof. of Agriculture.*

## APPENDIX D.

*To the Regent of the Illinois Industrial University :*

## EXPERIMENTAL ORCHARD.

The trees of this orchard were purchased of A. M. Lawver, South Pass, Ill., the fall of 1868, and heeled in on the University grounds until the following spring. Roots were badly infested with *Pemphigus pyne*, Fitch, causing knotty excrescences on the roots, commonly but incorrectly called in Illinois, the "*Woolly Aphis*." In the spring, before planting in the orchard, we washed the roots clean and immersed them in strong lye, and heeled in again until the ground was prepared to receive them. The ground was deeply plowed and thrown in ridges, upon which the trees were set about the same depth they stood in nursery, in quincunx order, 24 feet each way ; every tenth row being left for a row of evergreens. Avenue running through the center, east and west, 60 feet wide.

Commenced planting May 7th, and finished May 14th. Immediately before planting, the bruised roots were cut smooth with a sharp knife, and well grouted. Holes were made large enough to receive the roots in their natural position, with a small mound in the center for the tree to stand on ; fine dirt well filled in around the roots ; trees leaned to the southwest, as most of our strong winds are from that quarter during the growing season. Most of the trees, at the time of planting, were cut back to 3 to 5 buds of last seasons' growth ; would have been better if they could have been cut back in the fall or *early* spring. Planted 2,193 trees, about 1,000 known varieties. Planted the orchard in corn, commencing June 2d, and finishing June 8th—lateness owing to the wet and backward season. Kept the ground *well* cultivated, which is one of the great secrets of successful tree culture ; well mulched with straw or coarse litter, is equally as good. Another is to keep off *all* injurious insects.

Insects found on the trees during the season, were brown and green Aphides, Catterpillars, *Datana Minestra*, and *Clisiocampa Americana*, *Atticus Cecropia*, *Sphinx Gordius*, Hammond's Leaf-Tiger, (*Acrobasis Hammondi*, Walsh.)

Our means of destruction of the insects were as follows : For the Catterpillars we adopted Dr. Hull's plan, "catch-and-kill," and the same for Hammond's Leaf-Tiger ; and for the Aphides, that infested the body and leaves of trees, strong soft-soapsuds, and also, a solution of  $1\frac{1}{4}$  lbs. of salsoda, dissolved in a gallon of water, and washed all of the trees twice. The Brown Aphis was found on the bodies of trees, mostly places where the bark was bruised, clothed in a woolly covering—Green Aphides on the leaves and young shoots. We have lost about  $\frac{1}{2}$  per cent. of the trees. At the present, October 20th, the roots are in a very fair condition. The knots caused by the *Pemphigus Pyri* have grown smoother ; the trees have made a growth of from 6 inches to 3 feet ; those that were cut back in the spring before planting, are in the best condition.

## NURSERY.

We planted in nursery about 600 apple trees, one to three years old, for the purpose of filling in wet places in the orchard when drained, and replacing any that might die. Planted 3,000 Green Ash, 1 year; 1,000 White Elm, 2 years; 1,000 American Arbor Vitæ, 6 to 12 inches; 1,000 Balsam Fir, 6 to 10 inches; 1,000 Red Pine, 6 to 8 inches; 200 Austrian Pine, 12 to 15 inches; 100 Scotch Pine, 18 to 24 inches; 18 varieties of Pears, 3 years old; 2 varieties of Cherry; a few Tulip and Sycamore Trees, 2 years old; 400 Soft Maples, 2 years old. Forest Evergreens: 10,000 White Pine, 4 to 6 inches, donated by Samuel Edwards of LaMoille, Illinois; 1,000 White Spruce; 1,000 Red Pine; 1,000 Hemlock. A few nuts of the Black and White Walnuts, which have done very well; 1 peck of Catalpa Seeds, donated by W. C. Flagg, Alton, Ill., which, also, has done well.

We have lost about 2 per cent. of fruit trees; not any of the Green Ash and White Elm; about 10 per cent. of Arbor Vitæ; 7 per cent. of Balsam Fir; 80 per cent. of Red Pine; 10 per cent. of Austrian Pine; 2 per cent. of Scotch Pine; Tulip, Sycamore and Maples, none. Of the forest evergreens, about 1 per cent. of the White Spruce; 50 per cent. of the Red Pine; 20 per cent. of the Hemlock; 8 per cent. of the White Pine. The forest evergreens were shaded by lath frames.

We planted a few of the forest evergreens in open sun, by way of experiment; of the White Spruce we lost about the same as of those shaded; Red Pine, 98 per cent.; Hemlock, 65 per cent.; White Pine, 35 per cent. Those planted in open sun were well mulched with saw-dust.

## HEDGES AND SHELTER BELTS.

We planted hedge, Osage Orange, around the Experimental Farm, except the wet places and 40 rods on north side, and 20 rods on east and west of arboretum, nearly 740 rods in all. The lines on the east side were set 8 inches apart in the row; south and north lines set 10 inches in row; west line, 12 inches in row. Commenced planting 1st June, and finished 7th June. We have been successful in getting a good stand, and it has made a satisfactory growth; looking well at present.

Shelter belts are set 12 feet inside of the hedge. About 60 rods on the north side of the orchard we set two rows of Silver Maples; first row 12 feet from hedge, and second, 8 feet therefrom, alternating; trees set 8 feet apart in rows. On the south side of orchard are 80 rods of Maples set in the same way as on the north. On the west side of orchard, 71 Norway Spruce, 3 to 4 feet; 110 Austrian Pine, 4 to 6 feet, being all we could get in season, of sufficient size, and set same distance as the other belts; Spruce on the west side and Pines on the inside; intend filling the whole line next spring. On the northeast side of "160," we set 120 Red Cedars, 4 to 10 feet, same as above. We lost 2 per cent. of the Spruce; 25 per cent. of the Red Cedar. They were planted June 7th, in good condition, and well mulched. Of the Austrian

Pines, lost 7 per cent. on account of fungus on leaves. Maples have all done well.

All the trees and hedges received good cultivation.

H. K. VICKROY.

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On motion of Dr. Burroughs,

To refer the Regent's Report to a Special Committee, for apportionment, was carried, and Dr. Burrough's, Mr. Pickrell, and Dr. Kile were appointed committee.

RESOLUTIONS OF JUDGE BROWN.

Judge Brown of Pulaski introduced the following preamble and resolutions, which were seconded by Mr. Edwards :

WHEREAS, some dissatisfaction seems to exist with the plans and management of this Institution, as indicated by resolutions recently passed by the Northern Horticultural Society and otherwise ; and, whereas, it is important that the University should be in sympathy, as far as possible, with an intelligent public sentiment ; and, whereas, we desire to correct and amend our plans if they shall be found to be erroneous or imperfect ; therefore,

*Resolved*, That those members of this Board who participate in the dissatisfaction alluded to above, if any such there be, be requested and invited to present to the Board, at as early an hour as practicable, during the present session, a definite and specific statement of the errors and imperfections complained of, and such amendments or alterations as they may have to propose, to the end that a full, fair and candid examination of them may be made.

Carried.

Mr. Johnson moved the appointment of a committee of three, to nominate standing committees for the coming year. The motion was carried, and Messrs. Johnson, Pearson and A. M. Brown appointed Committee on Nominations.

On motion of Mr. Blackburn,

The motion of Dr. Burroughs, to apportion the Regent's Report, was re-considered ; and Dr. Burroughs moved the following amended form of his original resolution :

*Resolved*, That the Report of the Regent be referred to a special committee of three members, who shall report to the Board a proper distribution of the several subjects discussed therein, as they shall deem to need special consideration, among the appropriate standing committees.

Carried, as amended.

The minutes of the Executive Committee, subsequent to those printed in the Second Annual Report of the Board, were read by abstract, and approved.

## ORDER TO PRINT THE REGENT'S REPORT.

On motion of Judge Brown,

It was ordered that the Corresponding Secretary cause to be printed, in pamphlet form, at as early a day as practicable, 5000 copies of the Regent's Report, for general circulation.

Adjourned, to meet in the library at 7½ o'clock, P. M.

## EVENING SESSION.

The Board met in the evening, in the Library, pursuant to adjournment, and was called to order by Mr. Blackburn.

Judge Lawrence was called to the Chair, and suggested that Mr. Edwards be requested to present his views on the subject of Industrial Education. This Mr. Edwards proceeded, by general consent, to do, yielding the floor once, by request, to allow the motion of Judge Brown to be read, inviting the discussion, and finally presented the following scheme of studies, arranged in ten schools or departments, and moved its adoption :

1. A School of Agriculture.
2.     "     Horticulture.
3.     "     Mechanics.
4.     "     Chemistry.
5.     "     Geology and Mining.
6.     "     Zoology and Veterinary Science.
7.     "     Botany.
8.     "     Engineering and Military Science.
9.     "     Laws and Economics.
10.    "     Languages.

## 1. SCHOOL OF AGRICULTURE.

*First Year.*—Operations and methods.

*Second Year.*—Mixed agriculture; grains and grasses; feeding cattle.

*Third Year.*—Theory of agriculture; manures; drainage.

## 2. SCHOOL OF HORTICULTURE.

*First Year.*—Principles; culture; practice of propagation; the garden.

*Second Year.*—Orchard and vineyard; small fruits; forestry.

*Third Year.*—Landscape gardening; ornamental planting; hedges; arboretum.

## 3. SCHOOL OF MECHANICS.

*First Year.*—Principles and forces; natural philosophy of agricultural implements.

*Second Year.*—Machinery; physics; materials; buildings and bridges.

*Third Year.*—Powers employed; mechanism of animals; wind; water; steam.

## 4. SCHOOL OF CHEMISTRY.

*First Year.*—Principles; inorganic chemistry; mineralogy; analysis.

*Second Year.*—Analysis; organic chemistry; chemistry of agriculture.

*Third Year.*—In mines, ores, etc.; chemistry in the arts; blow-pipe and spectroscopy; poisons.

## 5. SCHOOL OF GEOLOGY AND MINING.

*First Year.*—Principles; outlines; palæontology.

*Second Year.*—Of soils and natural manures; of building materials; of road-making.

*Third Year.*—In mines; of waters, wells, etc.; meteorology.

## 6. SCHOOL OF ZOOLOGY AND VETERINARY.

*First Year.*—Comparative anatomy; comparative physiology; hygiene; veterinary.

*Second Year.*—Stock breeding; natural history; birds; fishes; veterinary.

*Third Year.*—Natural history; entomology; laws of life.

## 7. SCHOOL OF BOTANY.

*First Year.*—Vegetable physiology; principles of propagation.

*Second Year.*—Systematic botany, (or classification); geology of plants.

*Third Year.*—Botany applied in agriculture; botany applied in horticulture; botany applied in the arts.

## 8. SCHOOL OF ENGINEERING.

*First Year.*—Laying out farms; surveying and drafting; mechanical drawing; manual of arms.

*Second Year.*—Architecture; roads; bridges; drafting; free hand drawing; drill.

*Third Year.*—Of mines and buildings; of draining; drawing; tactics.

## 9. SCHOOL OF LAWS AND ECONOMICS.

*First Year.*—Constitution of United States and of the State of Illinois; personal rights and duties; book-keeping.

*Second Year.*—Real estate and transfers; roads and water courses; fences and boundaries; book-keeping.

*Third Year.*—Of trade, commerce and navigation; of transportation; of political economy.

## 10. SCHOOL OF LANGUAGES.

*First Year.*—French; English literature.

*Second Year.*—French; German; general literature.

*Third Year.*—French; German; ancient literature.

Mr. Pickrell moved that the Board do now go into Committee of the Whole, to consider the course of study offered by Mr. Edwards; which motion finally prevailed, and the Board went into Committee of the Whole, Mr. Johnson in the chair.

The committee rose, announced that they were ready to report progress, and asked leave to sit again.

A motion to receive the report of the committee was lost.

A motion to allow the committee to sit again was lost.

A motion to refer the scheme of study, offered by Mr. Edwards, to a special committee was lost.

After some discussion, the previous question being ordered, the main question was put on the motion to adopt the course of study, proposed by Mr. Edwards.

The ayes and noes being called for, resulted in ayes 4, noes 18, and the motion was lost.

Those voting in the affirmative were Messrs. Dunlap, Edwards, Galusha and Van Osdel.

Those voting in the negative were Messrs. Bateman, Blackburn, Brayman, E. L. Brown, A. M. Brown, Burroughs, Cunningham,

Goltra, Griggs, Kile, Johnson, Lawrence, Pearson, Pickard, Pickrell, Pullen, Slade, Wright, and the Regent.

Mr. Burroughs then introduced a motion that the Committee on Faculty and Course of Study be instructed to consider, in the light of the discussion of the evening, what modifications, if any, should be made in the course of study at the University.

Carried.

Adjourned to the next day, at 9 o'clock, A. M.

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## SECOND DAY.

WEDNESDAY, *March 9*, 1870.

The Board of Trustees met in the Library, at 9 o'clock, A. M., the Regent in the Chair.

The session was opened by reading the Scriptures and prayer, by Judge Lawrence.

On calling the roll, twenty members answered to their names, and the Regent announced that a quorum was present.

### COMMITTEE ON REGENT'S REPORT.

Mr. Burroughs brought in the following report :

The committee to which was assigned the duty of proposing a distribution of the Regent's Report among the standing committees, beg leave to submit the following report :

We recommend that from pages

8 to 12, inclusive,		be referred to Committee on Finance ;
13 to 16,	"	" Agriculture ;
17 to 24,	"	" Horticulture ;
25 to 29,	"	" Mechanical Department ;
29½	"	" Military Department.

J. C. BURROUGHS,

WM. KILE,

J. H. PICKRELL,

*Committee.*

On motion of Mr. Blackburn,

That the report of the Committee on the Regent's Report be received and adopted and the committee discharged, was carried.

The special committee to whom was referred the nomination of the standing committees here brought in their report, which, on motion of Judge Lawrence, was laid on the table, to be taken up at a future time.



## VISITING COMMITTEE APPOINTED.

On motion of Dr. Burroughs,

*Resolved*, That a committee of five members, with J. S. Pickard as Chairman, be appointed to visit the several departments and classes now in session, and to report to the Board, at this session, in respect to the condition in which the same are found.

Messrs. Pickard, Bateman, Slade, Galusha and Burroughs were appointed said committee.

## CLOSE OF YEAR FIXED.

Mr. Pickrell offered the following :

*Resolved*, That the fiscal year shall end on the last day of February, and that the committee year shall end on Wednesday after the second Tuesday in March : *Provided*, that members of all committees shall hold their office until their successors are appointed.

A division of the question was called for, and both parts adopted.

## RECESS.

On motion of Judge Brown the Board agreed to take a recess until 11 o'clock A. M.

## AFTER RECESS.

The Board resumed business at 11 o'clock, Dr. Bateman in the Chair.

On motion of the Regent, Prof. Powell was invited to make a statement in regard to the collections made by him for the University in his exploring expedition. Prof. Powell not being present, the Committee on Buildings and Grounds read their report.

## REPORT OF THE COMMITTEE ON BUILDINGS AND GROUNDS.

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

The Committee on Buildings and Grounds would respectfully report, that in pursuance of the authority of this Board, at the last annual meeting, the old roof on the main building was removed early last summer and its place supplied by one of the best tin, put on under the direction of this committee. Previous to letting the contract for this work bids were invited, and the work let at a price under the appropriation of the Board. The work was well and promptly done.

Instead of the cast-iron water-table authorized by the Board, it was found that one of tin and wood could be supplied at a much less cost and of greater service, which, by the advice of the Executive Committee, was substituted.

The basement walls, on the outside, and the corridors, have been painted as authorized; but the work on the outside of the main building (the cornice and the cupalo) has not been undertaken, on account of the necessity for retrenchment in our expenditures, apparent as the year progressed.

The sidewalk on the west side of the grounds, leading to the shop and experimental farm, has been completed.

A building, to be used as a green-house, is now in course of construction upon the University grounds, which, owing to the lack of funds at the disposal of the committee, and the apparent propriety, has been placed under the direction of the Committee on Horticulture.

The building is now in a good condition of repair, and the grounds under good cultivation.

All of which is respectfully submitted.

M. C. GOLTRA, *Chairman*.

The report of the Committee on Buildings and Grounds was accepted.

Prof. Powell was here introduced, and stated that the plants collected have already been properly put up and delivered to the University, by Dr. Vasey, and that the labor of sorting, classifying and identifying the specimens in several other departments was now in progress, but that some time must elapse before this work could be completed, as some of the specimens must be sent to distant places, and some even to Europe, for identification; that a collection of eighty or ninety mammals, embracing a grizzly bear and many of the most important animals of the Rocky Mountains, would be included. The specimens promised from his own private collections were ready to be delivered whenever called for. He added that another expedition was in contemplation, to explore some additional territory, and expressed a wish that the University should again participate in the expenses and the results.

On motion of Mr. Blackburn, it was

*Resolved*, That we have heard with satisfaction the statement of Prof. Powell, in regard to the collections designed for the University, and refer the same to the Committee on Library and Cabinets.

#### REPORT FROM COMMITTEE ON FACULTY AND COURSE OF STUDY.

The Regent presented the following report from the Committee on Faculty and Course of Study:

The Committee on Faculty and Course of Study, to whom was referred Mr. Edwards' propositions, respectfully report as follows:

In the wide difference of views between men who are all equally earnest to promote true industrial education, the only appeal left us is to the law. Some

men would exclude some studies as useless, if not injurious; others, with equal earnestness and honesty, would welcome and provide for all as desirable, if not absolutely necessary. Argument cannot settle the question. Experiences vary. There is nothing left but to go to the law. By this all must abide, whether its decision be disagreeable or otherwise.

The law seems clear. It requires that, without excluding other classical and scientific studies, the branches of learning relating to agriculture and the mechanic arts shall receive the chief attention, shall be placed foremost in the courses, and taught with the greatest fullness. The question hinges on the expression "related to agriculture and the mechanic arts." What branches are thus related? Your committee are of the opinion that there are two ways in which a branch of learning may be related to agriculture and the arts: first, it may be *directly related*, as involved in agriculture and the mechanic arts, and necessary to explain their laws and processes; or, second, it may be *indirectly related*, as necessary to fit the farmer or mechanic to pursue his calling and to investigate or invent his art. Thus Chemistry is *directly related*, because involved in the knowledge of the composition of the soil. Book-keeping and arithmetic, on the other hand, are only *indirectly related*, because they simply fit the farmer to pursue his business with success. Neither class of these studies, it should be remarked, are necessary to the practice of the mere art of agriculture. A man can plow without knowing anything of either Chemistry or Book-keeping, and as well without the one as the other. Now, in the first class we find the following studies, Chemistry, Mineralogy, Geology and Physical Geography, as explaining soils and their position; Chemistry, Meteorology, and Astronomy, as explaining atmospheric phenomena and conditions of growth; Chemistry, Botany, and Vegetable Physiology, as explaining the phenomena of plant life and growth; Chemistry and Zoology in its several departments, as Entomology, Ornithology, etc.; Comparative Anatomy, Physiology, and Biology, as related to Animal Husbandry; Mensuration and Surveying, as involved in the measurement and subdivision of land; Leveling, Hydraulics, and Hydrostatics, as explaining the drainage of lands; Mechanical Philosophy, as involved in the machinery for working land; Property Law, to explain the titles of land; and Political Economy, as involved in the marketing of farm produce.

Besides these there is another branch of studies bearing a secondary relation to agriculture—since they are necessary to the sciences just mentioned. Thus, Mathematics are necessary to mensuration, surveying and mechanical philosophy; the English language is necessary to all; the Latin and Greek languages are desirable, to some extent, for all the natural sciences; History is important for the study of property law, etc.

The second great class of related branches of learning—those necessary not to explain agriculture and the arts but to fit the agriculturist and mechanician to more thoroughly investigate, improve, and practice their arts—those needed in the language of the law "for the the liberal and practical education of the industrial classes in the several pursuits and professions in life"—embrace the following studies: Book-keeping and Commercial Law, to make them safe and intelligent business men; English language and litera-

ture to fit them to thoroughly and easily to understand and use their native tongue as it is used in the broad range of scientific readings and study necessary for them to pursue; the German and French languages, to give them access to those works of the great students of agriculture and mechanical science in Germany and France; Inductive Logic and some Mental Philosophy, to fit the students of the inductive sciences and arts to properly comprehend and use the facts they will need to examine.

On examination we find that all the above branches of learning are taught, and taught in their relations to agriculture and the mechanical arts.

We find, also, on examination, that the course proposed by Mr. Edwards differs only in form and not in substance from the course as now arranged, introducing no essential feature and omitting only the ancient languages.

We find, on examination, that the ancient languages hold only a very subordinate place in the teaching and affections of the University—no Greek being now taught and there being only twenty-seven students in Latin.

The committee do not feel that any good point will be gained by the omission of the ancient languages, since, while some would be gratified by such omission, others, and perhaps an equal number, would inevitably be offended, and we should be acting, in the eyes of many, in violation of the laws both of Congress and of the State. We should not even save a dollar of expense, as not one single teacher could be dispensed with by such omission.

It appears clearly, on full inquiry, that the study of the languages is not attracting the attention of either teachers or pupils from other studies; and that the evident and decisive drift of the Institution is increasingly in the direction of the scientific and practical studies related to the industries.

The committee would mention, as a most significant fact, in this connection, that while out of 77 students who entered here the first term, 29 or 30 chose Latin; now, out of 150 students or more belonging to the Institution, only 27 are pursuing the Latin language.

J. M. GREGORY,  
C. R. GRIGGS,  
N. BATEMAN,  
A. BLACKBURN.

On motion of Mr. Dunlap,

To strike "Greek" from the report of the Committee on Faculty and Course of Study, was lost; and, on motion, the report of the majority was adopted.

Mr. Edwards, of the Committee on Faculty and Course of Study, presented the following minority report, which was ordered to be entered on the record:

#### MR. EDWARDS' MINORITY REPORT.

Whilst the report of the majority of the Committee on Faculty and Course of Study meets my general approval, I must respectfully and firmly dissent from admitting the necessity of our teaching the Latin and Greek languages,

in order to answer the requirements of the act of Congress, our charter from the State, or the wishes of the industrial classes—whose servants we are.

Respectfully submitted.

SAMUEL EDWARDS.

The Regent reported 3480 volumes in the library.

Referred to Committee on Library and Cabinets, with instructions to report.

#### REPORT OF THE COMMITTEE ON MILITARY DEPARTMENT.

Gen. Brayman, from the Committee on Military Department, made the following report :

The Committee on Military Department, respectfully report :

That at the present time 131 students are receiving efficient instruction in military science and tactics. The good effect of daily drill upon the health, discipline and development are apparent, and give promise of great usefulness in this department, when proper facilities are at command for a full compliance with the requirements of the law.

The number of arms and accoutrements received from the State (100) being insufficient, it is proposed to make an application for an additional supply of 50 muskets, together with 25 swords and sabres for exercise.

The chapel, now used for a drill hall, is inconvenient, unsafe and inadequate. The committee respectfully recommend the erection of a drill hall, one story in height, not less than 135 feet in length, and 72 in width—upon a plan approved by the Committee on Buildings and Grounds—and that an appropriation, not exceeding \$2000, be made for that purpose. A drill hall is indispensable to regular and systematic instruction, during inclement weather, and no part of the college building is fit for such uses.

The committee recommend an appropriation of \$100 for cleaning and repairing arms, the purchase of fencing gloves, whalebone bayonets, and other articles incidental to instruction.

The committee adhere to the rule, heretofore established, requiring all students to take part in military exercises and studies—unless excused for sufficient cause. The country has a right to demand, as it has done, that those receiving the benefits of an education here, shall be prepared to render patriotic and skillful service in war, and no young man should be deprived of the honorable advantages which such instruction secures, should his service be required.

While it is the purpose of this department to conform in discipline and instruction to the national code of arms, as taught at West Point and other national schools, the want of adequate means must, for years to come, confine our instructions to such branches as are most easily taught, and are in most need in those emergencies which arise, calling our citizen-soldiery hastily into the field. What we want is, to prepare our young men to organize and instruct recruits, and to perform the usual duties of line officers, not to be com-

pelled as heretofore, to learn duties while performing them, at such fearful risks to human life and national honor.

The committee, therefore, recommend the following, as approximating the list and course of studies most useful, until the means at command shall justify a wider range.

That a class be taught in military science and art, so far as is necessary to duty for officers of the line, comprising—

- Infantry Tactics, complete,
- Bayonet Exercise,
- Sword Play,
- Target Practice,
- Military Administration,
- Army Regulations and Military Law.
- Military Fortifications.

OPTIONAL:

- Artillery Tactics,
- Drill at the Cannon,
- Cavalry Tactics, (theoretical,)
- Grand Tactics and Strategy.

From the class can be drawn officers for companies, and drill sergeants.

Practical instruction to be given in—

- Manual of Arms,
- Squad and Company Drill,
- Bayonet Exercise,
- Skirmish Drill,
- Battalion Drill,
- Guard and Picket Duty.

The whole military course to be so arranged as to make it possible for any course to be taken by the member of any other course, and to occupy no more than one hour's instruction or practice each day.

The Committee congratulate the Board on the success that, under many discouragements, has attended the operation of the military department. The proficiency in study, promptness, manly bearing, grace of movement and general good conduct of the students, already give evidence of the beneficial results to be expected from this branch of study. The results thus far attained are due, in a gratifying degree, to the zeal, efficiency and learning of Capt. Snyder, assistant professor of book-keeping, and instructor in military tactics.

M. BRAYMAN,  
M. L. DUNLAP,  
J. W. SCROGGS,  
WM. KILE.

The report of the Committee on the Military Department was received and adopted, with the exception of that portion of it which called for the appropriation of money; which was referred to the Committee on Finance.

## REPORT OF THE COMMITTEE ON MECHANICAL DEPARTMENT.

The Committee on the Mechanical Department, made the following report:

Your Committee, to whom was referred that part of the Regent's Report relating to the Mechanical Department, beg leave to report, that the appointment of Prof. S. W. Robinson, by the Executive Committee, as Professor of Mechanical Sciences, at a salary of \$2,000 per annum, be confirmed.

The course in this department extends over three years, embracing Mathematics as applied to the Mechanic Arts, Architectural and Mechanical Drawing, Mechanical Forces and Strength of Materials, Metallurgy and Mining Engineering, with practical instruction in the Model Workshop.

We also recommend the employment of Mr. Alexander Thompson as Master Mechanic, in the Practical Department, and that his salary be fixed at \$1,000 per annum.

Your Committee further recommend, that the action of the Executive Committee in preparing a shop to contain steam engines, lathes and other apparatus, to illustrate the mechanical forces practically, be approved; and they further recommend that the sum of \$1,000 be appropriated to cover the expense of the practical branch of this department.

All of which is respectfully submitted.

JOHN M. VANOSDEL,  
M. L. DUNLAP,  
EDWIN LEE BROWN.

Judge Cunningham moved that the Executive Committee be instructed to secure uniforms, at least possible rates.

Carried.

Dr. Scroggs moved that Capt. E. Snyder be appointed Professor and Instructor in Military Science, and that his salary be \$1,500.

Referred to Committee on Faculty and Course of Study.

Judge Brown read the report of the Standing Committee on Horticulture, and asked leave to withdraw the report in order to make some additions.

Leave was granted.

Judge Lawrence requested a call of the house, to see whether a sufficient number was present to amend the By-Laws.

The absentees were called, and it being found that the required two-thirds were present, it was ordered that further proceedings under the call be suspended, and

Judge Lawrence offered the following resolution:

*Resolved*, That article 21 of the By-Laws be amended, by striking out the words "two-thirds," and inserting the words, "a majority."

A call for the yeas and nays on the resolution, resulted in, yeas 24, nays 0.

The Committee on Horticulture presented their report :

#### REPORT.

The Standing Committee on Horticulture respectfully report as follows :

Of the 3,000 Apple trees obtained from A. M. Lawver, supposed to embrace about 1,500 varieties, 2,180 were planted permanently in orchard, and the remainder set in nursery to be planted the present season.

Of forest tree stock, intended for planting in arboretum, shelter-belts and forest plantations, we have growing in the nursery since last spring, the trees in the following list:

3,000 Green Ash.....	2 to 3 feet in height.
1,000 White Elm.....	15 " 24 inches "
680 Soft Maples.....	3 " 6 feet "
1,000 Am. Arbor Vitæ, transplanted.....	6 " 10 inches "
100 Scotch Pines.....	15 " 24 " "
100 Austrian Pines.....	6 " 8 " "
1,000 Norway Spruce, transplanted.....	6 " 10 " "
1,000 Am. Arbor Vitæ.....	From forest.
1,000 Hemlock.....	" "
1,000 Red Pines.....	" "
1,000 White Spruce.....	" "
10,000 " Pines.....	" "
12 Tulip.....	3 to 4 feet high.
200 Sugar Maples.....	3 " 6 inches high.
25 Sycamore.....	3 " 4 feet "
25 Comewell Willow.....	3 " 4 " "
25 Forbyana ".....	3 " 4 " "
108 Pear trees, 18 varieties.....	5 " 7 " "
28 Plum " 6 ".....	5 " 7 " "
12 Cherry " 2 ".....	4 " 6 " "
8 Crab ".....	4 " 6 " "
126 Apple " 21 varieties.....	1 year.
660 " ".....	2 to 5 years.
10,000 Catalpa, grown from seed.	

Of the shelter-belts, there have been planted about 50 rods on the west side of the orchard, in Austrian Pine and Norway Spruce; about 40 rods on north side, of Soft Maple; on the south side, about 80 rods of Soft Maple; on the north side, commencing at the northeast corner, about 60 rods of Red Cedar. If a sufficient number of trees can be obtained, of suitable size and kinds, the remainder of the shelter-belts will be completed the present season.

We have ordered, and will receive the present spring, about 143,000 trees, of various kinds, intended for arboretum, forest and shelter-belts, the cost of which, besides freight, will be about \$953 50. These trees have been obtained



at very reasonable prices. Of course, they are small, and must go into nursery for at least one season. The following is a list of these trees, with prices and memorandum of sizes :

4 barrels Walnuts, @ \$3 .....	\$12 00
2 " Butternuts.....	6 00
20 M. White Ash, 6 to 12 inches high, @ \$2 50.....	50 00
10 " " Sugar Maples, 6 to 12 inches high, @ \$2 50.....	25 00
6 " " Elm, " " " @ \$3.....	18 00
8 " Silver Maples, @ \$6.....	48 00
14 " Norway Spruce, 3 years, transplanted, @ \$11.....	154 00
2 " Red Pine, 6 to 12 inches, " .....	50 00
2 " Black Spruce, 6 to 12 inches, @ \$25.....	50 00
2 " Butternut Seedlings, @ \$6.....	12 00
8 " White Willow Cuttings, @ 50c.....	4 00
6 " Tulip, 6 to 12 inches, transplanted, @ \$12.....	72 00
8 " White Pine, 1 and 2 years, transplanted from forest....	88 00
2 " Apple Stocks, 1 year, @ \$5.....	10 00
8 " Black Sugar Maples, 6 to 12 inches, @ \$2.....	16 00
4 " Bass-Wood, 6 to 8 inches.....	24 00
3 " Hemlock, 1 and 2 years.....	45 00
6 " American Chestnut, 4 to 8 inches, @ \$10.....	60 00
5 " Apple Stock, 2 years, @ \$8.....	40 00
250 Arbor Vitæ, @ \$15 per hundred.....	37 50
12 M. Arbor Vite for forest, 6 to 12 inches, @ \$11.....	132 00

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\$953 50

It has been suggested, that the place heretofore selected for the forest tree plantation, is not so suitable as can be found on the Stock Farm, both on account of the nature of the ground, and of the fact that the ground heretofore chosen for this purpose may, and probably will be needed for experimental farming, etc. Your Committee, therefore, recommend that all the trees intended for the forest, remain in nursery for another season. They think that no time will be lost by taking this course.

The trees planted last year have been well cultivated, and have made satisfactory growth.

The whole farm has been surrounded by hedges of Osage Orange, except small intervals of wet land, and has made a good growth.

Five thousand feet of under-drain has been put under the land intended for the arboretum.

A gardener's house and conveniences have been erected.

Materials for a green-house have been collected and prepared, and the building would have been erected last fall, but for the early setting in of cold weather.

The whole sum so far expended for the purchase of trees, erection of buildings, labor, etc., on nursery, orchards, etc., amounts to \$5,359 74. The Executive Committee appropriated \$1,000 for the erection of the green-house, of which about one-half has been paid out, and we have left out of the State

appropriation, available for expenditure the present season, in even numbers, \$14,000.

Your Committee recommend the appropriation of \$600 for a small barn near the gardener's house. They recommend, also, the erection of a dwelling house on the Experimental Farm, at a cost of not more than \$2,000. A barn is also needed on this farm, near the house last mentioned, of considerable size. We have no plans or specifications of this building, and would recommend that this matter be entrusted to the Executive Committee, with directions not to exceed a cost of \$4,000.

Your Committee recommend the purchase of two good horses, and a market wagon and cart for the garden, and two horses and a two-horse wagon for the orchard grounds, besides harness, etc. These will cost about \$800, for which an appropriation is recommended. For salaries of Head Gardener and Orchardist, cultivation of orchards, nursery, gardens, etc., and feed for horses, an appropriation should be made of \$3,000.

Your Committee deem it essential that the Experimental Farm, so called, should be divided between the Horticultural and Agricultural Departments, and they propose, with the consent of the Chairman of the Agricultural Committee, that the latter Department have 80 acres on the east, the remainder to be used by the Horticultural Department for orchards, gardens, nurseries, and arboretum.

Your Committee also report, that they have received from M. L. Dunlap, Esq., trees and shrubs, on account Champaign county donation, \$225, leaving balance still on said account of \$353.

Your Committee recommend a further appropriation of \$750 for the completion of the green-house, and the sum of \$150 for the purchase of lawn mower, roller and other garden tools, and \$100 for plants and seeds, for propagation.

Your Committee further recommend that the Professor of Agriculture be relieved of the care of the Horticultural Department, and that this be placed under the charge of Prof. Burrill.

A. M. BROWN, *Chairman.*

The report of the Committee on Horticulture was received and adopted, except so much of it as called for appropriations, which was referred to the Committee on Finance.

The Regent asked and obtained leave to insert in his report the details in regard to the library, drainage, and geological excursion.

The Special Committee appointed to visit the several departments, and classes in session, made the following

#### REPORT :

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

GENTLEMEN: Your Committee have attended to the duty assigned to them this morning, and beg leave to report as follows :

## I. AGRICULTURAL COURSE.

Prof. Bliss has charge of two classes in Agriculture, numbering 5 in the Advanced Class, upon Soils, their origin and properties, and 15 in Elementary Study. Prof. Bliss has charge, also, of the farm.

Prof. Stewart has two classes in Chemistry, of 16 members each, with 20 students in the Laboratory.

Prof. Burrill has two classes in Botany, of 20 and 10 respectively.

## II. NATURAL AND MECHANICAL PHILOSOPHY.

Prof. Robinson, assisted by Prof. Burrill and Mr. Bellangee, has charge of one class in Natural Philosophy, of 11 members; three classes in Mechanical Drawing, numbering 25; one class in Descriptive Geometry, numbering 7. Prof. Robinson has also charge of the shops.

## III. MILITARY TACTICS, AND COMMERCIAL SCIENCE.

Prof. Snyder has a class of 18 in Military Tactics; 39 in Book-keeping, and 4 in Banking.

## IV. NATURAL HISTORY.

Instruction given by Prof. Tenney, by lectures.

## V. PURE MATHEMATICS, AND CIVIL ENGINEERING.

Prof. Robinson has two classes in Algebra, of 25 and 23, respectively.

Prof. Shattuck has a class of 4 in Civil Engineering; two classes in Geometry. Students in Agricultural Department taking the first five books of Davies' Legendre, number 26; 16 form the class now studying Spherical Geometry; a class of 10 is engaged upon Analytical Geometry, and one of 2 upon Calculus.

## VI. ENGLISH LANGUAGE AND LITERATURE.

Two classes under Prof. Baker, numbering 54 and 9, respectively.

## VII. FRENCH LANGUAGE AND LITERATURE.

The Regent has a class of 9, and Prof. Bliss a class of 5 members.

## VIII. GERMAN LANGUAGE AND LITERATURE.

Two classes under Prof. Snyder, 47 in both.

## IX. LATIN LANGUAGE AND LITERATURE.

Prof. Baker has one class of 5 in Horace, and Mr. Douglass has a class in Sallust of 4; a class in Cæsar of 9; a class in Latin Reader of 10; 28 in all.

## X. GREEK LANGUAGE.

No class.

The young men seem to be very earnest in their work, manly in their deportment, self-reliant, and some of them enthusiasts in their departments.

The Professors are evidently working under some embarrassments, through the multiplicity of duties, which the limited funds of the Institution have

heaped upon them, but their work seems to us thorough and hearty. We would suggest that some provision be made for more specific instruction in Horticulture, and that a little more attention be given to classification of students, through preparatory examinations.

The educational agency of school rooms and surroundings, seems to be hardly as much considered as your committee would be glad to see, and we would suggest that the janitor be paid a little higher salary, if by so doing the house could be kept in a little better order.

Signed by the Committee.

J. S. PICKARD,  
N. BATEMAN,  
J. C. BURROUGHS,  
O. B. GALUSHA,  
J. P. SLADE.

Report adopted and committee discharged.

Mr. Pickrell offered the following resolutions :

WHEREAS, The next census will give Illinois additional Congressional representation, and

WHEREAS, We believe that the present Board is even larger now than need be, incurring unnecessary expense to the University; therefore,

*Resolved*, That the Board suggest to the General Assembly the propriety of so amending the law in regard to the number of Trustees, that the Board shall hereafter consist of one member from each Congressional District, and the present members *ex officio*; a majority of whom shall constitute a quorum.

*Resolved*, That the Corresponding Secretary transmit a copy of these resolutions to the Governor.

The resolutions were adopted.

On motion,

The Board adjourned to meet at 1:30, P. M.

WEDNESDAY, MARCH 9.—AFTERNOON.

The Board was called to order at 2 o'clock, P. M.; Dr. Kile in the Chair.

Mr. Pickrell presented the report of the Committee on Agriculture.

#### REPORT.

*To the Trustees of the Illinois Industrial University :*

Your Committee on Agriculture beg leave to report, that they have expended, (as already reported by the Regent,) for the year 1869, as follows :

## EXPENSE.

Farm labor .....	\$2,803 54
Improvements and repairs .....	1,678 15
Implements (wagons, etc.) .....	380 00
Stock .....	567 38
General expense .....	551 55
Total .....	<u>\$5,980 52</u>

## RECEIPTS—FROM APPROPRIATIONS.

Appropriations by Board .....	\$3,000 00
“ “ Executive Committee .....	1,202 52
“ “ State .....	1,778 00
Total .....	<u>\$5,980 52</u>

## RECEIPTS—FROM PRODUCTS.

Rent of Griggs farm (1869) .....	\$1,650 00
Produce sold, of 1868 .....	1,760 31
“ “ 1869 .....	1,181 00
	<u>\$4,591 31</u>
Estimated Products of 1869, unsold .....	2,199 00
	<u>\$6,790 31</u>

We beg the privilege of stating why we went beyond our appropriations. (Reference is made to the Executive Committee's Report, for re-distributing the appropriations, etc.) It seemed indispensable for the next year's operations, that much plowing for next year's crops should be performed last fall, that the utmost precaution should be taken to prevent the seeding of weeds, etc. We respectfully call attention to the farms themselves to relieve us of reaching beyond the limits set for our expenditures.

We herewith present plans, specifications and estimates for barn on Stock Farm :

## ESTIMATES.

Excavations .....	\$ 250 00
65 cords rubble stone work, @ \$24 .....	1,560 00
30,000 brick work, @ \$15 .....	450 00
Cement floor manure pit .....	100 00
Carpenters and lumber .....	4,200 00
Painting and glass .....	375 00
Hardware and tin work .....	280 00
	<u>\$7,215 00</u>
Cost to inclose and lay floors .....	475 00
Stalls and partitions, stairs and stall floors .....	<u>7,690 00</u>
Completed .....	7,690 00

We would state, that no matter what should be the final disposition of the Stock or Busey farm, we have endeavored to present such a plan as might not be considered extravagant.

We ask from the general fund an appropriation for work account, \$1,000, together with the products of the farm.

We would most respectfully report, that we have had that portion of the Regent's report that refers to the future management of the farm under consideration; especially that portion which suggests the idea of the possibility of renting to a tenant, to be farmed under our instruction. We would say that we think it impracticable, especially while we must be continually working upon improvements. We would also submit the plan of Prof. Bliss, for the management of the next crops.

We would also recommend, that the management of the farm remain in the hands of the Agricultural Committee, the same as last year, and they may report from time to time, as they may think best, to the Executive Committee for instructions.

J. H. PICKRELL,  
J. S. JOHNSON,  
WM. KILE,  
A. BLACKBURN.

On motion, the report was adopted, with the exception of the part which called for an appropriation of money, which was referred to the Finance Committee.

Dr. Scroggs moved that the Regent and Faculty be requested to spend a reasonable portion of the time of the coming summer vacation in visiting the various sections of the State, in the interests of the University; and that the Regent be instructed to draw warrants to defray the expense of such canvass.

Carried.

On motion of Mr. Johnson,  
It was reconsidered.

On motion of Mr. Blackburn,  
It was received, and referred to the Finance Committee.  
Mr. Pearson offered the following:

*Resolved*, That Article 12, of the By-Laws for the government of the Board of Trustees, be so amended, as to relieve the Regent from service on the following Standing Committees:

No. 9. Buildings and Grounds.

No. 11. By-Laws and Rules.

The yeas and nays were called.—Yeas, 17; nays, 0.

Carried.

On motion of Judge Lawrence,

The report of the Committee on Nominations was taken from the table, and recommitted.

On motion of Mr. Edwards,

The salary of Patrick Lamb, the Janitor, was made \$40 per month.

Mr. Galusha offered the following :

*Resolved*, That the Committee on Faculty and Course of Study be, and they are hereby instructed, to provide for the teaching of Anatomy, Physiology and Hygiene.

On motion,

It was referred to the Committee on Faculty and Course of Study.

The Committee on Nominations presented the following report :

#### REPORT OF COMMITTEE ON NOMINATIONS.

The Special Committee, to whom was referred the nomination of the Standing Committees, reported as follows :

We, your Committee on Nominations, would respectfully recommend the following names for the several committees, for the ensuing year :

1. *Auditing Committee*.—Messrs. Lawrence, Dunlap, Cunningham, Edwards, and Galusha.

2. *Finance Committee*.—Messrs. Cobb, Burchard, Brown (of Chicago), Wright, and Burroughs.

3. *Committee on Faculty and Course of Study*.—The Regent, Bateman, Hayes, Pickard, Edwards, and Slade.

4. *Committee on Agricultural Department*.—Messrs. Pickrell, Johnson, Allen, Kile, and Blackburn.

5. *Committee on Horticultural Department*.—Messrs. A. M. Brown, Pullen, Galusha, Pearson, and Dunlap.

6. *Committee on Military Department*.—Messrs. Brayman, Scroggs, McMurray, Brown (of Chicago), and Kile.

7. *Committee on Mechanical Department*.—Messrs. Van Osdel, Allen, Pearson, Hayes, and Pickrell.

8. *Committee on Buildings and Grounds*.—Messrs. Goltra, VanOsdel, Griggs, Pullen, and Johnson.

9. *Committee on Library and Cabinets*.—Messrs. Bateman, Slade, Burchard, Scroggs, and Mahan.

10. *Committee on By-Laws and Rules for the University*.—Messrs. Burroughs, Mahan, and Brayman.

*Executive Committee*.—The Regent, and Messrs. Cobb, A. M. Brown, Pickrell, Cunningham, Griggs, Goltra, Lawrence, and Wright.

(Signed) J. S. JOHNSON,  
JNO. M. PEARSON.

The report of the Committee on Nominations was received and adopted.

The Regent here took the Chair, and the following resolutions, offered by Mr. Blackburn, were unanimously adopted :

*Resolved*, That the Board records with sorrow, the death, since its last meeting, of General Edward Kitchell, an efficient friend and laborer in the cause of Industrial education, and a recently appointed member of this Board; and that we present our sincere sympathy and condolence to his bereaved family in this, their hour of deep affliction.

*Resolved*, That the Recording Secretary be directed to send a copy of these resolutions to the widow and family of the deceased.

Mr. Brown, of Chicago, offered the following resolutions :

1st. That the salary of Prof. Snyder be made \$2,000, instead of \$1,200, as at present.

2d. That the Committee on Library be instructed to procure all the Chicago daily papers.

3d. That the Executive Committee be instructed to endeavor to procure the passage of a law, by the next Legislature, prohibiting the sale of intoxicating liquors within a radius of three miles of the Illinois Industrial University.

The 1st resolution was referred to the Committee on Faculty and Courses of Study; and the 2d, to the Finance Committee. The 3d resolution was adopted.

Mr. Johnson offered the following resolution :

*Resolved*, That as Trustees of the Illinois Industrial University, we believe that the girls of the State of Illinois are equally entitled to an Industrial education with the boys; therefore, be it ordered, that they be admitted to all the classes of the University, and subject to all regulations, except military drill.

Mr. Brown, of Chicago, moved to amend, by striking out the words "except military drill."

Lost.

Mr. Wright offered the following substitute to Mr. Johnson's resolution :

*Resolved*, That, hereafter, female students shall be admitted to the lecture and recitation room of the University, on the same terms and conditions as male students.

Mr. Burroughs offered the following, as a substitute for Mr. Wright's substitute :

WHEREAS, The law of Congress declares the end of this University to be the liberal education of the industrial classes, with no limitations to one sex more than another; therefore,



*Resolved*, That the Committee on Faculty and Courses of Study, be instructed to consider the practicability of extending the advantages of the University to young women, and to report to this Board at its next meeting.

Mr. Brown, of Chicago, was excused by vote of the Board, at his own request, but before leaving the hall expressed his desire to record his vote in the affirmative of Mr. Burroughs' substitute.

The yeas and nays being called on Mr. Burroughs' substitute, it resulted in—yeas, 10; nays, 10; and it was therefore lost.

Mr. Edwards moved to amend Mr. Wright's substitute by adding, after the words "male students," the clause, "as soon as means are at our command to furnish proper buildings for the purpose."

Mr. Wright's substitute, as amended by Mr. Edwards, was adopted.

The Treasurer's Report was read, and, with the Book-keeper's books, was referred to the Finance Committee.

#### TREASURER'S REPORT.

ILLINOIS INDUSTRIAL UNIVERSITY,

*In account with JOHN W. BUNN, Treasurer:*

To amount paid checks outstanding at date of last report.....	\$345 66
To amount paid on account of appropriations for 1868.....	432 70
To amount paid on account of salaries.....	18,327 98
To amount paid Treasurer.....	500 00
To amount paid Corresponding Secretary.....	200 00
To amount paid taxes on lands.....	988 48
To amount paid expenses of Trustees.....	1,011 55
To amount paid for fuel and light.....	1,180 56
To amount paid for stationery.....	179 33
To amount paid for incidental expenses.....	1,627 79
To amount paid for University grounds.....	1,039 26
To amount paid for building account.....	2,783 05
To amount paid for Mechanical Department.....	1,358 97
To amount paid for Agricultural Department.....	4,212 52
To amount paid for two lots.....	425 00
To amount paid for Military Department.....	56 00
To amount paid for Geological excursion.....	200 00
To amount paid for Meteorological instruments.....	81 50
To amount paid on account of State appropriations:	
For Agricultural Department.....	\$1,778 02
For Horticultural Department.....	5,359 74
For Chemical department.....	1,185 56
For books and apparatus.....	6,247 26
Balance.....	14,570 58
	21,201 40
	\$70,746 30

1869.			
March 9	By balance from last report	\$1,324 53	
April 1	By interest on \$50,000 Sangamon county bonds	2,250 00	
April 1	By tuition, matriculation fees, etc.	612 00	
April 1	By amount received of R. S. Walker for hay	22 61	
April 1	By amount received of J. Periam for farm produce	102 84	
May 8	By amount received of Ed. Snyder for tuition, etc.	72 50	
May 8	By amount received of Ed. Snyder for coal sold students	39 48	
May 17	By interest on \$100,000 Champaign county bonds	10,000 00	
June 15	By interest on \$25,000 Morgan county bonds	2,500 00	
July 6	By interest on \$100,000 Illinois 6 per cents.	3,270 00	
July 6	By interest on \$25,000 Chicago 7 per cents.	875 00	
July 6	By amount received on J. Heller's note for rent	50 00	
July 8	By amount received of E. Snyder for tuition, etc.	34 00	
July 8	By amount received of E. Snyder for coal sold students	15 05	
July 8	By amount received for flowers sold	25 30	
July 8	By amount received for 2,293 bushels of corn	1,134 47	
September 6	By a nount received of J. O. Cunningham for rents in 1867	196 45	
October 1	By interest on \$50,000 Sangamon county bonds	2,250 00	
October 19	By amount received of E. Snyder for tuition, etc.	946 50	
1870.			
January 3	By interest on \$25,000 Chicago water bonds	875 00	
January 3	By interest on \$79,000 Illinois 6 per cent. bonds	2,370 00	
January 13	By amount received of E. Snyder for fuel and lights	189 49	
January 13	By amount received of E. Snyder for tuition, etc.	164 50	
January 13	By amount received from sales from garden	25 17	
January 13	By amount received from sales of wheat	156 51	
January 13	By amount received from sales of hay, corn, oats, etc.	351 65	
February 26	By amount received from tuition, etc.	841 00	
February 26	By amount received from sales of corn	447 23	
February 26	By amount received from sales of farm produce	193 23	
February 26	By amount received from sales of coal	115 13	
February 26	By amount received from sales of broken glass	5 00	
February 26	From State appropriation for Agricultural Department	31,452 70	
February 26	From State appropriation for Horticultural Department	12,500 00	
February 26	From State appropriation for Chemical Department	10,000 00	
February 26	From State appropriation for books and apparatus	5,000 00	
February 26		10,000 00	
March 5	By J. M. Gregory for chairs	26 81	
March 5	By amount received for hogs and corn	532 53	
March 5	By amount received from sales from garden	23 69	
March 5	By amount received for coal	47 65	
March 5	By amount received from Illinois Central R. R. for freight	1,162 66	1,793 60
			\$70,746 30

JOHN W. BURN, Treasurer.

CHAMPAIGN, March 8, 1870.

## STATEMENT of Receipts and Expenditures from March 14th, 1869, to March 7th, 1870.

Accounts.	Appropriations made March 14, 1869.	Amounts actually expended	Resulting in unexpended balance.	Resulting in deficit.
Building account.....	\$2,575 00	\$2,783 05		\$208 05
Mechanical Department.....	500 00	1,358 97		858 97
Military Department.....	50 00	50 00		
Agricultural Department.....	3,000 00	4,212 52		1,212 52
Purchase of two lots.....	425 00	425 00		
Salary of Treasurer.....	500 00	500 00		
Salary of Cor. Sec.....	200 00	200 00		
Taxes on land.....	1,200 00	988 48	\$211 52	
Board meeting.....	1,000 00	1,011 55		11 55
Salaries.....	21,544 00	18,327 95	3,216 05	
Students' labor.....	1,500 00		1,500 00	
Fuel and Lights.....	500 00	1,180 56		680 00
Geological excursion.....	300 00	200 00	100 00	
Meteorological instruments.....	100 00	81 50	18 50	
Stationery.....	150 00	179 33		29 33
University grounds.....	1,000 00	1,039 26		39 26
Incidental expense.....	1,500 00	1,657 79		157 79
Appropriation of 1868 unpaid.....		432 70		432 70
Total.....	\$36,044 00	\$34,628 66	5,046 07	\$3,630 73
<i>State Appropriation.</i>				
Agricultural Department.....	25,000 00	1,778 02	23,221 98	
Horticultural Department.....	20,000 00	5,359 74	14,640 26	
Chemical Department.....	5,000 00	1,185 56	3,814 44	
Books and apparatus.....	10,000 00	6,247 26	3,753 74	
Total.....	\$60,000 00	\$14,750 53	\$45,430 47	
Total expenditures.....		\$49,199 24		

Of the expenditures, warrants 1 to 528, amounting to .....\$48,036 64, were drawn,  
 And from the Illinois C. R. R. donation..... 1,162 60, were used.

\$49,199 24

## RECEIPTS.

Items.	Income as estimated.	Income received	Receipts below the estimate.	Receipts above estimate.
Balance.....	\$900 00	\$1,324 59		\$624 59
Interest on bonds.....	25,230 00	24,390 00	\$900 00	
Farm produce on hand.....	1,500 00	1,760 31		260 31
Fees from students.....	1,800 00	2,670 50		870 50
Proceeds from farm, 1869.....	3,000 00	1,181 76	1,818 24	
Rent of lands.....	1,500 00	246 45	1,253 55	
Coal sales.....		404 81		404 81
Garden.....		73 47		73 47
Building and carpentry.....		31 81		31 81
Total.....	\$33,990 00	\$32,083 70		

On motion of Judge Brown,

It was ordered that the Treasurer be authorized to have the bonds belonging to this Institution, except the Illinois bonds, stamped, so as to show that they are the property of the Illinois Industrial University.

On motion of Mr. Pickrell,

It was ordered that the sale of scrip made by the Committee to Messrs. Lewis & Co., be confirmed, and that they proceed to collect the money due from them for the amount sold.

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

#### REPORT.

The Auditing Committee beg leave to report, that they have examined the following bills and find them correct, and recommend that warrants on the Treasurer be drawn for their payment :

M. C. Goltra, for traveling expenses in looking for lands to locate with scrip .....	\$86 70
Samuel Edwards, bill for trees .....	27 00

We also report, that we have examined the Treasurer's report and vouchers and find the same correct, and have canceled warrants numbers 1 to 529, inclusive. Also, old numbers 113 and 403, and have returned them to the Treasurer for safe-keeping.

Respectfully submitted.

L. W. LAWRENCE,  
M. L. DUNLAP,  
O. B. GALUSHA,  
J. O. CUNNINGHAM,  
J. M. PEARSON.

Judge Brown moved that the Treasurer be authorized to draw from the State Treasury the amounts appropriated to the Agricultural and Horticultural Departments.

Carried.

On motion of Judge Brown,

It was voted that the Treasurer be authorized to pay the taxes on lands belonging to the University, in Minnesota and Nebraska, and that the Regent draw warrants for the amounts.

The Committee on Buildings and Grounds submitted the following :

#### REPORT.

*To the Board of Trustees :*

GENTLEMEN—The Committee on Buildings and Grounds would respectfully report, that the grounds around the University Building are in an imperfect and unfinished condition. The great need is better walks. We believe that by a small expenditure for gravel and coal-tar, the present walks might be made perfect for all seasons of the year.

The Committee also find, that the early construction of a drill-hall is essential to the success of the Military Department.

In view of these necessities, your Committee respectfully ask appropriations as follows:

For walks on grounds.....	\$300 00
For drill-hall.....	2,000 00

Respectfully submitted.

M. C. GOLTRA, *Chairman*.

The report was received, and referred to the Committee on Finance.

The Corresponding Secretary made the following

#### REPORT :

The Second Annual Report of the Board of Trustees, already printed, exhibits about all that has been done in my department during the past year.

While it is a fact, as I have heretofore said, that the office and possible duties of the Corresponding Secretary can, and ought to be, made of first and primary importance to the University, it has not been a fact practically recognized; and whilst other departments have received some attention, and been furnished with the means to develop them, this has been left to my discretion, with the understanding that I must, above all things, be inexpensive. This, if nothing else, has been accomplished. I collected material for our first report by circulars, asking for specific details of a variety of agricultural, mechanical and scientific facts, at a trifling cost.

For our Second Annual Report, I depended on the material furnished by the course of Agricultural Lectures and discussions, held at the University in January, 1869; which material was also provided at a slight expense, additional to the cost of holding the lectures and discussions.

My salary, amounting to \$100 the first year, and \$200 the second, has not done much toward depleting the treasury.

In short, I look to the economical character of my office with much more pride than I do to its efficiency.

Among the cheap methods of collecting and diffusing valuable agricultural information, my attention has been specially given to agricultural lectures and discussions. Under the discretion given by the Executive Committee, the Faculty and myself arranged for three courses of lectures and discussions to be held at Champaign in the central, Centralia in the south, and Rockford in the north part of the State. A four-days' course was held at Champaign at the beginning of the winter term, from January 10th to 14th; at Centralia, January 24th to 27th; and at Rockford, February 21st to 24th.

The general result of these courses has been, I think, highly encouraging, although the attendance on some of them was not as large as could be wished. They excited a great deal of local interest among the more intelligent and progressive farmers, who expressed themselves highly pleased and profited by them. They gave a good many facts that were highly interesting not

only to the practical farmer, but to our professors of sciences bearing on the agricultural art. As calling attention to the Industrial University, and to the great want and lack among our farmers of the education that can here be obtained, I consider the courses as very valuable.

The total expenses of these three courses, including circulars issued, expenses of lecturers and a small bill for expressage, freight and telegraphing, was \$348 75, the details of which are as follows:

1000 Circulars.....	\$12 50	W. C. Flagg.....	12 00
		Express and telegraph.....	2 00
		Dr. Gregory.....	1 50
<i>Champaign Meeting.</i>			
Dr. H. Shlmer.....	35 90		
Dr. Manley Miles.....	60 00		
C. W. Murtfeldt.....	15 00		
Dr. H. J. Detmers.....	35 00		
W. C. Flagg.....	14 50		
J. M. VanOsdel.....	14 50		
D. Gere.....	14 55		
<i>Centralia Meeting.</i>			
Prof. A. P. S. Stuart.....	1 00		
C. V. Riley.....	9 00		
Ed. Snyder.....	2 00		
S. W. Shattuck.....	4 00		
C. W. Murtfeldt.....	3 00		
B. S. Hull.....	9 00		
		<i>Rockford Meeting.</i>	
		Dr. Gregory.....	\$10 15
		James Shaw.....	8 00
		A. P. S. Stuart.....	11 90
		J. G. Knapp.....	12 00
		Samuel Edwards.....	4 70
		L. W. Lawrence.....	1 10
		Elmer Baldwin.....	10 20
		S. W. Shattuck.....	10 90
		O. B. Galusha.....	16 00
		W. C. Flagg.....	18 35
		Total.....	\$348 75

Many gentlemen, especially several of the Professors and Trustees, gave unremunerated time and trouble to this work, and in lack of more substantial reward deserve the hearty thanks of this Board, and of all friends of Industrial Education.

Looking at the future, in the light of our present experience, I would urge that these annual meetings be continued, extended and improved. I regard them as, above all other present proposed methods, best adapted to popularize the work of this Institution, and bring it home to the hearts and minds of the people. And this is our first and most necessary work. As soon as we make farmers understand and appreciate their educational necessities, the rest will speedily follow. The demand will increase the supply.

I would also suggest, though this is treading on other ground, perhaps, that the special courses of lectures, like those of Dr. Warder, put in such time and sequence that a person could spend a winter month in attendance upon them, and find his time filled up with the acquirement of the more practical scientific principles and facts, would be an important sequence and continuance of the agricultural lectures and discussions, and ought to receive the early and favorable attention of the Trustees.

I have transmitted, by mail, to the Agricultural Colleges or Secretaries of forty-five States and Territories, and to the Secretary of the Interior, one or more copies of our Second Annual Report.

There should be, I think, in view of some opinions I have heard expressed by members of the Board, some instructions given to the Recording or Corresponding Secretary in regard to making up the reports of the Board and the Executive Committee. Shall the minutes of the Executive Committee be printed? Shall the proceedings of the Board be condensed any farther than they have been?

All of which is respectfully submitted.

W. C. FLAGG, *Cor. Sec'y.*

The report was received, approved, and referred to the Executive Committee.

Mr. Griggs read the following communication from Prof. Stuart :

*To the Special Committee of the Board of Trustees, on the Chemical Department:*

GENTLEMEN: Inasmuch as a large part of the State appropriation of \$5,000 for the Chemical Department is unexpended, and since much apparatus is yet needed to put the laboratory in an efficient condition, the undersigned respectfully asks permission of the Board to expend the balance of the appropriation for such apparatus as is best suited to render the department as efficient as possible.

State Appropriation.....	\$5,000 00
Amount expended.....	1,185 50

Unexpended balance.....	\$3,814 44
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A. P. S. STUART.

*I. I. University, March 9, 1870.*

On motion of Judge Cunningham,

It was ordered that the balance of the fund on hand, to the credit of the Chemical Department, be expended for apparatus for such department, under the direction of the Professor of Chemistry.

On motion,

The following resolution was adopted :

*Resolved,* That the thanks of this Board are due and are hereby tendered to the Hon. C. R. Griggs, President of the Indianapolis, Bloomington and Western Railroad, for his liberality in furnishing passes to the members.

The Board now took a short recess.

—  
5 O'CLOCK, P. M.

The Board was called to order by the Regent.

The Regent asked and obtained leave to communicate with his report a report of Prof. Burrill on Geological Excursion.

A letter from Mr. Pettit to Judge Baldwin, in regard to Entomological collection of Dr. Walsh, was read.

On motion of Judge Cunningham,

The question of purchasing Dr. Walsh's cabinet was referred to the Executive Committee.

The Board then adjourned to meet at 7, P. M.

## EVENING SESSION.

Meeting called to order by the Regent, who called Judge Lawrence to the Chair, and then presented the Report of Committee on Faculty and Course of Study, which,

On motion of Mr. Blackburn,

Was accepted, and its recommendations adopted.

## REPORT.

The Committee on Faculty and Course of Study recommend, that Prof. S. W. Shattuck be employed as Professor of Civil Engineering and Instructor in Mathematics, at a salary of \$1,800 per annum; Prof. T. J. Burrill, as Professor of Botany and Horticulture, at a salary of \$1,800 per annum; Prof. Edward Snyder, be Professor of Book-keeping and Teacher of Military Tactics, at a salary of \$1,500, and that \$300 per annum be allowed him as Book-keeper.

That the Executive Committee be instructed to employ the necessary assistant teachers, at such salaries as they may find proper.

J. M. GREGORY, *Chairman*.

Judge Brown, in the absence of the Chairman, Mr. Cobb, presented the

## REPORT OF THE FINANCE COMMITTEE.

The Committee on Finance have directed me to make the following report:

Your Committee recommend the re-engagement of Prof. Snyder, as Book-keeper of the University, and that his salary be made sufficient to compensate him for his labor. They would propose the sum of \$300.

The 50,000 acres of land scrip which was unsold at our last meeting, and which the Chairman of this Committee and the Treasurer were authorized to sell at discretion, were sold to G. F. Lewis at 89 cents per acre. He has paid for 8,000 acres, but wishes to abandon the contract. Your committee recommend that he be held strictly to his contract.

Mr. Goltra and the Treasurer were authorized to locate 25,000 acres, but have not yet been able to do so. It is thought best that this scrip be retained until other lands come into market.

Your committee have information that our lands in Nebraska and Minnesota are appreciating in value with satisfactory rapidity, and it is thought best that no attempt will be made to dispose of them until, at least, the patents are received.

Your Committee estimate the receipts for the current year, exclusive of the legislative appropriations, as follows:

Interest on Champaign county bonds.....	\$10,000
“ “ Morgan “ “ .....	2,500
“ “ Sangamon “ “ .....	4,500
“ “ Chicago water “ .....	1,750



Interest on Illinois 6 per ct. bonds.....	4,740
"    " Pike county                    ".....	2,000
Farm produce on hand.....	1,500
Produce from farm.....	3,000
Matriculation and other fees.....	2,500
Rent of Griggs farm.....	1,532
Back rent due, about.....	2,000

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\$36,022

Out of the General Fund, the following appropriations are recommended :

Salaries .....	\$20,000
Board expenses.....	1,000
Salaries of Corresponding Secretary and Treasurer, each \$500.....	1,000
Taxes on lands.....	1,500
Fuel and lights .....	1,000
Stationery, advertising and printing .....	1,000
Painting and repairing building .....	1,000
Incidental expenses.....	1,000
Balance, deficit of last year.....	1,728
Military Drill Hall.....	2,000
Mechanical Department, for labor, etc.....	1,000
For labor in Agricultural Department .....	2,000
Three Fire Extinguishers.....	225
Insurance.....	400

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Total.....\$34,853

Outstanding accounts.....500

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\$35,353

They recommend the following appropriations out of the funds derived from the legislative appropriations :

FOR HORTICULTURAL DEPARTMENT.

For plants, seeds, etc., for garden.....	\$200
For lawn mower, roller and other tools.....	150
For the 2-horse wagon, cart, etc., for gardener.....	400
For building barn near gardener's house.....	600
For labor in garden and on grounds.....	2,000
For green house .....	1,500

FOR ORCHARD DIVISION.

For trees and seeds.....	\$1,200
For labor.....	1,500

It is recommended that the appropriations for buildings, etc., on the Experimental and stock farms be referred to the Executive Committee, as the estimates are not in, but a sum of \$2,000 should be appropriated for the purchase of materials that may be needed before that Committee can have a meeting.

The Horticultural Committee asked an appropriation out of the fund belonging to that Department, for a dwelling-house, and barn near it ; but your Committee, upon fuller information, are of the opinion that these buildings are wanted for the use of the Experimental farm, and should be placed upon the land devoted to that object. The cost therefor should come out of the fund appropriated for that Department.

Your Committee cannot, in the present condition of our finances, recommend the canvass for students proposed in the resolution of Dr. Scroggs.

A. M. BROWN, *Chairman.*

On motion of Mr. Pearson,

The report was received, and each item voted upon separately.

All the items were adopted except the appropriation of \$2,000 from the general fund, for labor in the Agricultural Department.

It was thought by many of the members of the Board, that this labor could be paid for legally out of the State appropriation for the Agricultural Department. On this ground, a motion of Mr. Pearson to strike out the appropriation of \$2,000 from the general fund, for labor on the farm, prevailed.

On motion of Judge Brown,

There was made, from the State appropriation for the Agricultural Department, an appropriation of \$2,000, for labor on the farm, and the whole subject was referred to the Executive Committee, with instructions to make use of the State appropriation to pay for labor on the farms as far as they thought legal.

The Auditing Committee submitted the following additional report :

The Auditing Committee beg leave to report further, that they have examined the bill of B. C. Beach & Co., for coal, amounting to \$34 40, and find it to be correct, and recommend that a warrant be drawn for its payment.

L. W. LAWRENCE, *Chairman.*

On motion,

The report was approved, and the warrant ordered to be drawn.

Gen. Brayman offered the following resolutions, which were adopted :

*Resolved*, That this Board earnestly desire the passage of a bill, now pending in Congress, for furnishing aid, in the appropriations of money and the appointment of instructors to colleges and universities in the several States, for the instruction in military science and tactics.

*Resolved*, That the Regent furnish our Senators and Representatives copies of the foregoing resolution, with such documents and explanations as may aid them in attaining said object.

#### MOTION FOR REMOVAL OF STATE GEOLOGICAL COLLECTION.

Mr. Galusha offered the following :

WHEREAS, In the opinion of this Board, the Illinois Industrial University should be made the depository of the State geological collection, now at Springfield ; therefore,

*Resolved*, That Messrs. Brayman, Griggs, and A. M. Brown, be and are hereby constituted a committee, to petition the next General Assembly for the removal of that collection to this University, and to secure the services of the State Geologist as lecturer on geology.

Laid on the table.

The report of the Committee on Library and Cabinets, was read and adopted :

REPORT.

*To the Board of Trustees Illinois Industrial University :*

The Committee on Library and Cabinets submit herewith the catalogue of the books in the library, and recommend that the Faculty be authorized to expend the remainder of the State appropriation for library and cabinets, in the purchase of such books as, in their judgment, are most needed for their several departments.

J. M. GREGORY, *Chairman.*

Mr. Edwards moved that the Regent be paid \$250, for expenses incurred in purchasing books, while in Europe, out of funds not otherwise appropriated.

Carried.

On nomination of Judge Brown, the Hon. W. C. Flagg, was unanimously elected Corresponding Secretary, and Prof. W. F. Bliss, Recording Secretary of the Board.

In accordance with a resolution adopted by the Executive Committee at their January meeting, 1870, the Regent was invited to make a report on the Agricultural schools in Europe.

On motion,

The Board adjourned.