JUNE 8, 1875.

The Board met at 4:30 P. M.

Present—Governor Beveridge, Messrs. Cobb, Blackburn, Macon, Slade, Sabin, Gillham and Gardner.

Absent—Messrs. Brown, Byrd and Pickrell.

President Cobb called the meeting to order and the minutes of the last meeting were read and approved.

Messrs. Cobb and Gardner having been re-appointed members of the Board, the oath of office was administered by J. H. Nees, Esq.

The Board took a recess to hear the lecture of Prof. Turner in the University Chapel.

The Board re-assembled at 5:30 P. M.

The President, Mr. Cobb, having been re-elected President of the Board, during a temporary absence in the South, now thanks the Board for the confidence placed in him.

The Treasurer's bond for $300,000 was received and approved, and the Recording Secretary was instructed to take charge of these and all similar documents.

The Board took a recess till 9 o'clock, P. M.

EVENING SESSION.

The Board met at the appointed time.

Dr. Mills was called before the Board and made a verbal report on the proposed course in Agriculture.

Full certificates of graduation were granted to the following students, on recommendation of the Faculty: Laura Anderson, Champaign, Ill.; Amanda Campbell, Philo, Ill.; D. E. Barnard, Manteno, Ill.; Flora L. Kellogg, Woodsville, Ohio; Alice Lee, Champaign, Ill.; Fanny Purce, Champaign, Ill.; Maggie E. Stewart, Champaign, Ill.; Mary C. Steele, Urbana, Ill.; Arthur E. Barnes, Champaign, Ill.; Dillon S. Brown, Genoa, Ill.; Ralph L. Brown, Marengo, Ill.; Vanlite W. Coddington, Menomonee, Wis.; Frank P. Dobson, Minonk, Ill.; Henry Dunlap, Champaign, Ill.; Burleigh A. Dunlap, Savoy, Ill.; James Faulkner, Clement, Ill.; Winfield S. Everhart, Neoga, Ill.; Ernest Eaton, Philo, Ill.; George N. Gredley, Half Day, Ill.; George F. Kenowell, Clement, Ill.; John E. Leflar, Batavia, Ill.; Charles C. Lyford,

Roscoe, Ill.; John C. McCanley, Defiance, Ohio; John Mueller, Wurtemberg, Germany; Fernando A. Parsons, Waterloo, Iowa; Emory Patch, Janesville, Wis.; Watson Pickrell, Mechanicsburg, Ill.; Wm. C. Pollock, Mt. Vernon, Ill.; Elna A. Robinson, Champaign, Ill.; Melville A. Scovell, Rantoul, Ill.; Clarence O. Scudder, Creston, Ill.; L. Fenn Warner, Rockford, Ill.

Partial certificates were granted to the following named students, on recommendation of the Faculty: Kate Hullinger, Rock Falls, Ill.; Kate Karcher, Champaign, Ill.; George R. Shawhan, Sidney, Ill.; Hector H. Tyndale, Springfield, Ill.; C. W. Lambert, Rantoul, Ill.

The Business Agent read his report.

REPORT OF BUSINESS AGENT.

HON. EMORY COBB, *President of the Board of Trustees of the Illinois Industrial University:*

SIR:—I have the honor to make the following report:

Paper A is a statement of the State appropriations at date, including those made by the last Legislature.

Paper B shows the condition of the current appropriations, expenditures and collections for the three months ending June 1, 1875.

Paper C is a list of warrants drawn since the March meeting of Trustees.

Paper D is a list of bills offered for auditing.

Paper E gives in a crude form, estimates for the repairs of roof, etc. of New Building.

In the same connection I will draw your attention to repairs required in the building. The main stairway needs attention; windows and doors need overhauling, especially the first named; a little plastering and painting are required; the boilers of the heating apparatus need overhauling, the tubes of one of them being in bad condition. Other parties I suppose will call your attention to the work which should be done upon the grounds. The Old Building will need its usual summer's cleansing and repairs. The outside wood work needs a coat of paint, and the windows, as a rule, better stops. The walk on the west side of the grounds your committee will, I suppose, have re-laid this summer.

As authorized, a new fence has been made on the north side of the arboretum, and the fence outside of the walk placed inside.

The Machine and Carpenter shops are in a satisfactory condition in most respects. The Board is requested to authorize their being run this summer, if it can be done without loss to the University. Such a course seems necessary in order to keep their custom.

It also seems desirable to have the work of the Veterinary buildings, if put up this summer, done by the carpenter shop. The tools authorized to be purchased for the latter shop will be got before September. Improvements in the machines of both shops have been made. It is desirable to complete the steam pump for the machine shop at once. The cost will be $30. All work possible it is best, certainly, to keep till term time. This seems an exception.

The dry chamber for the Carpenter shop is giving satisfaction, and is worked at far less expense than the old dry house.

Mr. Baldwin, whose agent placed a gas governor upon our meter a year ago, has not removed it, though I notified him that the Trustees refused to accept it.

The action of the Trustees is asked in regard to having the old building occupied during the vacation. If not otherwise directed it will be occupied only by two assistants of the University for better protection.

Also, as to what building of the ——, if any, may be occupied by students working for it during vacation.

I recommend that the present Foreman be retained for the shops, so far as their commercial work is concerned.

Respectfully submitted,

S. W. SHATTUCK, *Business Agent.*

"A"—*Statement of State Appropriations, June 5, 1875.*

On account of	Appropriated.	Expended.	Unexpended.
New University building	$15,000 00	$15,000 00	.....
Heating apparatus	18,000 00	17,972 94	$27 06
Fitting and furnishing	7,350 00	7,271 17	78 83
Gas fixtures	1,200 00	1,200 00	.....
Physical Laboratory	3,000 00	2,997 33	2 67
Taxes on lands	6,000 00	5,202 78	797 22
Agricultural experiments	1,500 00	1,442 69	57 31
Taxes for 1875 and 1876	$6,000 00		
Buildings and grounds	2,000 00		
Physical Laboratory	1,000 00		
Printing office	500 00		
Veterinary Department	2,000 00		
	.....	.....	.....

URBANA, June 8, 1875.

S. W. SHATTUCK, *Business Agent.*

"B."—*Statement of Current Appropriations, Expenditures and Collections, June 8, 1875.*

	Appropriations.	Receipts.	Drawn.	Unexpen'd
Board expenses	$250 00		133 50	$116 50
Salaries	14,390 00		7,970 37	6,419 63
Fuel and lights	300 00		195 80	104 20
Stationery and printing	500 00		75 25	424 75
Buildings and grounds	1,000 00		91 82	908 18
Incidental expenses	300 00	$ 8 59	39 82	268 77
Mechanical Department	55 49	547 79	531 34	71 94
Architectural "	466 97	78 57	170 26	375 28
Agricultural "	2,039 19	1,537 12	2,662 74	913 57
Horticultural "	253 63	362 25	248 97	366 91
Chemical "	130 00	206 54	161 57	175 27
Military "	60 00		10 68	49 32
Library and apparatus	400 00		293 61	106 39
Sundries—Civil Engineering Department	170 00		17 90	152 01
Diploma Plate	100 00			
Ladies Gymnasium	50 00		23 20	26 50
Freight on mining apparel	40 00			
Mr. Seal's advertisement	15 00		15 00	
Physical Laboratory	100 00		24 28	
Unpaid bills	514 11		514 11	
Centennial Exposition				
Special—Agricultural Experiments	1,039 11		264 40	
Fees and room rents		1,677 50		1,677 50
Coal Collections		148 40		148 40
Burnett, rent		731 15		731 15
Taxes on wild lands			3,007 00	
		$5,298 21	$16,451 71	

S. W. SHATTUCK, *Business Agent.*

URBANA, June 8th, 1875.

"D."—*Unaudited Bills.*

To whom.	For what.	Amount.
Cleveland Screw Tap Company	Hardware	$5 12
M. E. Lapham	Lumber	125 51
Illini	2,500 catalogues	260 00
Dr. Manly Miles	Fifteen lectures	200 00
H. Swannell	Chemicals	66 19
S. W. Robinson	Apparatus for Physical Laboratory	31 66
E. Satterthwart	One bush rose bulbs	5 00
James M. Ralph	Work on Observatory	27 12
Webster, Davies & Co	500 feet lumber	25 00
H. Peddicord	Pipe	5 00
W. T. Pratt	Repairing roof of Drill Hall	48 00
Joseph McCorkle	Hardware	13 15
J. B. Webb	Petty expenses of department. and work and matariel for Observatory	14 49
Enterprise Coal and Coke Company	Ten cars coal	124 00
W. M. Kennedy	Advertising	4 00
Locke & Saxton	Hardware	13 64
A. Snedaker	Castings	83 82
H. H. Chandler	Advertising	135 00
"Illinois Schoolmaster"	Advertising	15 00
E. N. McAllister	Postage	14 36
S. W. Shattuck	Pay-rolls May, 1875	412 58
Agricultural Department	Farm expense May, 1875	313 02
Mechanical "	Credits	71 23
Architectural "	"	144 22
Agricultural "	"	370 84
Illinois Central Railroad Company	Freights March, April and May, 1875	368 00
S. W. Shattuck	Petty expenses May, 1875	29 12

Correct.

S. W. SHATTUCK,
Business Agent.

"C." *Abstract of Warrants.*

No.	To whom.	For what.	Amount.
362	Wm. Parker	Lumber, old account	$63 86
363	T. G. Lansden	Gas fixtures	3 50
364	J. M. Gregory	Expense to Springfield	19 00
365	E. V. Peterson	Fresco border for cabinet	27 75
366	Cunningham & Webber	Legal services	400 00
367	J. M. Gregory	Salary, March, 1875	333 33
368	S. W. Robinson	" "	166 66
369	T. J. Burrill	" "	166 66
370	S. W. Shattuck	" "	200 00
371	E. Snyder	" "	166 66
372	D. C. Taft	" "	166 66
373	J. B. Webb	" "	166 66
374	J. C. Pickard	" "	166 66
375	N. C. Ricker	" "	100 00
376	J. D. Crawford	" "	100 00
377	H. A. Weber	" "	120 00
378	C. W. Silver	" "	100 00
379	E. L. Lawrence	" "	100 00
380	B. F. Johnson	" "	41 66
381	C. E. Patchen	" "	50 00
382	Lou. C. Allen	" "	120 00
383	F. W. Prentice	" "	100 00
384	A. C. Swartz	" "	60 00
385	J. O. Baker	" "	50 00
386	F. A. Parsons	" "	40 00
387	E. A. Robinson	" "	15 40
388	M. A. Scovell	" "	25 00
389	A. E. Barnes	" "	25 00
390	H. A. Mann	" "	100 00
391	J. Kenis	" "	40 00
392	James C. Bryant	" "	20 00
393	Crane Bro's Manufacturing Co	Boiler, pump and setters	29 02
394	Hallock, Holmes & Co	Rubber tubing	2 78
395	D. E. Barnard	Putting up skeleton W	10 28
396	D. Gardner	Expense to meeting	18 00
397	Lyon & Healy	1 doz. music racks for band	3 93
398	S. D. Kimbark	Steel	6 84
399	Williams, Donnelly & Co	Copy Lakeside Directory	4 00
400	J. A. Schaffer	28 lbs grass seed	6 00
401	Editors "Illini"	Printing	10 00
402	Davies, Turner & Co	Freight charges on chemical apparatus	32 35
403	Fuller & Fuller	Chemicals	33 68
404	Plant Seed Co	Seeds	10 80
405	Ill. Cent. R. R. Co	Freight	3 53
406	A. M. Brown	Expense to meeting	26 55
407	R. B. Mason	" "	5 00
408	J. J. Byrd	" "	18 20
409	A. Blackburn	" "	18 25
410	D. D. Sabin	" "	23 75
411	J. H. Pickrell	" "	11 00
412	H. Swannell	Chemicals	36 27
413	H. P. Sampers	Seeds	96 02
414	T. R. Seal	Advertising	15 00
415	C. Kinnike & Co	Flower-pots and vases	8 60
416	G. Denerlich	Periodicals	9 93
417	Fuller & Fuller	Chemicals	8 83
418	I., B. & W. R. W. Co	Freights	10 18
419	Jno. McGavick	Millet seed	8 10
420	Student Labor Pay-Roll	March, 1875	382 82
421	E. L. Lawrence	Farm expense	2,105 72
422	J. M. Gregory	Salary, April, 1875	333 33
423	S. W. Robinson	" "	166 66
424	T. J. Burrill	" "	166 66
425	S. W. Shattuck	" "	200 00
426	E. Snyder	" "	166 66
427	D. C. Taft	" "	166 66
428	J. B. Webb	" "	166 66
429	J. C. Pickard	" "	166 66
430	H. C. Ricker	" "	100 00
431	H. A. Weber	" "	120 00
432	J. D. Crawford	" "	100 00
433	C. W. Silver	" "	100 00
434	E. L. Lawrence	" "	100 00
435	B. F. Johnson	" "	41 66
436	C. E. Patchen	" "	50 00
437	Lou. C. Allen	" "	120 00

"C."—*Abstract of Warrnnts*—Continued.

No.	To whom.	For what.	Amount.
438	T. W. Prentice	Salary, April 1875	$100 00
439	A. C. Swartz	" " "	60 00
440	J. O. Baker	" " "	50 00
441	F. A. Parsons	" " "	40 00
442	E. A. Robinson	" " "	15 40
443	M. A. Scovell	" " "	25 00
444	A. E. Barnes	" " "	25 00
445	H. A. Mann	" " "	100 00
446	J. Kenis	" " "	50 00
447	Emory Cobb	Expense to meeting	12 75
448	New Eng. Journal of Education	Advertising	30 00
449	M. L. Dunlap & Sons	"	5 00
450	C. U. Gas Co	Bill for March	32 00
451	Editors "Illini,"	1100 Circulars	8 00
452	W. F. Pratt	Repairs on roof	7 00
453	E. J. Benjamin	Chemicals	62 21
454	Crane Bros. Mnfg Co	Cutting gears	3 30
455	Enterprise Coal Co	6 cars coal	74 00
456	T. G. Lansden	Gas fixtures	2 10
457	M. Miles	Lectures to Senior Class	30 00
458	R. S. Wilbur	Hauling 10 cars coal	40 00
459	Elmer Baldwin	Lecture to Senior Class	30 00
460	L. C. Allen	Gymnastic apparatus	16 00
461	I., B. & W. R. R. Co	Freights	2 17
462	E. L, Lawrence	Farm expense, April	255 44
463	A. S. Kissell	Books	3 00
464	Trevitt & Green	Hardware	37 26
465	Fuller & Fuller	Glass	16 88
466	Cleveland Screw Co	Hardware	12 77
467	H. K. Vickroy	Apple and pear seed	10 30
468	Joseph Nelson	Rent of building	30 00
469	Enterprise Coal Co	4 Cars coal	52 00
470	Hollister & Baker	Posts and frames	13 55
471	Geo. E. Morrow	Lectures to Seniors	25 00
472	W. C. Flagg	" "	55 00
473	L. W. Lawrence	" "	20 00
474	Student's labor pay roll	For April 1875	487 23
475	E. N. McAllister	Postage	22 25
476	S. W. Shattuck	Petty expenses, March	35 50
477	J. W. Shermerhorn	Gymnastic apparatus	7 20
478	R. M. Walker	Repairs of band instruments	3 75
479	O. M. Colman	Tree digger	20 00
480	Dodson & Hodge	Hardware	43 68
481	J. M. Gregory	Salary, May 1875	333 33
482	S. W. Robinson	" "	166 66
483	T. J. Burrill	" "	166 66
484	E. Snyder	" "	166 66
485	S. W. Shattuck	" "	200 00
486	D. C. Taft	" "	166 66
487	J. B. Webb	" "	166 66
488	J. C. Pickard	" "	166 66
489	N. C. Ricker	" "	100 00
490	J. D. Crawford	" "	100 00
491	H. A. Weber	" "	120 00
492	C. W. Silver	" "	100 00
493	E. L. Lawrence	" "	100 00
494	B. F. Johnson	" "	41 66
495	C. E. Patchin	" "	50 00
496	Lou C. Allen	" "	120 00
497	F. W. Prentice	" "	100 00
498	A. C. Swartz	" "	60 00
499	I. O. Baker	" "	50 00
500	F. A. Parson	" "	40 00
501	E. A. Robinson	" "	14 70
502	M. A. Scovell	" "	25 00
503	A. E. Barnes	" "	25 00
504	H. A. Mann	" "	50 00
505	J. Kenis	" "	50 00
506	A. H. Roffe	Periodicals, 1875	180 93
507	F. W. Christern	" "	40 10
508	James Green	2 Thermometers	12 00
509	W. F. Bliss	Lecture to Seniors	25 00
510	Geo. Luch	Plants	9 45
511	R. S. Wilbur	Hauling 10 cars coal	40 00
512	C. Kinnike	Flower pots	12 20
513	J. W. Bunn	Taxes	3,007 00

The bills presented for payment were audited and allowed.

The Executive Committee and Business Agent were authorized to have the necessary whitewashing, cleaning and repairs of buildings done.

Mr. Gardner and the Business Agent were authorized to direct the running of the Carpenter and Mechanical shops during the summer vacation, if it can be done without loss to the University.

The steam pump commenced at the Mechanical shop was ordered to be completed, the cost not to exceed $30.

Adjourned till 2 P. M., June 9.

AFTERNOON SESSION.

Board met as per adjournment.

The Regent, Dr. J. M. Gregory, presented his report, together with reports from the several Professors in charge of Departments.

REGENT'S REPORT.

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

GENTLEMEN—This quarterly report closes the work of this academic year; but as the reports of the several departments are not yet complete, I must defer till a later time the proper historical statements.

But as some action is required in view of the wants of the coming year, I offer for your consideration the following recommendations:

RECOMMENDATIONS.

I recommend that Professor Weber be advanced to the full Professorship of Chemistry. His first year's work with us has been satisfactory, and his previous rank and experience justifies him in the expectation that his rank here shall now be made equal to his position.

I recommend that Assistant Professor Ricker's rank be advanced to that of the full Professorship of Architecture.

Also that Instructor Crawford be made Assistant Professor of Ancient Languages and Literature, and that he still be charged with the duties heretofore devolved upon him of Chief Librarian.

I recommend that Mr. Parsons be employed as Instructor in Bookkeeping and Commercial Arts.

Also, that Mr. Kenis be continued for the coming year as Instructor in Ornamental Art and Designing, and in Clay Modeling. His work is new among us, and may need further trial as to its ultimate utility. But I ought, in justice to Mr. K., to testify to the valuable interest his instruction has created among the students.

I wish to recommend the re-employment for the coming year of Mr. Frantz as Assistant in Mathematics and Architecture, and Mr. Baker as Assistant in Engineering and Physics; also, of Messrs. Scovill and Barnes as Assistants in Chemistry, and of Mr. Robinson as Foreman of Machine shop and Instructor in Practical Mechanics.

I recommend the re-appointment of Dr. Prentiss, and of Miss Allen and Miss Patchen to the places already occupied by them.

After consulting with the Business Agent, I venture to recommend such increase of the salaries of the several Professors, Instructors and Assistants just named as your funds will allow and as they reasonably expect, as follows:

Prof. Webber, salary raised to	$1,600 00
Prof. Ricker, " "	1,500 00
Assistant Prof. Crawford, salary as Professor, $1,200	
" " " " Librarian, 300	1,500 00
Mr. Parsons, as Instructor. $50 a month	
" " Clerk, 20 "	70 00
Mr. Kenis, as Instructor	60 00
Mr. Baker, "	60 00
Mr. Swartz, "	75 00
Mr. Scovill, "	40 00
Mr. Barnes, "	40 00
Mr. Robinson, as Instructor, $1.000	$40 00 and
" as Foreman	60 00,

Conditional on the income from shop for 9 months, and $100 a month during vacations on same conditions. Dr. Prentiss $100 a month for time employed. Miss Patchen's services in the drawing classes are needed in my judgment at least four hours a day, with such compensation as is right.

Miss Allen's appointment ought now to be made permanent, and I owe it to her to remind you that when she was first appointed, her acceptance was accompanied with a request that the salary be made $1,500 after first year.

Only a very small appropriation was made for the Library at your last meeting, wholly inadequate to our needs; but it was hoped at that time to secure from the legislature an appropriation of $2.000 for the purchase of books. This having failed, I have to ask that the sum of $500 be set

apart for this purpose. The legislative appropriation of $1,000 for repairs, will enable you to make this provision for books. After a careful revision, in company with the librarian, of the list presented you in March, we find the books immediately wanted will amount to the sum of $500. As I am to visit New York City during the vacation, I will cheerfully undertake the purchase if desired, that the books may be here by the opening of the next term. One hundred and fifty dollars also asked for binding and repairs.

The music teacher asks for two music stools, and an additional piano. The stools are necessary and the piano ought to be had if your funds will permit.

The School of architecture asks appropriations amounting to $200, for materials for shop practice, for the coming year, and for desk and seat form for class room. The requests are reasonable and ought to be granted.

There are also needed for the Library, as shown by the librarian's report, seven additional tables for reading room, and a supply of chairs. All the chairs there now are needed for other rooms, and I suggest that 200 new chairs of a different color, so that they may be easily distinguished, be purchased.

The Professor of Architecture has prepared, at my request, plans for the new Veterinary building and stalls, and estimates for same. I present them for your inspection and approval. The appropriation made by the legislature for this building and for apparatus for the department is $2,000. I earnestly recommend the purchase of Dr. Angum's *papier-mache* preparation, *C cheval couplet*, for the department, as the most important and useful of the apparatus. The balance of the appropriation is needed for books.

Prof. Snyder reports a receipt by donation of the students of the pay given by the Government for services in Chicago at the time of the great fire, amounting to $453. This has been donated for the fitting up of the drill hall, and an additional amount is asked to carry it up to $600. An order to have the work done is also required.

The Professor of Chemistry presents a request for additional chemicals to keep up his supply. He also suggests the need of more desks, if money can be spared. I hope some additional desks, providing for twenty-four more students, may be ordered.

Fifty dollars were voted at the March meeting for materials to begin the preparation for the Centennial at Philadelphia.

I recommend that some appropriation be made for purchases to be made by Prof. Webb for his department, as requested by his report.

The use of one or two public rooms for the meeting of the School Principals' Association, to be held July 6, 7 and 8, is recommended.

The use of public rooms for the County Teachers' Institute from July 15 to August 25, or thereabout, is asked by the County Superintendent, provided the attendance is too large for the public school building.

I recommend that the Janitor be required to take the meteorological observations during the vacation.

J. M. GREGORY, *Regent.*

MILITARY DEPARTMENT.

URBANA, ILL., June 4, 1875.

DR. J. M. GREGORY, *Regent Illinois Industrial University:*

DEAR SIR—I have the honor to herewith lay before you the report of the work for the academic year 1874-75 done in the Military Department and School of Modern Languages.

Instruction in the Military Department was given in accordance with the published programme.

Number and organization of students was as follows:

	Fall Term.		Winter Term.		Spring Term.		
	Officers	Men.	Officers	Men.	Officers	Men.	
Staff	3	.....	3	.....	3	.....	
Company A	6	35	5	25	5	24	Senoirs.
" B	5	29	4	22	4	24	Juniors.
" C	5	38	5	28	5	22	Juniors.
" D	6	36	3	28	4	28	Sophomores.
" E	4	22	4	23	4	20	Freshmen.
" F	5	22	5	24	5	21	Freshmen.
" G	4	22	4	24	4	20	Freshmen.
" H	5	23	5	23	5	23	Freshmen.
Band and music	1	10	1	14	1	12	
Total	44	247	39	211	40	194	

The plan and programme of instruction for the next year has been somewhat modified, using the experience had during the past two years with a view mainly to occupy a minimum of time and still give a sufficiency and variety, also perfect gradations of subjects of instruction, placing them also in those seasons where they can be most advantageously practiced.

The entire time given to Military exercise during the four years of the Academic course contemplates 150 to 180 drills of one hour each.

The class in Military Science, in which the officers of the Battalion are taught, has done good work this year. Sword fencing has been added to the exercises of the class.

Attendance has been as follows:

	Fall Term.	Winter Term.	Spring Term.
Senior Class	16	14	17
Junior "	27	26	23

The instruction in Modern Languages has been given in two classes in French and three in German. The beginning class in German being too large in numbers had to be divided.
The class rolls were as follows:

	Fall Term.	Winter Term.	Spring Term.
Advanced French	11	9	7
Beginning French	33	23	19
Advanced German	29	23	18
Beginning German	55	51	46

Good work has been done in the classes. Students seem more to appreciate the fact, that besides the practical utility of the acquisition of the idiom, a good deal of linguistic general drill may be given in the study of these languages—and willing to do thorough work.

I would also respectfully report that by an act of the General Assembly of the State of Illinois, a compensation had been voted for the services of the I. I, U. Battalion at the Chicago fire, in 1871. The students, all but 19 of whom had graduated and left, were written to and apprised of the fact, and have most all donated the amounts coming to them to the Military Department, to be expended in the fitting and fixing up of the University Drill Hall.

(Resolution passed and subscribed enclosed.)

I have drawn on my Pay Roll from the State Treasury the awarded amount, $4.00 each, for myself and 122 students actually on duty (23 students could not be found, and 3 had died, for whom nothing can be drawn) together $492. After remitting to the ten who had called for their amounts, I hold the sum of $453 for the purpose aforesaid.

The drill hall has been left with bare walls and rafters, when the Mechanical and Military Building was furnished, owing to the insufficient amount of the State appropriation, and the paramount necessity to furnish fully the machine shops.

It answers its purpose as it is, but I believe that appearance and neatness of a place has a great deal of influence upon young men, and would have asked and intended to ask several times for appropriation for plastering and painting, had not the funds been in so great demand always and for purposes more needed than this.

The generosity of my former pupils has thus made possible a wish long entertained by me, and I respectfully ask that the Board of Trustees fill the amount donated by the students to $600 with and within which sum I will have the hall painted, fitted up, etc., during the coming vacation.

Very respectfully,
E. SNYDER,
Col. Commanding I. I. U. Batt.

ENGLISH LITERATURE.

CHAMPAIGN, June 2, 1875.

HON. J. M. GREGORY, *Regent:*

In compliance with the rule of the Board of Trustees, the following report is respectfully submitted:

The course of instruction in English Literature during the past year has been substantially that laid down in the catalogue.

Whole number of pupils taught.....200
Average " " " 145

By terms and classes as follows:

	Freshmen. A.	Freshmen. B.	Sophomores.	Juniors.
First term	48	52	55	16
Second term	38	46	50	20
Third term	33	43	30	11

The Freshman class was so large that it recited in two divisions, so that my recitation hours have been four daily, as shown above.

Essays germane to the course have been required frequently, especially of the Freshman class.

Almost without exception my pupils have been diligent and interested in their work; and fair progress has been made by the several classes. Their great regularity in attendance has been to me a source of much satisfaction.

Three of the classes have been so large, the most of the year, that our work has been less efficient than it would otherwise have been. Moreover, some who were admitted proved to be quite inadequately prepared.

More books of reference are greatly needed, in addition to those reported last winter (of which none have as yet been purchased). I could now add the *Bible*, with *Apocrypha* and *Concordance*, and Ellis' Early English Pronunciation.

J. C PICKARD.

REPORT OF THE SCHOOL OF CIVIL ENGINEERING.

To EMERY COBB, ESQ., *President Board of Trustees, Illinois Industrial University:*

SIR—The past year has been a successful one. A few of the classes have not been so largely attended as in previous years, owing to the decreased demand for railroad work, in consequence of the panic. During the Spring term, however, the classes were full, some fuller than usual, and the prospect is for large classes next year. Six from the Sophomore and Junior classes have been appointed to positions on the lake survey, in place of one last year, and others have obtained profitable employment. I have confidence in all these, that they will do themselves and their University credit and give satisfaction to their employers. The graduates have usually found satisfactory employment. Of the present class of three Seniors, one goes on the Central Pacific Railway, and the others expect employment on lines nearer home. In consequence of the assistance given by Mr. Baker the work has been better done this year than before, and some classes which could not be held in previous years have been taught this year, viz: the class in Engineering and Drawing and two classes in Astronomical Field Practice. Two other classes will probably be necessary next year, and it will soon be necessary to have an Assistant who will devote his whole time to the work in this school.

I have been gratified with the increased attention and interest shown in some of the classes. The class just completed in Mechanics has been practically satisfactory.

During this spring term classes have been taught in "Stone Cutting," "Analytical Mechanics (Dynamics)," Practical Astronomy (Latitude)," "Topographical Surveying," "Architectural and Farm Surveying," "Descriptive Astronomy." The number in each class has already been reported, and, as far as they have been examined, the results are satisfactory.

Special circumstances and arrangements, and your kindness, has made it possible for me to start on my European trip at this time (May 22d) without interfering with the work due to the classes under my instruction, and I desire to thank you for the privilege of so doing, feeling that the information which I shall collect on subjects connected with every department will be of advantage to my future classes. To make it possible for me to leave before the end of the term, I told my classes that I wanted them to work hard and get through before Wednesday last (May 12) if possible. The work in "Dynamics" does not usually require the whole term, and the students finish with a short course in Descriptive Astronomy, and the seniors are always expected to finish a week or two before the end of the term, so that it was quite possible for the classes to get through as I wished.

The students worked well, and the class in Dynamics (Mechanics) got through with the subject, which is more than any previous class has accomplished. The classes finished their work and were examined Friday, May 14 1875. I also arranged that Mr. Swartz, Assistant in Architecture, who was anxious to take the class, should teach the Architectural and Farm Surveying, which relieved Mr. Baker, so that he will not be overtasked with the extra work put upon him by my absence. Mr. Baker will therefore complete the class in Descriptive Astronomy which I should otherwise have taught personally.

I have to thank you also for the appropriations made for the School of Civil Engineering, at your last meeting. On arrival in London, I expect to make final arrangements for the University instrument, and hope to get it completed in time for October use. Mr. Ricker has engaged to make the case for the amount appropriated, but the counter will cost from $10 to $15 more, for which some provision will be needed. The observatory is in its new position, and the brick and stone pier ready for mounting the instrument next fall, when the mortar and grout will be hard enough to do further work upon it.

The pier and foundation, with removal of building, will probably come inside of appropriation of $50, but owing to the position selected for it, there being no suitable high ground on which to place it, more embankment will be needed than was expected, for which $50 will not pay.

Respectfully,

J. B. WEBB.

March 21, 1875.

To the President and Board of Trustees:

GENTLEMEN:—There are several things needed for our department which I can best secure by personal selection in Europe. Among them are: a high power eye piece for equatorial telescope; a part set of models in plaster, etc., of arches and bridges; a French surveying chain, and standard metre such as are ordinarily in use in France; a set of small topographical plates; one copy of Vegas' 10 figure logarithmic table, etc., etc.

I respectfully request that if the above meets your approval, that I be authorized to expend for the department an amount not to exceed one hundred dollars.

Respectfully, J. B. WEBB.

LIBRARY.

LIBRARY, June 3, 1875.

HON. J. M. GREGORY, *Regent:*

There have been added to the Library since my report in March seventy-three volumes, making the total for the college year one hundred and ninety-two volumes.

I have but one book to ask for in addition to the list already presented to the Trustees—that is a Bible. It is needed frequently for reference, and I would suggest that one should be bought before any other books, and that it contain the Apocrypha and a Concordance.

I have found that more than two hundred books in the Library have no labels, and the stock has been exhausted; so I would ask that that a supply of labels may be printed.

There are in the Library unbound periodicals of several years, enough to make about two hundred bound volumes. Some of these are made use of frequently for study and reference, and need to be bound that they may be preserved. The periodicals of each year would make about eighty volumes, which ought to be bound, if the means were available.

Some repairing is necessary every year on account of the wear of books by ordinary use. I mention these points more particularly that I may call the attention of the Trustees to the subject of establishing a book bindery at the University, in connection with the printing office, a matter which has been agitated somewhat already.

I would call attention again to the suggestion made in my report in March, as to the need of more tables and chairs in the Library. There is enough room for seven more tables of the size of those already in use, and I think as many as that will be needed. During the fall and winter terms of this year there were more students in the Library every day than could be accommodated with the chairs and tables now here, and it is not possible to preserve the order and quiet necessary to the Library, under such circumstances. I think 200 chairs, at least, are needed, and it might be well if they were all of the same pattern, and so marked that they would be known to belong to the Library.

The casings of all the windows need repairing. When the wind blows from the south and west in winter it is not possible to keep the Library warm, since there are cracks in every casing. In the summer the dust comes in in such quantities as to cover the floor, and more injury is done to the books in this way than by all the wear of ordinary use.

The fastenings of the iron shutters on the east side of the Library are so weak that it is not safe to open them when there is any wind. There is not light enough on a cloudy day if the shutters are closed, so that it would seem some fastening should be devised which would be safe. In the Third Annual Report of the Trustees, the catalogue of the Library was printed. Since then the Library has been increased threefold, and there is no printed list of the books. I would suggest that the catalogue of the Library be printed in the next report of the Trustees.

There are about twenty books that need repairs, and as they are books in common use, it would be well if the work could be done during the vacation.

Very respectfully,

J. D. CRAWFORD, *Librarian.*

CHEMICAL DEPARTMENT.

J. M. GREGORY, L. L. D., *Regent Ill. Ind. University:*

DEAR SIR:—The undersigned begs leave to submit the following report, showing in brief terms the condition of and the work done in the Chemical Department for the past year. In the fall term the class in Elementary Chemistry opened with one hundred and four students, and was divided into two sections, each of which recited daily. The work done in this term embraced the study of chemical physics, the principals of chemical nomenclature, and the chemistry of the non-metals. Ninety-four of this class were present at the examination at the close of the term.

There was also taught in this term a class in Mineralogy, numbering eight students, seven of whom were present at examination. The class had three recitations a week, and the minerals constituting the cabinet of the University were determined.

The class in the Chemical Laboratory numbered twenty-nine students, four of whom commenced in Qualitative Analysis. Of the advanced students three were in the agricultural course, the rest were engaged in making analysis of soils, mineral waters, iron, zinc, lead and copper ores, assaying of gold and silver ores, organic analysis and the preparation of chemicals.

In the winter term the class in elementary chemistry numbered fifty-three students, and was again taught in two divisions. The work done in this term embraced the chemicals of metals, special attention being given to its application to the arts and manufactures.

The whole number of students in the Laboratory this term was eighty-four, twenty of whom were advanced students, and occupied the room which had recently been fitted up. Five of these were in the agricultural course, of the remainder three were engaged in the study of poisons and the rest in alalysis of various ores and other minerals, electroplating and preparing chemicals.

The class in elementary chemistry for the present term numbers thirty students; the whole term has been given to the study of Organic Chemistry. The whole number of students in the Chemical Laboratory is sixty. Of these, four are in the agricultural course. Of the remainder, two have been engaged in making the various preparations of the veterinary materia medica, one has been preparing tinctures and extracts with a view of going into the drug business, and the rest have been engaged in making general analyses, electroplating, etc.

ASSISTANTS.

During the whole year this department has received the constant and able assistance of Messrs. A. E. Barnes and M. A. Scovell, both of whom cannot be too highly recommended for the situations they are occupying. The teaching in the Laboratory must all be done individually, and at the opening of the winter term we found that with our help it was impossible to give the large number of students proper attention. Two of the more advanced students, Messrs. J. N. Stayman and W. Stull, were therefore taken as volunteer assistants, the former of whom has acted in the same capacity during the present term, and has rendered the department valuable aid.

With the prospects of an increased attendance in the Laboratory next fall, the number of assistants would have to be increased, and should it meet your views, and those of the Honorable Board, the undersigned would respectfully recommend the appointment of Messrs. Barnes and Scovell, at the salary agreed upon with you, as well as that of Mr. Stayman, with such little compensation as may seem fit.

It might also be well to state that if the class in Chemistry will be as large next fall as it was last, the lower room will by no means accommodate all who will work in the Laboratory. If it should be thought desirable, the old recitation room could be fitted up with desks.

Very respectfully,

H. A. WEBBER.

June 3, 1875.

J. M. Gregory, L.L.D., Regent Illinois Industrial University:

DEAR SIR—The undersigned begs leave to submit the following list of Chemicals and apparatus needed for the progress of work in Chemical Laboratory next fall. The estimate of Chemicals have been based upon the wants of the Laboratory for the whole coming year, since wholesale prices can be obtained if the Chemicals be purchased in the following quantities:

10 lbs	Potassium carbonate	$2 50
2 "	" hydroxide	1 50
5 "	" chlorate	2 00
2 "	" ferricyanide	2 00
5 "	" ferrocyanide	2 50
10 "	" dichromate	2 50
1 "	"	4 50
1 "	" bromide	1 00
5 "	" cyanide	4 00
5 "	Sodium phosphate	1 50
10 "	" sulphate	50
5 "	" bicarbonate	40
5 "	" borate	1 50
10 "	" acetate	5 00
20 "	" hyposulphite	2 00
1 keg	" carbonate (com)	3 50
1 carboy	Ammonia	10 00
8 lbs.	Ammonia C. P.	2 00
20 "	Ammonium carb.	2 00
20 "	" chloride	2 00
2 "	Barium nitrate	1 50
2 "	" chloride	2 00
10 "	" carbonate	2 50
2 "	Strontium chloride	2 00
2 "	" nitrate	1 00
10 "	" sulphate	2 50
10 "	Alum	80
2 "	Chrome alum	2 00
5 oz.	Nickel sulphate	5 00
1 lb.	Metallic nickel	5 00
5 oz.	Cobalt nitrate	5 00
10 lbs.	Copper sulphate	1 50
50 "	Iron sulphide	15 00
5 "	Copper carb	4 00
2 "	" acetate	2 00
2 oz.	Cadinium	1 00
½ lb.	Bismuth sub-nitrate	3 00
5 lbs.	Lead acetate	1 25
2 "	Red oxide	60
1 "	Mercuric chloride	2 25
1 "	Silver nitrate	15 00
2 "	Tartar emetic	2 00
5 "	Arsenious acid	1 50
1 carboy	Sulphuric acid	7 50
1 "	Nitric "	20 00
1 "	Hydrochloric acid	7 00
60 lbs	" C. P.	18 00
5 "	Tartaric acid	3 25
30 "	Acetic "	6 00
5 gals.	Alcohol	12 50
30 nests of	Beakers	33 00
20 "	" Large Beakers	46 00
10 lbs	Glass Tubing	7 50
1 doz.	Funnels	5 60
	Total	$307 65

Very respectfully,

H. A. WEBBER.

June 3, 1875.

SCHOOL OF ARCHITECTURE.

CHAMPAIGN, June 3, 1875.

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

GENTLEMEN:—I beg leave to submit the following report in behalf of the School of Architecture for the collegiate year just ending:

The present number of students taking full courses in Architecture, is fifteen, fourteen gentlemen and one lady; one senior, two juniors, three sophomores, and nine freshmen. Besides these, several from the schools have pursued special studies in Architecture, especially drawing.

During the term just past classes have been taught in these practices, four members, Architectural Surveying; five members, Architectural Designing; two, Architectural Drawing for Architects; four for Engineers; and also a class in Drawing for Gardening, of five members, for two weeks only, the allotted time. All the studies prescribed in the course of study for last year have been taught when desired by the students. In some, nearly all fourth year studies, there were no students, but there will be required during the next school year, so that the full course of instruction now required will be taught for the first time.

During this year, a year's course in the practice, of ten hours per week, has been pursued by several freshmen, thus being qualified to work in the shops next year, and to produce better work than most students have heretofore been able to do. The practice is very beneficial, but much experience and thought are necessary to direct the energies of the students so as to make the

utmost progress in the least time. From the work of this class the school may expect to attain a good collection of models of construction at a very small cost, greatly needed to illustrate lectures on construction, as very few large structures are accessible here to students, during their erection, and the models can be made to embrace all the latest experiments, thus being much more valuable than those purchased in Europe at a greater expense. The last term has been directed exclusively to stair building, as well as the shop practice of the advanced classes in construction. It is intended to make the theory and practice of stair building one of the prominent specialties of the school, as it is very valuable to mechanics, and is, I believe, taught nowhere else, at present, in the United States.

For the first time, too, in this school, the theory of Stair Building has been fully given, and applied to the difficult cases, in which all the necessary drawings were made by the class.

I propose to make the instruction in architecture during the next school year as full and thorough as given anywhere else in the United States, even where apparatus and advantages are far superior, and to make it the best in time.

Herewith I also submit a design and estimates for a veterinary hospital, which consists of a building 17x24 ; consulting office, 10½x11 ; closet for medicines, 5x8 ; stable with two box stalls, 12x12 ; and forage room, 10½x12, and a yard 36 feet square for performing operations. The building is to be sided with common thin siding ; plastered inside, two coats, to have sink with faucets to tank in attic, which is supplied by a force pump from well. The stalls to be floored with 2 inch oak plank, laid close on sleepers which are on cinders, sloping to the west side of stable. Each stall to have hay rack, manger and a water basin ; which are to be supplied for forage room. Sides of stalls sheathed 5 feet high with 2 inch oak plank.

The outside of the whole and the inside finish, and dissecting room to receive two coats of good paint.

Estimated at Champaign prices for work and material, the whole amounts to $1,101 00, but by buying at wholesale rates in Chicago, I believe the entire cost could be reduced to $1,000 00, which would be covered by the State appropriation for Veterinary Department.

I make the following requests as being necessary for the school for the next year :

1. An appropriation of $10 for drawing paper for making drawings for the shops and for classes in this practice.
2. An appropriation for expenses of, and material used by classes in shop practice during the next school year, of $15 per month for the fall and spring terms, and $25 per month for the winter term. During the winter term there are two distinct classes. Most of this is required for heating and power.
3. An appropriation of $25 for materials for construction of apparatus needed to illustrate lectures on heating and ventilation, next year. I propose to make most of it myself during this summer vacation.
4. An appropriation of $20 for a suitable desk and platform for the Architectural lecture room.
5. That Professor Shattuck be authorized to expend $16 and express charges, of the previous appropriation for expenses in this practice, in the purchase of a small chuck and tools for turning metal, for the small lathe purchased last winter for the class.
6. That Professor Shattuck be authorized to expend $10 for cherry lumber for models, of appropriation requested for class in this practice next year, immediately, so that it may be perfectly dry at beginning of fall term.

I also request that an additional room be assigned to the School of Architecture, for a lecture and recitation room, as but one is occupied by the school at present, and is full of drawing students and tables, so that a second room is absolutely necessary.

I also further recommend that Mr. Kenis be continued as Instructor in Modeling and Ornament, Mr. Swarts as Assistant in Architecture and Instructor in Mechanical Drawing, and Mr. Codington as foreman of the carpenter shops, as these gentleman are all able instructors, know their duties from experience, and are therefore much more valuable to the University than new men would be.

Mr. Kenis has made his classes in Modeling and Ornamental Drawing very useful and very practical.

Respectfully submitted,

N. CLIFFORD RICKER,

Assistant Professor of Architecture.

DEPARTMENT OF FARM EXPERIMENTS.

EMORY COBB, *President of the Board of Trustees of the Ill. Ind. University :*

SIR:—I beg herewith to respectfully submit this, a brief report of progress in Department of Farm Experiments :

Of the six varieties of wheat and two of rye, with which these experiments were begun last September, I have to report that four kinds of wheat were winter-killed and that two have partially succeeded, and that the rye is coming on and promises to come out splendidly. The two varieties of winter wheat which have proved their hardiness, under the assaults of a winter which destroyed the wheat crops of the country, are known the one, as the Treadwell, and the other, as the Senaca or Clowson.

Of the spring grain, of which two varieties of rye, three of spring wheat, and five of oats, were tried, the results (except in the case of the oats, where the frost killed part of the seed in process of germination, and made them thin on the ground) have been very satisfactory indeed. It may be too soon to come to a final conclusion, but at present I see nothing in the soil or climate of Central Illinois that would or should interfere with the successful growing of the whole line of spring grains. Wheat, barley, rye and oats, always provide a clean soil, and early seeding and careful cultivation are provided and attended to

There are four fields of corn averaging about four acres each, on which different kinds of cultivation are to be tried, according to previous prepared programme. Having been seeded early in May, three of the fields had to be replanted, and the stand is not as good as it would have been. The conditi n of the plats is very fair, however, and it is hoped that the future and different kinds of cultivation to be applied, may teach some valuable lessons.

Ten from New York, 3 from France, and 6 obtained at home, of varieties of Potatoes have been planted side by side and are coming on prosperously, the soil and the season having been exceedingly favorable. It is expected some trustworthy information as to value and comparative value in the matter of hardiness, yield, earliness, etc., may be obtained at the outsend of the experiments.

An attempt has been made to ascertain how much Indian Corn can be grown on an acre, and an acre has been devoted to that purpose. A good stand has been obtained, and at present the growth of the young plants is considerably in advance of any within my observation.

In addition to the above, there are under cultivation plats and patches of one variety of Sugar, and three of Field Beets, and one each of Carrots, Caragua, and California and Cuba Cane, Sorghum, Brown Cereo Cabbages, Field Squashes and Pumpkins, and Germania Millet—with other German Millet and Buckwheat yet to be sown.

The stand of Lucern Clere or Alfalfa, seems to be unexpectedly good, and that of the Cichard Grass and the Italian Ray Grass are both admirable. There does not seem to be anything now in the way of success with these plants, unless it be the sun-scald which may injure them when the grain which occupies the ground with them is removed at harvest.

The Flax experiments have failed, of which five acres were sown with three varieties. The patches were seeded early in April, but the very unusual freezing of the ground about the middle of the month froze and rotted the seed just at the period of germination, and not more than a fifth of a stand was obtained. Under these circumstances the ground has been broken up and will be given over to buckwheat and German millet.

For further information, and in order to give the Board an opportunity to judge of the appearance of the experimental grounds, and of the manner of cultivating and handling, I invite the members of the Board to make an inspection of the growing crops in the fields.

And in conclusion, and with considerable diffidence, I ask for the purpose of making the experiment with the single acre of corn, in foreign corn, the root crop, cabbages and potatoes, the purchase of the following fertilizers. which may be had here in the city at the prices named.

Two barrels, or 600 lbs. super-phosphated lime, at 2.15c per lb ..	$12 90
One barrel, or 300 lbs., of nitrate of soda, 4½c per lb.....	13 50
Two barrels, or 600 lbs., of ground gypsum, $3 per barrel.....	6 00
	$32 40

B. F. JOHNSON,
In Charge of Experiments.

CHAMPAIGN, ILL., June 7, 1875.

EXPERIMENTS IN CATTLE FEEDING.

To DR. J. M. GREGORY, *Regent Illinois Industrial University:*

I herewith present tables showing the result of two experiments in cattle feeding as well as two in feeding hogs, with accompanying explanations.

I am also making an experiment of rearing and feeding hogs, to ascertain the cost from first to last in corn and pasture. The design in these experiments is to make them practical by feeding and caring for the animal in the same manner as is practiced by different practical feeders, and comparing one with another. It is not claimed that we can improve on the methods of feeding as practiced by good feeders, but we may ascertain the relative value of each.

We are grazing on the stock farm 66 steers, and have large and small, about 100 hogs.

The crops in process of growth includirg the experimental plate, cousist of 170 acres corn, 30 acres oats, 110 acres timothy meadow, 12 acres clover, 150 acres pasture, as well as some small pieces of rye, spring wheat, etc. While I expect an estimate of the efficiency of the work done on the farms will be made from the amount of dividends turned over and the condition of the land for another crop, yet it would be gratifying to have yourself and the Board of Trustees make a more extended examination of my work.

I would call your attention to the fact that the house and barn on the Experimental Farm are in great need of repair, principally painting. The painting should be done immediately, both as a matter of economy and for the sake of appearances.

Respectfully submitted, E. L. LAWRENCE.

CHAMPAIGN, June 1, 1875.

The reader will remember the details of several experiments in cattle feeding, conducted by Mr. E. L. Lawrence, the manager of the farm at the Illinois Industrial University, heretofore described in these columns. In this connection the following accounts of later experiments conducted by the same gentleman will be found of great interest and value:

No.	Weight.		Gain, 90 Days	Grain Consumed.		Conditions.
	Dec. 24.	May 24.		Total...	Per day	
1	1070	1320	250	2090	23.2	Ear Corn and Clover—in barn.
2	1390	1545	155	2090	23.2	" " " "
3	1360	1435	75	1430	15.9	Corn Meal and Clover—in barn.
4	1130	1230	100	1430	15.9	" " " "
5	1200	1265	65	1368	15.2	Corn Meal, Cut Straw and Clover—in barn.
6	1360	1470	110	1367	15.2	Middlings, Cut Straw and Clover—in barn.
7	1220	1395	175	1367	15.2	" " " " "
8	1220	1395	175	*2160	24.	Shock Corn—in yard.
9	1100	1305	205	*2160	24.	" "
10	1130	1345	215	*2160	24.	" "
11	1150	1275	225	*2160	24.	" "
12	1060	1375	215	*2160	24.	" "
13	1130	1375	240	*2160	24.	" "
14	1190	1405	215	*2160	24.	" "

* Estimated.

Average daily gains for 90 days: Nos. 1 and 2, 223 lbs.; Nos. 3 and 4, 97 lbs.: No. 5, 72 lbs.; Nos. 6 and 7, 158 lbs.

7	steers in the barn averaged	145 lbs. daily.
7	" yard "	236 "
14	steers averaged	190 "

At the commencement, seven steers put in the barn averaged, 1,247 lbs; seven steers in the yard averaged, 1,140 lbs.

The cattle were of the common stock of the country, all showing more or less improved breeding. From one to seven, inclusive, were fed in the barn in stalls, and fastened by chains about the neck. The stalls were cleaned once a day and kept littered. The grain was weighed into separate bins, two animals being fed from each bin, except in the case of No. 5—fed alone. After the second week all had what they would eat; no steer was cloyed or ate enough to cause sickness. Nos. 1, 2, 3 and 4 had each, with the feed of grain, 5 lbs. of clover hay (10 lbs. daily) of the best quality. Nos. 5, 6 and 7 had, morning and evening, a feed of grain mixed with 2½ lbs. cut rye straw, wet, (5 lbs. daily) and 5 lbs. clover hay at noon. They were not removed from the stalls during the time of feeding. Water was offered twice a day; they usually drank freely in the morning, and lightly or not at all in the evening.

Nos. 8 to 14 were fed in the yard, a sheltered place by the barn, and had, morning and evening, a small shock of corn.

After the first week, 35 pounds ear corn was added, fed at noon. After the second week this was increased to 70 pounds. By husking and averaging several shocks, it was thought that the average feed amounted to 24 pounds daily; corn of medium quality for the season; compared with other years, it would be called small, though ripe. Of large and hard corn, cattle would not eat this amount.

As has been seen, the cattle in the barn, when put up, averaged 107 pounds more than those in the yard. This was accidental, and unfortunate. Some difficulty was experienced in getting them in the barn, as they were wild. In driving the lot to the door, the heavier ones went in first. The cattle were not bought with a view to make the experiment, and were not as even a lot as could be desired. In this respect they were inferior to those fed the two preceding winters. Again, as compared with the former experiments, they were thinner in flesh, on account of the drought, and consequent shortness of pasture, and, for this reason, gave better gains.

In an experiment like this there will always be found much that must be explained by the experimenter. By closely studying this experiment, as well as the two former ones made on the farm, I will venture a few observations.

To explain the difference in the gains of Nos. 1 and 2, I would say that No. 1 was the thinnest in flesh of any in the barn; Nos. 2 and 3 were the fattest. These (2 and 3) were wintered on the farm; the rest were bought the last of July, '74. These had better kept, and may have been some months older, both of which would tend to make the gains less. No. 4 should have made a better gain. About the middle of the feeding this one bloated badly for four different times during a period of two weeks, before it was discovered that the cause was lying against the chain that fastened him. It is thought that fifty or more pounds was lost by this. No. 5 was a smooth, fine steer that was in good fix when first put up and fat when he came out, but did not grow at all. It will be observed that the large steer, No. 6, fed with No. 7, gained 65 pounds less: they resembled each other in every particular except size, and were probably closely related to each other. Those out of doors need no explanation.

As to general observations, I may be allowed to make the following: A poor steer (in flesh) will gain more than a fat one; a young steer more than an older one, and this will hold good from birth to four years of age. Growth and fat must be made at the same time. A wild steer will do no good, especially in the barn. Cattle should be removed from the stalls for exercise and water.

As to methods of feeding and feed, I am satisfied that in this climate, and with the cattle we buy here—never having been handled—that the best and cheapest mode of feeding is to feed shock corn, in a sheltered yard. Three things are essential: Good cattle to feed, plenty of food and water, and a place to lie down, out of wind and snow; neglect either of these, and the result will not be satisfactory.

Since writing the preceding, another experiment has been completed, as follows: Two grade steers, raised on the farm, and on the same cow till weaned at six months of age, were sixteen months old December 1, 1874. They had often been weighed, giving always about the same increase or growth, and had always been fed alike. The following table will show weights and gains:

	Weight Dec. 1.	Weight Feb. 1.	Weight April 1.	Total Gain.	Gain per day.
No. 1	830	970	1,090	260	2.16
No. 2	860	970	1,070	210	1.75

No. 1 was fed daily 12 pounds corn in the ear. No. 2 was fed daily 12 pounds wheat bran. Both had for roughness good wheat straw. They were fed in stalls to which they were accustomed, and removed daily for water. There is no need of explanation as between the different kinds of feed; this is about what might have been expected.

Something may be learned by comparing No. 1 with the 14 in the former experiment, as regards breeding first; age second; and previous handling third. He was sired by the short-horn bull, Baron Louaufe, and from a grade cow, thus having an advantage of better breeding than the others; was only half the age, and was used to being handled. On the other hand, the grain was only half that fed the others, and the roughness half in value.

By comparison, we have the following: This steer gained, per day, 2.16 lbs; seven steers fed in barn, gained, per day, 1.45 lbs. Seven steers fed in yard, gained, per day, 2.36 lbs. Fourteen steers gained, per day, 1.90 lbs.

This is not given as showing a remarkable gain, but as being good for the feed consumed. He would probably have consumed 18 lbs. of corn daily, and this 6 lbs. added would have been the most profitable, had he been fed for immediate market. I will state that the cattle fed in the yard paid a fair profit, though fed on 60 cent corn. They were all sold, March 24th, for $5 80 per hundred weight, at the barn.

Herewith is a table showing the conditions and the average daily gains, in the three experiments made on the farm, all of which seem to point to the correctness of the premises before assumed.

Grain fed.	First. Time 105 Days.	First. No. fed.	Second. Time 119 Days.	Second. No. fed.	Third. Time 90 Days.	Third. No. fed.	Where fed.
Mixed meal cooked	.74 lbs.	2					
Mixed meal					.72 lbs.	1	Barn.
Dry meal	1.17 lbs.	2	1.60 lbs.	1	.97 "	2	Barn.
Corn in ear	1.43 "	2	1.76 "	2	2.23 "	2	Barn.
Mixed middlings					1.58 "	2	Barn.
1 meal, 2 and 3 corn	1.68 lbs.	2	1.83 lbs.	2	2.36 "	7	Shed.
Ear corn	1.21 "	3	1.76 "	6			Yard.
Roughness fed	Cut corn-stalks.		Clover		Clov'r in b'rn; corn-fodder in shed and yard.		

E. L. LAWRENCE,
Head Farmer Illinois Industrial University.

1.—PIG FEEDING EXPERIMENT.

Pigs—2 of each breed.	October 1st. Age, days.	October 1st. Weight, lbs.	Dec. 10. Weight, lbs.	Gain	Corn fed Bushels.	One bushel corn made lbs. growth.
Poland Chinas	145	185	320	145	8.13	17.83
Berkshires	168	182	230	48	3.89	12.34

2—PIG FEEDING EXPERIMENT.

Pigs—Four in each pen.	March 1st. Age, days.	March 1st. Weight, lbs.	Feed	May 1st. Weight, lbs.	Gain	Corn fed Bushels.	One bushel corn made lbs. growth.
Poland China	235	740	Corn.	1,060	320	29.46	10.86
Berkshire	258	545	Corn.	775	235	24.40	9.63
Berkshire	258	595	Meal.	760	165	23.43	7.04

The object of these experiments is to show the relative value of the differ nt breeds for fattening when put up in the pen and fed nothing but corn; and in the second experiment to test the value of grinding; as well as comparing pigs of different ages, by comparing the 1st and 2d experiments with each other.

In the way of explanation, I would say, that in the lot fed meal, one of the pigs did not appear to be healthy, and ate scarcely anything, and just about held his own, so that what he ate was a complete loss. Another thing noted was, that in feeding a full feed of meal there was more waste than in feeding corn. The meal was fed dry.

The pigs were fed in pens 8 by 16 feet, on plank floors, one-half of the pen covered.

This experiment should be repeated, and some tests of the relative value of different breeds when put on clover pasture, as it is here that the Berkshire seem to excel all others.

E. L. LAWRENCE,
Head Farmer I. I. U.

FREE HAND AND CAST DRAWING.

To the Hon. Regent of the Illinois Industrial University:

Report of the Departments of Free Hand and Cast Drawing Enrolled for Year 1875.

	Fall.	Winter.	Spring.
Music	30	32	35
Free Hand Drawing	65	82	60
Cast Drawing	10	8	8

I would suggest that it would be a great benefit to the class in Cast Drawing if a few easy models could be secured. The casts from the Art Gallery are too difficult for beginners to copy with profit. Also, I would respectfully suggest that one more hour per day be given to the class in Cast Drawing. We have only one at present making it impossible for pupils to take it except as a half study. There will be a large class next year. If provision can be made for them I am confident that the progress in that department will be as great as it has been in that of the Free Hand Drawing. My advanced pupils in music are perfectly competent to assist in the music classes, thus making it possible for me to devote more time to the drawing.

In the Musical Department a good piano seems to be in absolute necessity. Music must be provided for all the numerous public occasions. It is impossible to present it with satisfaction to the performers, credit to the teacher or acceptance to the audience on an inferior instrument.

Two new music stools are indispensable.

This report is respectfully submitted hoping it may meet with approval.

C. E. PATCHEN.

DOMESTIC SCIENCE AND ART.

To the Board of Trustees of the Illinois Industrial University:

GENTLEMEN:—I am glad to be able to report at the close of the year that the Department of Domestic Science and Art seems to be gaining in favor faster than I had even hoped. During the year I have given instruction to four classes in this department—two during the fall term and one each ensuing term.

I have mapped out a course in Domestic Science and Art, published in the new catalogue, to which I would respectfully call your attention, as setting forth our ideas of what the department is to embrace.

Each term during the year I have taught one or two classes in light gymnastics, using dumb-bells, wands, etc. Although fifty is the greatest number of pupils enrolled in these classes at any one time, and the average attendance has been much less, yet I feel assured that the work done has been sufficient to establish the value of physical education, which will insure larger classes in the future.

In addition to my regular work during the past term, I have taught two classes in Botany, the two together numbering fifty-six pupils.

Our dressing-room accommodations are quite insufficient for the number of young women we have had this year, and, as we are expecting a fuller attendance next year, I would suggest the necessity of making additional provisions for them.

Respectfully,

LOU. C. ALLEN.

SCHOOL OF COMMERCE.

J. M. GREGORY, L. L. D., *Regent Illinois Industrial University:*

DEAR SIR—I respectfully submit the following report of classes in the School of Commerce for the past academic year. Two classes have been taught each term, as follows:

	Fall Term.	Winter Term.	Spring Term.
Number of students in advanced division	21	38	23
" " commencing the Course	47	41	15

To complete the Course in the time specified (one year) it seems necessary to have the time of class exercises extended to two hours each.

Instruction could be made more effective if a "Practical Business" department were established in this School.

Very respectfully,

F. A. PARSONS, *Teacher.*

Mr. H. A. Weber was appointed to the Chair of Chemistry with $1,600 salary per year.

Mr. N. C. Ricker was appointed Professor of Architecture with a salary of $1,500 per year.

Mr. J. D. Crawford was appointed Assistant Professor of Ancient Languages at $1,200 per annum, and Librarian of the University at $300 per annum.

Mr. F. A. Parsons was appointed Instructor of Book-keeping at a salary of $50 per month for teaching and $20 per month for services as Business Agent's clerk.

Mr. J. Kenis was appointed Instructor in Modeling and Designing at a monthly salary of $60.

Mr. A. C. Swartz was appointed Assistant in Mathematics and Architecture at $75 per month.

Mr. J. Baker was appointed Assistant in Civil and Mechanical Engineering at a salary of $60 per month.

Messrs. Scovell and Barnes were appointed Assistants in Chemistry at $40 per month.

Mr. E. A. Robinson was appointed Instructor of practical Mechanics and Foreman of Machine Shops at $1,000 per year.

Dr. Prentice was employed as Veterinarian at a salary of $1,000 per ten months.

Miss Patchen was employed as Teacher in Free Hand Drawing, for four hours each day, at $50 per month.

Miss Allen was employed as Instructor in Domestic Science, for the next year, at $1,200.

Adjourned till 7:30 P. M.

EVENING SESSION.

The Board met as per adjournment.

Leave of absence was granted to—

Prof. J. B. Webb for a visit to Europe during the vacation.

Prof. J. C. Pickard to visit Madison, Wisconsin, and the remainder of his salary for the academic year was ordered to be drawn.

Prof. Shattuck, Business Agent, for three weeks.

Dr. Gregory, for the month of July.

Prof. Crawford, from the 14th of June.

The Treasurer then read his report, which was accepted.

JOHN W. BUNN, TREASURER,

In Acct. with Illinois Industrial University.

1875.	DR.		
Mar. 1	To balance		$6,676 97
" 16	" amount received of Burnett for interest		86 00
Apr. 1	" interest on Sangamon county bonds		2,250 00
" 1	" E. C. Hamburgher—cost refunded		46 50
" 7	" interest on Putnam county bonds		1,300 00
" 21	" " Kankakee " "		6,450 00
May 14	" " Champaign " "		11,500 00
" 14	" amount received on account of fees and rent	$387 00	
" 14	" " " of Burton—bal. of fees and rent '72, '73	631 15	
" 29	To amount received on acc't. fuel—coal collections	61 09	
" 29			$1,079 24
" 29			
" 29	" " " on account of Agricultural Department	$1,236 67	
" 31	To amount received Mechanical Department	76 87	
" 31	" " " Horticultural "	39 40	
" 31	" " " incidental expense	8 59	
" 31			$1,361 53
" 31			
" 31	" " " for fees and room rents	$1,290 50	
" 31	" " " for fuel and light—coal col	87 31	
	" " " for rent of Burton	100 00	
	" " " Agricultural Department	300 45	
	" " " Mechanical "	470 92	
	" " " Horticultural "	322 85	
	" " " Chemical "	206 54	
	" " " Architectural "	78 57	
			$2,857 14

	CR.		
	By amount paid on account of salaries		$7,970 37
	" " " " board expense		133 50
	" " " " fuel and lights		195 80
	" " " " stationery and printing		75 25
	" " " " buildings and grounds		91 82
	" " " " incidental expense		39 82
	" " " Mechanical Department		531 34
	" " " Architectural "		170 26
	" " " Agricultural "		2,662 74
	" " " Horticultural "		248 97
	" " " Chemical "		161 57
	" " " Military "		10 68
	" " " library and apparatus		293 61
	" " " civil engineering		17 97
	" " " ladies gymnasium		23 35
	" " " unpaid bills		529 11
	" " " physical laboratory		24 28
	" " " agricultural experiments		264 40
	" " " taxes on lands in Nebraska and Minnesota		3,007 00
	" balance		17,155 67
		$33,607 38	$33,607 38
1875.			
June 1	To balance	$17,155 67	

URBANA, June 9, 1875. JOHN W. BUNN, *Treasurer.*

Dr. Gregory was authorized to purchase books for the Library to the amount of $500.

One hundred and fifty dollars were appropriated for binding periodicals and repairing books.

Two music stools were ordered to be purchased, and $200 were appropriated to purchase additional chairs and tables for the use of the Library.

The plans and specifications for a veterinary stable submitted by Prof. Ricker and Dr. Prentice were adopted, and the Executive Com-

mittee was authorized to make such changes in the plans as they may deem necessary, and locate and erect said building.

An amount of $150 was granted to Col. E. Snyder in addition to the sum of $450 donated by the students of the Illinois Industrial University for fitting, plastering and painting the Drill Hall.

The following resolution, offered by Mr. Blackburn, was passed:

Resolved, That the hearty thanks of the Board are hereby presented to the students of the Illinois Industrial University for their generous donation of $450, the pay allowed them by the State for military service rendered the city of Chicago at its first great fire, in 1871.

An amount of $250 was appropriated for purchases in the Chemical Department.

The use of rooms in the University was granted for a meeting of the Principals of the High Schools.

The application of the County Superintendent for the use of the building for the County Teachers' Institute was not granted.

Action in regard to painting the Farm House was deferred until the fall meeting.

President Cobb, as Chairman of the Executive Committee, made the following report in regard to the employment of Dr. Miles:

Gentlemen of the Board of Trustees:

Soon after my return from the South an Executive Meeting was called to consider especially the appointment of Dr. Miles to the Chair of Agriculture. At said meeting letters from nearly all the members of the Board were read in answer to one sent them by Dr. Gregory. Copy of which is hereby submitted (inclosure I. and II.) The Executive Committee, in view of the salary named, and other prudential reasons, concluded to postpone definite action until the full meeting of the Board at this time. Upon Dr. Miles' assurance that he was seriously considering the acceptance of offers from other State Institutions, the Executive Committee signified their willingness to recommend his appointment to the Chair of Agriculture and Professoship of Agricultural Chemistry, provided that he, with the Regent and Faculty, in the meantime would carefully review, if such revision is found necessary, the Agricultural course to present to us for our consideration and adoption.

We deemed this necessary in order that, as far as possible, the work of the Professor of Agriculture should be especially set forth. I presume such report will be presented by the Regent.

The resignation of Mr. C. W. Silver, Instructor of Agricultural Chemistry, is herewith presented, and acceptance of the same recommended. (Inclosure III.)

Mr. Gardner moved that Prof. Manly Mills be appointed to the Chair of Agriculture at a salary of $2,000, and Instructor in Agricultural Chemistry with $1,000 additional compensation. The motion was carried and his engagement fixed for the first of July. The Secretary was instructed to lay before the Board a report from the Faculty in regard to the Student's Government and general discipline which was called for at the September meeting of this Board.

The request of Miss Allen for an additional dressing room for the ladies was referred to Mr. Gardner and the Business Agent.

The President made the following report in regard to State Appropriations:

1. For the payment of taxes occurring in the years 1874 and 1875 on lands owned by the University in the States of Nebraska and Minnesota the sum of three thousand dollars per annum, or so much thereof as may be necessary.
2. For the purchase and manufacture of apparatus for the Physical Laboratory one thousand dollars.
3. For building, apparatus and books for the Veterinary Department, two thousand dollars.
4. For additional mat rial for the printing office, five hundred dollars.
5. For repairs on University building and improvements on grounds the sum of one thousand dollars.

Respectfully, (Signed) EMORY COBB.
President.

On motion of Mr. Sabin, it was resolved that the President and Corresponding Secretary be authorized to sign an order directed to the Auditor of Public Accounts of the State for the moneys appropriated to the University during the session of the last General Assembly.

Adjourned.