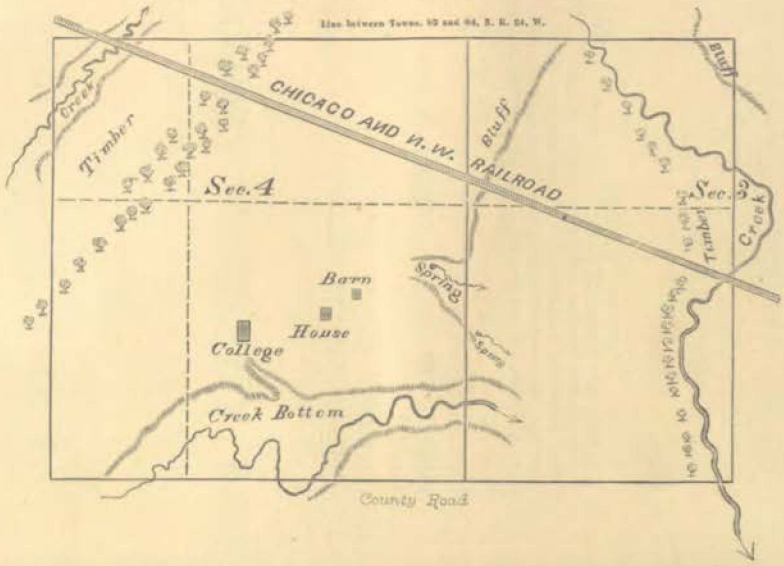
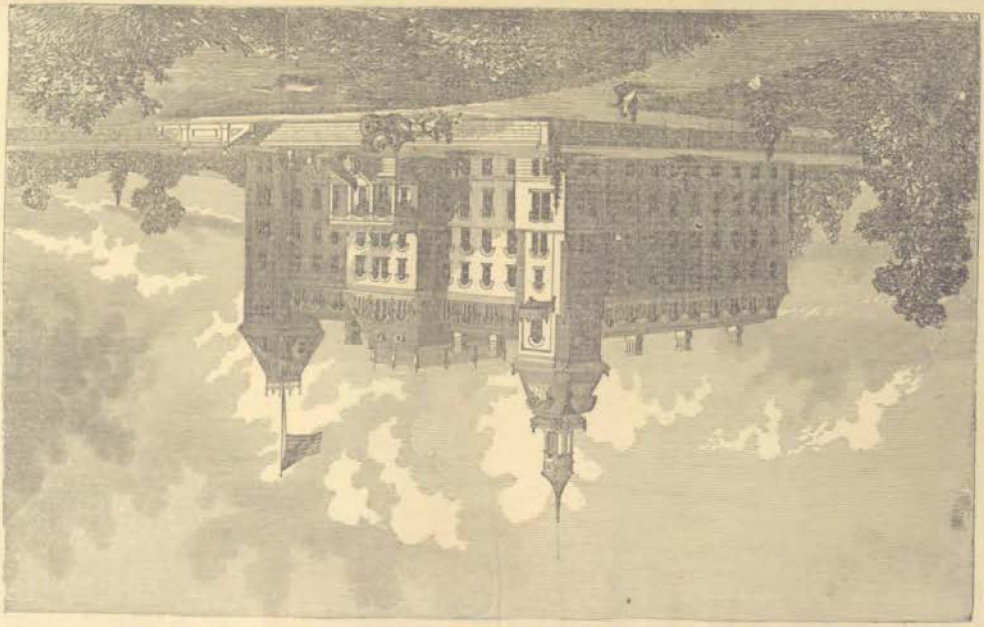
MAP OF AGRICULTURAL COLLEGE FARM.



STATE AGRICULTURAL COLLEGE, STORY COUNTY, IOWA



SECOND REPORT

OF THE TRUSTEES

OF THE

Iowa Agricultural College,

TO THE

GOVERNOR AND GENERAL ASSEMBLY OF IOWA,

CONTAINING A HISTORY OF THE COLLEGE FROM ITS INCEPTION TO THE PRESENT TIME; THE SUPERINTENDENT'S REPORT FOR THE LAST TWO YEARS; REPORT OF THE COMMITTEE ON ORGANIZATION; REPORT OF THE BUILDING COMMITTEE; REPORT OF THE EXECUTIVE COMMITTEE; REPORT OF THE TREASURER AND LAND AGENT.

JANUARY 27, 1868.

DES MOINES:
F. W. PALMER, STATE PRINTER,
1868.

To His Excellency, Governor Samuel Merrill :

In accordance with the requirements of the provisions of Chapter 114, of the Acts of the Tenth General Assembly, we herewith submit a Report of the condition of the Iowa Agricultural College and Farm; the Reports of the Executive and Building Committees; the Land Agent and Treasurer; a summary of the Report of the Committee on Organization, and other facts of public interest relating to the College; also a brief history of its origin and progress up to the present time.

TRUSTEES OF THE IOWA AGRICULTURAL COLLEGE.

Elected by the Legislature of 1866. *Terms of office began May* 1, 1866.

Ex - Officio—GOV. SAMUEL MERRILL.
1st *District*—J. WILSON WILLIAMS, Term expires, May 1, 1868.
2d *District*—DR. J. D. WRIGHT, Term expires, May 1, 1868.
3d *District*—B. O. STEVENSON, Term expires, May 1, 1868.
4th *District*—J. C. CUSEY, Term expires, May 1, 1870.
5th *District*—DR. T. K. BROOKS, Term expires, May 1, 1870.
7th *District*—H. M. THOMSON, Term expires, May 1, 1868.
8th *District*—JOHN RUSSELL, Term expires, May 1, 1870.
9th *District*—PETER MELENDY, Term expires, May 1, 1868.
10th *District*—JOHN GARBER, Term expires, May 1, 1868.
11th *District*—B. F. GUE, Term expires, May 1, 1870.
12th *District*—R. W. HUMPHREY, Term expires, May 1, 1870.

OFFICERS OF THE IOWA AGRICULTURAL COLLEGE.

HON. B. F. GUE.....President.
HON. H. M. THOMSON.....Secretary and Supt. of Farm.
MAJ. [illegible] RANKIN.....Treasurer.
C. A. DUNHAM.....Architect.

BUILDING COMMITTEE.

HON. JOHN RUSSELL, DR. J. D. WRIGHT, HON. J. W. WILLIAMS.

EXECUTIVE COMMITTEE.

B. F. GUE, R. W. HUMPHREY, J. C. CUSEY, PETER MELENDY.

COMMITTEE ON ORGANIZATION AND PROFESSORS.

B. F. GUE, PETER MELENDY, JOHN RUSSELL.

BRIEF HISTORY OF THE COLLEGE.

As the Iowa Agricultural College is beginning to be recognized as one of the most important of the public Institutions of the State, it is well to collect and preserve a record of all facts relating to its origin and history, up to the present time, that in the future, when the pioneers in the work shall have passed away, a truthful record of their doings may be secured.

At the first session of the Legislature held under the New Constitution, which convened at Des Moines on the eleventh day of January, 1858, R. A. Richardson of Fayette county, B. F. Gue of Scott county, Ed Wright of Cedar county, William Lundy of Muscatine county, and Charles Foster of Washington county, prepared a bill providing for the organization of a State Agricultural College, for the purpose of affording the laboring classes better facilities for procuring a college education.

The bill was introduced into the House on the 4th day of February, by Mr. Richardson, printed, and referred to the Committee of Ways and Means.

On the 10th day of March, Mr. Wilson, chairman of the committee, reported the bill back to the House, and recommended that its future consideration be indefinitely postponed. This brought on a spirited contest between the friends and opponents of the measure.

Speeches were made in advocacy of the bill by B. F. Gue, Ed Wright, William Lundy and R. A. Richardson, and against it — principally on the ground of inexpediency, owing to the condition of State finances — by J. F. Wilson, W. H. Seevers and John Edwards.

After a free discussion, the friends of the bill consented to reduce the appropriation asked for from $20,000 to $10,000, and the bill thus passed both branches of the Legislature by a large majority.

The first Board of Trustees, consisting of one from each Judicial District, was composed of the following named gentlemen, viz.:

M. W. Robinson, Timothy Day, John Wright, G. W. F. Sherwin, William Duane Wilson, Richard Gaines, Suel Foster, J. W. Henderson, E. G. Day, Peter Melendy and John Pattee.

In 1859, the Trustees purchased a farm in Story county, containing 648 acres.

The farm is located about thirty miles north of Des Moines, on the line of the North Western Railway, about midway between Boonsboro and Nevada.

The Trustees proceeded to erect upon the farm a brick house, a large barn, and other necessary buildings, and to build fence and break up a part of the land.

There was connected with the College bill, a provision for an Agricultural Department and Office, to be immediately opened at the Capital, for the purpose of procuring and supplying facts, statistics, seeds and plants to the farmers of the State. William Duane Wilson was elected Secretary of the Board of Trustees and Superintendent of this Department. He was continued in that position for several years, gathering and disseminating a large amount of valuable information, and some valuable grains, seeds and plants. At the session of the Legislature of 1864 this Department was abolished and the office at the Capital discontinued.

At the session of the Legislature in 1860 the enemies of the College made a strong effort to secure the repeal of the bill providing for its establishment. A resolution was adopted directing "the Committee on Agriculture to inquire into the expediency of repealing an act providing for the establishment of the Agricultural College." After taking the subject into careful consideration, the committee submitted the following reports, which are taken from the House Journal of 1860:

"The Committee on Agriculture, to whom was referred a resolution directing the committee to inquire into the expediency of repealing the law enacting and providing for an Agricultural College and Farm, have had the same under consideration, and the minority of said committee beg leave to report, that in their opinion it is expedient to repeal said law, and for the following, among other reasons:

"1st. Said Institution was not, and is not now, demanded by a majority of the tax-payers of the State, or those for whose especial benefit it is claimed the same was created.

"2d. It is believed that the expenditure of money required to establish and keep up such an Institution will be entirely disproportioned to the benefit resulting therefrom to the people of this State.

"3d. Admitting that the Institution would be of practical value to the agricultural interests of the State, your committee believe it unwise and unjust to embark in such a costly enterprise at a time when such financial distress pervades the country, and when the people are already overburdened with taxes.

"4th. Again, the State of Iowa is yet young, and almost one-half of her territory unsettled, and it is unjust to burden the present tax-payers of the State with the cost of establishing an Institution not imperatively demanded.

"JOHN M. WHITAKER,
"T. N. BARNES.

"Which, on motion, was laid on the table.

"Mr. Gue, from Committee on Agriculture, presented the following majority report:

"The undersigned, members of the Committee on Agriculture, to whom was referred a resolution inquiring into the expediency of repealing the law creating and providing for an 'Agricultural College and Experimental Farm, to be connected with the entire agricultural interest of the State,' ask leave to submit the following report: That, in their opinion, it is clearly inexpedient, unwise and unjust to repeal said law, for the following, among other reasons:

"1st. That the law was enacted by the last Legislature at the earnest solicitation of the most intelligent and experienced farmers, mechanical and working men of the State; that after a full and free discussion upon the merits of the bill, and the expediency of their laying the foundation of an Institution for the benefit of the great mass of the people who earn an honest living by the hard labor of their hands and the sweat of their brows, it was passed with a unanimity that ought to have entitled it to a *fair trial* before attempts are made to crush it out.

"2d. There is no evidence before the committee that any considerable number of people, of any class, or in any portion of the

State, desire that the law of the last session, for the establishment of this Institution, should be repealed until after a reasonable time has elapsed to enable them to judge whether it will meet the wants and expectations of those for whose benefit it was proposed to establish it. Your committee believe it would be but justice to the very large and respectable class of our citizens, who compose the working men of the State, to let the original intent of the friends of this Institution be fairly carried out, as provided by the law which it is proposed to repeal.

"3d. In view of the financial embarrassments which now depress our people, the friends of the College have decided to ask for no further appropriation from the State at this session of the Legislature; but that they will solicit and secure such subscriptions from friendly sources as may enable them, when times are more propititious, with some assistance from the State, to erect such buildings as the wants of the Institution may require; thus relieving the people from any apprehensions that this Institution should add to their already heavy burthen of taxation.

"Your committee would further represent that the law was so framed that the Institution should go into operation gradually. An Agricultural Bureau was organized in connection with the board, for the purpose of collecting and disseminating valuable information which could in no other manner be so effectually and cheaply obtained. It also provides for the collection and distribution of seeds; thus affording a medium of exchange among farmers in the different parts of the State, which, of itself, is of far more value than the whole amount of expense incurred. Indeed, it is impossible to calculate the great advantages which will undobtedly result from this department.

"Who can estimate the value to this State of the introduction of the single article of Sorghum, obtained by the seed department of the General Government, which has saved to our citizens, already, hundreds of thousands of dollars. Through this department of the College, we are already reaping the benefit of the law, to some extent, while the Board is engaged in making preparations for carrying its provisions fully into effect, as fast as the means at their disposal will justify.

"The farm has already been purchased, the location made, and an amount of money subscribed to assist in erecting the necessary

buildings. As evidence of the demand there is for an Institution of this kind, and its popularity among the farmers, your committee would state that there has already been numerous applications for admission into the College, as students, as soon as it goes into operation.

"In view of all these facts, your committee would most earnestly protest against the repeal of this law, and the consequent destruction of all that has thus far been accomplished; being confident, as we are, that if this step backward is taken, that it must and will be retraced, and that all of the time and money already expended, will be worse than lost; it will be evidence to our citizens and to the world, that after having once determined to educate our working men, to elevate labor and make it honorable and ennobling; that after having decided to provide an Institution in which the sons of our farmers and mechanics may be educated for their chosen profession, we have repented of our noble purpose, and have concluded that ignorance is preferable to knowledge, and have chosen darkness rather than light. All of which is respectfully submitted.

"B. F. Gue,
R. W. Macomber,
M. W. Robinson,
L. C. Noble,
F. A. Stevens."

The minority of the committee submitted with their report a bill repealing the act by which the College was established. This was a critical time in the history of the new enterprise. The State was depressed with a heavy debt hanging over it; the whole country was suffering from great financial embarrassment; the policy of the Legislature was to economise in all directions and cut off every project likely to draw heavily upon its resources. An Agricultural College was at best an experiment to some extent, and was looked upon with little favor even by many intelligent farmers. Its friends watched with anxiety the indications every where visible of a disposition on part of a majority of the Legislature to wipe out of existence thus summarily an act from which they had hoped to eventually build up a great institution devoted to the interests of the laboring people. H. C. Caldwell, one of the ablest and most influential members of the House, led the attack on the College. It was clearly evident to the friends of the College that a majority

of the House was disposed to vote for the bill of repeal. Time must be gained, or all their hopes were likely to be blasted. The Chairman of the Committee on Agriculture arose and moved that the bill be laid upon the table *for the present*, as its opponents were not quite ready to act upon it. The motion seemed reasonable, and prevailed. About two weeks later an effort was made to take the bill from the table, but the friends of the College *were not ready yet*, and raised the point—"that where objection was made, it required a *two-thirds vote* to call the bill up." The Speaker sustained the point, and as the friends of the College *never got ready during the session* to take up the bill, and as its opponents were not able to get a two-thirds vote, it has rested there in quietness from that date to this.

The friends of the College, well satisfied that they had barely saved their embryo institution from destruction, made no effort during the remainder of the session to procure an appropriation for the erection of a building, but decided to wait for a more auspicious occasion.

Before the assembling of the next Legislature the great rebellion had convulsed the whole country, and the entire energies and resources of the loyal States were required to preserve our government from destruction. All thought of asking aid of the State was postponed, and the trustees and friends of the College were content to wait for the return of peace.

The Secretary in his Report for 1863, says:

Beyond the expenditures necessary to place the Farm under a fair state of cultivation, the trustees did not feel justified in making appropriations from the limited amount in their hands, but preferred reserving the best of the assets for an endowment to meet the expenses of the Institution when in operation, hoping that when it had the ability, the State would make the needed appropriation for College buildings. But during all this time the people of the State, generally supposed that buildings were erecting and that the College would soon be open to the public, and many applications had been made to receive students. Had it not been for the extraordinary condition of the financial matters of the State, such would doubtless have been the situation of the Institution on the opening of the present year, now about five years since the purchase of the College Farm. If all this could not have been done, a general

expectation, or hope at least, was felt by its friends generally, that the Farm would be opened for experimental husbandry. Even this could not be accomplished under the circumstances without involving an expenditure which was thought would not be justified by the people of the State, unless the College Institution was fully provided for.

In July, 1862, Congress appropriated the several loyal States in the Union, for Agricultural Colleges, 30,000 acres of land, for each Senator and Representative in Congress. The amount under this grant, to the State of Iowa, was 240,000 acres. Any State accepting this grant is required by the terms of the grant to erect the necessary College buildings, without using any of the proceeds of the lands for that purpose, within five years from the time the acceptance of the grant. The State of Iowa, at the Special Session in September, 1862, accepted this grant, with this and other conditions imposed therein.

Peter Melendy was appointed by the Governor to select the lands embraced in the grant, and in October of the same year entered upon the work.

The following extracts from his report will show how and where the lands were located:

"It was ascertained that there were about 6,000,000 acres of vacant lands remaining in the State, two-thirds of which were in the Sioux City District, comprising all the counties north of township 85 and west of range 33. It required some days to prepare the necessary maps and plats for reference, and I was ready to commence the examination of lands about the first of November. It soon became apparent that the land speculations of a few years since had reached, in various directions, from the settlements along the rivers, and that a large part of the timber had been entered, together with considerable portions of the adjacent prairie. Under these circumstances I adopted the policy of selecting good lands only, even if they were so far from timber as to be slightly depreciated at present below the minimum of the government price. I considered it expedient also (confirmed by the opinion of several of the College Trustees) to select about 50,000 acres within the six mile limits of the land grant railroads—the Dubuque & Sioux City and the Cedar Rapids & Missouri River Railroads. For convenience, these will be designated as railroad lands, and as they

are taken at the maximum price it reduces the aggregate to about 200,000 acres. It is believed, however, that by the extension of these roads this class of lands will become quite as remunerative to the College fund as any of the lands selected at the minimum price. In the selections I have kept in view the adaptation of the lands to agricultural purposes, especially for grain-growing and stock-raising; also, the probable points of market, when the country becomes settled, and generally their location near the line of roads as well as probable towns; and in the railroad lands, in most instances, their position in reference to probable stations, or on roads leading through or near them to railroad depots.

After traversing the Sioux City, Des Moines and Fort Dodge districts, in more than thirty counties, including the region on both forks of the Des Moines over eighty miles above Fort Dodge, I reviewed the preliminary list prepared on the several routes, and made the selections in the counties hereinafter named; the lands being indicated in the list, described in the plat-books, and also marked on the accompanying maps of the land districts. The selections were made in as large bodies as practicable, in good localities, with a view to encourage settlement in neighborhood colonies, and also for the convenience of more careful examinations if found to be necessary, and for the better management of the agency that may be required in disposing of the lands. The limited time did not permit me to examine every tract personally, but wherever lands have been selected, reference was had to springs, streams, stone-quarries, nearness to timber, superior grass or grain land, or some of those advantages and circumstances that might render the land more salable. At the same time there remained in nearly every township some land of a quality equal to that selected, for I thought it better policy not to remove, in any township or county, all the opportunities that immigrants may seek for entries, pre-emptions, or homesteads upon Government lands; for settlements in the neighborhood of the College lands will tend to increase their value.

The quantity in the several land districts, and the quantity of railroad lands, are indicated, nearly, in round numbers, by the following figures:

Fort Dodge district railroad lands.....	30,000 acres.
Fort Dodge district other lands.....	85,000 acres.

Sioux City district railroad lands.....	20,000 acres.
Sioux City district other lands.....	50,000 acres.
Des Moines district railroad lands.....	6,000 acres.
Des Moines district other lands.....	4,000 acres.
Total, about	195,000 acres.

These figures, like those referring to the lands in some of the counties, will be slightly changed in perfecting the list, by the omission of some tracts selected by the counties, and perhaps by some pre-emptions. The apparent deficit in the total number is made up, nearly, by considering the maximum-priced railroad lands at twice their actual quantity."

By a subsequent adjustment of the selections with the General Government, the number of acres embraced in the grant was brought up to 204,309 acres, which amount was certified to the State.

At the session of the Legislature which convened at the Capital in January, 1864, a determined and systematic effort was made by some of the friends of the State University to divert the lands granted by Congress for the benefit of Agricultural Colleges, to increase the endowment of the University, upon conditions that a department of agriculture should be established, an experimental farm secured, and an agricultural course provided at the University for those who wished to pursue it.

It was claimed by the friends of the proposition, that this would be a substantial compliance with the law making the grant; that it would save a large expense in buildings, professors, cabinets, libraries, &c.; that the University would soon need, and must have, a larger endowment, and that in no way could it be so easily obtained as by diverting the College Grant.

These views were ably urged by Ex-Gov. Kirkwood, President Spencer, and A. B. F. Hildreth, then representative from Floyd county.

On the other hand, the friends of the Agricultural College resisted the attempt to divert the grant from its original purpose, contending that it belonged to the Agricultural College by the express terms of the act; that the industrial classes comprised the majority of the people and tax-payers of the State; that they were seeking to build up one institution that should be devoted to their

interests, and that after having assisted in securing the grant of lands for its endowment, it would be gross injustice to divert it to one that was already richly endowed.

Public discussions were held for several evenings in the Hall of the House of Representatives, in which Governor Kirkwood appeared as the champion of the diversion; while B. F. Gue, Senator from Scott county; Maxwell, Representative from Story; Russell of Jones, and Thomson of Scott, opposed it. The scheme was finally defeated, and the entire grant given forever to the Agricultural College.

After the contest was ended, the manner of disposing of the lands in such a way as would soonest produce an income for the support of the College, was a subject of much solicitude, and engaged the earnest attention of the Legislature and friends of the College for a long time.

The lands were remote from railroads, settlements and timber, and surrounded by Government lands which could be taken by actual settlers as homesteads at a merely nominal cost, and it could not be hoped that the College lands would sell for even $1.00 per acre, for several years to come. After much thought on the subject, the present plan of leasing them was devised by Governor Kirkwood, Senators B. F. Gue and C. F. Clarkson, incorporated in a bill which became a law, and has since produced such remarkable results, enabling the College to realize an annual income already, of nearly $30,000 per year.

The act provides that the Trustees may lease, for a term of ten years, any of said lands; the lessee to pay eight per cent interest on the appraised value of the land annually in advance, with the privilege of purchasing the same at the expiration of the lease. In case the lessee fails to pay the interest promptly, his right to hold the land is forfeited, with all improvements made thereon. The lands were then appraised, a land office opened at Fort Dodge, and Hon. George W. Bassett appointed agent for the sale and lease of the lands.

At the same session of the Legislature an appropriation was made of $20,000 to aid in the erection of the College building.

In June, 1864, the building committee, consisting of Suel Foster, Peter Melendy, and J. A. Bronson, proceeded to let the contracts

tracts for excavation of cellar, making brick, furnishing of lumber, carpenter work, stone cutting, &c.

John Browne, of Des Moines, was employed as architect, who furnished the plan of the building. In September, Mr. Browne was discharged and C. A. Dunham was employed, who materially changed the plans, and directed the removal of the cellar walls, which had become badly damaged owing to their faulty construction. By the report of the secretary, Peter Melendy, made to the General Assembly in 1866, it appears that the appropriation of $20,000 was expended in putting in the foundation of the College and making brick for the superstructure.

During this session a committee consisting of Senator Powers of Black Hawk county, Representatives Finkbine of Johnson, and Russell of Jones, was appointed by the Legislature to visit the College Farm and report the condition of affairs. They presented an elaborate report, and estimated that it would require $91,000 to complete the building, and pay the outstanding indebtedness. An appropriation for that amount was made by the Legislature, and an act passed regulating the manner in which it should be expended.

An entire new board of Trustees was elected who came into office on the first of May, 1866, and at a meeting held at the Farm in June, a contract was let to Mr. Reichard for the completion of the College building. He was to be furnished with all of the brick required to finish the work, and was to furnish all other material, and do the work, for which he was to receive $78,872. The building was to be completed by the first day of January, 1868. The remaining facts of interest connected with the College and Farm, will be found in abstracts of the reports of the Building Committee, Executive Committee, Superintendent of the Farm, Treasurer, and Land Agent, which will be found in this publication.

Among the early friends of the College, and active members of the Board of Trustees for a long series of years, will be found the names of Suel Foster of Muscatine, the first President of the Board; Peter Melendy, a member of the Executive Committee for many years, and at one time Superintendent and Secretary; Wm. Duane Wilson, the active and efficient Secretary of the Board, and author of several of the best publications relating to

the agricultural interests of the State; M. W. Robinson, who was for years an active member of the Board, and subsequently held the offices of Secretary, Superintendent, and Treasurer; J. A. Bronson of Jones county, who was an active member of the Executive Committee.

As long as Agricultural Colleges exist, the name of JUSTIN S. MORRILL will not be forgotten by their friends. It is to his untiring efforts, supported by Senator Wade of Ohio, and Senator Harlan of our own State, that Congress was induced to make a grant of the public lands for their permanent endowment. At the Thirty-Fifth session of Congress, in December, 1857, Mr. Morrill, as Chairman of the Committee on Agriculture, introduced his first bill granting lands to the States for the endowment of institutions devoted to giving instruction in agriculture and the mechanic arts. It met with strong opposition both in the House and Senate. In the House its most active opponent was Mr. Cobb of Alabama, and in the Senate Jefferson Davis of Mississippi, J. M. Mason of Virginia, and Mr. Pugh of Ohio. The bill finally passed the House on the 22d of February, 1858, by only five majority. In the Senate the friends of the bill were not able to reach it during the session, and it went over to the winter of 1859, when, on the 7th of February, it passed that body by only three majority. The bill went to the President for his approval; but James Buchanan, true to his instincts of sympathy with the lordly planters of the South, placed his veto upon an act that was designed to benefit the laboring people.

Upon the opening of the new Congress under President Lincoln's Administration, Senator Wade introduced the bill again in the Senate, and after a long delay it was finally passed by the decisive vote of thirty-two to seven. It went to the House, and on the 17th of June, 1862, was passed by ninety ayes to twenty-five nays. A few days later it received the signature of President Lincoln and became a law.

Among the active friends of the bill in the House, we have neglected to name Mr. Walbridge of Michigan, who was an active and efficient supporter of the measure. And to no one are the friends of Agricultural Colleges more indebted for earnest works in their interests, at all times, and upon all occasions, than to Dr.

Evans Pugh, the late lamented President of the Pennsylvania Agricultural College.

We have thus briefly alluded to the most active and earnest friends of our Agricultural College in the days of its infancy, and have also noted the prime movers in securing the beneficent act providing for the endowment of this and similar institutions, that their earnest and long-continued labor may not be forgotten by future generations who are destined to reap the great benefits of their works.

REPORT OF THE TREASURER FOR 1866.

Hon. B. F. Gue, President of the Board of Trustees of the Iowa Agricultural College:

I herewith submit a statement of the transactions of my office from the first day of May, 1866, to the first day of January, 1867.

BUILDING FUND.

By amount received from State Treasurer	$40,000.00
State warrant	10,000.00
Received from M. W. Robinson	312.75
Total	$50,312.75
To amount paid on warrants	$38,811.31
Transferred to farm fund	3,547.24
	$42,358.55
Balance	7,954.20
Total	$50,312.75

FARM FUND.

By amount paid from building fund	$ 3,547.24
By amount received of M. W. Robinson, Secretary	654.73
By amount of Story county bonds	1,600.00
By amount from parties on land notes	2,820.00
Total	$ 8,621.97
Amount paid on warrants	3,352.80
Balance	5,269.17
Total	$ 8,621.97

INTEREST FUND.

By amount of Story county bonds and interest	$ 7,733.66
By amount received of G. W. Bassett	4,923.27
Total	$12,656.93

REPORT FOR 1867.

To the President of the Board of Trustees of the Iowa Agricultural College:

I herewith submit a statement of the transactions of my office for the year 1867.

It will be seen that the fund demonstrated "Interest Fund," has accumulated quite a fund in my hands. During the first part of the year, by the provisions of the law making the appropriations requiring the filing of vouchers of actual payment by the Board on account of the College building, before any money could be drawn from the State Treasury, and at times the inability of the State Treasurer to pay the requisitions of the President of the Board, this fund was temporarily loaned to meet the payments due the contractor. I used this fund in such manner upon consultation with some members of the Board, as I believe to the best interests of the Institution. However, during the summer I perceived that this fund would not be further required for that purpose, and endeavored to invest the money so as to bring a revenue. As the College is to be a State Institution, I thought it not only proper but politic to invest its means in the State indebtedness, and sought Iowa bonds in preference to other securities.

Upon consideration of the resolution of the Board directing the investment of this fund, I came to the conclusion that I would not be authorized to pay over par for any bonds I might purchase. As government bonds have ruled high in the market, often bringing more than one year's interest as a premium, and for reasons above expressed, I did not invest any of these funds in them. I have corresponded with sundry persons in the State who I learned held Iowa bonds, have advertised in New York, and employed agents in Chicago to purchase, but have only obtained $9,100 at par. I could secure all wanted by paying a premium ranging

from two to three per cent. I submit the matter to the judgment of the Board.

It seems to me some discretion might be given the Treasurer, or perhaps better, the Executive Committee empowered to direct or advise him upon the terms and character of these investments. As the success and usefulness of the Institution, in a large measure, must depend upon its financial affairs, considerable attention ought to be directed to what will be its permanent fund.

I herewith submit a statement of the funds:

COLLEGE BUILDING FUND.

1867.		
Balance last report, January 6, 1867		$ 7,954.20
Feb. 9.	Amount received from State Treasurer	10,000.00
May 10.	Amount received from State Treasurer	10,000.00
Aug. 6.	Amount received from State Treasurer	10,000.00
Sept. 27.	Amount received from State Treasurer	10,000.00
Total receipts		$47,954.20
Amount paid out on warrants		$45,561.20
Balance on hand, January 6, 1868		$2,393.00

FARM FUND.

1867.		
Balance last report, January 6, 1867		$5,269.17
Feb. 18.	Interest on Story county bonds	112.00
May 22.	From A. H. Morris, on note	273.60
Sept. 25.	From H. M. Thomson, Secretary	800.00
		$6,454.77
Amount paid out on warrants		$2,298.70
Balance		$4,156.07
Composed of Story county bonds		$1,600.00
Cash		2,556.07
		$4,156.07

INTEREST FUND.

1867.		
Balance last report, January 6, 1867		$7,733.66
Jan. 17.	Received interest	4,923.27
Jan. 17.	Received of G. W. Bassett	1,965.40

Jan. 24.	Received of G. W. Bassett	5,419.00
Feb. 6.	Received of G. W. Bassett	1,262.50
Feb. 8.	Interest received from State Treasurer	100.00
Feb. 18.	Interest received on Story county bonds	511.17
March 31.	Received of G. W. Bassett	266.00
April 4.	Received of G. W. Bassett	2,809.96
May 2.	Received of G. W. Bassett	500.00
May 21.	Received of G. W. Bassett	835.25
May 27.	Received of G. W. Bassett	546.00
June 11.	Received of G. W. Bassett	28.80
July 5.	Received of G. W. Bassett	3,448.34
July 6.	Received of G. W. Bassett	588.15
Oct. 3.	Received of G. W. Bassett	6,920.48
Dec. 30.	Received of G. W. Bassett	6,253.33
1868.		
Jan. 2.	Received interest on Iowa bonds	297.50
Iowa bonds		9,100.00
		$53,508.66
1067.		
Aug. 12.	Amount paid for Iowa bonds and interest	$ 503.79
Aug. 15.	Amount paid for Iowa bonds and interest	8,062.28
	Exchange and interest	22.00
Sept. 19.	Paid for Iowa bonds and interest	629.69
	Paid in warrants	513.50
Balance		43,777.46
		$53,508.66
Balance composed of Iowa bonds		$ 9,100.00
Story county bonds		6,700.00
Cash		27,977.46
		$43,777.46

L. P. SHERMAN, Treasurer.

REPORT OF THE LAND AGENT.

LAND OFFICE OF THE IOWA AGRICULTURAL COLLEGE,
DECEMBER 31, 1867.

To the Board of Trustees of the Iowa Agricultural College:

In compliance with your instructions, the following annual report of the transactions of the Land Department of the College is hereby submitted for your consideration.

The agency for selling and leasing lands belonging to the College, and included in the act of Congress approved July 2, 1862, was established at Fort Dodge on the 15th day of July, 1865, by order of the Executive Committee, and the lands offered for sale and lease under the provisions of Chapter 117 of the Acts of the 10th General Assembly.

The lands were withdrawn by order of the committee, on the 6th day of December following. At the next session, the General Assembly authorized the Board of Trustees to sell or lease the remainder of the lands, but provided that the price should be advanced fifty per cent additional to the valuation made in 1865, and the interest on leases was advanced to eight per cent per annum. This established the minimum price of lands at $2.25 per acre.

The Board of Trustees having entered into a permanent contract with me for the establishment and maintenance of a land agency at Fort Dodge for a term of ten years from the date of the first leases, ordered the lands to be again offered for sale and lease on terms consistent with the provisions of the last mentioned act of the General Assembly.

The lands were accordingly again brought into market on the 14th day of May, 1866, but the great advance in price, and the increase in the rate of interest, necessarily made the sales somewhat slower than the previous year.

The following is a summary of the transactions of the office up to December 31, 1867:

Number of acres of land leased up to December 31, 1865		57,436
Valuation		$109,459.44
Annual interest at 6 per cent		6,567.56
Number of acres of land leased from December 31, 1865, to January 9, 1867		54,998
Valuation		$130,779.81
Annual interest at 8 per cent		10,462.38
Number of acres of land leased from January 9, 1867, to December 31, 1867		57,806
Valuation		$149,680.13
Annual interest at 8 per cent		11,974.41
Total number of acres leased		170,240
Total valuation		$389,919.38
Total amount of interest from leases		29,004.35
Total amount of interest paid over to the Treasurer		$ 43,512.46
Total number of acres in the grant		204,309
Amount leased		170,240 $\frac{3}{160}$
Amount not leased		34,068 $\frac{3}{160}$
Entire grant		204,309 $\frac{3}{160}$

The interest has been paid over quarterly, as stipulated in my contract with the Board.

No absolute sales have been made, the contracts being wholly in form of leases, with a right of purchase to the lessee, or his assignee, and consequently no part of the principal has been received, nor is it probable that the purchase money on many of the leases will be paid until at or near the expiration of the term of lease.

All leases have been so drawn as to terminate on or before the 31st day of December, 1875, at which time it is expected that all of the lands will have been disposed of, the principal collected and remitted to the College, and all business pertaining to the Land Agency closed up.

This unexpected success in converting an unproductive land grant into an interest-bearing fund, yielding an ample revenue for the support of the College, is chiefly due to the wise method adopted for the disposal of the lands. It is doubtful if a revenue sufficient for the support of the College, in its most limited operations, could have been realized in many years had the Board relied only upon absolute sales. The small sum required in advance in taking leases has enabled men of limited means to invest in College lands, while the price fixed by the College has, in almost all cases, been above the price held for lands of corresponding quality adjacent.

One strong inducement to persons leasing these lands was the fact that they are exempt from taxation during the term of the lease. This question was early brought to the attention of the Board of Trustees, and subsequently submitted to the Attorney-General for his opinion. On the 26th day of January, 1866, Hon. F. E. Bissell, then Attorney-General, in reply to this inquiry, addressed a communication to Hon. Wm. H. Holmes, President, and Peter Melendy, Secretary, of the Board of Trustees, in which he expressed the opinion "that these lands are not subject to taxation." This official opinion was printed and very generally distributed with circulars issued from this office. Although this exemption is not expressed in the terms of the lease, yet it was considered as an element of value in the contract, and was regarded as an important consideration to the lessee.

Any attempt now to change this implied condition, by imposing unexpected burdens upon the lessee, even if the right exists, would induce forfeitures, retard collections of interest, and fatally reduce the revenue of the College.

The interest for the current year is now being paid in with but few delinquences.

The Agency, as stipulated in the contract, has been conducted without expense to the College.

GEO. W. BASSETT,
Agent for the Iowa Agricultural College.

REPORT

OF THE

COMMITTEE ON ORGANIZATION, AND SELECTION OF FACULTY.

At the January session of the Board of Trustees, held at the Capital in 1867, the following resolution was adopted:

Resolved, That a committee of three be elected by ballot, whose duty it shall be, to examine into, and, if necessary, visit Agricultural Colleges in other States, in order to procure all information necessary for the successful organization of our College.

That it shall also be their duty to select competent professors, engage them and fix their salaries, and make a full and complete report of their doings to the Board.

Gov. Stone, Lieut. Gov. Gue, and Peter Melendy, President of the State Agricultural Society, were selected to constitute the committee.

Owing to the pressure of official duties, Gov. Stone was unable to serve, and the investigation was made by Lieut. Gov. Gue and Peter Melendy, who submitted their report to the Board on the 15th of January, 1868.

The following is a brief summary of the most important facts and suggestions contained therein:

We began our investigations by corresponding at once with some of the most successful Agricultural Colleges in the country, and with such persons as would be likely to know of suitable men to fill some of the professorships in our College. These investigations were continued for several months, but without satisfactory results. We were unable by correspondence to procure that amount of knowledge of details and facts that would enable us to arrive at any satisfactory conclusions as to the qualification of persons recommended for professors.

Appreciating the vital importance of securing as members of the Faculty, men thoroughly qualified, and as to whose competency there existed no reasonable doubt; and believing as we do, that the success of our College, from which so much is expected, depends in a great measure upon the capability of the men who shall conduct it, we soon became convinced that it was absolutely necessary to make a thorough personal investigation into the standing qualifications and capacity of the persons recommended to us for these positions.

We, therefore, determined to visit several of the Agricultural and Literary Colleges in other States, for the purpose of pursuing our investigations.

1. As to the plan of organization, working, success or failure of the several Institutions.

2. The causes which have led to success or failure of those which have been established in other States.

3. The course of instruction — how conducted and illustrated.

4. Determining how many professors and teachers we need, and of what grade.

5. Finding and securing competent men for President and Faculty.

6. Thoroughly investigating the manual labor system where it has succeeded, and also where it has failed.

7. Ascertaining the most approved method of fitting up and furnishing the various rooms and departments of our College.

We became convinced at an early day that the most difficult part of the mission intrusted to us, was the selection of a corps of professors thoroughly competent for the work — eminent as teachers of experience in conducting an Agricultural College. On the character and ability of its Faculty will the character and success of the Institution depend more than upon all other circumstances taken together. Buildings, cabinets, libraries, and rich endowments, will all be in vain, if the living agents, the professors, be not men of ripe attainments, fine culture, and eminent teaching powers. Self-nominated candidates are always abundant, but the men we want will need to be sought for, and are extremely difficult to obtain when found. Such men are always in demand, and are generally employed in positions which they will not readily abandon.

We determined to rigidly scrutinize without fear or favor the qualifications of every candidate for a place, and employ none but men of tried and proven ability. Older and ordinary colleges may do with second-rate men, but ours can only succeed with the best men. The greatest difficulty we have experienced is in finding suitable men for President and Professor of Agriculture. It is not so difficult to fill the other chairs with men competent, experienced, and of known ability.

The President, as the executive officer, the leading spirit, the head of the Institution, must be a man clearly comprehending the plan and objects of an agricultural college, who is in full sympathy with its friends, and a firm believer in the idea. He must be thoroughly educated, that he may inspire respect among other members of the faculty and the students; of untiring energy, for his mission is to build up an institution that will endure for ages, and rank among the first in the West. It is needless for us to say that it is extremely difficult to find such a man, and *more* difficult to secure him for our College when found. The services of such men are always in great demand, and at this time a large number of States besides ours are searching diligently for the very men we want. Wisconsin, Illinois, Minnesota, Vermont, New York, Ohio, Indiana, Massachusetts, and several other States, have within the past year been exploring the field, searching for such men for their Agricultural Colleges and Universities.

Our investigations thus far have been thorough, it being our determination to recommend no one for this most important position, about whose qualifications we entertain a doubt. Several of the States we have visited have been from one to two years in finding and securing the proper men for the Presidency of their Agricultural Colleges. An incompetent man at the head of such an institution in its infancy, will inflict a blow upon its prosperity that will require years to recover from. It will dishearten the friends of industrial education, give the College a bad name, keep away the most desirable class of students, and, in short, prove as fatal to success, as is an incompetent commander in time of battle. While we have found several persons whom we are satisfied will fill the chairs of Professors of Mathematics, Natural Sciences, Modern Languages, &c., with credit to themselves and the College, we are not yet satisfied that we have found any one whom we can

recommend for the presidency without further investigation. We have several in view who are highly recommended for the place, and are giving each case a thorough investigation, and hope to find some one among the number who will come up to the high standard of qualification required for the position.

VISIT TO THE COLLEGES.

We have visited several of the Agricultural Colleges now in operation in the different States, and carefully investigated their various plans or organization, the course of instruction, rules and regulations governing them, noting such facts as we regarded of importance in the organization of our College.

In Michigan and Massachusetts we found the same general ideas prevailing among those having the control of the Agricultural Colleges, and we were gratified to learn that their views in relation to the objects and aims of these institutions, correspond very nearly with the plan of ours as far as yet developed.

The fact that these two institutions seem to us to be the most successful by far, of any we have visited, in demonstrating the feasibility of combining practical with a theoretical education, encourages us in the firm belief that our College is aiming at the true system.

THE MICHIGAN AGRICULTURAL COLLEGE.

We visited this Institution in October last, while on our way east, and spent a number of days investigating its plan of organization, course of instruction, system of labor, and the manner of fitting up and furnishing a cabinet, lecture room, laboratory, &c. To Michigan belongs the honor of having inaugurated and established the first successful Agricultural College in the United States. The buildings consist of the College proper, which is fifty by one hundred feet in size, and three stories in hight above the basement; a separate boarding-hall forty-three by eighty-two feet in size, and the same hight; and four commodious dwellings for the use of the President and professors,—all built of brick. The College is located three miles east of Lansing, the Capital of the State, on a farm of 676 acres, which was at the time of its location covered with a dense forest.

The College was opened on the 13th of May, 1857, under the

charge of President Williams, four professors and an assistant in chemistry, and has continued in operation up to the present time with varied success.

For several years after its organization it labored under many disadvantages, arising from its location in the midst of an extended forest in an inaccessible part of the State, the opposition encountered from its enemies, and all of the various obstacles that are met in organizing any new Institution.

The first President had been engaged in active political life, and while under his charge, the College was made the object of bitter party feeling, which in some measure impaired its usefulness, and served to arouse a partisan prejudice against the Institution.

The first two years were years of severe trial to the College and its friends. The buildings had been insecurely made; large outlays were required to render them trustworthy; a wet spring, and afterward a severe drought, produced almost a failure of crops; the farm was new, and most of the labor of the students was necessarily employed in chopping, logging, fencing, draining and pulling stumps, a kind of labor that is hard and not very instructive to the pupil.

It was admitted by all that the academic instruction was of a high order, but the lack of facilities for imparting practical instruction in agriculture had a tendency to render the labor system irksome to the student and unpopular with the public.

It was a serious misfortune to the Institution that its isolated location, and the native wildness of the farm rendered it unable to take advantage of the first enthusiasm, which otherwise might have been excited in regard to an enterprise devoted to the interests of the laboring classes, and which promised so much for their future benefit. The President in his inangural truly said:

"Friends and enemies will demand too much, and that too early. The acorn we plant to-day will not branch into the majestic oak to-morrow. The orchard we plant this year will not offer a harvest of fruit the next. The Institution itself, like the seeds, plants, trees, and very implements which come under its ordeal, require patience, wisdom and time for trial and development."

At this time the object and chief aim of the Institution were not definitely settled, but continued for many years a subject of debate.

Many urged that its first object should be, to enable a very large number of students to acquire a passably good education, in a way that should reduce their expenses.

Others claimed that it should be a purely and thoroughly agricultural school, and devoted only to such branches as pertained to that course.

The average attendance of students for the first six years up to 1864, had been about seventy-five, and the average expenses of the College, exclusive of permanent improvements, were about $12,000 per year.

Up to this time continual changes had been made in the control, management, course of instruction and professors, all of which could not be otherwise than damaging to the Institution.

It was in a great measure an experiment and must necessarily grope its way along in an untrodden path, and learn by experience and actual trial, many facts of interest and vital importance which other similar institutions can now have to guide and direct them in their organization and management.

Up to this time, Michigan Agricultural College has received no aid from the Land Grant, but has relied for support upon appropriations of the Legislature, a very uncertain and unpleasant method of procuring an endowment. But that will soon be ended, as the lands have been located chiefly in the valuable pine forests in the northern part of the State, and will soon be a source of large revenue.

After ten years' experience, the following course of study has been adopted and seems to be well suited to the wants of the students. We present it in full for the guidance of our College in its organization:

COURSE OF INSTRUCTION.

PREPARATORY CLASS.

FIRST HALF YEAR.

Arithmetic — Robinson's Higher.
Descriptive Geography — Mitchell's School.
English Grammar — Green.

SECOND HALF YEAR.

Algebra — Robinson's Elementary.
Natural Philosophy — Olmsted's School.
Composition — Quackenbos.

COLLEGE COURSE.

FRESHMAN CLASS.

FIRST HALF YEAR.

Algebra — Robinson.
History.
Geometry — Robinson.
Book-keeping — Bryant & Stratton.

SECOND HALF YEAR.

Trigonometry — Robinson.
Surveying — Davies.
Practical Agriculture.
Geology — Dana.

SOPHOMORE CLASS.

FIRST HALF YEAR.

English Literature — Chambers.
Structural Botany — Gray.
Vegetable Philosophy.
Elementary Chemistry — Youmans.

SECOND HALF YEAR.

Entomology—Harris.
Landscape Gardening—Downing and Kemp.
Analytical Chemistry—Fresenius.
Systematic Botany—Gray.
Horticulture.

JUNIOR CLASS.

FIRST HALF YEAR.

Physics—Snell's Olmsted.
Agricultural Chemistry—Johnstone.
Inductive Logic—Herschel.

SECOND HALF YEAR.

Physics.
Rhetoric—Whately.
Animal Physiology.

SENIOR CLASS.

FIRST HALF YEAR.

Zoology — Carpenter.
Practical Agriculture.
Mental Philosophy — Haven.
Astronomy.

SECOND HALF YEAR.

Civil Engineering — Mahan.
Moral Philosophy.
Political Economy — Carey.
French.

Declamations every six weeks during the course. Compositions every two weeks.

SELECT COURSE.

Persons of suitable age and acquirements, who desire to pursue one or more branches of study more closely related to Agriculture, (such as Chemistry, Botany, Animal Physiology, &c.,) may be received for a less time than is requisite for the full course.

DEPARTMENTS OF INSTRUCTION.

Elementary Chemistry.—The primary forces—Heat, Light, Electricity, Magnetism, &c.; Chemical Affinity and the Laws of

Chemical Combination; Elementary Substances—their history, properties, combinations and uses; Application of Chemistry to the Arts and Manufactures; Organic Chemistry. In the study of Elementary Chemistry the facts and principles of the science are illustrated by experiments.

Analytical Chemistry.—General Analysis; Analysis of Soils; Analysis of Minerals; use of the Blow-Pipe; Analysis of Manures; Analysis of the Ashes of Plants; Alkalimetry and Acidimetry. In prosecuting Chemical Analysis, the student spends three hours a day in the Laboratory, under the direction and supervision of the Professor of Chemistry, applying with his own hands the tests required to determine the composition and properties of bodies, thus securing a practical knowledge of the methods employed in these investigations.

Agricultural Chemistry.—Formation and composition of soils; the relations of air and moisture to vegetable growth; connection of heat, light and electricity, with growth of plants; nature and source of food of plants; chemical changes attending vegetable growth; chemistry of the various processes of the farm, as plowing, fallowing, draining, &c.; preparation, preserving and composting of manure; artificial manure; methods of improving soils by chemical means; by mineral manures; by vegetable manures; by animal manures; by indirect methods; rotation of crops; chemical composition of the various crops; the chemistry of the dairy. The instruction in Chemistry is imparted both by lectures and text books.

Practical Agriculture.—*First Year.*—Laying out of farms; arrangement and planning of farm buildings; farm implements; general principles of tillage; principles of drainage; laying out and construction of drains; methods of seeding; harvesting of crops; principles of stock-breeding; breeds of domestic animals —their characteristics and adaptation to particular purposes.

Fourth Year.—General principles of farm economy; manures—their management and mode of application; succession of crops; preparation of the soil for particular crops; cultivation of crops; management of grass lands; stock husbandry; care of animals and principles of feeding; fattening of animals; management of

sheep. In addition to the above course, instruction is given in the field in the various manual operations of the farm.

Botany.—A course is first given in Physiological Botany, Systematic botany is then taken up, the Natural Orders being studied as to their Botanical characteristics; their size and geographical distribution; their relative importance; the genera and species having agricultural value; those having commercial or medical value; those having ornamental value; and those which are obnoxious or detrimental, as weeds or poisonous plants. The orders are illustrated by diagrams, and numerous living and dried specimens. The living specimens are dissected and examined by the students, and their genera and species determined. The indigenous plants, together with those cultivated in the gardens and grounds, afford material for the study of this department of Botany. In the study of Vegetable Physiology, structure is illustrated by means of diagrams. Several excellent microscopes are used in the study of minute structure.

Horticulture.—In the course of Vegetable Physiology, the relations of that Science to Horticulture are pointed out. The Sophomore class being employed during the year in the gardens and College grounds, is afforded abundant opportunities for the application of the instruction received in the class-room. It is intended that each student shall have practical experience in every agricultural operation. In addition to these methods of instruction, a course of lectures is given on the history, theory and practice of Horticulture.

Animal Physiology.—In this department, particular attention is given to the Anatomy and Physiology of domestic animals. The course is illustrated by anatomical preparations, and diagrams, representing the comparative structure of the organs of locomotion, digestion, circulation, respiration and reproduction of each branch of the animal kingdom. Dissections of animals are made, to render the student familiar with the appearance, situation and relation of the organs of the animal system in a state of health, and the changes produced by disease. Opportunities are given for the study of the minute structure of the various tissues by means of the microscope.

Zoology. — Principles of the classification of animals, as founded

on their structure and embryonic development. Descriptive Zoology, comprising the systematic arrangement of animals in accordance with their natural affinities, in classes, orders, families, &c.; habits and geographical distribution of animals.

Entomology. — The course in Entomology is illustrated by a valuable collection of native and exotic insects. Particular attention is given to the study of species injurious to vegetation; and the best methods of checking their ravages are discussed. Students by collecting and preserving specimens of our native species, become familiar with their habits in their several stages of development.

Mathematics and Civil Engineering. — The Preparatory class spend some time in a review of Arithmetic. The following branches of mathematics and their application follow: Algebra, Geomery, Plane Trigonometry, Spherical Trigonometry, Analytical Geometry, Surveying, Leveling, Platting, Mechanics, Strength of Material, Arches, Framing, Bridge and Road Building. Students have the use of chain, compass, and other instruments for practice, and receive instruction in the field as well as in the lecture room, each student being required to take charge of field surveys, and to become practically acquainted with the use of the level.

Geology. — A course of daily recitations in Geology during the second half of the Freshman year, is illustrated by maps, diagrams and specimens.

English Literature. — Instruction in this department is given by means of text books and lectures. Rhetoric—style. History of English literature. Rhetoric—arguments, conviction, persuasion, fallacies in reasoning. Select portions of English classics receive critical examination in a course of reading prescribed for each class. The classes have regular and systematic instruction in the art of the selection, arrangement and expression of the matter related to the assigned or chosen topics for composition.

Preparatory. — The Preparatory course is designed, by a review of the ordinary branches of a common school education, to prepare the student to enter upon the regular College course of study. It serves also to qualify him to teach during the winter months.

LABOR. — Each student, not exempt for physical disability, is required to labor three hours a day on the farm or in the gardens. The number of hours may be increased to four or diminished to two and a half. Some compensation is allowed; but the labor is regarded as an essential part of the educational system of the College, and is performed with special reference to illustrating and applying the instruction of the lecture room. Students are not employed in those kinds of work only in which they may be most proficient, but, as the work is classified, each is made acquainted with all the operations of farming and gardening."

THE LABOR SYSTEM.

Your committee have taken especial care to obtain all the information in their reach on this subject, as by the law of our State it must be embraced in the course of instruction in our College. We are aware that manual labor has often been tried in various educational Institutions in this country and Europe, and in many —perhaps most instances—has been pronounced impracticable, and has been abandoned as a failure. In some cases, it has succeeded and produced satisfactory results. In many cases it has been adopted chiefly with a view to reducing the expenses of acquiring an education, and has not yet in many instances that we are aware of in this respect, met the expectations of its advocates. It can hardly be expected that such labor as boys can perform—each laboring two or three hours a day, with continual changes from one kind of work to another, as may be required by the season and circumstances, performed by unskilled hands, can be very profitable.

In an Agricultural College, that is not the chief object of labor. Its first use should be educational, and so planned and conducted as to most clearly illustrate the principles of science taught in the recitation.

The theory may be explained in the lecture or recitation-room, but it can only be thoroughly understood and fixed in the mind of the student by illustration and practical application.

A second object of the labor rule is, that if properly conducted at regular stated times, it will serve to promote and preserve the health of the student, and under judicious management will tend to cultivate a taste for agricultural and mechanical pursuits.

It is a well established fact that students who go through a regular college course, such as is generally adopted in literary institutions, very seldom engage thereafter in any industrial pursuit. Four or six years of study without labor at that period of life when habits and tastes are rapidly being formed, will almost inevitably destroy the inclination to return to farm or mechanical labor; and in too many instances the student has imbibed the notion that there is something degrading in manual labor. They generally turn to the so-called learned professions, as being more genteel and attractive, corresponding more nearly with the habits and education acquired while in College. Thus it is that these professions are continually over-crowded, while Agriculture is deprived of the best educated and most promising young men who were reared while boys to habits of industry of the hand as well as the head.

A third object of the labor system is to enable the student, by a few hours of work each day, to reduce his expenses while acquiring a College education. This will enable many deserving young men of limited means to secure a thorough education, who might otherwise be unable to meet the expense.

Since entering upon our mission, we have often had occasion to discuss, with its ablest and most sincere opponents, the feasibility of the labor system. We find the prevailing opinion among prominent educational men of the East to be, that manual labor, and a thorough college education, can not be successfully pursued at the same time, in one institution.

Our faith in the soundness of the theory adopted by the organic act establishing our Agricultural College has, however, never been shaken. We have visited one Agricultural College where it has been tried for years, and is now abandoned as a failure; one other where it has never been tried, and the idea is scouted as impracticable; two where it is succeeding in a degree to satisfy its most ardent advocates, and one other where it is about to be inaugurated under circumstances that will doubtless secure its success.

In the Michigan Agricultural College it has now been tested for nearly ten years, and no candid, observing person can deny that it is working there with great success, and to the entire satisfaction of the students, faculty and the public.

One thorough application of the theory to practice, as successful

as has been done at this Institution, demonstrates its soundness, and that with proper management, in the hands of practical men, it may succeed equally as well in any Agricultural College. As to the Michigan Agricultural College belongs the honor of having first successfully introduced and systematized the manual labor system, making it a leading feature in the course of instruction, your Committee gave their plan a thorough investigation, and make an elaborate report of the result of their observations, that our College may profit by the experience of this Institution.

We had before us here the positive demonstration, extending through a long series of years, that a combination of labor and study could be profitably and successfully embraced in a College course. It has been thoroughly tested in this Institution for so long a period that it can no longer be regarded as simply an experiment, but has become there an established system. President Abbott, who has given the subject careful study, and has had a large experience in demonstrating the soundness of the theory, in his report for 1866 answers many of the objections urged by its opponents, and many questions asked by those still in doubt. As we know of no better authority, we have here introduced a part of his able article on the subject, together with the rules governing the labor in their College:

"*What is the labor system at the Michigan Agricultural College?*

1. *All* students labor, except from physical disability. There is consequently no caste in the College.

2. The regular hours of labor are from half-past one to half-past four each afternoon, Saturdays excepted, on which day labor is furnished only on request. Until a few years past the students were arranged in three divisions, the first division going to their work immediately after breakfast, being succeeded by a second at the end of three hours, and by the third in the afternoon. By this means the teams were kept employed by the students, and the expense of hiring hands to a good degree obviated. The objection to the plan was that the labor could not be made so educational to the students as when working in one division.

3. The professors and foremen work with the students, or personally superintend the work. The Professor of Agriculture and the Professor of Horticulture, and the foreman of the farm, a

graduate of the College, are in the field with the students during the whole of the regular working hours.

4. The labor is intimately connected with the subjects of their lectures and lessons. The principles learned from books find their illustration in the field or work-shop, and on the other hand, what students observe while at labor, stimulates them to the investigation of principles.

5. The Sophomores work the entire year with the Professor of Horticulture; the Juniors, the entire year with the Professor of Practical Agriculture. To others are assigned special duties, such as ringing the bell, the care of Library and Museum, assistance to the Secretary of the College, &c. The rest of the students are divided from an alphabetical list, into three equal portions, two of which are assigned to the Farm Department, and one to the Horticultural Department, for their labor. A new assignment is made every fortnight.

Does the labor make the student a skilled workman? It tends to do so. The student who sees a body dissected, under the skillful hands of a professor of anatomy, does not become by that sight an accomplished anatomist, but he has learned anatomy in a way that books and lectures alone can not teach him. The student in geology does not think a cabinet of geological specimens useless to him because it has not made him at once competent to conduct a geological survey. To labor upon the farm and gardens, and about the stock, &c., gives the student some practice in various kinds of work, although not always, nor perhaps generally, sufficient to give him very great skill in it. But he sees the principles he has been learning illustrated. The operations of farming, horticulture, &c., are before his eyes for four years, and he can not help acquiring some valuable familiarity with the details of farming and horticultural operations. He may have to set a tire upon a wheel, or graft fruit, or hang a gate, or set posts in balloon frames, or manage the drill machine, but once or twice in his College course; but these things are constantly done and talked about and lectured upon in sight and hearing, while other and more common operations fall oftener to his hand.

Do students do their work as well as hired men do? Much of it has not been done so well as hired men would do it. Some of the students are but boys. Some of them are entirely unaccustomed

to work when they come. On the other hand we have been able to have much work done well, that ordinary hands can not do at all. Surveying, leveling, platting, are such. Besides, we always find some among the students more competent to be left in charge of certain labors connected with farming, horticultural experiments, the stock, &c., than any we can hire. Moreover, the labor is succeeding better every year. As more of it is done in gangs, working with the professors, as it becomes more interesting from connection with the lectures delivered, the work grows better, and the results of the system, both educationally and otherwise, are more satisfactory. The average age of our students is greater than it was during the war. As a general thing students like the labor, and there is very little shirking of it.

The students receive from 1 to 7½ cents an hour for their labor, the average wages paid being 6½ cents. It has generally been thought that those who received most received less than they earned, while those who received least, received more than they earned. It has often been doubtful, at the year's end, whether the labor was, on the whole, worth all that was paid for it. Much of the labor has been expended on permanent improvements, necessarily, and the results are not such as to determine exactly the amount of profit. The best scholars are almost always the best workers.

The students work cheerfully with the professors and foremen. They are treated more as companions, than as laborers, and the feeling of authority extended, or of compulsion, is scarcely ever thought of, if we can trust to appearances, and to the hearty feeling of good will existing between faculty and students.

Could not students derive the same advantages from excursions made to well managed farms, &c., that they derive from the labor system?

It is already the custom at this College, as it is in Pennsylvania, Maryland, Yale, and other Colleges, to make excursions with the students to any places which will be likely to repay the expense and time of the visit. Grand Ledge, with its sandstone cliffs, its limestone and coal, has been repeatedly visited by classes in geology under the direction of the teachers of that branch of study. Botanical excursions are not infrequent. The County Agricultural Fair has been visited by the classes in stock-breeding

and practical agriculture. Older and wealthier communities, doubtless afford better opportunities for learning from such sort of excursions, and every year will be adding to the interest of such as we can make. The Agricultural College could be located in no place in Michigan, however, so as to secure within any reasonable limits the advantages for study of practical operations, or of stock, that the College itself affords.

It is not easy to see how such excursions can take the place, as an educational agent, of daily labor, under competent instruction. The student needs to be deliberately shown how to do things, with explanations, repeated if necessary; his own practice will then fix in his mind what he has learned. Renewed practice will make the operation easy for him to perform, or at least frequent observation of process, render them familiar.

Excursions to finely-managed farms, or to herds of fine cattle, will not tend to *preserve habits of manual labor, and the taste for it*, as actual labor does. This is a point of some importance. 'At the outset,' says Wilson Flagg, in his prize essay on Agricultural Instruction, 'we are met by this objection, that the surest way of causing a man to quit his paternal acres, and to enter into other business, is to give him a superior education.' This will continue to be the case until the cost of an education seems to the farmer to be repaid by increased profits, or pleasure, or influence. Such a conviction does not extend itself rapidly. The natural processes on which successful farming, or stock-raising, or fruit-culture depend, are of the most complicated sort; so much so, that Agriculture is among the last of the arts to be assisted by the advancement of science. Farmers, too little accustomed to act in concert, are more slowly moved by new views than other classes of people. Hence, has been inferred the necessity of governmental assistance in the establishment and maintenance of Agricultural Schools. And because the sort of schools was new and without precedents, the inaugurators of such schools have urged the necessity of patiently working upon some plan until it should have time to develop and perfect itself.

The labor system certainly works too well to warrant its abandonment, or its modification very materially. Its pecuniary value to the student is manifest. Probably greater care should be

taken to ascertain the real value of the returns it makes to the institution.

In many institutions the system does not work so well as here. Probably our students are older than those of most other institutions, not professional, and of a more industrious turn of mind. Nor do we know whether elsewhere the Professors take immediate charge of the labor of the students.

Each student labors three hours every day. The work, is performed under the direction, and as far as may be, under the eye of the Professors of the College. Although some compensation is allowed for this work, yet the chief object of it is neither profit to the student nor to the College. It is conducted *for the education of the student*, under rules which will shortly be given.

There is consequently vital connection between the class-room and the farm, gardens, orchards and stock. All these, and the management of them, become objects of study to the student. They serve him both as means of illustration, and as fields for practice.

The rules by which these features of the College become realized are as follows:

RULES.

RULE I. At least one week before the commencement of the term in each year, the Superintendent of the Farm shall present to the President of the College, in writing, a plan of the system of cultivation and management of the farm, proposed for the season, giving in detail the contemplated operations for each field and division. This plan shall embrace:

1. Proposed permanent improvements;

2. The crops to which each field is to be devoted, together with the variety and quantity of seed proposed;

3. The mode of culture, and the kind and quantity of fertilizers proposed for each crop;

4. A detailed and accurate description of any new seed or mode of culture, if any such is proposed, together with a full account of the advantages likely to be derived therefrom.

RULE II. The Superintendent of the Horticultural Department shall, in like manner, present a plan of operations for his department, giving the details as minutely as possible for each section and subdivision of the gardens and grounds.

RULE III. The Faculty shall carefully consider the plans presented by the Superintendents, and discuss as fully as possible the principles involved in the proposed methods; and they offer such suggestions and amendments as may seem desirable for perfecting and maturing the same. The plans as perfected and adopted by the Faculty, shall be carried out in practice on the farm and in the gardens, unless modified by the Board of Agriculture when referred to them.

RULE IV. The plans for conducting the farm and gardens, as soon as determined, shall be recorded in full by the Secretary, in books kept in his office for that purpose.

RULE V. The Professor of Agricultural Chemistry shall present to the Faculty a detailed statement of a proposed system for the management, manufacture and proper preservation of manures, having reference to the best and most economical disposition of the same, and the adaptation of special manures to particular crops.

RULE VI. The Faculty, after a full examination and discussion of the proposed system for the management of manures, shall determine the plan to be pursued, and make suitable provisions for putting into practical operation the plan adopted.

RULE VII. The Superintendents of the Farm and Gardens shall keep a journal of all the work done in each field of their respective departments, and of all transactions connected with the same. This journal shall be transcribed by the Secretary, once a month, into books kept in his office for that purpose. The journal shall embrace:

1. A general statement of the weather at the time of preparing the soil — of putting in the crop — of cultivating the same — during its growth and at the time of harvesting;

2. A detailed account of the crops raised in each field and in the garden, including a statement of the condition of the soil before cultivation, and during its preparation for the crop; the method of seeding, with variety and quantity of seed used, and its preparation for sowing or planting;

3. Details of the growth of the crops and any circumstances that may have influenced the development or maturing of it;

4. The time of harvesting the crop, the condition in which it is secured, the disposition made of the same — as, where stored, whether sold or not, with the yield and general results;

5. Purpose for which the crop has been cultivated, whether for profit or to test some new variety of plant or method of cultivation.

RULE VIII. A committee shall be appointed by the Faculty at the commencement of the term in each year, to prepare and report a series of experiments for the next season, which report shall be presented to the Faculty at its first meeting in October following.

RULE IX. The Faculty shall decide upon the experiments to be made, and the manner of conducting the same; and shall appoint some one of their number to superintend such experiments. Each officer having in charge any experiment shall keep a full record of his proceedings in conducting the same.

RULE X. Students, who have attained a suitable proficiency in their studies, may be appointed to assist in conducting experiments, and they shall, for that purpose, be under the direction of the officer having charge of the same.

RULE XI. The Superintendent of the Farm shall present to the Faculty, at their first meeting in February, a report on the stock belonging to the College, giving a detailed account of its condition, mode of management, increase and results of the system of breeding, together with such suggestions as he may think fit to make. This report shall embrace —

1. The number and kind of horses, their management and condition;

2. The number and condition of each of the different breeds of neat cattle; the number of grade animals, and the breeds from which they have been derived; and proposed disposition of the same;

3. The number and condition of each distinct breed of sheep, and the grades of the same, with a statement of the amount and quality of wool produced, their management, increase, &c.;

4. Swine;

5. Poultry.

RULE XII. Each breed of domestic animals shall be so kept as to avoid any danger of crossing or mixing with any other breed. Cross-breeding shall not be permitted, except to accomplish a definite object, or for the purpose of experiment, and then only in accordance with a plan, setting forth the object to be accomplished and adopted by the Faculty; who shall prescribe such regulations as may be necessary for putting the same into practical operation.

RULE XIII. An accurate record of the stock belonging to the College shall be kept in a book provided for that purpose. The details of the breeding and management of each breed shall be carefully and distinctly stated, together with the purpose for which each animal is kept, and the disposition made of the same.

RULE XIV. For the purpose of imparting to the student an accurate knowledge of Agriculture as an art, the Instructors in the several departments of the College, in their class-exercises, shall illustrate the sciences taught, as far as possible, by a thorough discussion of the principles involved in the details of the practical operations on the farm and in the garden.

RULE XV. The superintendents of the farm and gardens shall make an annual report on the implements used in their respective departments, giving the results of their experience in the use of each implement and its adaptedness to the purpose for which it was designed, and its comparative value. Any new implement that has been tried during the year shall be particularly described, and an accurate estimate of its merits given.

RULE XVI. A Committee on Buildings shall be appointed each year, who shall report to the Faculty the condition of the buildings, and recommend such additions and improvements as may seem desirable. The Faculty shall carefully examine the report when presented, and shall make such recommendations to the Board of Agriculture as they may deem for the interest of the College.

RULE XVII. The State Board of Agriculture shall determine what proportion of the whole number of students on the farm and in the garden shall be assigned to each. The list of students shall be examined each week, to see that the proper proportion is employed in each department.

RULE XVIII. Students shall labor both on the farm and in the garden; and the alternations from the farm to the garden, and from

the garden to the farm shall be as frequent as the proportion of farm and garden labor, as determined by the State Board of Agriculture, will permit: provided that such changes shall not occur often than once a week.

[April 6, 1863, Rule XVIII was amended by an addition that one class shall work an entire year on the garden and another on the farm for the same period.]

RULE XIX. Students shall be employed with a view to their attaining the greatest proficiency in the art of farming, without reference to the greatest pecuniary gain to the College.

RULE XX. Work at the College shall be classified as follows: 1. Care of stock; 2. Care of tools and repairing the same; 3. Care of grounds and shrubbery; 4. Preparation of grounds for crops, plowing, &c.; 5. Sowing or planting different kinds of seeds; 6. Weeding and hoeing; 7. Harvesting and securing crops; 8. Preparation of manures; 9. Gathering and preserving seeds; 10. Secretary duties, care of books, &c.

RULE XXI. The Faculty shall make such arrangements that each student shall perform a proper proportion of labor of the several kinds, as classified in Rule XX.

RULE XXII. The Superintendents of the Farm and Gardens shall, once a month, deliver to the students lectures on topics connected with practical arrangement and management of farms and gardens.

RULE XXIII. The Professor of Agricultural Chemistry shall cause a daily meteorological journal to be kept, according to the system adopted by the Smithsonian Institute.

RULE XXIV. Any officer having in charge the development of any of these plans, who shall deem any change or modification of them advisable, shall submit to the Faculty a written statement, setting forth in full the reasons for the desired change. Changes or modifications adopted by the Faculty shall be recorded by the Secretary.

Under Rule XVII, it was determined that two-thirds of the students not employed on special duties, should report to the Superintendent of the Farm for work, and the other third to the Superintendent of the Gardens.

Under Rule XVIII, the work of the Sophomore Class has been performed entirely under supervision of the Superintendent of the Gardens, and that of the Juniors under the Superintendent of the Farm. This was done in order to enable systematic instruction in the manual operations of farm and gardens to be given during some portion of a student's course.

The plan contemplates the bestowing of considerable labor upon experiments—an expenditure that rarely brings pecuniary profit, and when it does, rarely without a very large previous expenditure of means and time. The list is a large one of discoverers and inventors, who have devoted life and all its means to accomplish some end, which has been secured only as the discoverer was ready to die. Agricultural experiments are costly; even the safer kinds require a degree of care that absorbs the profit which otherwise might accrue.

But if Agriculture is ever to be an art founded on science, if a real knowledge of the laws and workings of nature is to be the basis of the farmer's practice in the culture of plants, in the selection, feeding, and breeding of animals, and the numberless other duties of his craft, then experiment must determine those laws and workings. The universal complaint of those philosophers who would generalize from particular cases and discover laws is, that, in spite of the multitude of observers and the cases recorded in the agricultural and other papers of the day, there is a great lack of accurately recorded observations. It is indeed *the* great lack, even upon the most commonly performed operations of the farm. As Agricultural Colleges become established, and able, from their endowment, to be at the expense, will it not be their work to provide the means of evidence from which these truths may be discovered? And may it not be hoped that the several State Agricultural Colleges will unite in well-considered and conjoined efforts to this end? Gradually the world will furnish interpreters of the facts, and a true body of those sciences on which the practice of agriculture is based, will be the result.

But, aside from the hopes of furthering science, experimenting must be carried on as a means of education of the student. He must be inducted into the methods of scientific proof and scientific discovery, or the grander and more inspiring views of his profession

sion will be wanting, and his power of doing good by the education bestowed upon him will be in great measure lost.

The system of labor, and of experimenting, was entered upon under many embarrassments. A complete compliance with the rules has been kept in view, and more nearly approximated to every year. At the close of the last year (1864) the Faculty reported to the Board of Agriculture their great satisfaction in the workings of the system. It has served in a good degree to withstand the tendency of the College to turn from its proper work to that of giving a general education from books merely. It has tended to excite and maintain in students a relish for their out-of-door work. It has directed the native curiosity of the student toward those subjects which the College professes most particularly to teach."

We observed that the students seemed to take the same degree of pride and interest in the performance of the allotted labor, that they did in any of the other exercises.

Where students desire, they are permitted to labor at any time not employed in regular exercises, and as they receive compensation for all labor performed, many are almost, and some entirely, paying all expenses by their industry.

Most of the labor on the farm of three hundred acres under cultivation is performed by the students. Hired help is only kept to use the teams during the interval when the students are not employed

BOARDING AND OTHER EXPENSES.

The students and several of the assistant teachers board at the Boarding Hall, which is in charge of a steward, who has charge of it, furnishing the table, making all purchases and providing all of the labor and material for carrying it on. A strict account is kept of all expenses incurred, and the entire cost is apportioned equally among the students and other boarders. The steward is furnished with rooms and board for himself and family, and receives a salary of $500 per year. The cost of board of the students for the past year has amounted to about $2.60 each per week. The amount earned for labor is credited to each student, and deducted from this and other expenses. Four dollars a year to each student is charged for room-rent. Washing is done for forty-two cents per dozen. Students' rooms are furnished with bedsteads and stoves.

Students furnish every thing else, renting mattresses and pillows of the College. The cost of providing other furniture for the rooms varies from four to six dollars to each student, depending upon the taste of the student. A matriculation fee of five dollars entitles the student to the privilege of the whole course, and the proceeds are appropriated to the increase of the library. At the opening of each year the student is required to pay ten dollars as an advance on board, which is allowed in settlement.

During the winter season, when labor can not be performed on the farm, a vacation of three months is given to enable such as wish to teach school. The wages thus earned, together with the proceeds of labor on the farm, enables those who are industrious and economical to defray a large share of the expenses of the year.

The necessary annual expenses of the student for the College year will be about $135, which is far less than that of any other College we know of. Where this amount is reduced by wages saved from labor and school-teaching, it becomes so small as to place a college education within the reach of the poorest young men in the State.

The College is under the direction of a President and four full Professors, two assistant. The salary of the President is $2,300, and of the Professors $1,500 each, with house-rent free.

The entire management of this College seemed to be conducted in a thoroughly systematic manner, reflecting great credit upon the trustees and Faculty.

The discipline is mild, but firm, and the students generally seem disposed to make the best use of their time and opportunity.

The President, T. C. Abbott, has long been connected with the College, and fully comprehends the importance and value of the new system of industrial education. His able assistants, Manly Miles, Professor of Practical Agriculture, R. C. Kedzie, Professor of Chemistry, and A. N. Prentiss, Professor of Botany and Horticulture, seem to be peculiarly adapted to the important positions which they fill. Their method of imparting instruction, is thorough and in a way that requires the students to work out chiefly with his own head and hands the various problems presented. In this manner a lasting impression is made upon the mind of the student,

as he has proved the truth or error of the theory presented to him.

The students at this College have as means of illustrating their studies:

First. — A large farm consisting of meadow, plow and timber land, upon which they labor and keep the best breeds of stock.

Second. — A vegetable garden, small fruit, apple and pear orchards and nursery.

Third. — A botanical garden of trees, shrubs, flowers and plants, in which a hot-house is to be erected.

Fourth. — A large chemical laboratory with a fine assortment of apparatus.

Fifth. — Philosophical and mathematical apparatus.

Sixth. — A museum of animal, mineral, and vegetable productions.

Seventh. — The Cooley Herbarium, a valuable collection of plants.

Eighth. — Library and reading room, workshop, tools, &c.

We have thus given the details of the Michigan Agricultural College, and its organization and working, because we believe it to be the most perfectly arranged of any one we have visited, and that the knowledge here obtained will be of great value in organizing and conducting ours.

The next Institution of a similar character that we visited was the

PENNSYLVANIA AGRICULTURAL COLLEGE.

This College was opened in February, 1859, on a plan similar to that adopted in Michigan. The object of the Institution, as stated by the President, Dr. Pugh, "is to combine manual labor with study during the College course. By requiring the student to labor a certain amount each day, he acquires a practical knowledge of the principles taught in the recitation-room, regards labor as a necessary part of his education, and preserves his health and habits of industry while pursuing his studies. The course of instruction shall be practical, excluding ancient and foreign languages."

The College was opened with Dr. Pugh as President, and four additional Professors. The course of study was radically different

from that pursued in the ordinary literary colleges, and was so arranged as to be particularly adapted to imparting a knowledge of those branches of education, of practical value to students who were preparing themselves for following industrial pursuits. Many of the branches embraced in the ordinary College course were discarded, and the time and study devoted to illustrating by labor and experiment the theories taught in the recitation-room.

The President, in speaking of the advantages of the course adopted, says:

"The student has an opportunity of seeing all of the practical operations of the farm, garden and nursery performed in the most approved manner, with the use of the best manures, seeds, tools and implements; and what is of more importance than all of this, he studies in the class-room and laboratory the scientific principles involved in all he does. He learns how to study the geology, mineralogy and chemistry of the soil he cultivates; the botany of the plant he grows, and the laws of health and diseases of the animals he uses."

Dr. Pugh was a firm believer in the manual labor-system, and during his administration inaugurated and established this part of the educational course, and conducted it with satisfactory results, both to the students and friends of industrial education.

During the four years in which Dr. Pugh was President of the College, it was gradually growing in favor and usefulness, with the industrial classes for whose benefit it was established, and promising great usefulness and success in the future. During this time it was rapidly working its way into the confidence of the farmers, mechanics and laboring classes generally. The attendance was large, and, judging from all we can learn, the College was in a highly prosperous condition.

The death of Dr. Pugh occurred suddenly in the spring of 1864, and a new President, taken from a literary College, was elected to fill his place. From this time it is observed that there was a falling off in the number of students; that the labor was badly managed, without system or superintendence; it ceased to be directed by those competent to give instruction, and soon began to be regarded by the students as a species of drudgery, instead of a means of illustrating theories taught in the recitation-room.

The new President was not experienced in practical agriculture,

and was consequently not competent to direct or successfully carry out a system of instructive labor. It is not strange that under such circumstances the labor soon ceased to be instructive to the students or profitable to the farm, and in the course of two years after the death of Dr. Pugh it was practically abandoned, and this distinctive feature of the Agricultural College system was discarded as a failure.

There has been adopted in its place a full course of military instruction, extending through the whole period of four years. Students are now required to provide themselves with a complete uniform, and devote one hour each day to drills. They are also required to take exercise daily, one hour in the gymnasium provided for that purpose. There has also been added a regular classical course, in which the ancient languages are taught, as well as other branches usually adopted in literary Colleges, thus abandoning the distinctive feature of an Agricultural College.

We noticed that under the manual-labor system the annual expense for board, tuition, washing and incidentals amounted to $140 for each student; while under the new system, since the abolition of labor, the annual expense amounts to about $350 each.

In 1867 the Faculty of the College was reorganized in accordance with the new plan of instruction decided upon, and General John Frazer was elected President. The new Faculty are firmly of the belief that manual labor can not be successfully incorporated with the course of instruction; that it is neither necessary, profitable nor practicable, and that no College can succeed in the undertaking.

Your committee were somewhat surprised that the farmers and mechanics of the "Quaker State" should thus willingly consent to exchange the manual-labor feature of their College for the military drill and a resort to the gymnasium, in order to obtain that amount of exercise necessary to secure good health to the student. Having recently witnessed the remarkable success of the labor system as practiced in the Michigan Agricultural College, we could not readily be converted to the *Pennsylvania reform*, even when so ably and plausibly argued as it was by the accomplished President of the Pennsylvania Agricultural College. We had observed that, while the former Institution was crowded with students to its utmost capacity and had within the last year refused admission to

more than three hundred applicants from inability to accommodate them, the Pennsylvania College, with ample room for four hundred students, had only forty-five in attendance at the time of our visit. This one fact was significant to us of the estimate placed upon the usefulness of each by the citizens of their respective States, who ought to be competent judges.

We believe the Pennsylvania College to be a good and valuable institution, but not as an *Agricultural* College.

After some time spent in investigating the qualifications of various applicants for professorships in our College, we proceeded to New Haven, at which place is located the Institution which received the land grant for the State of Connecticut, known as the

SHEFFIELD SCIENTIFIC SCHOOL.

It is a branch of Yale College and located near the old buildings, thus enjoying the benefit of enabling its students to have access to the large and valuable cabinets, collections and laboratories belonging to Yale. Although the recipient of the Agricultural College Grant of lands, its Faculty make no pretentions to having an Agricultural College. It is more especially designed as a school of science, but has among the several courses of instruction here pursued one called the course in Agriculture, in which especial attention is given to lectures on the theory and practice of Agriculture, instruction in Chemistry, Botany, Zoology, Geology, Meterology, Horticulture, and Forestry. No attempt is made to give the student any of the practical applications of the theories taught by a system of labor, as the entire Faculty are unbelievers in the idea of manual labor in connection with acquiring a College education. Excursions are made under the Professors for the purpose of observing the methods of out-door illustrations, in the examination of plants, insects, animals, farming operations, &c. There are ten professors employed at an average compensation of about $2,300 each per year.

The number of students in attendance is about one hundred and twenty, whose annual expenses are about $450 each. The Institution will accomodate about two hundred students, but is not yet filled.

The arrangements of the interior of the building and its various departments were excellent, and we learned much of value to our

College in relation to apparent furniture, apparatus and fitting up which can not well be here enumerated.

MASSACHUSETTS AGRICULTURAL COLLEGE.

This Institution is located at Amherst, sufficiently near to the old Amherst College to enable the students to enjoy the benefit of lectures, cabinets, collections, &c. The buildings consist of one dormitory structure, capable of accomodating about fifty students, with recitation-rooms, a cabinet and library-room, a separate building for laboratory, containing lecture-room and other accommodations. A boarding-hall for about fifty students is erected near by.

The College had been but recently organized, and was opened in October last with a full attendance of students, and in charge of President Clark, assisted by an able corps of Professors. The salaries paid range from $1,500 to $3,500.

The course of instruction is similar in many respects to that of the Michigan Agricultural College, which has been given, with the addition of the French and German languages.

The President and Faculty are firm believers in the manual-labor system, have inaugurated it from the start, and are conducting it with the most satisfactory results.

The students labor in the afternoon of each day, under the direction of the Professor of Agriculture, and Superintendent of the farm. They are divided into squads, each party under the direct charge of a captain appointed from among their own number.

Through the courtesy of President Clark we obtained a large amount of valuable information upon the various subjects connected with the plan of organization in its details, including their plans of fitting up and furnishing laboratory, cabinet-rooms, library, lecture-rooms, recitation and students' rooms; also the manner of conducting their financial affairs, keeping the various accounts and books, preparing the blanks, rules, regulations, &c., all of which are too voluminous to be incorporated here. We have procured copies of all of their publications, forms, blanks, &c., course of study and instruction, which accompany this report.

After visiting several towns, cities, colleges, and seminaries, pursuing our investigations relative to professors, we visited the

NEW YORK AGRICULTURAL COLLEGE,

or more properly known as Cornell University, which is located at Ithica, New York.

This University is designed to be much more comprehensive in its plan and scope than an ordinary Agricultural College. It will embrace six departments, namely:

First. — Department of Agriculture.
Second. — Mechanic Arts.
Third. — Civil Engineering.
Fourth. — Military Engineering and Tactics.
Fifth. — Mining and Practical Geology.
Sixth. — History, Social and Political Science.

The University is not fully organized yet, but the general plans have been decided upon and adopted.

ADMISSION OF STUDENTS, FEES, &C.

By the terms of the act granting lands to the Institution, one student from each Assembly district in the State is to be admitted to a full course free of any charges for tuition. Such students are to be selected by the School Commissioners and Board of Supervisors of the county in which he resides, subject, however, to examination and approval by the Faculty of the University.

Suits of rooms are provided for about two hundred students, and will be furnished at the expense of the University, for which rent will be charged at the rate of seventy-five cents per week.

A tuition fee of thirty dollars per year is required of all excepting one student sent from each Assembly district.

Chemicals for use in the laboratory will be charged to the students receiving them at actual cost.

LABOR SYSTEM.

Students in the Agricultural Department will labor on the farm connected with the University from one to three hours per day, under the direction of the Professors of Agriculture and Engineering.

Work-shops are to be erected, where the students in the Mechanical course can labor under the instruction of skilled artisans in the various departments of mechanic arts.

The general plan of this University is on a magnificent scale, embracing the erection of not less than thirty buildings, at a cost of not less than $30,000 each.

The leading spirit in this great enterprise is Hon. Ezra Cornell of Ithica, who has already given to the Institution the munificent gift of $500,000, beside two hundred acres of land for the Agricultural Department, and other gifts to the amount of more than $25,000. The University receives the entire land grant made to the State for Agricultural Colleges, amounting to 990,000 acres.

It is expected that this great endowment will eventually enable the Institution to furnish State students board free, as well as instruction.

Sectarianism of every description is forever excluded from the University. By the terms of the charter no trustee, professor or student can be accepted or rejected on account of any religious or political opinion he may or may not hold.

The great aim of the University, as tersely expressed by its founder, Mr. Cornell, is "to provide an Institution where any person can find instruction in any branch or study."

Your committee, in pursuing their investigations, visited the following colleges, universities, seminaries and schools of science:

Columbia College, New York, where we had a conference with Prof. Chandler, who was a student of Liebig, and was formerly a professor in one of the New York agricultural colleges, but is now connected with the School of the Mines.

Harvard University, Cambridge, Massachusetts.
Cornell University, Ithica, New York.
Massachusetts Agricultural College, Amherst, Massachusetts.
Amherst College, Amherst, Massachusetts.
Willetston Seminary, East Hampton, Massachusetts.
Yale College, New Haven, Connecticut.
Sheffield Scientific School, New Haven, Connecticut.
Pennsylvania Agricultural College, Center county, Penn.
Smithsonian Institute, Washington, D. C.
Michigan Agricultural College, Lansing, Mich.
Farmers' College, College Hill, Ohio.

School of the Mines, New York City, N. Y.
Douglas University, Chicago, Illinois.
Girard College, Philadelphia, Penn.
School of Technology, Boston, Mass.
Lehigh University, South Bethlehem, Penn.
Agassiz Museum, Cambridge, Mass.
Department of Education, Washington, D. C.

The mass of information obtained at these Institutions is too voluminous to be given here, but will be invaluable in the organization, furnishing, fitting up and inaugurating our College.

Our investigations extended through twelve States, embracing visits to the chief seats of learning, and conferences with the following eminent educational men:

H. D. Emory and C. D. Corbet, of Illinois, editors of the *Prairie Farmer*.

President Abbot, Professors Miles, Kedzie and Prentiss, of the Michigan Agricultural College.

P. Barry, distinguished horticulturalist, Rochester, N. Y.

J. J. Thomas, assistant editor *Country Gentleman* and author of several works on Forest-growing and Agriculture.

Luthen Tucker & Son, Albany, N. Y.

B. P. Johnson, Secretary New York Agricultural Society, Albany, N. Y.

Gen. M. P. Patrick, late President New York Agricultural College at Ovid.

President Gould, Syracuse, N. Y.

President White, of Cornell University, Ithica, N. Y.

Ezra Cornell, founder of the University, Ithica, N. Y.

President Fraser, Vice-President Caldwell and Prof. Phin, of Pennsylvania Agricultural College.

President Allen, of Girard, formerly of Pennsylvania Agricultural College.

Dr. Witherell, of Lehigh University, Pa.

Prof. Glover, of Maryland Agricultural College.

Prof. Baird, Smithsonian Institute.

Prof. Barnard, Commissioner of Education, Washington, D. C.

H. Capron, Commissioner of Agriculture, Washington, D. C.

Orange Judd, Editor *American Agriculturist*.

Dr. Thurbur, Assistant Editor *American Agriculturist.*
Prof. Chandler, School of the Mines, N. Y.
Prof. Root, School of the Mines, N. Y.
President Woolsey, of Yale College, New Haven.
Profs. Lyman, Brough, Brewer, Wright and Gilman, of Sheffield Scientific School, New Haven.
Marshall Wilder, President United States Agricultural Society.
President French, late of Massachusetts Agricultural College.
Dr. George B. Loring, E. W. Buel and C. L. Flint, of Massachusetts Agricultural Society.
C. F. Brown and M. Fletcher, Editors *New England Farmer.*
Prof. Agassiz, of Andover, Mass.
President Clark, Massachusetts Agricultural College.
Prof. Stockbridge, Massachusetts Agricultural College.
Dr. John Warder, President Ohio Pomological Society, Cincinnati, Ohio.
President Carey, late President Farmers' College, Ohio.
Lieutenant-Governor of Kentucky, Trustee of Kentucky Agricultural College, and many others of lesser note.

Your committee have received letters and certificates recommending the following persons as well qualified for members of the Faculty of the Iowa Agricultural College. We have conferred with some of these gentlemen, and investigated their qualifications as far as we have been able up to this time, and are still engaged in the work.

Of those recommended for the Presidency, the following are the most prominent:

Prof. Welch, late Principal State Normal School, Michigan.
Dr. Witherell, Lehigh University, Pennsylvania.
Dr. Wm. Clift, graduate of Amherst.
Dr. Chadborn, late of Massachusetts Agricultural College.
Prof. Whitman, late of Pennsylvania Agricultural College.
Dr. George Law Olmstead and Hon. J. B. Grinnell, of Iowa.
Prof. Amos Brown, Havana, N. Y.
For *Professors of Chemistry:*
Prof. Root, of New York School of the Mines.
Prof. E. S. Wright, of Ohio Medical College.
Dr. S. H. Kridelbaugh, of Page county, Iowa.

For *Professors of Botany, Natural History, Geology, Mathematics,* &c., the following persons have been recommended:

Prof. Baker, of Indianola, Iowa.
Prof. Piper, of Manchester, Iowa.
Prof. Brainard, of Dubuque, Iowa.
Prof. Parry, of Davenport, Iowa.
Dr. Shaffer, of Fairfield, Iowa.
M. St. John, of Waterloo, Assistant State Geologist.
Prof. Dupins, Queen's University, Kingston, Canada.
Prof. G. W. Jones, Franklin, N. Y.
Prof. Wright, Willitston Seminary, Massachusetts.
Prof. Wright, of Sheffield Scientific School, New Haven, Conn.
Prof. Long, of Western Union College, Ohio.
And many others whose qualifications we have not yet investigated.

Your committee have not been unmindful of the great responsibility which rests upon them in deciding who to select from among the long array of names of eminent men placed before them. We have felt that it is far better for the future prosperity of our College to go slow, investigate thoroughly, and be fully satisfied that we are right before deciding upon the selection of the Faculty. There is far more danger, in our opinion, likely to result from haste, than the public may realize.

We are firmly of the belief, judging from facts which have come to our knowledge, that the partial failure of many similar Institutions within the last few years, has been owing more to the employment of incompetent men as members of the Faculty, than from all other causes combined. In seeking to avoid this danger we have thus far gone slow, and endeavored to give each case a fair, rigid, and impartial investigation, without being influenced by fear or favor.

We have arrived at the following conclusions in relation to the selection of Professors:

That, other things being equal, it will be better to select young men of promise, who have graduated at the best Institutions in the country, and have had the benefit of instruction from the most eminent teachers of science, who are just entering upon the great work, and are seeking to identify themselves with a new enterprise where a wide field of usefulness is open before them. Men

who are able and willing to work, who have a name to make and will give their best years and entire energies to the cause of industrial education.

We can not hope to procure the services of the eminent men whose genius and acquirements have given them a world-wide fame. To take Agassiz from Cambridge we must outbid the Emperor of France. To take Dana or Johnson from Yale, Chandler or Dwight from Columbia, Guizot from Princeton, or Parke from Andover, would absorb our whole income. We can not hope to secure such acquisitions in the start; but by employing the most promising among the younger men, who are willing to work in building up an Institution that bids fair to take its place, in due time, among the great seats of learning in the West, we secure enthusiasm, energy, ambition, talent and all of the elements of success.

We need a few thoroughly-tried and experienced men among the Faculty to direct and control, and give to the Institution the benefit of their experience; but for the hard work which is required to build up and sustain such an enterprise, we must have a strong element of young Western men.

In conclusion we would say that we have given the subject of organization our careful attention, and as thorough investigation as was in our power during the three months devoted to the work, and are prepared to recommend the following general outline of a plan of organization:

First. — That we need at least a President, four full Professors and two Assistants, in the organization; and that the President should be chosen at as early a day as practicable, that he may assist and advise in filling up the Faculty, and fitting up the College building.

Second. — That the following studies shall be included in the course of instruction, viz.: Natural Philosophy, Chemistry, Botany, Forestry, Horticulture, Fruit-growing, Animal and Vegetable Anatomy and Physiology, Geology, Mineralogy, Meteorology, Entomology, Zoology, Veterinary Art, Plain Mensuration, Leveling, Surveying, Book-keeping, Practical Agriculture, Landscape Gardening, with such other branches as may be added by the Faculty and Trustees.

Third. — A system of instructive labor on the farm, in the garden, orchard, nursery, and in such mechanical trades as may be from time to time provided for.

No student to be exempt from labor except in case of sickness or physical disability. The labor to be made instructive by being conducted and taught in the most thorough and systematic manner.

The students to be paid by the hour a reasonable compensation, which shall be applied upon board and other necessary expenses.

Fourth. — The Boarding Department to be under the supervision of a Steward selected by the Trustees, who shall make all purchases, furnish the supplies for the table, keep the accounts of his department under proper guards, and have general control of everything pertaining to the Boarding Hall.

Fifth. — The admission of students to be on the basis of one or more for each Representative in the popular branch of the General Assembly; to be selected in a manner to be fixed hereafter, subject to such examination of qualifications as to education and moral character as may be determined by the Trustees and Faculty.

Sixth. — Politics and sectarianism of every description to be carefully excluded, and never to be permitted to control the selection of students or members of the Faculty, and under no circumstances to be taught in any department of the College.

Seventh. — The exercise of great care in the selection or purchase of apparatus, instruments, furniture and fixtures, that all be of the most approved style; and that appropriations be at once secured for laboratory, library, cabinets, &c.

Eighth. — That three or four non-resident Professors — men of eminence and great attainments in particular sciences, such as Geology, Natural History, Chemistry, Horticulture and Fruit-growing, — be engaged to deliver each a series of lectures to the students, and such others as may desire to hear them, during each year, that the College may have the benefit in this way of the best talent in the country.

We are aware that it will require several years to fully develop and properly arrange all of the departments of our College. We shall undoubtedly learn many valuable facts in the course of our progress, which will aid us in the future.

It is gratifying to note the increasing interest that is yearly being manifested in the subject of industrial schools. The doubtful

problem of a few years ago is to-day a fixed fact, tried and proved. Agricultural Colleges are now among the necessary institutions of growing civilization, destined to supply the great want so often felt by the sons of toil, that will enable the most lowly and obscure of farmers' sons to secure a thorough education suited to their wants and avocations.

All of which is respectfully submitted.

B. F. GUE,
PETER MELENDY,
Committee on Organization.

REPORT

OF THE

SUPERINTENDENT AND SECRETARY.

To the Board of Trustees of the Iowa Agricultural College and Farm:

GENTLEMEN: The law creating the office of Superintendent and Secretary of the Iowa Agricultural College and Farm, requiring an annual report from me as the incumbent of that office, I herewith submit the same for your consideration.

I entered on the duties of the office on the 24th day of January, A. D. 1867 (nine days after my election). I found things much in the same condition they were by the Executive Committee in the early part of the month. The preparations for the better care of the stock had made some progress, but were not completed, although very much needed. I found, also, that no change had been made in the indiscriminate mode of feeding. Grain was fed in such abundance that it was rarely all consumed in time for the next meal, and many of the young sheep were so nauseated that they would not eat enough to support them, for several days at a time; while, on the other hand, some with more vigorous appetites were very unnecessarily fat for stock animals. No regular amount had been fixed as the ration of any animal or lot of animals, but all had abundance, and much was wasted. The hay was very coarse and innutritious, and with corn of rather inferior quality (it was all more or less frost-bitten), it was difficult to fix the amount of feed necessary per head or lot, to keep them in healthy condition. I therefore gave orders to reduce the amount of grain fed, until it was all consumed in one hour after feeding, and to measure all grain fed, so as to keep an accurate account with the grain and stock. The hay being of very poor quality, it required a good deal of grain to keep the stock in condition.

My predecessor reports the total net value of crops of all kinds on hand on the first of January, 1867, to be $2,132.72. On the 28th of January I measured the oats and corn, and found the amount on hand on that day to be 670 bushels of oats — $268.00; and 511 bushels of corn — $255.50, taken at his valuation per bushel. Of the wheat I found substantially as stated in his report — 263 bushels of the crop of 1866. I also found about 50 bushels of wheat of the crop of 1865 (a very inferior article). The timothy-seed and wool I found also on hand, reports of which will be found under their proper heads.

Finding the stock of oats and corn so much less than represented, I instituted a system of rigid economy to prevent waste, and required a weekly statement by weight of all grain fed, and what fed to, my occasional measurements in the bins prompting to care and accuracy in both feeding and making out the monthly returns.

Notwithstanding all our care, I found it necessary to purchase both hay and corn to save the stock from suffering, and to keep the teams up so as to get along with the work. The cost of each will be found under the head of "Receipts and Expenditures."

I have procured material and partly erected a picket fence around the garden, &c., attached to the farm house; but from the difficulty of procuring workmen who could erect it in a workmanlike manner, until the setting in of winter, I have not been able to get it finished. The cost already incurred for lumber, posts, nails, labor, &c., is $150.

During the fall of 1866 the fence separating the orchard from one of the small pasture lots was removed and put up on the west side of the orchard. I had a good, substantial post and rail fence, 36½ rods long, put up in its place, costing $54.

I was notified that the post-and-board fence across Squaw Creek Bottom was from three to five feet over on the public road, by the person superintending the work of improving the road across the Bottom, and asked to remove it, as the whole of the room was needed to get material for raising the embankment above high-water mark. I had the whole, amounting to 111 rods, taken down and rebuilt, at a cost of $28.90 for labor, the old material being used with the addition only of a few posts. I have a ditch opened wide and deep enough to carry all the water ordinarily flowing

in the slough that skirts along and near the south side of the farm, directly east from where the slough debouches from the bluffs to Squaw creek, length a little over 100 rods. This improvement conveys the water directly in a straight due east line into the creek, instead of letting it flow over some forty acres of pasture. The grass crop produced hitherto, has been so coarse as to be very unpalatable to stock except for a very short time in the early part of the summer; According to my experience the grass now produced will become finer every year until principally composed of what are usually termed tame grasses. The cost of the ditch was $45.65.

There was no reliable fence on the north line of the farm, and no part of the fence that was there was owned by the State; in consequence of which, our crops have been somewhat injured by stock ranging the woods and pastures in that direction. I have had a very substantial post- and rail-fence put on the north line of the farm opposite and as far as our lands are under cultivation. Length of fence, eighty-five and one-third rods; cost, $120.00. I would recommend the erection continued westward to the railroad bridge, so as to be some barrier to keep trespassers from among the timber.

About six hundred and fifty rods of fence have been built by the C. & N. W. R. R. Co. on the north side of the railroad track.

From old lumber that had been used about the brick-yard I have had three sheep-houses or sheds erected, 24 feet by 12 each, with double-board roofs of sound lumber — each having access to an open yard for air and exercise — yet so constructed that the different lots can be kept apart from each other. The work was all done by the farm hands; cost for nails, $10.00.

The hog-house, partly erected during the fall of 1866, was completed; cost, including material and labor, $85.87½. I have had open-yards added to four of the pens, at odd times, by farm hands — using old lumber.

In the north-west corner of that portion of the farm south of the railroad, there were a few acres of land on which were several small patches of hazel brush, &c., around and among which some breaking has been done. I had sufficient broke and cleaned up to make the field square. The grubbing and breaking cost $40.50.

North-west of the College and between that and the brick-yard,

there were fifteen or sixteen acres of flat, wettish land that had been broke with the prairie plow, (some of it three times) and each time been allowed to run back, in a great measure, to a wild state. We endeavored to plow it in the spring, but got only between three and four acres very imperfectly done. I have the whole sown with oats, and by giving a good deal of extra harrowing succeeded in raising a rather inferior crop. On the south side of, and close to the railroad is another piece of wet land, amounting to about eight acres that was broke out of prairie during the summer of 1865; sown with oats in the spring of 1866, and was so wet that the oats could not be reaped. We made an effort to plow it in the spring, but failed to accomplish anything with it at that time. Since harvest I have had both well plowed into narrow ridges and channels opened to carry off the surface-water so as to facilitate the putting in a crop early in the spring. If drained, these two pieces of land are the best on the farm, and to drain them it will require 3,665 feet of four-inch tile for mains and about 12,250 feet for side drains of two- and three-inch tile, which will cost at the tile-works about $368.00. Both utility and appearance demand that these two pieces of land should be drained or else sown to grass and pastured; but neither of them will produce a good quality of grass without drainage. These tracts are interspersed with dry knolls and ridges of very fertile land, and I would urge upon the Board the propriety of taking steps to procure the thorough drainage of these and all the other wet spots on the upland part of this farm.

The orchard produced a few apples but of inferior quality owing to the drought.

The young vines also produced a few grapes which with currants, gooseberries &c., were all used in the house.

Agreeable to a resolution of the Board at the last annual meeting, Hon. J. Willson Williams made (about the 1st of April last) a topographical survey of the farm. In doing so it was discovered that some of the original corners, witness-trees, &c., had nearly disappeared. I had new bearing- or witness-trees marked, (when at a distance from timber, stones deep into the ground have been substituted for trees.) I had also stones, dressed and marked, set in each of the original or other corners of the farm, and all recorded in the County Surveyor's record book of Story county.

While the County Surveyor was on the farm, I agreed with Mr. Porter to have the land surveyed that the old Board had proposed exchanging with him in connection with a contemplated alteration of a road supposed to be laid through the farm. The records of the county show that said road was vacated between the years 1857 and 1859, and until some information was had in 1866, the only portion of known public road on the farm, except $17\frac{5}{100}$ chains (which has never been opened) on the line between sections 3 and 4, was the road along the south, and $14\frac{5}{100}$ chains on the south end of west lines. I have posted notices, as by law required, and taken the other necessary steps to have the road on the line between sections 3 and 4 vacated.

I think that trading away $17.63\frac{1}{2}$ acres of the best and most beautiful laying land on the farm for a piece of land as broken and shapeless as the $14\frac{5}{100}$ acres the State would receive from Mr. Porter, and abandoning the road along the south line of the farm for one to run diagonally across and through a portion of the most useful land on the farm, is to perform an act injurious alike to the appearance, and detrimental to the true interests of the farm and the State.

During the fall, to-wit.: on the 22d of October, and 1st, 3d, and 7th of November, the dry grass near the railroad caught fire from railroad trains (on the 5th twice) and destroyed several hundred rails on different parts of the farm, (about 200 are totally destroyed, and from 4 to 500 so much injured that if moved from their present position they could not be put into another fence). In addition to the above, the fires did much damage to young timber on the farm and many hundreds of dollars damage in the neighborhood. I notified the agent of the railroad company at Ames of these fires and of the damage we had sustained, but on examination of the laws now in force, I am in doubt of our ability to reach the company, so as to recover damage, I therefore refer the matter to the Board and Legislature.

Of the tools and implements on the farm many were nearly worn out; of those said to be in good order I found only one plow in a condition fit for work, but by putting some repairs on that and one other, I succeeded in getting the spring crop into the ground, although not always in a satisfactory manner.

The majority of the implements, &c., were found to be unsatisfactory and inefficient, and on consultation with the Executive Committee it was decided to advertise for sale such implements, tools, surplus stock, &c., as it was deemed advisable to dispense with, or have replaced with those improved and perfected so as to keep up with the progressive age in which we live.

The sale was far from being a success; some implements unsuited to this soil were sold; also some pigs, sheep and a yoke of oxen. The implements and oxen I think, were sold for their full value, also some of the sheep and pigs, but considering that prices offered for some portion of the latter were below their value, I stopped the sale. I hold three well secured notes bearing ten per cent interest for $190; and the remainder of the proceeds were paid in cash, to-wit: $159.70. Total $349.70. The plows sold were as far as this farm was concerned, perfectly useless lumber.

There are now here three stirring plows, of which one made at Dixon, Illinois, does very fair work, but so much time is lost in getting repairs made on the cast iron portions of it that we have been compelled to lay it aside.

The next, the Garden City plow, from Furst & Bradley, Chicago, Illinois, is a tolerably fair plow while on dry ground, but on our flat, rich, rather damp soil, it does not scour, and consequently makes very poor work in such places.

During the fall, I got a plow from the manufactory of Deere & Co., of Moline, Illinois, which far surpasses any plow I have yet seen tried in this soil; the mold-board differs in form from any of the plows I have yet seen. Those heretofore in use are made of a plate of steel presenting a regularly curved surface to the furrow, and very few of them will scour in the black sticky portions of the soil peculiar to Central Iowa (the soil sticking like wax in the hollow formed by the concave face) whenever it gets the least damp. This new patent mold-board is not merely bent over and outward to turn the furrow slice upside down similar to those heretofore in use, but in these new plows the middle of the mold plate is as if pressed outward until it presents a surface very similar in form to that frequently taken by the common plow when the sticky soil is adhering to it (what some people call half loaded) or slightly convex on its horizontal line, thus presenting every part of its front surface equally to the furrow, so that with its high polish and extra hard face it rarely ever requires to be cleaned off while being used in the field. It is well made, very strong, and so finely polished as to be very easy on the team.

The bills actually paid for repairs on the reaper and mower amounted to over $30.00, and this is by far the smallest portion of the expense incurred in trying to carry on a farm with such implements. The loss of two hours in harvest getting repairs done may be of more consequence to the farmer than ten times what he may have to pay a blacksmith for repairing his reaper; but such losses he will have to bear until he secures tools and implements that give a reasonable promise of being equal to the task required of them, and the old reaper, mower and corn planter were sold with a view to procuring others better adapted to the full performance of their work.

STOCK.

The cattle have been healthy and have done well during the past season, and their natural increase has been all that could be desired: I advertised some surplus stock for sale as instructed by the Board, and sold four head for $275.00 part of which are not yet paid, or stock delivered. I think it would be much more profitable for the State to provide more accommodations, for the stock than to be compelled to force the sale of such promising young animals in this manner. With the sale of these we yet have all the stock we can accommodate with a due regard to their health and comfort.

HORSES.

The horses are all doing, and have done well for their age, but two of them are getting pretty old and should be replaced by animals of more youth and vigor, one of them especially, and it will be necessary either to purchase or hire at least one additional team to enable the next season's work to be carried on successfully. There ought to be five able work-horses on the farm to do the work, and a mare to breed or work occasionally in spring and fall so as to keep up stock, without going into the market to buy.

SHEEP.

Three sheep died during the summer, two from the intense

heat, and one (supposed) from snake-bite, and one died at the beginning of winter from catarrh or some disease of the lungs. The remainder of them appear in excellent health and are in good store order.

HOGS.

A very fine young Chester White sow died in farrowing. The rest of the hogs are doing very well. We have a number of young hog, and amongst them some very fine pure Berkshires of both sexes, very superior animals — but we find very little market for them for breeding purposes, and what little we find is at prices scarcely remunerative.

I made an effort to secure a supply of mangolds, turnips and carrots for our young stock during the winter, but from causes as stated below I was not very successful. The mangolds were sown in the small enclosure adjoining the farm-house, our land I supposed in a suitable condition to produce a good crop, but the heavy rains in the latter part of May and beginning of June, caused so many of the young plants to perish that there were not enough left for half a crop, I therefore had the ground prepared for turnips, with some other pieces on different parts of the farm. I had turnip-seed sown at the proper season which grew well, and until the month of September promised us a very good supply of roots for winter use, but alas, "the best laid schemes of mice and men gang aft agley."

Early in September the grasshoppers made their appearance, and before the middle of October, our whole turnip-crop had disappeared. The grasshoppers first eat off the tender leaves then the bulbs. The rutabagas fared some better, the leaves only being eaten, but after the leaves were eaten off, the bulbs ceased growing, and became so hard, dry, and fibrous that they can scarcely be used.

Our carrots which promised an excellent crop, suffered also severely; their growth was stopped by their tops being eaten off just at the season of the year when their most rapid growth takes place. I estimate that the crop was curtailed at least two-thirds.

Following is a summary of the accounts kept with the different crops, mangolds and turnips excepted:

VALUE AND COST OF CROPS FOR THE YEAR 1867.

		Profit.
Value of 23 a. 3 r. and 29 poles wheat	$594.70	
Cost of do. (436 bu.)	255.75	— 338.95
Value of 26 a. 0 r. 28 poles oats	516.90	
Cost of do. (996 bu.)	198.76	— 318.14
Value of 25 a. 1 r. 18 poles corn	542.00	
Cost of do. (1006 bu.)	243.40	— 298.60
Value of 24 a. 1 r. 33 poles timothy hay	322.00	
Cost of do. (33¼ tons)	74.25	— 247.75
Value of 72½ tons natural grass hay	327.00	
Cost of do.	129.00	— 198.00
Value of 1 a. 69 rods sorghum	108.00	
Cost of do (135 gall.)	68.40	— 39.60
Value of 1 a. 9 rods carrots	64.20	
Cost of do. (107 bu.)	61.10	— 3.10
Value of 4 a. potatoes and vegetable	200.00	
Cost of do	150.00	— 50.00
Net profit on produce		$1494.14

There were about 4 acres of potatoes and vegetables of various kinds raised on the place that have cost in seed, labor &c. about $150.00. As near as I can estimate the product was about $200.00, but being from time to time since early summer consumed in the house, and since stored for winter use I can only make an estimate.

The improvements required, exclusive of field labor, made it necessary to keep more hands employed permanently on the farm, as it was impossible to procure sufficient suitably skilled labor at such times as it was required in this vicinity. I therefore endeavored to retain a sufficient force of experienced hands so as to be certain of getting work done in a systematic manner and at the proper season.

The cost of farm labor, including Mr. Graves' salary and the hire of a team for the year, is	$1,112.00
Cost of permanent improvements on the farm and farm buildings, house, &c.	610.00
	$1,722.04

I have received funds from the following sources, to-wit:

Sales of Story county lands	$959.00
Sales of Boone county lands	332.89
Sales of wool (crop of 1866)	229.00
Sales of timothy seed	175.30
Sales of wheat	169.75
Sales of stock	196.10
Boarding workmen at college 12 days	202.10
At various times from treasurer from farm and building funds	978.00
Collected Story county notes	78.70
Various other sources	216.20
	$3,537.00

I have expended as follows, to-wit:

For farm labor and team hire	$ 762.00
For improvements on farm, &c	610.00
For deposited with treasurer	800.00
For paid executive committee	200.20
For insurance policy for three years	58.25
For building fund	123.00
For to P. L. Porter, on account of road	50.00
For surveying, (County Surveyor)	24.00
For blacksmithing and hardware	186.10
For express on book, &c., from Washington	35.25
For hay and corn	80.10
For incidental expenses	619.14
	$3,549.04

SALES OF STORY COUNTY LANDS.

To W. G. Little, the s. hf. se. qr, nw. qr. of sec. 14, T. 83, R. 24, for	$240.00
To Hy. McCarthy, e. hf se. qr. sec. 10, T. 83, R. 24, for $800.00. Received note for $267.00 bearing ten per cent interest, due in two years, and in cash	533.00
To W. A. Gossard 15 acres off of the n. end of w. hf, se. qr. sec. 34, T. 83, R. 24, for $90.00. Received two notes for $30.00 each, bearing ten per cent interest, due in one and two years, and in cash	30.00

To Daniel McCarthy, the s. hf. sw. of nw. of sec. 11, T. 83, R. 24 west, for $200.00. I received one note for $66, due in one year, and one note for $67.00, due in two years, both bearing ten per cent interest, and in cash	67.00
To Benjamin McLaren, ten acres off of the s. end of the e. 24 acres of the se. qr. of sec. 10, T. 83, R. 24, for $100.00. I received two notes for $33.00 each, due in one and two years, with ten per cent interest, and in cash	34.00
To Polly A. Kintzley, 10 acres off of the e. side of the se. qr. of the se. qr. sec. 33, T. 84, R. 24, for $75.00. I received two notes for $25.00 each, bearing ten per cent interest, due in one and two years, with cash	25.00
To Daniel McCarthy, 10 acres, being part of the s. hf, ne. qr. of sec. 10, T. 83, R. 24 w. I received two notes for $30.00 each, due in one and two years, with ten per cent interest, and in cash	30.00
For 40 acres sold in Boone county	332.89
	$1,291.89

RECAPITULATION.

W. G. Little	$240.00
Henry McCarthy	533.00
W. A. Gossard	30.00
Daniel McCarthy	67.00
B. McLaren	34.00
Polly A. Kintzley	25.00
Daniel McCarthy	30.00
Land in Boone county	332.89
Total received	$1291.89

Promissory notes received and when due.

Hy. McCarthy for	$267.00	due 24th Aug. 1869
W. A. Gossard	30.00	due 27th June 1868
W. A. Gossard	30.00	due 27th June 1869
Daniel McCarthy	66.00	due 14th Sept. 1868
Daniel McCarthy	67.00	due 14th Sept. 1869

B. McLaren	33.00 due 12th	Nov. 1868
B. McLaren	33.00 due 12th	Nov. 1869
Polly A. Kintzley	25.00 due 27th	Dec. 1868
Polly A. Kintzley	25.00 due 27th	Dec. 1869
Daniel McCarthy	30.00 due 12th	Nov. 1868
Daniel McCarthy	30.00 due 12th	Nov. 1869

Total in notes	$635.00 for land sold.
	190.00 for auction sales.

There are three work-horses and two colts, the property of the State, on the farm, valued at	$ 565.00
Four cows and three yearling (common stock)	222.00
Seven young grade animals	160.00
One bull, four cows, and three young Durhams	2,800.00
One bull and two cows, Devon	300.00
One bull, Ayrshire	300.00
Three bucks and three ewes, Spanish Merino sheep	1,400.00
One buck and two ewes, Cotswold sheep	350.00
One buck and one ewe, Leicester sheep	275.00
Fifty-six high grade sheep	280.00
Forty-one high grade lambs	103.00
One buck, five ewes and three lambs, Southdowns.	475.00
One boar, two sows and nine young Berkshire swine	295.00
Two Hospital sows	100.00
One sow and two young Suffolks	75.00
One Chester White boar	50.00
Fourteen fattening hogs	200.00
Thirty-four store hogs	170.00
Fifty-one chickens	12.20
Eighteen bronze turkeys	27.00
Total value of stock	$8,259.70
Value of tools and implements	1,461.45
Value of office and household furniture	283.25
Value of crops raised in 1867	2,664.60
Total	$12,669.00

There are about 300 evergreens on the farm, nearly one-half of which are red cedar the remainder chiefly balsam, pine, and spruce. From one-third to one-half will do to transplant the coming season if properly protected afterward.

There are also a few very fine young larches fit to transplant. I would recommend that a large supply of those trees be procured for improving and ornamenting the grounds around the College.

DONATIONS.

Early in the spring I received from the Department of the Interior three boxes containing —

Jefferson's complete works	9 volumes.
State papers	17 volumes.
Annals complete	42 volumes.
American archives	9 volumes.

During the months of May and June I received four boxes from the Smithsonian Institute containing some valuable geological specimens, marbles, shells, &c. which are carefully stored away for the use of the College.

In the beginning of June I received a note from Dr. White, State Geologist, informing me that he had some boxes of specimens for this Institution. I was not in a position to take proper care of many valuable acquisitions of this nature, and so signified to him. I have since sent for and received four boxes of specimens from him, for the use of the College.

I also received a very superior plow from Messrs. Deere & Co., Ill., described elsewhere in this report.

The members of this Board whose term of office expires on the first day of May next, are —

J. W. Williams, 1st District.
J. D. Wright, 2d District.
B. O. Stevenson, 3d District.
H. M. Thomson, 7th District.
P. Melendy, 9th District.
John Garber, 10th District.

All of which is most respectfully submitted,

H. M. THOMSON,
Superintendent and Secretary.

APPENDIX TO SECRETARY'S REPORT.

The act of Congress making donations of land for the support (endowment) of Agricultural Colleges, demanding an annual report of the progress of the agricultural and other industrial interests of the States accepting those grants, I herewith present the following tables from the last Census Report of our State, which present a reliable exhibit of the condition of those interests:

ITEMS.	1865.	1867.
Number of dwelling-houses	114351	155758
Number of white males	379746	463537
Number of white females	371379	433316
Total white population	751125	897325
Number of colored males	1804	2508
Number of colored females	1803	2203
Total colored population	3607	4715
Number entitled to vote	146427	181749
Number of militia	94734	125646
Number of foreigners not naturalized	10594	13503
Number between the ages of 5 and 21 years	293565	339618
Number of blind	*259	*412
Number of deaf and dumb	376	368
Number of insane	613	644
Number of miles railroad finished	793	1159
Number of colleges, academies and universities	41	62
Number of students attending college	2337	3951
Number of acres land inclosed	5337053	8263174
Number of acres sorghum	21452	25796
Number of gallons syrup from sorghum	1443605	2094557
Number of pounds sugar from sorghum	8386	14697
Number of acres Hungarian grass	37894	39436
Number of tons hay from Hungarian grass	63698	58889
Number of acres tame grasses	302899	497460
Number of tons hay from tame grasses	225349	537812
Number of tons hay from wild grass	713119	823153
Number of bushels grass seed	62114	107532
Number of acres spring wheat	827487	983905
Number of bushels harvested	7175784	13912368
Number of acres winter wheat	116965	73435
Number of bushels harvested	1108781	723152
Number of acres oats	577540	504361
Number of bushels harvested	15928777	15861494
Number of acres corn	1727777	1992326
Number of bushels harvested	48471133	56928938
Number of acres rye	48992	35604

TABLE—CONTINUED.

ITEMS.	1865.	1867.
Number of bushels harvested	662388	492841
Number of acres barley	51804	48013
Number of bushels harvested	950696	1197729
Number of acres Irish potatoes	40198	42493
Number of bushels harvested	2780811	2666678
Number of bushels sweet potatoes	26222	50390
Number of bushels onions	207618	213285
Number of acres flax	12111	11906
Number of bushels seed harvested	75721	61917
Number of pounds lint	1112753	400053
Number of gallons linseed oil	890	80053
Number of acres in all other crops	202788	63116
Number of fruit trees in bearing	636458	1075177
Number of fruit trees not in bearing	2523905	3629789
Number of hogs of all ages	1037117	1620089
Number of cattle of all ages	901831	956169
Number of milch cows	310137	326539
Number of pounds butter made	14538216	19193737
Number of pounds cheese made	1000738	1403864
Number of work oxen	37717	27246
Number of sheep in 1864	1000541	.....
Number of sheep in 1866	.....	1598226
Number of pounds wool shorn in 1864	2813620	.....
Number of pounds wool shorn in 1866	.....	5323385
Number of sheep in 1867	.....	1708958
Number of horses of all ages	316702	425055
Number of mules and asses of all ages	14303	22037
Number of dogs	80069	125207
Number of hives bees	87118	85727
Number of pounds honey taken	1128399	896745
Number of pounds beeswax	51434	56266
Number of pounds grapes raised	390409	549179
Number of gallons wine made	30779	29495
Number of pounds hops raised	27847	48653
Number of pounds tobacco raised	753626	385002
Number of acres planted for timber	20285	48653
Number of rods hedging	331741	663063
Number of bushels coal raised, 80 pounds per bushel	1666582	2483010
Value of minerals raised, not including coal	$31875	$320820
Value of manufactures	$7100465	$15957599
Value of agricultural implements, machinery and wagons	$7707027	$11362402
Value of sheep killed by dogs	.....	$82612
Value of sheep killed by wolves	.....	$53653
Number of acres land assessed	.....	28773400
Assessed value of lands and town lots	.....	$189550825
Assessed value of personal property	.....	$ 6696359
Total assessed valuation	.....	$156517184

*The number of blind in 1865 does not include the inmates of the State Asylum for the Blind at Vinton; the census of 1867, on the contrary, does include the inmates of that Institution.

TABLE

SHOWING THE POPULATION OF THE SEVERAL COUNTIES OF IOWA AT EACH ENUMERATION SINCE THE ORGANIZATION OF THE TERRITORY OF WISCONSIN.

COUNTIES.	WIS. TERR.	IOWA TERRITORY.					STATE OF IOWA.										
	1836.	1838.	1840.	1844.	1846.	1847.	1849.	1850.	1851.	1852.	1854.	1856.	1859.	1860.	1863.	1865.	1867.
Adair											150	663	1011	984	900	1071	1594
Adams											339	1019	1413	1533	1638	1818	2317
Alamakee							227	777	1300	2000	4366	7709	10843	12237	13465	13957	16003
Appanoose																	
Audubon					1300	948	1281	3131	3951	4243	6265	9075	11499	11931	11866	10748	13064
Benton												283	365	454	388	510	790
Black Hawk					297	312	312	673	753	1237	2623	6247	8063	8496	9561	11245	14772
Boone										315	2514	5538	7095	8244	10014	12306	16036
Bremer							419	756	890	1924	1678	5518	4018	4232	4607	5236	9861
Buchanan										309	1095	3228	4336	4915	5404	7224	9337
Buena Vista					149	250	406	519	1006	1023	2309	5125	6918	7906	8294	10037	12331
Butler														57			151
Calhoun										73		2141	3504	3724	4142	5006	6542
Carroll												119	136	147	170	224	546
Cass												251	250	281	297	400	688
Cedar		557	1225	2217	2862	2800	3183	3941	4084	4971	416	815	1489	1612	1623	1895	2479
Cerro Gordo											7643	9481	12175	12949	13274	14041	16076
Cherokee												632	855	940	1007	1311	1988
Chickasaw													85	58	20	64	209
Clarke										400	588	2651	3816	4336	4397	5355	6220
Clay										549	1626	3978	5006	5427	5693	5716	6244
Clayton		274	1044	1200	1500	2176	3000	3873	5000	6318	9337	15187	18639	20728	21235	21922	22879
Clinton		445	800	1201	1300	1570	2044	2835	3001	3822	7306	13441	17395	18938	19821	22405	27334
Crawford												235	429	383	456	574	1070
Dallas												3991	4058	5244	5088	5886	7538
Davis						164	635	812	925	1216	2392	9787	11258	13323	13764	13959	13123	13517
Decatur				2622	3400	4464	4939	7264	7454	7553	9025	6229	8238	8677	8373	8052	8501
Delaware								965	1016	1184	2615	4637	8099	10024	11024	11607	12508	14463
Des Moines		171	300	781	1111	1300	1759	2000	2615	4637	8099	10024	11024	11607	12508	14463	

Des Moines	6257	4605	5546	9109	9391	10071	11649	12914	14488	12575	16700	20198	20781	19611	21213	19804	23444
Dickinson													121	180	189	300	509
Dubuque	4274	2381	3056	4049	6030	7440	9185	10841	11000	12500	16662	25871	30581	31164	30839	33078	38860
Emmett														105		368	708
Fayette								825	1200	2065	3042	8375	11391	12073	12739	13124	14992
Floyd												2448	3458	3744	4018	4886	6731
Franklin												780	1159	1309	1448	1899	2321
Fremont								1244	1600	2044	3006	3368	4327	5074	4778	5698	7013
Greene												1089	1424	1374	1416	1659	2353
Grundy												435	680	793	1024	1302	2119
Guthrie									222	300	772	2149	2754	3058	3205	3249	3906
Hamilton													655	1699	1602	2023	3154
Hancock													121	179	240	292	357
Hardin										300	1259	4033	3323	5440	5376	6813	9345
Harrison											1085	1900	3132	3621	3663	4265	5836
Henry		3058	3784	6017	6875	6759	7229	8707	8915	9633	10139	15395	16299	18701	16780	17816	20110
Howard												444	3017	3168	3382	3871	4401
Humboldt													519	332	394	606	1307
Ida													58	43			90
Iowa						435	600	822	1000	1322	2307	4873	7098	8029	8544	10258	12390
Jackson		881	1452	2000	4767	4639	5677	7210	7597	8231	12166	14077	17710	18493	19158	19097	19970
Jasper						560	1233	1288	1492	1674	3466	7490	9195	9883	10627	12005	16239
Jefferson			2780	5094	6000	8463	8825	9997	10081	10225	11117	13305	14478	15038	14649	14772	16420
Johnson		237	1504	2949	3000	3387	4010	4474	5061	5788	8467	14457	16900	17573	17184	18778	21641
Jones		241	475	1112	1758	1779	2140	3007	3400	4201	6075	9835	13475	13306	13495	14376	16228
Keokuk						2918	3953	4822	5105	5306	7299	10346	12329	13271	13412	13996	15429
Kossuth												377	310	416	365	694	1573
Lee		2839	6095	9830	12860	13231	15000	18783	17625	20360	22590	27373	31242	29232	28523	28063	31417
Linn		205	1385	2643	3411	3954	4762	5444	6160	6890	10802	14702	17720	18947	18700	20754	24549
Louisa		1189	1925	3238	3644	3648	4155	5067	5100	5476	7341	9568	10805	10370	10073	10948	11885
Lucas	[lized.]							471	1025	1046	1921	4408	5287	5766	6257	6352	7746
Lyon	(unorgan-																
Madison							701	1174	1492	1893	3122	5508	7071	7339	7934	8214	9764
Mahaska					2942	3774	5559	5986	6758	7479	9093	13050	14515	14816	16249	17082	18693
Marion					1360	2350	3797	5412	5809	6289	9315	14060	16167	16813	17318	18719	20181
Marshall								338	454	710	1607	4460	5713	6015	7550	8759	11513
Mills										1463	2171	3102	4381	4481	6287	5218	6994
Mitchell												1911	3291	3409	3375	4176	6150

TABLE SHOWING THE POPULATION OF IOWA SINCE THE ORGANIZATION OF THE TERRITORY OF WISCONSIN—CONTINUED.

COUNTIES.	WIS TERR.	IOWA TERRITORY.				STATE OF IOWA.											
	1836.	1838.	1840.	1844.	1845.	1847.	1849.	1850.	1851.	1852.	1854.	1856.	1859.	1860.	1863.	1865.	1867.
Monona	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	222	459	885	882	931	1096	1664
Monroe	.....	.....	.....	386	400	1222	2000	2886	3125	3420	4577	6860	8377	8612	9322	9425	10208
Montgomery	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	233	872	1094	1256	1218	1535	2072
Muscatine	.....	1247	1942	2882	1485	3010	4516	5773	6170	6812	9555	12569	15503	16444	15989	17241	20699
O'Brien . [ized.]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	.....	.....	20
Osceola(unorgan-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Page	.....	.....	.....	.....	.....	.....	.....	551	534	636	1148	1964	3674	4419	4662	5211	6025
Palo Alto	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	131	132	142	216	413
Plymouth	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	112	148	93	105	214
Pocahontas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	126	103	122	215	453
Polk	.....	.....	.....	.....	1301	1792	4214	4444	6000	5939	5968	9417	11238	11625	12956	16473	22630
Pottawattamie	.....	.....	.....	.....	.....	.....	6552	7828	5758	5057	2060	3498	5012	4968	4737	5388	8783
Poweshiek	.....	.....	.....	.....	.....	.....	443	615	742	915	1953	4460	5238	5668	6370	7796	9888
Ringgold	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1472	2507	2923	3039	3089	3888
Sac	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	251	269	246	234	704	595
Scott	.....	1259	2193	2750	3000	3652	4837	5987	6016	8628	12671	21521	25861	25959	26327	28474	34362
Shelby	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	328	456	784	818	828	960	1213
Sioux	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	.....	.....	18
Story	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	214	836	2868	3826	4051	4368	5918	6888
Tama	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	262	1163	3520	5346	5285	7027	7882	11165
Taylor	.....	.....	.....	.....	.....	.....	.....	204	393	479	891	2079	3468	3590	3757	4199	4546
Union	.....	.....	.....	.....	.....	.....	.....	.....	.....	80	81	806	1993	2012	2420	2528	3010
Van Buren	.....	3174	6166	9019	9870	10203	11577	12269	13000	12753	13843	15921	15879	17081	15863	15599	16292
Wapello	.....	.....	.....	2814	4422	5660	7255	8479	8500	8888	10521	13246	15060	14518	16729	18794	18930
Warren	.....	.....	.....	.....	.....	.....	649	943	1193	1488	4446	8000	9150	10281	10932	11150	13162
Washington	.....	283	1571	3120	3483	3518	4434	4991	5079	5881	7560	11113	13366	14235	15003	15729	17675
Wayne	.....	.....	.....	.....	.....	.....	.....	341	500	794	1665	4182	5860	6409	6522	6927	7657
Webster	.....	.....	.....	.....	.....	.....	.....	.....	.....	872	907	3088	2596	2504	2858	3772	5631
Winneshiek	.....	.....	.....	.....	.....	182	300	546	800	1523	3315	7506	12211	13942	15421	15421	16303
Winnebago	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	188	168	204	298	785
Woodbury	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	170	2000	1100	1119	1106	1295	1970
Worth	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	427	759 632	756 653	895 693	1143 908	1543 1332
Wright	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	10531	22859	43114	75152	97588	116651	152988	191982	204774	230713	326013	519055	638775	674913	701732	754699	902040

NOTE.—Calhoun county was originally called Fox county; Lyon was called Buncombe; Monroe, Kishkekosh; Washington, Slaughter; and Woodbury, Wahkaw. Hamilton was created as Risley county, and subsequently formed a part of Webster. Humboldt county, originally erected under that name, was afterward divided between Kossuth and Webster; more recently, the territory which had been annexed to Kossuth, with the northern half of that detached to Webster, was re-erected into the county of Humboldt. The northern part of Kossuth county was at first Bancroft county, which in 1855 was with Kossuth in 1855; subsequently the territory obtained from Humboldt was again detached. Webster county was at first called Yell county, which in 1855 was united with Risley and two tiers of townships in Humboldt to form. Webster; in 1857, Hamilton county was detached, and also one tier of townships from Humboldt.

Since I became immediately connected with this Institution I have heard much said in relation to it. Those for whose benefit it has been created almost invariably have high anticipations of its success, while at the same time, those who from their position in society might be supposed to know that it is "mind that makes the man," are in many cases incredulous of our success; of all such I request a careful perusal of the following extract:

THE RESPECTABILITY OF MECHANICAL TRADES.

"The choice of a pursuit in life, one of the most important practical questions upon which a young person is ever called to decide, is often determined by the most trifling circumstances and without the slightest aid from judgment or reflection. One youth becomes a soldier because his great grandfather was at the taking of Quebec, or his great uncle signalized himself in Braddock's fight; another studies medicine, and hopes to be an almost infallible doctor because he is the seventh son of a seventh son; while a third chooses the profession of the law for no better reason than that his sponsor, at the baptismal font, chose to call him John Marshall, Daniel Webster or Henry Clay. Surely this is not that practical wisdom which adapts the fittest means to the noblest ends. The choice in life is at least worthy of such consideration as common sense would dictate in any other case, where success in an enterprise depends upon fitness for undertaking it. Men do not expect to "gather grapes from thorns," or "figs from thistles," yet they expect their sons and daughters to succeed in pursuits for which they are wholly incapacitated by talents, disposition or education. And what is still more unreasonable, they expect them to be happy in situations which are totally uncongenial to their natures. One reason why parents and guardians fall so frequently into errors on this point — errors, too, which they lead those under their charge to embrace—is the vain imagination that there is a great and essential difference in the respectability of those pursuits which are admitted by all to be honest.

The respectability of a profession, we suppose it will be admitted, must depend in a great measure upon the respectable character of its members, taken collectively, or regarded with reference to the most brilliant examples. If we adopt this standard, it will be found no easy matter to establish a claim to superior respectability in favor of any one trade or profession, or class of trades or professions. If it should be asserted that the (so called) learned professions of law, physic or divinity, are more respectable than the pursuits of commerce, mechanics or agriculture, it might easily be shown that taken collectively, the members of these latter trades or professions possess more wealth, ease and independence than those of the learned ones; and further, that among them as brilliant examples of pre-eminence, patriotism and public spirit may be pointed out as those of the more learned professions.

In a country like ours such a claim of respectability in behalf of any profession is preposterous; and yet it is constantly assigned by purse-proud fathers and weak-minded mothers, as a reason for determining their children's pursuit in life.

There is a very general impression that a merchant, clergyman, doctor or lawyer, stands higher in social estimation than a mechanic or farmer. But such is not the fact, as a general principle; if, in a particular instance, a particular merchant, for example, stands higher in social estimation than a particular mechanic, it is not on account of the respective means by which they earn their livelihood, but because the merchant in this instance has claims by wealth, intelligence or education, which the mechanic has not; and by passing into the next street, and taking another example, you will find the tables completely turned, and the mechanic in the enjoyment of a social position to which the merchant can not aspire. This fact is sufficient to prove that a man of one trade or profession does not take a lower position in society than another of a different profession simply on account of the different modes by which they subsist, but by reason of other circumstances which are wholly independent of this consideration. A gentleman who is a merchant does not, for example, decline an intimate acquaintance and social intercourse with his neighbor simply because his neighbor is a mechanic, but because their favorite topics of conversation, their tastes and pursuits are different; and this is clearly apparent from another fact, viz: that whenever two persons of totally different trades or professions happen to meet frequently upon some common ground of science or the fine arts in their leisure hours, they immediately recognize each other's natural equality, and become familiar companions; they unite in

the same pursuits in their leisure hours, and become daily more and more assimilated in mind and character, as well as in their favorite recreation, until they are bound by the strictest bond of friendship.

There is, therefore, no necessary or essential difference in the respectability of different trades and professions; and there is no estrangement between their members that may not be overcome by precisely the same means which constitute the cause of intimacy in other circumstances. In our country, therefore, in point of real and essential respectability, all trades and professions are equal; and the social position which a man occupies, and the degree of respect which he is able to command, depends not upon his trade or profession, but upon his individual character.

If, in every part of the United States, the stupid prejudice which would exclude the mechanic or farmer from any society to which his intelligence and good manners entitle him, is not thoroughly exploded, the time has certainly arrived when it is no longer to be avowed by intelligent or well-bred people. In fact, the rule which would exclude a man from any drawing-room in the land, on the simple ground of being a mechanic, would have excluded from the same drawing-room such men as Nathaniel Bowditch, who was a sailor by trade; Roger Sherman, who was a shoemaker by trade; Benjamin Franklin, who was a printer by trade; Geo. Washington, a very respectable man of the last century, who was a surveyor by trade; or U. S. Grant, who is a tanner by trade.

But the imaginary respectability which a man may happen to enjoy, from his position in society, is not, by any means, the first and most important thing to be considered, in the choice of a profession. It should not be the leading motive in determining the choice of the parent; neither should it be the main consideration in the mind of the young person himself. There is another, and much more important point, which claims and should receive the precedence.

Every parent, in making choice of a profession for his son, and every son in making the same choice for himself, should seriously and deliberately inquire what trade or profession affords the best chance for happiness — happiness in the noblest and broadest sense — happiness which consists in contentment, independence

and real usefulness — happiness which begins in the conscientious and successful discharge of duty on earth, and reaches forward to the unerring retribution of a future world. The inquiry which is thus presented is a very extensive one. It admits of whole years of investigation — whole volumes of disquisition to treat it at large, and apply it to any considerable portion of the cases that might arise.

* * * * * * * * * *

Farmers and mechanics of Iowa, this Institution is created for the purpose of mentally elevating the class of which we are a part. Let us unite earnestly for its support. Shrink not, although we may sometimes see the smile of incredulity flit across the countenances of those whose illiberal minds can not discern that progress belongs to the age in which we live. Rest assured that no man of pure enlightened mind but will rejoice at every effort we make for improvement, and with such on one side, we can afford to bear with those whose limited minds lead them to look down on the man whose independent spirit prompts him to rely on the skill of his own hands for the means which supports himself and those he loves. It is said "in unity there is strength," and it is well known that a want of unity is one of the greatest obstacles we have to encounter; let us then, drop our minor and local differences and present a united front in support of a scientific, systematic, and intellectual training of those who are destined to be the future producers and creat or sof the wealth andprosperity of our country.'

H. M. T.

REPORT OF THE BUILDING COMMITTEE.

At the meeting of the Board of Trustees in May, 1866, they proceeded to elect the Superintendent of the building and the Building Committee of three, as prescribed by the Act of the General Assembly, granting the appropriation to complete the College Building. Mr. C. A. Dunham was elected Architect and Superintendent, John Russell, J. Willson Williams and J. D. Wright were elected members of the Building Committee, all of whom gave the necessary bonds as required by law. The Board also, at the same meeting, resolved to authorize the Superintendent to employ a competent mechanic to be present at the building and see that the work should be executed in every respect as prescribed by him, the cost of whose services should not exceed five dollars per day.

After the adjournment of the session of theBoard, the Superintendent and the Building Committee visited the building and found that the foundation walls were in a much damaged condition. It was concluded, after due consultation, that the chairman of the Building Committee should immediately proceed to make the necessary arrangements to commence the repair of the walls and have the cellar thoroughly drained. With this in view, the superintendent, the other members of the committee and members of the Board of Trustees concurred in requesting him to go to the work and act in the capacity of Superintendent's representative.

Many difficulties were at first presented. Hands had to be procured and material obtained, which involved the visiting of different localities sometimes remote from the building. No pains were spared in order to secure information that would enable the committee to determine where the best accessible material could be obtained.

As shown by the report of the joint committee of the 11th, General Assembly who visited the building during the session of

1866, Mr. Robertson of Des Moines had entered into a contract with the former Board of Trustees under which he was to superintend the making of all the brick expected to be used in the construction of the building, and was also to superintend laying in the walls, all the brick to be used in the basement and cellar of the building. The Board were bound to pay to Mr. Robertson as his compensation for superintendence, twenty five per cent on all the cost incurred in prosecuting the work.

The present Board of Trustees were anxious to rid themselves of this contract. After several ineffectual attempts, on the part of the Building Committee, to secure more favorable terms from Mr. Robertson, the Board of Trustees at a meeting in June, following finally concluded to pay Mr. Robertson five hundred dollars to release them from his contract which he accepted.

The repairs upon the walls and drain were commenced on the 21st of May, 1866, and were completed on the 28th of July, at which time the chairman of the Building Committee ceased to act in the capacity of Superintendent's representative on the work.

The whole cost of the work done, repairing the walls, draining and grading the cellar, was one thousand one hundred and twenty-three dollars and ninety-three cents.

Shortly after the adjournment of the first meeting of the Board, in May, the Building Committee instructed the Superintendent to advertise for propositions to complete the building after the repairs were completed. With a view to this the Board held a meeting at the farm on the 22d of June, 1866. Propositions were received from several parties to complete the building. The lowest proposition made was by Mr. Jacob Reichard, who proposed to complete the building — the brick being furnished by the Board — for the sum of seventy-three thousand eight hundred and seventy-two dollars. The contract was awarded to Mr. Reichard, and the Building Committee instructed Mr. Dunham to proceed to Des Moines with Mr. Reichard and have a contract and bond drawn up with the approval of the Attorney General or Judge Wright. The contract was duly executed, and a bond for fifty thousand dollars conditioned for the faithful performance of it, placed in the hands of the committee.

The brick-making to complete the building was prosecuted through the summer of 1866. A good foreman and hands were

hired by the Committee, and were placed under the direction of the Superintendent's representative. Five hundred thousand were made that year at a total cost of three thousand eight hundred and fifty-seven dollars and fifty-six cents. Many difficulties were encountered in procuring the proper material, and it had to be hauled a considerable distance a portion of the time.

The contract with Mr. Reichard was signed on the 17th of July, 1866, at which time he received $7,000.00 on it; and he commenced work on the building in the latter part of that month.

The Committee had succeeded through the kindness and friendship of Mr. Howe, the Superintendent of the Iowa Division of the C. & N. W. R. R., in securing the construction of a side-track on the railroad opposite the building, so that material was shipped nearer than at the railroad station.

A deduction of 33⅓ per cent was also ordered by Mr. Dunlap, the General Superintendent, on all freight passing over the road, used in the construction of the building; which was given to the contractor.

During the first year (1866) the building progressed as far as could have been expected. Many difficulties presented themselves to the contractor which he could not control, and the work was not in as forward a condition on the approach of winter as Mr. Reichard had expected.

As early in the spring of 1867 as it was proper, work was resumed on the walls of the building. In the month of August of last year, it was ascertained by the Superintendent that there would be a deficiency of the amount of brick necessary to complete the building. Notice was received by the Chairman of the Committee that seventy-six thousand would be needed for that purpose. As soon as practicable he hastened to secure them, and finally purchased the amount at Marshalltown, at the rate of ten dollars per 1000, delivered on cars. The freight charged was $336.00, costing at the building in all $1,096.00.

Mr. Reichard was bound by his contract to have finished the building by the first of January, the present year. He has been unable to complete it, but thinks he will able to do so early in the coming spring. The building is now all inclosed and some of the rooms entirely finished. Most of it has received one coat of plaster,

and the joiner-work mostly ready to be put up as soon as the plastering is ready to receive it.

Mr. Reichard has up to this time received 72,214$\frac{82}{100}$ dollars on his contract and has yet due to him 1657\frac{18}{100}$, which is the full amount of the contract price. There will be some amount due to him for extra work ordered bythe Superintendent. But no report of it has yet been received from Mr. Dunham, and no claims have been presented by Mr. Reichard. So far the character of the work done upon the building is all that could be desired and is creditable to the contractor.

The expenditures of the appropriation to complete the building and pay debts, has been as follows:

Amount paid Mr. Reichard on contract	$72,214.82
Amount paid C. A. Dunham for per centage as architect	2,000.00
Amount paid for brick and freight on same	1,096.00
Amount paid for sundry expenses, as shown on book and by vouchers filed	357.80
Amount paid Superintendent's representative on the work	2,320.00
Amount paid members of Building Committee per diem and expenses as allowed by board	769.26
Amount paid on debts contracted by old Board of Trustees	5,303.50
Amount paid for brick making (500,000) in 1866	3,861.31
Amount paid for repair of foundation, drain, &c.	1,123.93
	$89,046.62

It has been found, on examining the books of the Treasurer, that amounts in the aggregate to the sum of $263.75 have been drawn from the building fund without the orders being made payable to the chairman of the Building Committee, which amounts will require to be added to the above amounts, making in all $89,310.37.

Vouchers for the expenditure of each ten thousand dollars have been filed with the Auditor of State as fast as the money has been paid out. A strict account of each item has also been kept by the chairman of the Building Committee, and will be open to the inspection of any committee which may be appointed to examine them.

REPORT OF THE EXECUTIVE COMMITTEE.

The following are the important items contained in the report of the Executive Committee for the past two years:

The committee spent considerable time, immediately after their appointment in investigating the financial affairs of the College and farm.

They were unable to find any records of the doings of their predecessors, and as no complete book account of the receipts and expenditures could be found, it was impossible to ascertain with any degree of certainty, the financial condition of the Institution. They found a large amount of old claims unpaid, and at once set about investigating them and paying such as they were satisfied were just. They have during the past two years audited and paid of the old debts against the Farm Fund $6,598.94 in addition to the debts against the College, which amounted to 5,303.50 making a total indebtedness of 11,902.44, all of which has been paid.

For a detailed statement of the receipts and expenditures on the farm during the last two years, see the reports and books of the Superintendent, which show all items in full, with the vouchers.

The statement of the Superintendent for the year 1866, shows that there was raised upon the farm during that year, the following products:

Wheat.—263 bushels at a cost of $141.28, valued at	$452.00
Oats.—1,078 bushels at a cost of $189.44, valued at	471.20
Corn.—1,697 bushels at a cost of $214.31, valued at	865.00
Timothy.—Hay and seed, cost $57.05, valued at	274.00
Sorghum.—Cost $23.50, valued at	28.80
Potatoes, Carrots and Beans—Cost $49.10, valued at	93.00
Buckwheat, Hungarian and Garden—Cost $31.55, valued	75.00
Prairie Hay.—Cost $67.50, valued at	350,00
Value of wool sold	285.00
Total value of farm products	2,132.72
Total amount paid for labor	1,487.50

The stock on the farm consisted of	
4 horses valued at	$435.00
21 head of cattle, valued at	5,615.00
134 head of sheep, valued at	4,307.00
20 head of swine, valued at	684.00
Total value of stock	$11,041.00
Value of tools and farm implements	$1,721.29
Value of office and household furniture	137.50
Value of implements purchased in 1866	405.60
Increase of stock during the year 1866 was estimated at	941.50
Loss of stock valued at	287.00
Value of fruit trees planted	84.00
Permanent improvements, building, fencing, &c., for 1866, cost	719.26

In January 1867, H. M. Thomson was elected Superintendent and Secretary, and upon the 24th of the month he entered upon the duties of his office. As his report of the transactions on the farm for the last year is very full and complete, and is published in the report of the Trustees it will not be necessary to enter into the details in this place.

We are gratified to be able to state that a marked change for the better is clearly visible in the management of the farm during the past year. A system of farming has been inaugurated that is already producing better crops, better care of stock, and is clearly discernable in the permanent improvements, in fencing, draining and bringing the land under a better system of cultivation. From a careful examination of his financial management, we are satisfied that he is working with energy and system to make the farm a paying investment instead of drawing heavily upon our resources, as heretofore. There are many permanent improvements needed to place the farm in a condition creditable to the State, for the purpose which it is designated to serve.

For the proper care of stock, additional buildings and fencing are very much needed. Some additional stock should be procured at once in order to keep up the varieties that are now being tested. More horses are absolutely required to make out teams sufficient to successfully carry on the work. A considerable amount of

draining should be done at once to place the farm in proper condition for successful cultivation.

The College building is now nearly completed, and long before another meeting of the Legislature it is expected that the College will be in successful operation. Our building is one of the finest in the West, and one in which the people of the State may well feel a just pride. The farm is well adapted to the purposes of illustrating the instruction of the recitation-rooms, embracing as it does every variety of soil in the State.

Our endowment fund has been most judiciously managed, and so invested that it is producing a large annual income, amply sufficient to sustain and build up one of the best educational institutions in the West. The time so long and anxiously looked for by hundreds of the young men of our State has almost arrived when they shall be enabled to obtain a thorough College education in an Iowa Institution adapted to their wants. It only remains for the present Legislature to provide means for finishing one of the noblest works which has ever engaged its attention.

By the express conditions of the Act of Congress making the grant of lands to the States for the support of Agricultural Colleges, no part of "the fund arising from the grant can ever be used directly or indirectly, for the purchase, erection, preservation, or repairing of any building or buildings." It is further expressly provided that the interest shall be inviolably appropriated to the endowment, support and maintenance of the College. The Act also declares that any State which accepts this grant, shall within five years provide at least one College for industrial education, or the grant is forfeited and reverts to the General Government.

It will be seen from these requirements of the Act, that in order to hold our munificent land grant, the Legislature must at its present session make the necessary appropriations for fitting up and furnishing the College building at once, as the five years have nearly expired since the State accepted the grant.

The committee have, therefore, with the assistance of competent judges of the cost of the various fixtures required, made the following estimate of the amounts needed for the various purposes:

To provide for heating, plumbing and cooking range for College	$10,000

Lecture room, furniture and library	5,000
Furniture for student's rooms, recitation and professor's rooms, and tools for students	10,000
Two cisterns and laboratory fixtures	2,200
Three Professor's dwellings	10,000
For grading, laying out grounds and planting trees, &c	2,000
For Philosophical, Astronomical and Mathematical Instruments and apparatus	2,000
For clocks and bell	1,200
For out-buildings and office-furniture	1,300
	$43,700

There is also needed for fitting up the farm in a condition creditable to the State, the following amounts, for buildings, stocks, &c.:

For tile draining	$1,000
Hog-house, corn-crib and hen-house	800
Horse-stable, granery and tool-house	2,500
Cellar for roots and shed for implements and farm machinery	750
Horses and harness	500
Furniture for farm house	1,500
Other improvements and incidentals	1,200
	$8,250
Deduct cash on hand	2,556
Balance required	$5,694

The College Building will accommodate about 200 students, the steward and necessary help, and two or three teachers.

There are no dwelling houses in reach that can be obtained for the professors and their families, as there is no town in the immediate vicinity of the College, and it will be necessary to proceed at once to erect suitable dwellings for the President and at least two of the Professors. In no other way can we induce competent men to accept these positions. It is believed that three good substantial houses for this purpose can be erected for about $10,000. The rent will of course be taken into consideration in

fixing the salaries of the Professors. A few single men can probably be obtained, among the numbers of the Faculty, who can occupy rooms in the College building; but men with families must have accommodations of a home, or we shall be compelled to employ those of an inferior grade.

No similar institution in the West is in a better condition, when we consider its buildings, endowment, and favorable surroundings, than the Iowa Agricultural College; and it only remains for the Legislature at its present session, to act with its accustomed liberality, to insure the success of the only College within its borders devoted to the industrial education of farmers' and mechanics' sons, who desire to remain in the pursuits followed by their fathers. No class of people have a stronger claim upon the consideration of the Legislature.

All of which is respectfully submitted.

B. F. GUE,
R. W. HUMPHREY,
J. C. CUSEY,
Executive Committee

OPINION OF THE ATTORNEY GENERAL.

[A question having been raised as to whether the Agricultural College lands are taxable, the opinion of the Attorney General was solicited, and that officer has kindly communicated it as follows.]

OFFICE OF ATTORNEY GENERAL,
DES MOINES, IOWA, Jan. 25, 1866.

Hon. W. H. Holmes, President pro tem., and Peter Melendy, Secretary, &c., of the Iowa Agricultural College—

GENTS: You ask if the lands granted by the State of Iowa to the Iowa Agricultural College by Chap. 117 of the Tenth General Assembly, are liable to taxation under the revenue laws of the State.

These lands were granted by the United States to Iowa for a specific purpose. (See Act of Congress, July 2, 1862.)

The State of Iowa accepted the grant for the purpose specified, and on the 29th day of March, 1864, an Act was passed by the General Assembly granting these lands to the Iowa Agricultural College; and in said Act it is provided that said College should have authority to lease "for a term of ten or more years, any of said lands—the lessee to pay six per cent interest per annum upon the appraised value of said lands, with the privilege of purchasing the same at the expiration of the lease, at their appraised value at the date of the lease."

All the rights of the lessee are derived under and by virtue of leases made in accordance with the terms of the foregoing provision.

It is provided in the Code, Sec. 712, that "lands bought from the United States or this State, and whether bought on credit or otherwise, are liable to taxation."

The only question then, is whether these agricultural lands are

under the law, and the contracts given *bought* on a credit or otherwise.

My opinion is they are not. The persons holding the leases are not purchasers—they have neither paid for the land, nor have they agreed to pay for the same.

The lease may be an agreement to sell, but it is not an agreement to *buy*, for no one is bound to pay.

My opinion therefore is that these lands are not subject to taxation under any law now in force.

F. E. BISSELL,
Attorney-General.