DEDICATORY EXERCISES

HELD IN THE AUDITORIUM OF THE NEW BUILDING, AT 1 O'CLOCK, P. M., DEC. 10, 1873.

MUSIC ................................................................. By the University Band.
PRAYER.

SINGING—UNIVERSITY ANTHEM ........................................ University Choir.
(The words and music of this anthem were written for the inauguration, in 1868.)

HISTORICAL ADDRESS—1867-1873 ................................. By the Regent.
SINGING—DEDICATION ODE .......................................... University Choir.

ADDRESS .................................................................. By Gov. J. L. Beveridge.

SINGING—SOLO ......................................................... By Miss M. E. Stuart.


SINGING—SOLO ......................................................... By Miss Kincaid.

ADRESSES ............................................................... By Prof. J. B. Turner, Dr. Rich'd Edwards, Gen. M. Brayman, and others.

MUSIC ................................................................. By the University Band.

BENEDICTION.

[ "Ode," written for the occasion. ]

LEARNING AND LABOR.

Down the line of struggling ages,
Swells the cry for truth and light,
Wring from bosoms of the peoples,
Dimly yearning for the right.

Toiling millions, bravely bearing
All the burdens of the day,
Supplicate the ear all-hearing,
For to labor is to pray.

Down the line of ages flaming,
Glow the kindling fires of thought;
Flashing 'neath the stroke of hammers,
Light, as well as iron, is wrought.

And the mighty schools of labor,
With their problems deep and stern,
Educate the toiling peoples,
For to labor is to learn.

Thus the Father's wisdom giveth
Answer, from the prayer outwrought:
From the furrowed fields of labor
Come the harvest sheaves of thought;
And from out the flux of ages,
Gleans the truth of Christly birth—
Learning, incarnate in labor,
Shall regenerate the earth.

Thea to labor and to learning
Let us consecrate these halls:
Lo! they come as God's strong angels
Bringing light and breaking thralls;
Kindling in us hopes supernal
Of a glorious coming time,
When the love and might eternal
Shall work out God's will sublime.
To-day this University, with its banner flung to the breeze, formally enters the new house munificently provided for it by the State. To-day, and here, in the presence of some of the highest officers of the State and of this assemblage of the citizens, representing every section of the commonwealth and nearly every class of its people, we are to dedicate this grand edifice for the high uses for which it has been constructed. It fits well the occasion to retrace briefly the pathway now become historic, by which the University has marched to this happy hour. History drives the baggage train of human progress, and brings forward all the spoils gathered upon the battle fields of the past. Institutions, like men and nations, grow wiser and richer by treasuring up whatever is valuable in their past experience. At the dawn of each new epoch there comes the demand for the historian and the prophet—the one to record the past, the other to forecast the future. It is assigned to me, to-day, to serve as historian, to rehearse to you the history of the University; and since we have no inspired prophets in these days, it may be allowed me to show the trend of the history whose progress I am to trace, and thus give to all the means to forecast for themselves the probable future which lies yet veiled before us. It is not a mere bald statement of facts, such as may be gathered from our annual catalogue and the proceedings of the Board of Trustees, to which you are here invited. These may be necessary, as the bones are necessary to the body; but they constitute not the real history of the University. The day and this presence invite us to grander and more comprehensive views and statements. At the centre and base of all true institutions lie ideas. Such an institution is but the incarnation of ideas; it exists for them, and its history is but the record of their development, progress and products. More than all others, this Industrial University is the embodiment of certain great ideas. It has been nourished, shaped and inspired by them; and to-day it challenges the judgment of mankind of its fidelity to them. To recite its history without a reference to these grand constructive ideas which lend that history its interest and significance, would be as if I should present you Webster's dictionary as a grand compendium of English literature, because that all the words of that literature are contained in it. Let us indeed carefully note the facts—these are necessary; but let us also interrogate and interpret these facts, for this is also necessary.
Many of us still remember the grand and masterly address which the Hon. Newton Bateman, the able and eloquent Superintendent of Public Instruction, delivered in yonder chapel at our inauguration. That address, on record in the first volume of our annual reports, retraces the story of the public movements which gave rise to this University, with such fullness and clearness that it leaves little need to re-write that part of our history. A few facts quoted chiefly from that address will amply serve the present occasion. Where, and in whose brain, was born the idea of an Industrial University, may not now be known. The first enunciator in this State, and I believe in this country, was Prof. J. B. Turner, and no one, I may add, did more to give it currency and to gain it success. The first important organized movement made in its behalf was the convention at Granville, in this State, 1851. Out of this convention and its successors sprang, in 1853, a memorial to the General Assembly of the State, asking that Assembly to memorialize Congress—

"To appropriate to each State in the Union an amount of public lands, not less in value than $500,000, for the liberal endowment of a system of Industrial Universities, one in each State of the Union, for the more liberal and practical education of our industrial classes, in their various pursuits, for the production of knowledge and literature needful to those pursuits, and developing, to the fullest and most perfect extent, the resources of our soils and our arts, the virtue and intelligence of our people, and the true glory of our common country."

"Scarcely was the ink of that memorial dry," says Dr. Bateman, "when it was presented, in due form, to the Legislature of the State, then in session. The reception it there met with was worthy alike of its commanding importance and of the forecast and statesmanship of a great commonweal th. Instead of being laughed down the wind as the wild fancy of some dreaming enthusiast, or shuffled off to some unsympathizing committee, there to sleep the sleep that knows no waking, or bartered away, by intrigue, for some wretched mess of local or political pottage—instead of this, that General Assembly made way for the grand message of the people, as the lords and commons made way for the king! Acknowledging the majesty of its presence, and the exceeding glory of which it was prophetic."

The Legislature promptly responded by passing a series of joint resolutions, of which I report here only the main one. After a preamble, opening with this broad and grand statement:

WHEREAS, the spirit and progress of this age and country demand the culture of the highest order of intellectual attainment and theoretic and industrial science; and whereas, it is impossible that our commerce and prosperity will continue to increase without calling into requisition all the elements of internal thrift arising from the labors of the farmer, the mechanic and the manufacturer, by every fostering effort within the reach of the government; it was

Resolved, That our Senators in Congress be instructed and our Representatives be requested to use their best exertions to procure the passage of a law by Congress, donating to each State in the Union an amount of public lands, not less in value than $500,000, for the liberal endowment of a system of Industrial Universities, one in each State of the Union, to co-operate with each other and with the Smithsonian Institution at Washington, for the more liberal and practical education of our industrial classes and their teachers—a liberal and varied education, adapted to the manifold wants of an enterprising people, and a provision for such educational faculties, being in manifest occurrence with the intimations of the popular will, it urgently demands the mutual efforts of our national strength.

The press of the country, and especially the agricultural press, hailed with warm approval these resolutions, and the magnificent conceptions they contained. Its grandeur was then, at least no objection against, but a powerful argument for, the proposed Industrial University. No one then rebuked its friends and advocates with such words as "your plans are too broad;" "your views are too grand, too comprehensive, too magnificent." There was no talk of cutting it down to a simple technical school of agriculture, and the mechanic arts. The very grandeur of the purpose in view was its best argument and chief claim to the public regard. Its magnificence was in keeping with the greatness of the mighty national and humanitarian interests involved, and this very grandeur of thought lent inspiration to its advocates, and rendered them resistless against all opposition. The agitation was now transferred to the floors of Congress, where, for nearly two years, the great debate went on. The result, though slow coming, was sure, and in July, 1862, the law of Congress was approved by President Lincoln, giving nearly 10,000,000 acres of the public domain to be apportioned among the States, for—
"The endowment, support and maintenance of at least one College, whose leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches as are related to agriculture and the mechanic arts, in such manner as the Legislature of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life."

Note the grand scope and comprehension of the terms of this law, "The liberal and practical education of the industrial classes in the several pursuits and professions in life," and to this grand end the "leading object" of the institution must be to teach such branches of learning as are related to agriculture and the mechanic arts, without excluding other classical and scientific studies, and including military tactics. What terms could outline more broadly the Industrial University? Every clause breathes something of the grandeur of the bold conception. The State of Illinois received from this grant scrip for 480,000 acres of land for the purpose defined in the act just quoted. With the acceptance of this grant there arose a new agitation in the State. This time it related to the disposition of the grant and the plan for the proposed University. The representatives of the existing colleges asked that the funds and the work of the proposed institution be entrusted to them. But the old and steadfast advocates of an Industrial University soon negatived this claim, and insisted that the great idea of their first memorial should be carried out. Next came a contest for the location. Many counties naturally coveted to become the permanent home of an institution whose plans as expounded by its most prominent and warmest friends were so magnificent and far-reaching, and whose prospective endowment it was generally believed would prove ample for those plans. I cannot now notice the incidents of this contest, but we may certainly conclude that it was no narrow view of the character of the coming institution which inspired the people of this and other counties of such unprecedented liberality to secure the location of the institution in their midst. If I am reminded at this point that Champaign county now seems desirous of repudiating its pledges as if repenting her too trustful generosity, I must here avow my firm faith that such is not the fact. The majority of the supervisors, acting under what seems to me bad and injudicious counsel, and not dreaming of the harm that might come of their action, have declined to levy the interest tax as a means to bring the question of the validity of the bonds before the courts, but the most intelligent men of the county protest that the people will oppose repudiation. They made their pledge in good faith and see no reason to reject their bargain. The expressions already heard from them give ample reason to believe that their sentiments have not been rightly understood. When it can again be fairly submitted to them with a restatement of the arguments before used, they will, I must believe, again and with even larger majorities, reaffirm their former decision and testify their desire to retain the location of the institution here in its first home. In February, 1867, the State law was passed for the organization of the new University. It is said that the draft of this law was from the same able pen whose eloquent sentences had so long led and inspired the columns of the friends of industrial education. Certainly it embodied the same magnificent conceptions which had so often filled their minds. Adopting the language in part of the law of Congress, it added emphasis by requiring to be taught "in the most thorough manner" the branches of learning relating to agriculture and the mechanic arts.

The name chosen for the new institution by the General Assembly, "The Illinois Industrial University," was in itself a proof of the grandeur of the ideas of its founders. Whoever will read the discussions of the day
will see that this name was not chosen as a mere advertising device. It was no mean effort to befoul the people and attract public patronage by a high sounding and pretentious title. The man who wrote the bill knew full well the meaning of the words he used, and his writings and speeches have everywhere shown that his conception of a University was neither narrow nor niggardly. In another place he once declared there was room for only four such Universities on this continent. If, as we are bound to suppose, the members of the General Assembly knew the import of the law that they were enacting, and the immense public excitement under which it was enacted forbids any other conclusion, they deliberately chartered a University not of the classical sort, but of the new industrial sort.

The law was approved the last day of February, and on the 12th day of March the new Board of Trustees assembled at Springfield. Just one week previous to this meeting a letter from one of the trustees reached me at my home, in another State, asking me, much to my surprise, to allow my name to be presented as a candidate for the regency of the proposed institution. I knew nothing of the struggles that had been going on, and nothing of the plans of the University, except the brief statements of the letter that the funds of the institution would allow its development on the largest scale. But, though a stranger to Illinois and its people, I was no stranger to the great ideas of industrial education, and yielding to the urgent request of my correspondent, I gave a somewhat hasty consent to his wishes, but with little expectation of an election and still less desire for it. The next week a letter announced to me the result, and entreated me not to decline the post offered me till the writer could see and explain the plans of the Trustees. I withheld my decision till I could come to Chicago and thence to Champaign to learn the prospects of the institution and the views of the Trustees.

Only one opinion was expressed to me by all whom I met, whether in Champaign or Chicago. All seemed to have the same view. And this was expressed by the Trustees residing in and near Champaign in the strong assertion that the institution was to be “the grandest University on the American continent.” Without accepting fully the too enthusiastic expressions of these gentlemen and other citizens, I saw that the broad and generous views prevailing in the public mind would allow the development of an institution such as I knew an Industrial University must be to command success. Urged by prominent citizens, I at length accepted the task before whose grandeur stronger hearts and brains than mine might have paused in modesty if not in dread. Having accepted, I entered at once upon my great work. The most careful inquiries were made afresh into the intention of the laws, both of Congress and of the State; into the wishes of the friends of the enterprise, and into the views of the Board of Trustees. A careful estimate was also made of the probable resources of the University, and the educational condition of the State. In all these lay the limiting conditions of which must give shape to the enterprise. Under the wise and constant advice of other members of the “committee on faculty and courses of study,” I prepared the first formal report on the plan of the University, and presented this report to the Trustees at their second meeting, held May 9, at which I met them for the first time. I shall venture to quote briefly from this report to show the view that then prevailed, not only in my own mind but also in the minds of the Trustees, who, immediately after the reading, unanimously voted its publication “as embodying the aims
and designs of this Institution." It was believed to embody mainly also the ideas and wishes of the most intelligent friends of industrial education — the current belief and expectation, indeed, of the people of the State. To test the public mind and invite criticism, 3,000 copies were printed and scattered widely among all classes of citizens. I do not now recall that for many months any adverse criticism was offered, while the commendatory letters from all classes gave assurance that the plan, grand as it now seems, was no grander than the public sentiment. The report discussing the aims of the Congressional grant says:

"Congress sought to extend still wider the benefits of science and liberal culture. They wished to establish other seats of learning, equally great and equally powerful, which should send scholars of high scientific attainments and broad and liberal culture, to the farms and workshops of the country.

"And, finally, as it was not the object of the Industrial colleges to educate simply the sons of farmers and mechanics, so it was not their design to teach the mere manual arts of agriculture and manufacture. The college course cannot replace the apprenticeship in the shop or on the farm; and if it could, a hundred such Universitites as this could not train to their various trades the future farmers and mechanics of this State. Some practice should, if possible, accompany the study of the several arts, but the aim of this practice should be to insure the thorough comprehension of the principles involved. To teach the millions their trades, however desirable, is beyond our power. To so teach the few who will come and patiently complete their course, that they shall be thorough masters of practical science, and able in their turn to teach others, this is the worthy and attainable end of the University.

"The committee profoundly appreciate and commend the far-reaching wisdom and beneficence of these aims of the congressional grant, and would seek to carry them out to the very letter. They havediscarded the false impressions which may have gained currency, and to bring out into clearer relief this grand idea of the Industrial University, as it lies involved in both State and National statutes—a true University, organized in the interest of the industrial, rather than the professional pursuits, and differing from other Universities in that its departments are technological rather than professional—schools of agriculture and art, rather than schools of medicine and law.

"This broad idea of the Industrial University proceeds upon the two fundamental assumptions: First, that the agricultural and mechanical arts are the peers of any others in their dignity, importance and scientific scope; and, second, that the thorough mastery of these arts, and of the sciences applicable to them, requires an education different in kind, but as systematic and complete as that required for the comprehension of the learned professions. It thus avoids the folly of offering as leaders of progress in the splendid industries of the nineteenth century, men of meager attainments and stinted culture, and steers clear also of the other and absurder folly of supposing that mere common-school boys, without any thorough discipline, can successfully master and apply the complicated sciences which enter into and explain the manifold processes of modern agriculture and mechanical art.

"And besides all this, it should be reflected that half the public value of a body of educated and scientific agriculturists and mechanics will be lost, if they lack the literary culture which will enable them to communicate, through the press or by public speech, their knowledge and discoveries; or if they are wanting in that thorough discipline which will make them active and competent investigators and inventors, long after their school days are over.

"Let the State open wide, then, this Pierian fount of learning. Let her bid freely all her sons to

The following enumeration of the departments of the institution proposed by the report will not only show how broad the idea then prevailing of the character of the coming University, but it furnishes a curious proof of how little all the latter discussions and criticisms have been able to change the fundamental plan. Except in the substitution of the term colleges and schools for those of departments and courses, the scheme almost exactly describes the University as it exists to-day.

I. The Agricultural Department, embracing:
   1. The course in agriculture proper.
   2. The course in horticulture and landscape gardening.

II. The Polytechnic Department, embracing:
   1. The course of mechanical sciences and art.
   2. The course of civil engineering.
   3. The course in mining and metallurgy.
   4. The course in architecture and fine arts.

III. The Military Department, embracing:
   1. The course in military engineering.
   2. The course in military tactics.

IV. Department of Chemistry and Natural Sciences.

V. The Department of Trade and Commerce.

VI. The Department of General Science and Literature.
I have prepared this statement of the great ideas of an Industrial University, which originally prevailed in this State and in accordance with which the University was organized, not for any controversial purpose, but as a principal and fundamental fact in the history I am asked to relate. Neither myself nor the Board of Trustees are to be credited with or held responsible for the grandeur and magnificence of this plan. It lies clearly conceived in the memorial of the old convention at Granville with its demand for $500,000 worth of public lands to serve as an endowment. It was reiterated in the joint resolutions of the Legislature and was affirmed anew in the grant of Congress and the law of the State. If any one seeks a controversy with the trustees of the University, for the magnificence of their plan, it is not against the trustees, but against the farmers of Illinois, against their great conventions, like that of Granville, against that most eloquent and most trusted champion of the cause of agriculture and industrial education, our good Prof. Turner; nay, more, against the Legislature of the State which enacted the law creating this institution and prescribing the name and character. As well complain of the honest hen which from an eagle’s eggs hatched eaglets, as to complain of the Board of Trustees, who, under the law, which prescribed a University, organized this University. Trustees who, under such a law and with such ideas and inspirations before them, should they have done differently, would have richly deserved the censure they would most certainly have received.

It was not unknown to the trustees that there was another class of industrial schools, after which they might have planned this, like the special agricultural and technical schools in Europe; but it was also known to them that the best experience and judgment of Europe was not in favor of these narrow, special schools, standing isolate and alone. The late Baron Liebig, who did more for agricultural education than any other man in Europe, urged with increasing energy the union of the technical schools with the universities, as organic departments of the same; and when one day I asked him where I should find the best agricultural colleges, he advised me to go to the agricultural departments of the Universities of Halle, and Jena and Bonn.

It should also be remembered that it was not an agricultural college that the board of trustees were set to organize and support, but an institution for the “liberal and practical education of the laboring classes in the several pursuits and professions in life.” It was not to be one whit more an agricultural college than it was to be a mechanical college. It was to be both; and “to teach in the most thorough manner the branches of learning relating to agriculture and the mechanical arts and military tactics without excluding other scientific and classical studies.”

What man of sense and of sufficient education to understand the meaning of this law, would have done otherwise than these trustees did do? What language could have been used to indicate with more clearness and certainty that the institution proposed was not a simple technical school, but a full industrial university?

I cannot forbear to notice here the extraordinary assertion made, the last summer, by Dr. McCosh, President of Princeton College, that “in all Germany there are only six agricultural colleges, and I can testify from personal visitation that some of them are very feeble institutions.” In 1851, Prof. Hitchcock enumerated 352 agricultural schools in Europe, of which twenty-two were of the superior sort which we call colleges, though never thus called in Europe. Nine of these colleges and large
numbers of the intermediate schools were in the several German States. I know that they have not diminished in numbers or in rank and influence since Prof. Hitchcock's time. When was it then, that Dr. McCosh could find only six, and these in a feeble condition? What shall we think of such a statement, made by such a man, and made to justify himself for having interfered to prevent any further appropriations by Congress for agricultural education. The assertion is as false as the purpose for which it was made is illiberal and mean. Can it be that the President of Princeton fears the rivalry of these new and growing institutions?

Over against this bold and baseless assertion of this learned Scotchman, I venture to place my own assertion, also the result of personal observation, that the agricultural schools of Europe of all grades, are yearly multiplying. It may be true that separate agricultural schools are not increasing, but agricultural colleges as departments of Polytechnic and other Universities, are steadily increasing in numbers and influence though fluctuating and varying in prosperity as all other institutions fluctuate; certainly not more. Equally extraordinary and baseless is that other assertion of this most extraordinary doctor, that he "could show that in no country in the world has agriculture been much benefited by mere agricultural schools." To this assertion I oppose the assertion of Baron Liebig, made to myself, that "the success of agricultural schools in Germany has been immense;" that in Hesse, in particular, "the value of land had been enhanced 300 per cent. by the improved cultivation taught by the agricultural schools." In France, thousands of acres of land worn out by the exhausting tillage of a thousand years, and sometimes abandoned as worthless, have been recovered by the applications and cultures taught by the agricultural colleges of France. I do not know how far Dr. McCosh's influence prevailed with Congress to prevent the appropriation of some further portion of public lands to support Industrial Schools; but if it was by such assertions as these that his influence was exerted, his course deserves the severest reprobation, and his success is as deplorable as his spirit was illiberal and unpatriotic. I can neither suppress, nor calmly endure the conviction that this immense public domain yet remaining unsold, is to become, piece by piece, the prey of speculators and speculating schemes; and that through mistaken or mischievous views, our national Congress will fritter away the opportunity to make nobly effective and fruitful its legislation of 1862, missing the noblest chance ever offered to any government to provide for the higher and most careful education of the people.

Let us tell Dr. McCosh and all who share his opinion, that the figures show—

1st. That no grant of land for education ever made in this country, has been so productive as this for Industrial Colleges.

2d. That no institutions of higher education in this country have ever grown more rapidly in numbers of students and in public esteem.

3d. That in spite of all the disadvantages of an adverse influence from some of the old institutions and their Presidents, and from the lack of any well established public demand for this kind of education, the number of students of agriculture and the mechanic arts compare favorably with those in the schools of theology and law. We shall cheerfully place these new colleges in comparison with any equal number of old colleges of equal age and means.
But another criticism nearer home, has questioned the wisdom of organizing the University on so broad a plan.

1st. Because it is feared that it will exceed the resources provided, and prevent the performance of the special technical work, required, and,

2d. That it will attract to its more liberal and literary course, the students who are expected to study agricultural or mechanical sciences.

To the first objection we reply that the organization is not only no broader than is required by the laws of Congress and the State, but no broader than the successful teaching of the sciences related to agriculture and the mechanic arts requires. And further, it was believed that the proper income of the University would fully meet, for many years at least, all the requirements of the University. Nothing has ever yet been asked or received from the Legislature for simple current expenditures, except for such purposes as were not strictly a part of the University work, such as the expenses of an Experiment Station, the experiments in forest planting and the Farmers' Institutes, and agricultural lecture courses abroad. The State has simply been asked to provide those buildings which it was required by the act of Congress to do, and to provide such apparatus and books as were needed as an outfit. If the interest can be collected on its endowment funds, the University can carry on for years still all the departments it has organized without asking from the State one dollar more than it undertook to pay when it accepted the grant. Let this assertion be carefully marked; and let no man base any complaint against the grandeur of our plan on the plea that it exceeds the resources of the University.

To the other objection that the University will attract to its literary courses, those who came to study practical sciences, I reply: I am firm in my own faith, that when we place classical studies and scientific studies, side by side, in the same catalogue, with the same facilities of instruction, and with the same social influences around them, science will not go to the wall. In my inaugural I announced such a belief, and the six years that have passed here have proved that I was no false prophet. The danger has been, not that classical and literary studies should attract students from scientific and technical studies, but that these latter should crowd out all others. I knew full well the attraction which the beauty and novelty of natural sciences, fairly exhibited, would exert over the minds of the young, an attraction intensified by the knowledge of the practical value of these sciences in the affairs of the world. In a country like ours, whose physical aspect and resources are so commanding,—among a people like ours whose love of the practical and useful has been nourished by every circumstance in their national fortunes; in a country like this, in which the sciences and useful arts are making such unprecedented progress, and winning such magnificent rewards, these studies are in no danger of being neglected. He who fears the result of a fair competition between scientific and classical studies, confesses his disbelief, in the equal value of the former, or his distrust of the good sense of the young men of our country. The University organization adds to the facilities for technical education, while it detracts nothing from the interest of such education.

To return from this long, but not needless digression. Such as we have described it was the grand idea blazoned upon the banners of the University, as in 1867 it began its march. Whatever it may hereafter become; however much, under the pressure of misfortune or neglect, it may hereafter vary or contract its plans, we here, to-day, put it boldly
on record that, at the outset, the University was true to the grand ideas of the early friends and champions of industrial education, true to the laws of Congress and of the General Assembly, true to the best experience and judgment of the ablest educators of both continents, and true to the great interest with which it stood charged. History will record that it was not from any inconsiderate ambition of the Regent, nor from the thoughtless complaisance of its first Board of Trustees that so grand an institution was planned, but from the simple and hearty obedience of both Regent and Trustees, to the public will and the public law.

It is not necessary that I rehearse the work of the ten short months of preparation between the location of the University, the 9th of May, 1867, and the opening of the first term, the 2d day of March, 1868. The published reports of the proceedings of the Board of Trustees have already made that work historic. But no history will ever tell the unofficial toil and thought which the inauguration of such an institution must ever cost.

The Legislature of 1869 appropriated for the Horticultural department $22,000, which was expended in the building of a house and barn on the Horticultural grounds, a gardener's house, a greenhouse, in the purchase of teams, tools, and necessary stock and seeds, and in fencing, hedges and drainage. An appropriation of $25,000 was at the same time made for the Agricultural Department, which gave to the stock farm its large and excellent barn, with teams, tools, fences, hedges and fine stock. Besides these appropriations, $10,000 were given for library and cabinets, and $5,000 for the Chemical Department. These timely and useful appropriations gave the University facilities for its work, and helped to place it at once on high vantage ground.

In 1871 it had become evident that a new building would soon be needed to accommodate the increasing number of students. The Mechanical Department had also outgrown the capacity of the little shop in which it had begun its practical operations. An appeal was again made to the General Assembly, and appropriations were made of $25,000 for the Mechanical and Military Building, and $75,000 to begin the erection of this main building. Besides this there were appropriated $3,000 per annum, for two years, for agricultural experiments and institutes; $1,750 for horticultural experiments, especially in forest planting; $5,000 for the industrial library and cabinet, and $5,500 for the chemical department. The expenditure of these appropriations added to the University new and most valuable apparatus and attractions. The noble mechanical building, with its great variety of machinery for working in wood, iron and brass, placed our College, for mechanical engineers, civil engineers and architects, abreast with, if not in advance of, any other on the continent. The Horticultural Department took a large step forward, and the artificial forests now growing at the eastern extremity of the experimental farm were begun. The library received large additions of the most valuable books in the several departments of sciences, agriculture and in the useful arts. The Chemical Laboratory was reinforced with some of the best apparatus manufactured in Europe, and the University was enabled to stretch forth its hands in a helping way to the agriculture of the State, by courses of lectures delivered at several series of farmers' institutes. But the chief part of the appropriation was designed for the commencement of this building, the main house and center, henceforth, of our school work. The plans
of the building were prepared by J. M. Van Osdel, architect, though the general arrangement of the rooms was suggested by members of the University Faculty. Like all true buildings, the growth was from within outward. The interior of the edifice was planned first, and planned for its great uses. The shell that was to enclose it took shape afterwards, and hence we believe it to be unrivaled in the commodiousness of its apartments and arrangements. Ground was broken for the building in June, 1872, and some part of the substructure was laid, but the formal laying of the corner-stone did not take place till the 13th of September. The leading addresses on that occasion were delivered by Prof. J. B. Turner and Hon. N. Bateman, and I venture to reproduce here some brief extracts to show what still was the interior ideal history which was moving parallel with, and leading character and inspiration to the exterior history of visible acts and shapes. Says Prof. Turner:

"For the first time I came to this University last winter to see for myself. I did not find any one of the Professors or Teachers either omniscient or omnipotent; nor yet angels walking the earth with sublime grandeur, with wings at their shoulders all plumed and ready for the skies. From the newspaper accounts I had previously read of them, I hardly expected this. But I found (or at least I fancied that I had found) good, honest-hearted, intelligent men, prosecuting a great, arduous and difficult public work—new in its ends and aims, and untried in its modes and methods—with a patience, a zeal, and a self-devotion worthy of their great cause; and when I have said that, I have said enough in praise of any set of mortal men that ever lived. I found, also, a corps of most courteous and well-behaved pupils, well worthy of their teachers. They frankly told me (what it is easy to see in any similar institution under the sun) that they had made mistakes, and were striving to correct them; and expected to make more and correct them, too. What more or better did any man expect, who knew anything about the newness, the difficulties, and the natural and artificial obstacles of the great enterprise in which they are engaged? It will probably take a thousand years for a single one of these great free States to learn to endow and manage these Industrial Universities, in the best possible manner! But what of that? Shall we not attempt to learn the art, and to put to all pupils the preparing of our American youth for a true American life, because our art is difficult and our lesson a long one? Shall we not try to do our best, and to bury all my former prejudices and prepossessions—if prejudices and prepossessions they were—and to bury them beneath the corner stone of this new and beautiful edifice, now rising to our view. What greater joy can any man have than when he finds things better even than he had dared to hope."

"This institution will still need, in the future as in the past, a magnanimous patience within, and a magnanimous forebearance from without its walls; our little and censorious criticisms can neither destroy nor aid it. Thank God, it has already, even though beyond our former hope, become too big for any such result."

"It must now live! It ought to live! And it will live! The fly that can annoy the elephant cannot devour him, even though he may continue to keep him in an unseemingly wagging of his tail. Do the best it can, this institution will not and cannot do all we desire, for at least a round hundred years to come; though it may, and it can, and it will, do a good work to-day, to-morrow and forever."

The Chicago fire caused a failure of the appropriation expected to be made at the adjourned session in 1872 for the completion of the main building. To meet the emergency, and to save the State and the University from great loss, the trustees determined to borrow temporarily from the endowment fund, the $60,000 of the Champaign county donation which had been placed in that fund, and to expend the same in finishing the work. They trusted that a wise and just legislature would recognize the emergency created by the failure in promised appropriations, and would reimburse the impaired endowment. In 1873 the petition was accordingly presented, but owing to causes whose history must be told elsewhere, the appropriation was made only for the $15,000 found necessary to complete the building, leaving the University crippled in its annual resources by the loss of this part of its endowment. The legislature also made appropriations amounting to $29,550 for heating, furnishing, etc., and the further sums of $1,500 for experiments, and $3,000 per annum for taxes on the lands located in Minnesota and Nebraska. The act of 1873, also for the first time, modified the fundamental law of the University, reducing its Board of Trustees from 32 to 11 members, and making a requirement in regard to studies which I may notice further on.
Such is the history of the legislation concerning the University, and of the State appropriations for its establishment. These, though not always as large as were asked and needed, have been as liberal as the legislature have judged it possible to make, and have evinced an appreciation of the character and claims of the University which gives good hope for the future. Illinois will never fall behind other States in the support of its institutions, till the character of her people shall have lost that spirit of enterprise which has drawn upon them the eyes of the civilized world.

Let us now retrace our steps for a few minutes to look at the history of the University under another aspect—the history of its work. And if in the recital of this part of its history, I shall find occasion to speak of the opposition it has encountered, it shall be with the calm impartiality of the historian, and not with the irritation of a partisan. If at any time I have felt the soreness of wounded feelings, that time has passed away. Working now for the great cause of industrial education—a cause which in my growing esteem of it is too grand to admit any mere personal consideration to interfere with our devotion—I will not belittle it by any personal controversies, nor shape my cause to catch or avoid personal criticism. Having no longer, if I once had, any personal motive to detain me here, left nearly alone, a part of my family exiled, and perhaps permanently by their inability to endure the climate, my own health not a little shaken by the labors of the past, I know no reason for swerving the least from such frank, plain, truth-telling statements as may help the institution whose prosperity I seek, and the great cause whose principles are to me as God's truths. Freely pardoning every word uttered against myself, I shall not care to notice any spoken against the University, except so far as to disarm them of their power to injure it unjustly.

Whatever be the animus of the critics, whether simply anxious to see their views prevail, or alarmed by their fears that the institution shall suffer harm or defeat, or prompted by less worthy motives of personal bitterness, let it be all the same to us. We are in the midst of a great conflict—the battle of the ages. We belong to the charging squadrons. It matters but little whether mere spectators of the fight like the order of our march or not. We cannot even pause to pay heed to the movements of our comrades in other ranks. The cry, onward, is ringing in our ears, and humanity bids every man do his best. It is victory, and not excuses, that we seek. We are not culprits asking for our lives, but soldiers contending for our country and our cause.

On the 2d day of March, 1868, the proper work of the University was begun. About fifty young men appeared in the classes, and their number was increased in a few days to seventy-five. They were all in the elementary grades, and were set at such studies as would soonest prepare them for their proper scientific and technical studies. The labor system was also put in operation, and all students required to go out two hours each day for work upon the grounds and gardens.

Besides the Regent, there were only two Professors, Geo. W. Atherton, now Professor of History in Rutger College, N. J., and Wm. M. Baker whose labors on earth have ceased. In the month of April last, while the spring flowers were yet blooming, we laid his mortal remains away in the grave which he believed to be but the portal to a better world. A genuine worker, and a noble, christian man, history will embalm his memory among those who toiled faithfully for the good of the
University and of mankind. Besides these, T. J. Burrill, now Professor of Botany and Horticulture, assisted in the work of instruction. From year to year the number of students and teachers steadily increased, till the last annual catalogue showed a total attendance for the year of 402 students and a roll of 19 instructors, besides the foremen and Superintendents. The attendance during the current term shows the same rapid and steady growth, and is largely in excess of any former term. But the mere record of numbers is not the grand central and fundamental history we are attempting to recite. It is the conformity of the facts to the great ideas I have so fully exhibited which the country will wish to know. Who are these students, and what are they studying? The yearly reports furnish the answers to these questions. Time forbids me to read from all. The last report published, that for 1871-72, tells us that the 381 students of that year were from sixty-nine counties of Illinois, from 12 other States, and from three foreign countries; 68 were in the agricultural course, 11 in the horticultural, 45 in civil engineering, 33 in the mechanical, 3 in mining, 4 in architecture, 14 in the commercial, 14 in the special course for chemists, 15 in military, 84 in elective courses, 44 in literature and science, and 45 were unassigned. These last were chiefly ladies. The analysis has not yet been completed for the last year, but it will show an increased number in the agricultural, horticultural, mechanical, and engineering departments. But we do not even by this analysis touch the last answer to our question and reveal the true spirit of our history.

There is something in an institution of learning greater than its courses of study, grander and more potential even than its colleges and classes. It is the spirit that fills and animates it. The last great question which ought to be asked here, and concerning this University by the agriculturists, by the mechanics and manufacturers, and by the friends of industrial education, is not simply how many have you studying this or that study? or, what do you teach these students? but what is the general bent, what are the life and spirit and breath—what are the organized temper, tone and trend of the University itself? I will not take up your time to answer at length all these questions, because I have already trespassed beyond my hour; but I wish here, to-day, in the presence of the Governor of the State of Illinois—of the Board of Trustees of this University—of the President and gentlemen of the State Horticultural Society—of the members of our Board of County Supervisors—of the literary gentlemen visiting us from other institutions, and of our fellow citizens of all classes, to testify as one who has no private purpose of any kind to attain, and only one wish to gratify—the wish for the prosperity and well-being of the University—to testify that in its several classes and courses, in its various studies and teachings, in the body of its membership, its teachers and its students of both sexes, this University stands, in its aims, ideas and animating spirit, a whole hemisphere apart from the general aim, and spirit and tendency of the old institutions which this was organized not to supplant, but to supplement rather, by the addition of that kind of education which the nineteenth century demands for mankind—that century around whose brow lies as a coronal of light the magnificent circle of sciences which, if not born within its years, have come to their larger maturity of growth here—a century equally venerable and glorious for the progress of knowledge and for the achievements of its more than magic art—a century whose industrial arts, led and guided by science,
work with all the power that science, conspiring with the forces of na-
ture and of man, can exert for the good of mankind.

I believe the motto yonder on our walls, "Learning and Labor," ex-
presses in the fewest terms possible, and in a glorious manner, the great
central thought—the pulse-beating heart, the very brain center of this
institution of learning.

I should give, if the room would permit, the facts in the case that
would fully assure you, as they have assured those who are working
here—my colleagues and myself—that yearly, steadily, now this very
hour of our triumph and our joy, more than at any one hour since the
first student form darkened our doors, the spirit of scientific industry
and education rules in our midst, fills our halls, haunts every lecture
room, breathes in every recitation, and does its rich and beneficent work.
If our rolls are not filled as much as you and we desire with hundreds
rather than scores of the young agriculturists and mechanics of the
State, the fault is not ours, nor that of the institution. Give us your
warm-handed, warm hearted aid, rather than the cold and careless criti-
cisms which have too often been the greeting of the agricultural press
to the agricultural colleges of America, and we will fill to the overflow
these magnificent halls, and demonstrate to the wide world the value of
this education of and for the industries. I had designed a fuller dis-
cussion of this part of my subject, but others have claims upon the
time, and I must leave to other occasions the explanation of the great
obstacles which have opposed, and do still oppose, though with lessen-
ing power, the progress of industrial education.

Gentlemen, your hopes will never be disappointed, so far as they are
based on the fundamental conceptions of the grandeur and scientific
character of these arts which you are prosecuting, and to promote which
these institutions were built. A late writer has stated as a fact of his-
tory that the steady progress of education has wheeled into the rank of
the learned profession one after another of human employments. Three
hundred years ago there was one learned profession, and only one, that
of clergyman and priest as Rome calls him. The physician was a mere
barber who cupped and bled, and who still in European lands uses as
the sign of his calling the bowl which he used in his avocation as a
blood-letter. The physician moved in time into the ranks of the learned
professions. In the progress of the wants of mankind, in the growth
of cities and states, the simple scribes and servitors of the courts also
wheeled into line as another learned profession—that of law. In the
growth of modern railroads and telegraphs came another—that of en-
gineering. And others will follow.

Steadily as science has flung abroad her influence into the houses and
shops and employments of men, she has bidden man to go up higher—
bidden him to leave his lower toil and tasks to the harnessed forces of
nature—bidden him use steel for muscle and steam for nerve force, and
work with his brain as well as his hands. Onward and still onward
must this movement urge its resistless way till all the great employ-
ments of men shall become learned professions, and all arts become
scientific and noble.

There is no mockery—there is no lurking sarcasm—there is no humbug
in yonder motto written in this great auditorium where we meet daily to
worship God, and ask His blessing on our efforts. There is a prophecy
in it grand as science and its future, grand as the God of science, who
was the first Worker—the great Author of both learning and labor—a
prophecy of the coming time when you and I shall lay our heads under the sod, and leave to younger hands to clasp and bear onward down the march of time the banner upon which we have written that motto, till they plant it in the culmination of history over the crowned humanity of free, enlightened and regenerated man.

The work which we have roughly outlined will be accomplished, and in the end God will not leave on this earth one single one of the necessary employments of mankind, or of womankind, unredeemed from that old, clinging curse which reduced labor to ignorant, sweating toil—will not leave a single avocation necessary to the maintenance or civilization of mankind, which shall not demand and receive its own share of all that guiding and glorifying light that He has written in the starry skies above, in the petals of flowers beneath, and on this whole framework of things—not a machine, but a book. And labor thus linked to learning become the mightiest education of the soul, working out the problems of truth in the laboratory of God, shall reinterpret this mighty divine volume of worlds, out of which shall come grander conceptions of the author than ever yet swept through the heart of the wildest dreamer, or penetrated the brain of the profoundest theologian.

Some of those who are here to-day—the youngest of you, perhaps, that hear my words—shall come here on other anniversary occasions, and attend dedications of yet other halls that a great and liberal State, mindful of its own civilization, its own grand central, commanding position—the key-stone of the continent—shall consecrate to this great work. Gray-haired and sage, you will recall the memories of this day—you will look still in fancy on this meeting, and think on the predictions this day made in your hearing—that there lie in these two words, Learning and Labor, the clasped hands of the marriage tie, the sworn oaths of love and mutual service, between the Brain of man—God's Senate Chamber on the earth—and the Hand of man, God's vicegerent on the earth of noblest work and worship.

ADDRESS BY HIS EXCELLENCY, GOVERNOR BEVERIDGE.

The Illinois Industrial University is not Harvard nor Yale; is not Cambridge nor Oxford; it ante-dates not, with the former, beyond the birthday of the Nation; it goes not backward, with the latter, into the dim undefined ages of the past. Unlike them, it has no long line of professors, authors, divines, jurists, scientists, philosophers, historians, poets, statesmen, heroes, bishops and kings, for its alumni. Unlike them, painting and sculpture have not graced its walls with the likenesses and forms of great and distinguished men, living and dead. Unlike them, it has not gathered power from the accumulated influences of ages and centuries. It wears not the gray hairs of years, but the flaxen hairs of childhood. It has not the sombre face of age, but the sweet smile of youth. It has not the stillness of the evening, but the energies and activities of the morning. It has not the glow of sunset, but it is encircled with the radience of the rising God of day. And
Illinois Industrial University.

may we not hope—may we not confidently hope—may we not predict—and I wish today I might speak with the spirit of prophesy and utter its fulfillment—that the Illinois Industrial University, with its farm, its buildings, its new temple, its capacious auditorium, its geological room, its library, its laboratory, its horticultural and agricultural departments; with all its facilities for learning and pursuing the sciences; nurtured by the State, blest with the care of a wise and judicious Board of Trustees; cherished by an intelligent and Christian Faculty; guarded, cared for and protected by the people; it may grow in power and widen in influence, so that in the years to come, it will stand side by side, and in front line of the institutions of learning in this land, and in the old world; that from these halls may go out statesmen equal to Sumner and Pitt, historians equal to Bancroft and Macaulay, jurists surpassing Story and Bacon, heroes rivaling Nelson and Washington, farmers and mechanics, traders and commercial men, and the wives of all these men, such as were unknown to any of the ages of the past, in our country or in Europe. If this be prophecy—I see but one thing in the way of its fulfillment—and that is Champaign county. If this be the coming greatness of the Illinois Industrial University, I see but one shadow to that greatness, and that is the Honorable Board of Supervisors of Champaign county. Now, I do not feel like Moses—standing upon holy ground, but I feel that I tread upon very delicate ground. I do not come here to impugn the motives of any man or citizen of this county or of this State; but while I commend and applaud the members of the Board of Supervisors of this county who stood by the pledges made by the county, I deprecate the action of those who did not stand by the former pledges of Champaign county. I shall talk candidly and fairly, without impugning the motives of any one, or censuring any citizen of this county.

To state the case: When this institution was seeking a location, this county was very anxious to secure that location. For that purpose it voluntarily, freely, without compulsion, without force, without fraud, without menace, voted bonds to the amount, I believe, of $200,000. Of these bonds this Industrial University now holds $115,000, the interest of which is $11,500 per annum. This interest is a part of the fund by which the institution is carried on from year to year. Now, whether this county can legally or not avoid the payment of the interest on the bonds, I am not prepared to discuss. It is said, I know, that Livingston county made void its bonds. My own opinion is that Champaign county is legally bound to pay its bonds, every dollar and cent, with interest thereon, according to the contract. But passing by the question of legality, morally, Champaign county is bound to pay these bonds. You cannot avoid it—you voted the bonds for a certain purpose—you have received the consideration—you have located in your county, this institution, with its buildings, with all its appliances for learning, to accommodate the State, more particularly Champaign county and the counties immediately surrounding; you have received the consideration, and you cannot morally repudiate the contract.

Now, I take this position: that no individual, no municipality or organized community, no State, no nation, can afford to repudiate its solemn obligations. A man, through inability or misfortune, may not be able to meet his contracts and pay his debts; but a man who, through dishonesty or flat refusal fails to pay his debts, is marked by his neighbors. The county that is abundantly able to pay all its obligations,
like Champaign county, if it refuses to pay these solemn obligations, will be marked by all the other counties of the State; and if a State should refuse to meet its obligations, it would be marked, as Mississippi has for years been marked, by all the States in the Union; and if the United States of America should refuse to meet its obligations, it would be marked by all the nations of the world—and justly so too.

Suppose you do—what then? If the interest on these bonds is not met, or some provision made by the county, this institution must necessarily, about the 1st of next May, close its doors; and I fear if it closes its doors, then, they will be closed forever. I am not prepared to recommend to the Legislature an appropriation of $11,500 to meet the payment of this interest; and, unless the Legislature does come to the support of the institution, it must necessarily close its doors in May for the want of funds. Suppose you go further, and avoid payment of the bonds in the end; the matter is taken into the courts—one, two or three years elapse before the matter is ended. Long before that time the grass will grow all over the walks around the institution; long before that time, you will not see a single student walking up and down our streets; you will not have a single professor of this institution living in your midst; The Illinois Industrial University, located at Champaign, will be among the things that were; never to be resurrected by the State of Illinois. If you should ultimately avoid payment of these bonds, then by the terms of the contract and the nature of the case, by the conditions upon which the endowment was given to the State, it becomes the duty of the State to make that endowment good to raise by taxation, $115,000 and the interest thereon, which the people of Champaign county solemnly promised to pay. Do you think when that time comes the Legislature of Illinois will have any great liking or desire to levy such a tax for Champaign county? Do you think they will be willing to put their hands in the pockets of the people, and take this amount out of their taxes, and turn it over for your benefit and your good? No. My impression is, that they will locate the institution among a people who will appreciate the gifts and honors of the State.

Now, I am a friend of Industrial Universities; I am a friend of the Illinois Industrial University; I am a friend, I think, of the people of Champaign county. I wish to aid in the support of this Industrial University. I wish to help the good people of Champaign county, but, if they won't help themselves, what can they expect of me? What can they expect from me? What can you expect from anybody? I could not, consistently, as the Executive of this State, recommend to the Legislature an appropriation to meet the payment of this interest, much less to make an appropriation of $150,000 to help you out of this difficulty. All I could recommend, would be for them to make good the endowment, and then leave it to the wisdom and conscience of the Legislature to put their money where they pleased.

But, I have hopes, and I am going to say it, not only here, but officially—that the good people of Champaign county do not approve of their board of supervisors. I have hopes, and I am going to say it here, and say it officially, that when the people of Champaign county have a chance at the ballot-box, they will repudiate that action and stand by their solemn pledges.

Now I wish to say to my good friends who have taken an opposite course in the board of supervisors, I don't ask you to come down—I don't want you to come down. If you think you are in the right, stand
Illinois Industrial University.

by it, and let the people be the judges who are in the right, and who in
he wrong. You are the representatives of the people, and if you are sat-
sfied the people are not pleased with your action, it is your duty, and
it is no coming down to correct that action, and place yourselves and
his county right, before the people of the State. If, as Professor Tur-
er said, in his eloquent address, you have made a mistake, correct it;
and if you make more mistakes, correct them again. It is more honor-
able to correct mistakes than to stand by them forever, and go mad
through life.

I thank you for your kind attention, and will say no more.

ADDRESS BY GEN. JOHN EATON.

COMMISSIONER OF EDUCATION.

The architecture of educational buildings is an interesting study in
self. How the visitor feels the contrast between the taste and fitness
of the University at Rome, designed by Michael Angelo, and the rude-
ness and uncomfortableness of the old college at Geneva, as the abode
of student life! How have halls of learning affected the very health
and vigor of thought, as well as of the body, of generations of students!
How have they become sacred, too, as associated with the training of
the eminent leaders in human affairs! As a traveler in Bologna, in
passing through the old University, is attracted by the representation
of coats-of-arms of each of the thousands of alumni from different coun-
tries, who have become distinguished in some of the walks of life, what
a history is revived around him! How much was formed in germ on
the spot where he stands! Turning to the old medical lecture room,
the very chairs and halls proclaim the experiments that gave galvanism
to mankind. What inspirations are these triumphs of genius to those
who afterwards frequent the same haunts!

Thoughts like these might fitly occupy and instruct us on the occa-
sion of the dedication of this new building. What minds, what charac-
ters are to be here formed, and what primary forces here set in motion
for the welfare of the people! And in the far future, what pilgrimages
are to be made hither in commemoration of these associations! But the
number of students to be attracted hither, and the eminence which they
shall attain among the great benefactors of mankind, must be deter-
mined by the correctness of the direction and the amleness of means
given to the University, the eminence and skill of its instructors, and
the completeness of the aid furnished them. How fully will its curricu-
um, the study, practice and training here afforded, cover the entire
welfare of society, discriminating in favor of what is beneficial and
against what is deleterious?

In answering this question, there are many courses open, each of
which would have the support and co-operation of certain elements in
society, and certain influences among educators. In rendering an an-
swer, it has evidently been remembered that the Institution is sustained
by the commonwealth; that it is for all the people, and has taken to
itself the style of Industrial University, as not excluding any courses of instruction and knowledge they may require, and that it is specially conside rate of the industries of the State. Illinois having adopted a system of education at public expense, which reaches the home of every child within its borders, and offers in every centre of population instruc tion fitted to qualify each of them for all the common pursuits of life, here crowns that system with a circle of the highest opportunities within its gift. What shall this be? Certainly no partial, one-sided or per verted theory will answer. Your commonwealth—as the civil organiza tion into which all your citizens have entered, and through which only they are able to reach all their interests—needs science, needs art, needs every form of culture, and must furnish for them an opportunity, a chance, a scope—nay, must stimulate, encourage and sustain them. This, moreover, the commonwealth does not for itself, as an abstraction, nor for itself alone, as represented in its officers, but for all the people and all their interests, by whom, through whom and for whom it is so conducted. In a sense, this University is the agency by which science is to be fostered, new fields explored, new applications of industry tested—by which, too, the diffusion of all knowledge is to be promoted, and by which all the people are to be inspired to a higher intelligence and virtue. Necessarily, as many as will must be fitly aided in their general culture, while large and reasonable opportunity is furnished for special preparation for service in the arts and trade.

Who could study the position of your University, the sources from which its means have come, or the methods by which it is conducted, without finding in it a beautiful expression of what American educa tional forces may be? As the nation had set apart a fixed section of land in each township for its common schools, so it contributed from its domain the first endowment for establishing the superior instruction here imparted, and appropriately and scrupulously refuses to interfere with its administration. Thus, then, you have at once the benefit of a powerful inspiration to local action and to a large and national patriotism; and the commonwealth, by this aid stimulated to effort, takes up the full responsibility, confides it to a board of trust and control, and places the instruction here to be imparted in proper relation to the other schools—elementary, secondary and superior—among you, so as to benefit them all, and to be benefited by all—the State proposing to supplement by the ampiest means what the nation has done. In religion the culture now to be imparted here, is non-sectarian, but not unchristian; in political, while not partisan, it is not without patriotism; a part of the civil organization, it is not in antagonism with institutions of any grade that may be established and conducted by the different branches of the church.

This harmony of educational forces, to which there is so distinct a tendency in our country, relieves us of evils which are elsewhere en countered. Looking over the history of the world, studying carefully the facts before me, I confess I see in it special advantages. I should become uneasy if there was such action by the civil organization as to preclude the free action of the church, and I should be equally alarmed to see such exclusive control by the church as to forbid this action by the State. With us civilization has made such rapid strides, because here it has been possible to harmonize so many elements, to lay under contribution such a variety and diversity of forces. I am among those who believe that we cannot afford to spare or exclude any social, civil,
intellectual or moral elements, calculated to promote the welfare of the individual or community. The institutions of learning exactly of this character are of more recent date in our country; indeed, perhaps in the world. In a sense, they have been declared to be consecrated to a new education, new however, only in making active in the education of our day; principles which have, in some form, been known and adopted by education in other centuries. Yet the establishment of this class of institutions was with us an experiment, which some have apparently sought to embarrass with antagonisms, but which the greater number of the thoughtfulest statesmen have sought to make successful.

Of the thirty-seven State institutions benefited by what is known as the national agricultural grant, I consider this among the most successful in its administration. Honoring all, moreover, who have contributed of their skill and wisdom to these results, I cannot fail to observe how largely they are due to the ability, character, and attainments of your chief administrative officer. I seem to see how certain portions of his experience have served to fit him specially to do this work with success, scholarly in tastes and pursuits, devout according to his conscience, and honoring the same in others familiar with that State system of education in which a similar experiment had been proceeding successfully, he was thus, as it were, in training for the work here undertaken. I need not call to your minds how easy, at different points in the progress of this institution, it would have been for a one-sided character—a man of crotchety ideas, or one unacquainted with affairs or with the conditions and sympathies of all the classes of persons, and interests and subjects to be here harmonized, in the means and methods employed and the results attained—how easy it would have been for such a man to place this University in the rear instead of in the front rank of the institutions of this class, in spite of the greatness of your State, the largeness of its population, the abundance of its wealth and the general prevalence of education among your people. To-day you commemorate another forward step. From the hour when this great scheme was projected, one element after another of the conditions for its success has been settled, principles and methods have been taken up, examined and rejected or adopted by its managers; the people have been informed and have given the sanction of their approval; and more and more, there is freer and freer play for that organization, instruction and training, which would be suggested by the nature of science and its relations to the welfare of a state, with the present conditions and future conditions of yours. These efforts neither commenced too soon, nor have advanced too rapidly.

New settlements at first reap the fruits of other civilizations. The early settlers of Massachusetts Bay, undoubtedly, had a larger proportion of thoroughly educated men than has ever obtained either there or elsewhere in our country. Illinois, for a period, gathered chiefly the fruits of high culture carried on elsewhere; but for a considerable time the training of your sons and daughters has depended upon the facilities for education furnished them at home. Whatever advantages or disadvantages, therefore, may be derived from other sources, it is fair, perhaps, to bring the means for higher instruction furnished by the State into view, in comparison with the population and its interests.

On a soil of great productiveness, 635 feet above the sea, located in the interior of the Continent, yet surrounded, touched or intersected by water channels, promotive of intercourse with mankind, having an area
82

Report of the

of 55,410 square miles, already sustaining a population of 2,539,000, possessed of an aggregate wealth of $2,121,681,579, or an average of $835.34 to the individual; it is known, according to the report of your able State Superintendent for 1872, that of a school population of 882,693 it has 662,049 under instruction, and an average total attendance of 329,799, or an average total absence of the school population from the schools of 552,894; that, according to the census of 1870, there were 133,581 persons ten years old and over, who could not write; and that out of an adult population of 1,171,499, there were 44,775 males and 60,944 females who could not write, or a total of 105,719 illiterate adults; so that the percentage of adult male illiterates to the adult male population was 7.16; that of the adult female illiteracy to the adult female population 11.16; and the percentage of total adult illiterates to the adult population was more than nine in every hundred. Our appreciation of what the commonwealth is doing for the education of its children cannot blind us to the fact that of 133,584 illiterates, ten years old and over, only 42,989 are foreigners, and that 90,595 are natives. We cannot pause to dwell on these instructive figures, showing so clearly that already your State has reached that maturity in which its own native population is yielding a large illiteracy in spite of the magnificent efforts for education. None can appreciate better than your own able and earnest educators the fact that the common schools of Illinois, notwithstanding their great excellencies, have much more to accomplish before even elementary instruction will become universal. Unfortunately for any judgment that we may form in regard to what is being accomplished for the secondary and higher instruction of the people, we have as yet no adequate record. But some suggestive facts, however, may be called to mind. Looking over the reports of the institution for superior instruction in the State, we find the total number of students classed in what is known as collegiate departments to be 2,074, of whom 388 were students in the Industrial University. I do not know the exact statement of the number that completed the collegiate course, nor can we ascertain how many of the sons and daughters of Illinois are receiving this training elsewhere, or how many may, at great odds, secure the same attainments outside of college halls. There are doubtless very few educators managing these courses of superior training who would not advance them; who would not have them require more and accomplish more. According to the census, we may be perhaps safe in saying that at least 54,000 become 21 years of age, annually, in Illinois. If now the average age of students who complete this course of instruction is 21, and if one-fourth who enter these classes complete the courses, there would be 518 graduates annually, about one in every hundred of the population of that age. What Illinoisan would be satisfied with this amount of products in higher training?—satisfied that there should be furnished annually only this limited number, to renew the supply of the several learned professors, and meet the increasing demand for college-trained teachers, and men and women of thoroughly disciplined minds well stored with information in the different pursuits of life? Let it be understood here that I do not suggest that all who are to be benefitted by science or by advanced learning must be trained in these courses of study. The subdivision of attainments, responsibilities and pursuits is most cordially admitted; nor is it demanded that in each pursuit every person should be trained to perfection in its respective details; some must pursue science more and practice less—some, practice more and study less; but in every
pursuit all the truths of science fitted to contribute to its advancement and highest success should be known by a sufficient number to communicate the benefit of their knowledge to all. Am I understood? Let me be more specific. I do not mean that every farmer should graduate at the Industrial University in chemistry, but that a sufficient number should understand chemistry, as applied to agriculture, to diffuse its practice and doctrines among all the farmers of the State. I do not mean that every one who builds or buys a house should obtain a diploma in architecture, but that there should be a sufficient number of experts in the application of science to architecture to make it certain that every house, every home in the commonwealth is constructed in accordance with the essential principles of lighting, heating, ventilation, health and taste.

Nor do I say that these provisions should be made by the State for the purpose of hindering the success of educational institutions under other auspices. Indeed, even where all the resources of institutions conducted for profit, or by benevolence, or at public expense, have been taxed to their utmost, the result is in danger of being inadequate to the end. Moreover, in the management of superior education, there are, in the past and present, certain indications of limitation. True, there is nothing either in the nature of the action by the State or church or science to restrict culture; all studies may find free scope under the auspices of either; yet the condition of resources or the objects proposed may enforce the prominence of specialties.

The church or the science that establishes a college, however much it may exalt general culture or be ready to impart special training, by its very nature cannot ignore that instruction essential to the perpetuity of its own doctrines. The State, while it charters and protects, and so far aids these independent ecclesiastical and scientific institutions, finds, at its hand, great experiments, either in the development of new principles or the application of old ones, so intimately and closely related to the welfare of the people, that as the sole organization directed exclusively by them all and for them all, cannot divest itself of the obligations to prosecute them until they yield up their fruits for the public good. Great cost and ample means are required. Again, what farmer could bear the expense of all experiments relating to that vast industry, or why should any one do this, when every dollar invested in agricultural pursuits in the State is equally interested? What engineer, what town, what city, could afford to work out all the problems required in engineering? And yet how many Dixon disasters would you consent to have, before the principles of bridge building were sufficiently known and practiced to render impossible such a catastrophe? But we are pressing these suggestions as if the present demands were not to be increased, whereas, Illinois is only passing from its civil childhood. Massachusetts, of most sterile soil, has already nearly 187 inhabitants to every square mile. It is easy to see that Illinois, at her present rate of progress, will soon attain the same density of population, or a total of 10,353,000 inhabitants. Suppose that the same average wealth should prevail then as now, (and if the forces at command are wisely used it should be greater,) the total wealth of the community will amount to the enormous sum of $8,648,138,000, or more than one-fourth the total wealth of the whole Union in 1870. It is for this future that your educators must prepare. Already we notice a growing conviction that the proportion of educated men to the whole population, in some
of the older portions of the country, is decreasing. Reasonable fore­
sight would require, in all the interests of society, that the motives and 
conditions of culture should be so modified that the power of reason and 
truths of science should steadily increase their ascendency over the 
baser social and civil forces.

We boast that we are approaching an age of pre-eminent excellence 
in virtue—an age surpassing all past ages in progress; that we are 
leading the world in the application of equity and reason to statesman­
ship and the conduct of government. Peculiarly separated from other 
powers, and so free from their interference, we have been calling to them 
to adopt principles of reason, of arbitration, of equity, in their inter­
course. We call “halt” to barbarism, and oppose it in every direction 
and point to our free institutions for the imitation of mankind. More 
and more they inquire for the facts. Indeed, we find, in Europe espe­
cially, a growing indisposition to make war the first instead of the last 
resort. Where formerly statesmanship took account of the resources of 
countries only to determine whether one could be victorious over the 
other in the shock of battle, now we find it turning its attention to the 
social and industrial conditions of the people. National policies are in­
trusted less and less to the air castles of theory, and are brought nearer 
to the hard-pan of statistics. It is no longer beneath kings and princes 
to promote the intelligence, skill and virtue of the humblest laborer. 
Finding in the figures a ready indication of how the balance of trade is 
turning, whether the comforts or dis-comforts of life are increasing, le­
gislation and administration are laid under contribution to devise ways 
and means. The new thought, or inquiry, or necessity, turns them to 
the school, college, university—to every place where the young are 
gathered for training; newer courses of study are introduced, or old 
courses modified, or better aids are furnished; at any rate, no expense 
is spared to train and fit a generation to overcome the evils that may be 
threatened. Is Prussia humbled by the first Napoleon? She quietly 
turns her attention to rearing a generation that shall bear her banners 
triumphantly against whatever French force may oppose her. Does 
England find the commodities dependent on the skill of her artizans 
losing their supremacy in the market of the world? She turns her at­
tention to the multiplication and improvement of technical instruction. 
Is Austria beaten at Sadowa? She does not attempt, petulantly and 
foolishly, to renew the struggle, and bring on other disasters, but ac­
cepts the lesson of experience, and turns all her energies to the internal 
development of her resources, first and foremost pushing elementary in­
struction into every dark corner of the realm, and offering a reward for 
all the higher efforts of mind, so that learning and science may be stim­
ulated to the most rapid progress. Shall we, as a people, shall our in­
itutions, shall your commonwealth, be less wise in applying the great 
lessons most emphatically taught by the current experience of the civi­
lized world? Your reply is a most emphatic “no,” by all that has been 
done in furnishing this Institution with its present facilities. What we 
see here to-day, is the best possible assurance of what is to be done in 
the future. God speed your efforts. Teach here the highest rectitude, 
the noblest patriotism. Gather here the best instructors in the classics 
and mathematics, and in the physical sciences. Carry on here to settle­
ment the great problems in which the several industries of your people 
are interested. Add the history and illustrations in the arts and trades, 
and enrich the sons and daughters of the State, who may come here for
instruction, with the best training and amplyes information that can qualify them to go forth as benefactors of the race, as almoners of the treasurers of knowledge here gathered for the benefit of all the people.

Mr. Fellows, being called upon, spoke as follows:

A very eminent clergyman was once preaching upon the subject, "The world, the flesh, and the devil." He said that he would pass over the world, touch lightly upon the flesh, and pass on to the end of his subject. Now, I know that you want the benediction and the amen. I am not going to detain you from the full and complete realization of your wishes. I came here this afternoon as a stranger to the most of you—not to some around you. I came here as a consistent friend of industrial education. In my own State, for years, I have been battling for it, and while not oblivious to the claims of so-called higher education—while not forgetting that in any complete or rounded course of study for the development of the full manhood there must be the humanities as well as the industries of life included—yet in behalf of my own institution, and I hope I can say it, in behalf of every college, classical or otherwise, in this great and glorious State of the West and the Union—I can extend the hand of cordial friendship to the Illinois Industrial University, and bid it God-speed.

There are about 9,000,000 of workers, I suppose, in these United States—men working with their hands. There are, according to the last census, about 1,500,000 of laborers in our midst, and it has been computed—but I will not go over the reasons for the result—that if these were to receive the barest rudiments of a common school education, and were to earn in their present condition one dollar per day for their labor, they would, by the knowledge of these rudiments, be able to earn $1.25 per day. If this be so—and the generalization has been of the widest character, and the results I believe are truthful and right—if this is the case—if these 1,500,000 were to receive a common school education, they would add to the productive value of the United States, year by year, $116,000,000. That is twice the amount paid for the support of public schools in the United States. Take this great army of eight millions of toilers in our midst, and five millions of them are farmers; yet until recently there has been no opportunity given this grand band of artisans for education in their specific work. Let those who have received instruction in the common schools of the country receive the additional instruction imparted in this and kindred institutions, and year by year $500,000,000 would be added to the productive value of the United States; and yet in face of these there are persons talking of the cost of education, and we have been dwelling for a few moments under the baleful shadow of repudiation—that shadow which will soon be lifted, and the full sunlight pour in upon our souls.

I will close with a single reference to the motto we see above us. It is not learning or labor. That was the motto of the old civilization, by which a few men were put over the shoulders of the toiling masses, and remitted the millions to become hewers of wood and drawers of water. It is not learning above labor, for that has been the motto of the nineteenth century until very recently; but as that motto had its day, and must now give place to the motto presented here—the motto which the
ever living God teaches to his children upon earth, and what God hath joined together let no man—no Board of Trustees—put asunder.

Now, young gentlemen, one word to you, and to you, young ladies: It is not out of the way that young ladies are admitted to the Illinois Industrial University. What have they to do with labor? They have a great deal to do with it. Sir Richard Steele said that to look upon a beautiful woman was a liberal education in itself. You have abundance of such sources of a liberal education here, and I hope they will be increased, for these fair daughters are soon to become the fair wives of these artisans, and farmers, and other professional men; for remember this, that three-fourths of all the men in positions of trust and eminence in church and state, at the bar and by the bedside of sickness, in the United States, have come from the ranks of farmers; three-fourths of the women that grace and gladden their households come also from the farmers’ homes.

Now to you, young men: these young ladies will take care of themselves. Realize the end for which this Illinois Industrial University is established. Let the rest of us take care of lawyers and theologians and others in the learned professions; but do you take care that those professions, which are the basis of life—which lie at the very foundation of the stability, the prosperity and the glory of this country—that they suffer no harm at your hands; and I trust, as the years onward roll, you will go back to the farms; you will go back to the workshops, you will go with the culture of the brain, with the culture of the heart, with the culture of the cunning hand, and bear ever before you this inspiring motto, “Learning and Labor,” and God bless you in your efforts to realize the ends at which you are aiming.

Mr. Wines, Secretary of the State Board of Charities, then said:

I give you notice that I shall say nothing of much consequence, but I never hear a story without trying to match it; and Dr. Fellows told us such a capital story that I shall have to speak of a sermon once delivered by an eloquent Baptist preacher, upon the text “Adam, where art thou?” He divided his subject as follows: First, All men are somewhere. Second, Some men are where they hadn’t oughter be. Third, Some men, if they don’t look out, will be where they will not want to be; and Fourth, A few remarks, by way of exhortation, upon infant baptism. Now, Mr. Chairman and Gentlemen, I do not know whether I am where I ought to be or not; I know I am where I am very glad to be; but if I should detain you much longer, I am afraid you will put me where I do not want to be.

I remember an implied warning contained in a sermon preached when I was a boy at college, by an old negro preacher. You know the negroes are very fond of dreams, in fact, their religious experience they make to assume the form of a dream. He said, “My bredring and sistering: Last night I dreamed a dream; and I dreamed dat I had de berry identical ladder dat Jacob went up to saw de Lord on, and by de help of faith, I mounted away up de top, and it was too short; so I took it down, and I spliced it; an, by de help of faith, I mounted away up to de top a second time, and it was too short de second time. I took it down again and put on a smashing big splice, an, by de help of faith I mounted away up to de top a third time, an it was too short de third time. Fo I spread my wings, an I give an almighty jump, an I got the tarnationest fall dat ebber you see on God’s yearth.
Mr. President and Gentlemen, I am a little afraid that will be the fall of some of the Supervisors of Champaign County. I can only say in all seriousness, that I value your worthy Regent highly. I honor him for his ability, courage, fidelity and perseverance in the face of obstacles, whose magnitude, no one but him can fully realize. When he spoke today, he drove a nail in a sure place, and the Governor clinched it. I am glad to be here, and I hope the Industrial University will go onward and upward, conquering and to conquer.