THE NATIONAL UNIVERSITY[1]

I HAVE been asked to make an address upon the relation of the National Association of State University Presidents to the movement for the establishment of a national university.

I desire to say in the first place that, apart from the facts which I shall give concerning the action of the association, I shall be presenting my own ideas. I believe they represent fairly well those of my colleagues in the association, and yet as they have not been presented to them for their criticism or endorsement, I wish it to be distinctly understood that I am speaking for nobody but myself in the argument which I shall present on this subject.

After the fullest and most careful discussion of all phases of the subject the National Association of State University Presidents has repeatedly endorsed the project for the establishment of a national university.

This means a university established by the federal government of the United States, deriving its support primarily from the federal treasury, subject to the ordinary control which a free government exercises over its organizations and their work.

I desire to lay down two or three propositions which seem to me fundamental in securing a proper position from which to judge this whole question. My first proposition is, that in a free state education is fundamentally a national function. I do not mean by this that it is necessary for the federal government of such a free state to regulate, control or support education; though it may be desirable that it should do so. If the locality or the state, or the two together, in a country like ours, will provide adequately for this national function, it may be properly enough left to them; but if they either do not or will not provide for it, then the federal government itself should undertake to see that provision is made. I mean, therefore, that education is a national function in the sense that it is of fundamental importance to the nation as a whole; that it should be properly performed, and if there is no other way to secure its proper performance except through the cooperation of the federal government, then we should have this cooperation.

I maintain that in a state like ours, education is a national function; because to the permanent endurance of a republic, popular education is an absolute necessity, and if it can not be obtained by one form of governmental organization, then it must be obtained by another, or the nation will suffer the consequences. No free government can long exist which is based upon an illiterate people—nay, I believe we may properly paraphrase Lincoln's great expression on another subject, that this government can not remain permanently free if it is based upon a population half literate and half illiterate. All the people must become educated to the necessary extent to secure the basis for democratic government, or in a certain sense, all will become uneducated, *i. e.*, the value of the educated half will be largely lost, *i. e.*, will fail to secure that degree of education necessary for the preservation of a free state. Now that is a national function, to my mind, in its nature, the adequate performance of which is essential to the existence of a nation. From this point of view, education, after the national defense, is the most distinctly national function of all the functions which our society has to perform.

But education is national in its nature

[1] Abstract of an address delivered before the National Education Association at Chicago, July 8, 1912.

from another point of view and should be recognized as such in the organization of our government. The advantages given by elementary and secondary and higher schools are not limited to the communities which support them. A little red school house upon a lonely hillside of a New England state may train the man who will head a great movement for reform and progress in a distant state beyond the Rocky Mountains. The people of the latter state profit by the education which that man obtained at the expense of that New England district, and they should, by all standards of fairness, contribute their part toward the support of the school which produced him. In fact, I think it is not too much to say that, taken broadly, the history of this country during the last two generations demonstrates that in many cases the chief advantage of the school system of a community has redounded to the benefit of other communities in which the particular boys and girls educated in these community schools have subsequently spent their lives and done their work as members of society. Now if all sections of the country profit by the existence of educational advantages in any one community, so the country and the nation, as a whole, should be expected to do its part in developing and supporting these local facilities for education.

There is another reason why education is in its nature a national and not a local or state function, and that is that the disadvantages of the lack of facilities and the lack of schools are not limited to the communities which suffer such lack of school facilities to exist. You hear a man say sometimes that it is up to the community to keep its school, and if it doesn't wish to keep one, let it suffer the consequences. But the same thing is true here as in the case just mentioned, the evil results of inadequate school facilities do not accrue alone to the communities which neglect such matters, but are liable to be of the most serious consequence to other and distant communities; because under our scheme of life, the ebb and flow of our population is so continuous and so extensive that the boys and girls who have missed the opportunity for the highest development, owing to the lack of these local facilities, become members of other communities and go into them and into their work weighted down with all the ignorance and apathy and indifference to higher things which is characteristic of an ignorant population as a whole. So that alike by the distribution of its advantages and the distribution of its disadvantages, popular education is in its nature a national function and not merely a state and local function, and consequently, unless the locality and the state can and will perform this function satisfactorily, the nation must come in as a unit and through its organized representative, the federal government, contribute its share in this way to the support of this common institution.

We must not lose sight of the fact that it is, after all, the American people, as a whole, that pays the bills. It is not the nation distinct from the state or the state distinct from the locality; but it is the locality and the state taken in their totality which make up the nation; and it is therefore a mere question of expediency through what organ and to what extent the people will exercise their power for the purpose of promoting the public welfare.

Now there is another important reason why the people of the United States should aid the cause of education through their federal government as well as through their state and local government, and that is that the people, as a whole, can do certain things through the cooperation of

their federal government which they can not do through their state government or through their local government alone. The expense of an adequate educational system is enormous, and grows continually with the rising standard of the people as to what satisfactory education is. An adequate revenue system will draw upon national sources of revenue through the federal government, upon state sources of revenue through the state, upon local sources of revenue through local government. Some sources of wealth may be more easily and efficiently tapped through the federal government than through the state or local government, and *vice versa*.

In our scheme of federal government in this country, we handed over to the central authority a revenue power—I will not say more than adequate for the federal purposes which we incorporated in our constitution, but I will say more adequate to accomplish the national ends contemplated in the law than were given either to the state or the locality. The federal government can raise funds in many respects more easily than either the state or the locality. And a sound financial system demands that that element in our system shall raise the revenue which it can raise most easily, and then that a reasonable distribution of the revenue so raised among the various federal functions and among the state and local functions shall be made.

I think our history has demonstrated clearly enough already that education can never be properly cared for in this country unless we draw upon national sources of revenue as a means of assisting in its support.

Owing to history which I need not recount, the southern states, for example, find themselves in the position of having two independent and complete systems of education, for the white and colored races, respectively. It is quite unreasonable to hope that in our day and generation the southern communities will be wealthy enough, or, what amounts to the same thing for our purpose, will think they are wealthy enough, to care adequately for these great interests, and if the people will not utilize their other sources of revenue and their other organs of government to assist in providing a part of the means for the solution of this problem, we shall still continue to suffer as we have suffered for generations by this situation.

My next proposition is that this country can not solve its educational problems in the large until it recognizes that education is the business of the nation and that pecuniary assistance for its support in a large way shall come through the organs of the nation as a unit.

We can not get the money in any other way. We refer, of course, by preference in our educational discussions to the unhappy educational conditions of certain portions of the South. But the conditions are just as really and just as truly inadequate over whole sections of the northern states as they are in the south. We need not go out of the state of Illinois itself to find schools which do not deserve that name. We need not go outside of Illinois to find local communities which, after taxing themselves to the limit which the law allows, still have not sufficient money to maintain, during the months in which a child ought to be in school, the kind of school which it is worth the child's while to attend.

There is another important matter which we ought not to lose sight of. Great national issues are pushed forward only when it is possible to secure national attention for them; only when they have become national in a formal as well as an informal way; only when the nation is

discussing them as great national issues. If we could get national attention concentrated upon our educational problems year after year as one of the fundamental issues going to the very life of the nation itself, we should make vastly greater progress than we do. And this attention we shall get when we recognize the essentially national character of education by making educational policy a part of national policy. When the federal congress discusses educational questions as fully, as completely, as they discuss questions of defense and the tariff and internal improvements, we shall be in a way of securing for educational issues that attention which is necessary to their continuous and rapid solution.

Intimately connected with this fact, namely, the necessity of securing national attention for the consideration of national problems, if we wish to hasten their solution, is the further one that we could advance with far greater certainty and with far greater speed, our national standards, *i. e.*, the standards of the people taken as a whole and in their local organizations, if we can get before the nation, as a whole, a proper standard of what education means and what education ought to mean.

The nation then, and not merely the local school district or community or state, must become an educational unit in all grades of education.

It has already become so to a certain extent. It is becoming so more and more every passing day. Unequally, it is true—in spots only—here and there, but steadily and persistently. The federal government has granted lands for the support of elementary education in nearly all the states of the union within whose territory were to be found large stretches of government-owned land. In fact the federal grants were the foundations of the school funds in the vast majority of the states of the union. But the federal government has not been content with this. It began some fifty years ago the policy of developing within each state in the union a higher institution of learning supported in large part, first by federal grants of land; second, by the grants of money realized from the sale of lands; and finally, by grants of money raised by the general revenue system of the government. To-day we have sixty-seven such institutions which owe a part, or the whole, of their income to the action of the federal government. The aggregate value of the permanent funds and equipment of these land grant colleges themselves exceeds to-day $125,000,000. The total income of these institutions in 1910 was nearly $23,000,000. It would take an endowment fund of over $450,000,000 to produce this income.

We take pride here in Illinois in the fact that it was an Illinois farmer and professor who first formulated this plan, and that the legislature of Illinois was the first American legislature to stand strongly behind this policy of federal grants to higher education within the states. It has become the greatest scheme of an educational endowment which the world has ever seen. The federal government itself contributes only a small part of the total funds necessary for the support of these institutions, but it was the giving of that small part which made the rest of it possible, which stimulated local and state interest, which by fixing national standards stimulated the nation to rise to these standards. I have very little doubt myself that if it had not been for the action of the federal government in making these appropriations for the development of agriculture and the mechanic arts within the states, we should be a whole generation behind what we are

in the development of our educational system.

Incidentally, I may say that the House of Representatives of the Illinois legislature has again led the way in urging upon the federal government the necessity of large additional grants for educational purposes by sending to congress a unanimous petition, as follows:

WHEREAS, The legislature of Illinois by the joint resolution of February 8, 1853, was the first among the American legislatures to petition the congress of the United States to make a grant of public land for each state in the union for the liberal endowment of a system of industrial universities, one in each state, to promote the more liberal and practical education of our industrial classes and their teachers; and,

WHEREAS, The congress not only made a liberal grant of land in the year 1862 for this purpose, but has also followed up this policy once begun by still more liberal appropriations for the support of higher education in agriculture and the mechanic arts, resulting in the great chain of colleges for agriculture and the mechanic arts to be found in every state and territory in the union; and,

WHEREAS, The time has now come for the adoption of a similar policy in the field of elementary and secondary education; therefore, be it

Resolved, By the house of representatives of the state of Illinois, the senate concurring herein, That the congress of the United States be respectfully petitioned to appropriate annually to each state and territory in the union a sum equal to one dollar per head of the population of said state or territory as ascertained by the last census, for the purpose of establishing, maintaining and extending in the elementary and secondary schools of said states and territories, while not excluding other elementary and secondary subjects, such practical, industrial and vocational training, including agriculture, the mechanic arts, domestic science, manual training, commercial subjects and such instruction in other similar subjects of practical nature as the interests of the community may seem to demand; and

Resolved Further, That our senators in congress be instructed and our representatives be requested to use their best exertions to procure the passage of a law of congress donating said sum to each state and territory in the union for said purpose; and

Resolved Further, That the governor of this state is hereby requested to forward a copy of the foregoing resolutions to our senators and representatives in congress and to the executives and legislatures of each of the other states and territories, inviting them to cooperate with us in this meritorious enterprise.

I wish to emphasize again very strongly that national aid to education, whether lower or higher, does not necessarily mean excessive federal centralization and control. The extent to which the federal government shall have control of the funds which it devotes to education is a matter of expediency to be settled from time to time and from generation to generation, as national and local needs and possibilities may dictate.

I should like to call attention to one other fact, and that is that the federal government, when it wished to develop, by the expenditure of a comparatively small sum of money, a system of educational institutions which should have a profound effect upon the development of elementary and secondary education, it chose to establish colleges, not high schools; colleges, not grade schools; colleges, not kindergartens. In other words, it recognized that in the development of any educational system in a country, progress goes often from the so-called higher to the lower. You can not develop a good high-school system unless you have a good college system which can supply the necessary teachers, the necessary guidance, the necessary stimulation, the necessary leadership. You can not have good grade schools unless you have good high schools which furnish, taken as a whole, the training of the teachers employed in these elementary schools. The converse is, of course, equally true, that you can not develop your college beyond a certain low level of efficiency unless the high schools can be brought up to a high level. Nor can you raise the level of your

high schools to what it ought to be unless the grade work is done properly.

I desire again to call attention to the importance to educational advance of securing a national formulation, a national organization of the educational idea and educational ideal.

There is a subtle moral and psychological reaction upon the people, as a whole, arising from the formulation and incorporation of a national ideal in a practical national policy which spells progress and success for movements which are able to find such national expression.

As suggested above, when education is as regularly the subject of national debate and national conflict as the tariff, banking and currency and internal improvements, we shall take another long step forward in our educational development.

What I have thus far said applies to all grades of education alike, and it is upon this foundation that in my advocacy of a national university I take my stand. If the views thus far advanced command your assent, I believe I shall have your consent to the further proposition I advance, namely, that one of the essential elements of our American system of education is the kind of a university which the federal government can build and which shall stand, so to speak, at the apex of our educational pyramid, or if you choose to reverse the simile, it is all one to me—which shall be the foundation stone upon which the pyramid of national education shall be erected; for all history shows that from the universities, from the highest schools, have gone forth steadily those influences which have molded and shaped and fashioned the popular education in all times and in all countries.

I mean by a national university, an institution sufficiently like the ordinary institutions with which you are all acquainted to be thoroughly familiar to you. A teaching and training, as well as an investigative institution, manned with the best men in all departments in which the human intellect has exercised itself, drawn from the entire world, equipped with all that money can provide, for the purpose of stimulating and increasing our interest in the world of the spirit and the world of sense about us.

Now one of the fundamental purposes of a university system is to beget, diffuse and establish, in the mind—nay, I will say also in the heart of the people, the scientific spirit and the scientific method. If this can be accomplished, the face of the world will be changed. Now this can be done in certain respects more easily and more thoroughly and more rapidly by means of a system of state and national universities than by any other means.

In what I am about to say I am not animated by any spirit of opposition to the historic, private institutions of this country. He would be an ungrateful American indeed who would cast any slur upon Harvard and Yale and Princeton and the scores of more recently founded private universities, like Hopkins, Chicago and Leland Stanford and Northwestern, which are such an honor to our country and our civilization. I should certainly consider myself an ingrate if I should say anything derogatory of Harvard or Pennsylvania or Chicago or Northwestern, where as student or professor or president I had an opportunity to prepare myself for public service, and to have had some small part in the glorious work of these institutions. All honor to them, and increasing power and glory and prosperity! But, friends, however great they may become—and may their shadow never grow less—they can never accomplish the purposes we have here in mind, namely, to incorporate in a

visible form the national ideal of university education.

I have long been a warm admirer of President Eliot, in many respects the greatest figure in American education. He was kind to me personally when I was a freshman at Harvard. He was for more than a generation my guide, philosopher and friend in the field of university education and administration. I think it is not too much to say that he revolutionized it to its great betterment.

But I know no more striking illustration of the fundamental weakness that doth beset us all, than President Eliot's notion that he could make of Harvard a national university in the sense that we have been using the term here. That he could make a private institution, dependent for its resources upon the liberality and self sacrifice of alumni, however generous they may be, or upon the whims of rich men, however numerous they may be, situated upon the edge of the country, even though in such a glorious city as Boston, that he could make an institution so located, and so fathered and mothered to be that embodiment of our national ideal of science and education and art which we are looking for. Other men have or have had the same notion for their institutions. Idle and vain hope! Neither Harvard nor Yale nor Columbia nor Princeton, nor all of them taken together, great as is their function, great as is their service, can hope to do this particular service for this country. Nor Mr. Rockefeller nor Mr. Carnegie nor both of them together, though multiplied by five and animated even still more fully than at present by patriotic unselfishness and far-sighted motives, can do this thing for the nation which, after all, only the nation can do for itself. The state universities of Michigan and Wisconsin and Minnesota and Illinois and the forty others—no one of them alone nor all of them together, great as they may become—and we are all headed for great things—can hope to fill this place, incorporating in themselves, in such a way as to satisfy the national longing, that deep-felt, that unexpressed ideal of university education.

The reason is simple. No partial expression will satisfy this longing for wholeness. When that which is perfect shall have come, that which is imperfect will unite with it and help constitute its perfection—private and state institution, with the national university—making one complete system, or it will dry up and disappear. When that which is complete shall have appeared, that which is incomplete must become a part of it or be sloughed off or cast into the scrap heap. No national university can exist except as the creation and organ of the national will, shaped and directed by it. Supported and sustained by this national will, it will be the expression of you and me and all of us, we a part of it and it of us.

Such an institution would not injure, but benefit every private and every state university, by its superior support, by its superior prestige, by its greater wealth. It would strike the popular imagination of this country in such a way as to give to the university idea itself an enormous impetus, the reflex effect of which would show itself in the increasing prosperity and development of every private and state institution.

The foundation of Leland Stanford did not injure the University of California, but helped it immensely. The foundation of the University of Chicago did not injure Illinois or Northwestern or Michigan or Wisconsin, but by the bold and striking way in which it raised high aloft the standard of science it gave an impetus to the university idea which made the work of

every one of these institutions more adequate and more easy.

The same thing would be true in a larger degree of a national university, organized along proper lines, and put under proper influence.

Such a national university as I have suggested, located at the site of the federal government, supported by appropriations from the federal treasury, controlled and regulated by federal law, would easily become, as it ought, the crowning institution of our university system, private and state alike. It could supplement the shortcomings of our other institutions as well as emphasize their excellencies. It could undertake many enterprises of national scope, and which no existing single institution, public or private, can afford to undertake. It could offer to our best qualified young men and young women, opportunities which only a nation like ours can afford to offer.

Such an institution, located in the national capital, would exercise a vigorous and salutary influence on the course of federal legislation itself. Its pointed spires and gilded domes would of themselves be powerful, though mute, monitors calling attention to the claims of science to be the guide of legislations.

Such an institution located in the center of political power of the greatest nation on earth would attract in large numbers the bright and promising youth of other countries, who, as students here, would imbibe those fundamental American ideas which we fondly believe are destined to work out the salvation of the world when they shall have done their perfect work, while these youth would gain added respect for our society and our ideals, which, carried back home and incorporated in their own policies, would contribute powerfully to that mutual understanding which is the surest basis for international peace.

Such an institution located in Washington could utilize for purposes of instruction and investigation the wonderful resources heaped up by the government of the United States in its scientific departments. The National Library, the museums and collections of all sorts lie largely fallow at present, waiting for the people of the United States to make their utilization possible in the various schools and colleges of a national university.

Such an institution, located at such a strategic point, will wield a subtle, ever deepening and widening influence over the whole American people in the direction of increasing their interest in science and their belief that science is an important element in private and national life. It will be their university, and they will come to take an increasing pride in, and appreciation for, the work it is doing; and thus will, by this reflex effect, be trained to gradually entertain an ever deeper respect for the standards and ideals of higher education itself.

Friends, such an institution is coming, as surely and irresistibly as the tides of ocean. Will you help it, or will you oppose it, or, worse than either, will you do nothing?

This National Education Association could secure the establishment of this institution in a short time if it would only go after it in earnest.

Ignorance and apathy and prejudice have thus far been most potent in preventing the realization of this dream of Washington.

Private institutions, religious and secular, have opposed, thus far successfully, the movement. Private institutions, men of wealth, men of no wealth, men of ideas, men of no ideas, have set themselves against this project. It is up to you and the like of you to help bring this about in our day and generation.

This great power can be set to work immediately in the interests of science and art and education, supplementing, reinforcing our defective and weak system of education. Every day its coming is delayed represents so much pure loss to the causes in which you are interested; to the welfare of this nation, and to civilization in general by all that it might contribute if it were now at work.

This institution, this national university, would be one of the most important elements in making this nation of ours in reality what it is in our dreams and hopes and fond anticipations, the leader of the world in art, in science and education, and in civilization.

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SCIENTIFIC NOTES AND NEWS

DR. ANTON FRITSCH, director of the zoological and paleontological division of the Museum at Prague, has celebrated his eightieth birthday.

SIR WILLIAM RAMSAY has been elected a foreign associate of the Paris Academy of Medicine.

DR. A. ENGLER, professor of botany in the University of Berlin, has been elected a corresponding member of the Paris Academy of Sciences.

GEORGE AMOS DORSEY, associate professor of anthropology in the University of Chicago, who has recently returned from a three years' tour of the world and investigations in his special field of research, was given a banquet in Chicago on July 30 by the directors of the Chicago Geographical Society, of which Dr. Dorsey was at one time president.

DR. JOHN K. SMALL, head curator of the museums and herbarium of the New York Botanical Garden, was given the honorary degree of doctor of science at the one hundred and twenty-fifth anniversary of Franklin College, Lancaster, Pa., on June 13.

DR. D. H. SCOTT, president of the Linnean Society of London, has been elected a foreign member of the Academy of Sciences at Copenhagen.

SIR PATRICK MANSON has retired from the position of medical adviser to the Colonial Office, and has been appointed a Knight Grand Cross of the Order of St. Michael and St. George in recognition of his eminent services in connection with the investigation of the cause and cure of tropical disease.

THE Moxon gold medal for research in clinical medicine has been awarded by the Royal College of Physicians, London, to Sir David Ferrier, F.R.S., and the Murchison memorial scholarship, founded in memory of Dr. Charles Murchison, has been awarded to Dr. W. Rees Thomas.

DR. JOSEPH H. WHITE, of the United States Public Health and Marine Hospital Service, has been asked to become a member of the Boston board of health to act as an expert in the health department.

AT the recent annual meeting of the Imperial Cancer Research Fund in London Dr. William H. Woglom, of Brooklyn, was appointed first assistant in New York, a position maintained under the Crocker Fund for the Investigation of Cancer. Dr. Woglom was sent to London by the directorate of the Crocker Fund to pursue a course of studies under Dr. Bashford, director of the Cancer Research Fund.

DR. EDGAR W. OLIVE, professor of botany in the State College of South Dakota, has been appointed curator in the Brooklyn Botanic Garden.

MR. HERBERT E. IVES has resigned his position in the Physical Laboratory of the National Electric Lamp Association in Cleveland to accept the position of physicist of the United Gas Improvement Company of Philadelphia, where his work will consist of consultation and research in connection with the measurement and utilization of heat and light.

MR. E. H. TENNYSON D'EYNCOURT has been appointed director of naval construction to