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THE NATIONAL ACADEMY OF SCIENCES¹

ADDRESS OF WELCOME BY THE PRESIDENT OF THE UNIVERSITY OF PENNSYLVANIA

THE University of Pennsylvania has special gratification in extending a hearty welcome to the members of your distinguished body in the annual meeting which you are holding this week within our halls. You bring to our campus a group of scientists and educators who feel a certain definite obligation to the state in the several fields in which they are involved. Your association is one of creative possibilities. As your president pointed out in his remarks at the dinner of the academy a year ago your organization traces its origin into Colonial times, but there is a certain significance to the impetus which the movement gained through its incorporation under the approval of Abraham Lincoln at the time of our Civil War. And one reads with new inspiration these words from

the first annual report of the academy submitted to Congress a year later:

It is a remarkable fact in our annals that, just in the midst of difficulties which would have overwhelmed less resolute men, the 37th Congress of the United States, with an elevated policy worthy of the great nation which they represented, took occasion to bring the scientific men around them in council on scientific matters, by creating the National Academy of Sciences. Such has been the way in which the public mind has been stirred before in the annals of other countries, leading to the organization of great systems of education, science, art and literature, to be encouraged and perfected when more peaceful and prosperous times recurred.

This historic association augments the significance of the academy by the tradition of a great man, the mere mention of whose name makes us search our hearts with a view of doubling the earnestness of our efforts.

Now that the progress of civilization is imperiled by the unbridled and destructive forces of evil which

¹ Autumn meeting held at the University of Pennsylvania, Philadelphia, October 28, 29 and 30, 1940.

have been unleashed abroad, you on your part stand prepared to furnish to your government all the resources which can be brought to bear through the academy, and through its instrumentality, the National Research Council, organized for the purpose among other things of strengthening the national defense and cooperating in the interest of the public welfare. And we on our part have offered to our government every man and every facility at our command for such purpose in the national emergency as our government may think helpful in the grave problems it has in hand. Our preparation involves also the organization of base hospitals, the setting up of Army, Navy and Pilot training corps, and our cooperation with plans having to do with registration and special researches and services bearing upon national defense. As before in our history when our services were useful or needed, we stand ready to make available to all departments of the Federal Government the special abilities, experiences and the capacities of each and every activity we possess.

You come to the university in a year of great meaning to us. Founded by the many-sided Franklin two hundred years ago we find ourselves interwoven with the academy through a distinguished group of scholars deeply grounded in the objectives of each institution. Beginning with Bache, and coming through Frazier, Leidy, Lesley and two Rogers, Longstreth, Cope, Donaldson, Mitchell and Wood, we can trace adventures into the unknown through the dramatic lives of those who between us had common interests. By coming here in this special year you demonstrate again the vitality of democracy, the unity of purpose of intelligent men and the power of education, which in these times gives renewed faith and encouragement to us all. It is well that in some place there should be provided at just this time in the history of the world a platform from which the best minds in all fields of useful knowledge could give encouragement to a weary world. And while the location of such an event is not nearly so important as the circumstance it seems appropriate that the scene should be here in Philadelphia which saw the birth of American liberty, and is to-day more than ever a shrine from which free men may renew their inspiration. The bicentennial celebration of this university, which is being observed throughout the year, reached in a sense its high point during the present fall and the observances which have occurred emphasize again the fact that knowledge and learning know no boundaries of nationality, of creed, of race or social preference. We have all been inspired by the fact that great scientists and humanists invited to our commemoration came with enthusiasm and with generosity, and that those who could not come from overseas because of the war heroically stayed at home but sent to us for

the benefit of learning and welfare their papers to be read by other colleagues in the free realm of scholarship.

From countries on both sides of the European and the Asiatic wars came messages of hope of a new tomorrow. From men of universities no longer in existence came letters and cablegrams pleading that the fires of freedom be kept burning as the hope of civilization. "Free science in America means free science for all the world," wrote the delegate from the University of Latvia, whose faculties have been banished.

Institutions such as those with which you and we are associated and the forces which lie back of them are older than any government in the world. Around them liberty and independence have grown. Education that is free and virile can exist only in a democracy. And democracy can exist only where education and intelligence grow guided by such institutions as yours and ours leading the people along pathways that are free and upward. Therein rests the hope of civilization for the kind of a future for which intelligent men and women are even now giving their genius, their energies and their lives.

One can not overstate the significance of a meeting such as this at the present time. Nor can one overestimate the lasting values which may result from our association together. There is inherent in the event the acceptance of the challenge to our collective abilities to meet and overcome the onslaught of a world ridden by fear.

THOMAS S. GATES

REMARKS AT THE DINNER BY THE PRESIDENT OF THE ACADEMY

THIS is neither the time nor occasion for any extended remarks on my part. Nevertheless I do wish to trespass on your good nature for a few minutes. I have learned something out of my experience these past eighteen months as President of the National Academy of Sciences which I would like to convey to you—members and guests alike.

To the members, particularly to those who have been members long, it is not particularly new, nor, as they may remember, is this my first reference to it. My justification for reverting to it now is that it is at present an important matter in connection with the functioning of the academy. To these older members I crave pardon in advance.

To you who are our guests, what I have to say is probably new. To all of you, members and guests alike, who are interested in or concerned with the *raison d'être* of the academy it is, I think, something you should understand clearly.

I suspect that most people outside its membership think of the National Academy of Sciences as some sort of a voluntarily created scientific society of limited membership, which differs from numerous other