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ADDRESS OF THE PRESIDENT OF THE NATIONAL ACADEMY OF SCIENCES

By Professor FRANK R. LILLIE

UNIVERSITY OF CHICAGO

Members and Friends of the

National Academy of Sciences:

WE welcome your presence at the annual dinner of the National Academy of Sciences, an occasion devoted to the charms of friendly intercourse and the conferring of such honorary awards of the academy as may fall due and be recommended by appropriate committees after careful investigation.

This is in no sense therefore a business meeting of the academy; but my distinguished predecessor, Dr. W. W. Campbell, director emeritus of the Lick Observatory and president emeritus of the University of California, created a precedent of speaking on the status of the academy on this occasion, which I have been requested by the committee in charge of arrangements for this meeting to continue.

At the last two annual dinners Dr. Campbell presented the history of the academy and emphasized especially the obligation that rests upon members of the academy under its congressional charter "whenever called upon by any Department of the Government to investigate, examine, experiment and report upon any subject of science or art" without any compensation whatever for such services.

May I, in my turn, remind you that this building is also the building of the National Research Council, and that the names of both the academy and the research council appear over its door. The National Research Council was organized by the academy in 1916 under its congressional charter, as a measure of national preparedness, at the request of President Wilson; and was perpetuated by the academy in 1918

at the request, and under executive order, of the same great President, in order to develop more fully and effectively purposes stated and implicit in the charter of the academy, which in course of time had resulted in functions so various and important that a special executive branch of the academy was needed for their proper performance.

Prior to the current year the presidency of the academy and the chairmanship of the National Research Council were held by different persons, and for the first time during the current year these two offices have been united with the aim of bringing about closer correlation of operation between the academy and the council. I think it may be said that this aim has been to some extent realized. The proper performance of both duties, however, presupposes a degree of vigor and activity that only a younger person could hope to possess; and it therefore seems indicated that as soon as possible a separation of these offices should again take place.

The current year has also been marked by the union of the Science Advisory Board with the Committee on Government Relations of the National Academy of Sciences with the idea of centralizing the performance of our charter obligations to the government which had become scattered among two or three bodies of the academy and the council. The distinguished services of the Science Advisory Board are well known and are permanently recorded in its published reports. The benefit of these services has carried over; and, during the current year, not only have certain of the committees of the Science Advisory Board been continued, but new requests for aid and advice of the academy have been received from the departments of commerce, agriculture and the navy, and also from the

National Resources Committee, which are now in process of examination.

An unusually enjoyable and well-attended autumn meeting of the academy was held at the University of Virginia last November, when the pleasures of Southern hospitality were experienced to the full. The academy has accepted an invitation from the University of Chicago to hold its next autumn meeting in November of this year in those equally delightful, but very different, surroundings. The autumn meetings of the academy carry the message of the academy to different regions of the country in successive years.

For the rest I can only say that the academy remains firmly founded on the bed-rock of scientific research, and serene in confidence in orderly thought, whether for the understanding or control of the processes in nature and in man. If any change of attitude is to be noted, it is in an increased state of consciousness of public and social responsibility, which developed rapidly under the stress of the great war, and of these recent times of economic depression, stimulated by an awakened public confidence and interest in science. There is no present danger, in our country at least, that scientific discovery and thought should be underestimated or suppressed; this condition should heighten our sense of responsibility to see that its power and authority are not exaggerated. The true friends of science recognize that limitations are set in nature and in the mind itself to scientific progress. We can not predict its rate, direction or extent for any considerable period of time. Yet I think that experience should give us confidence to claim that the conquering spirit of science is one of the strongest components of ideal social processes; and always will be.

MEDALS OF THE NATIONAL ACADEMY OF SCIENCES

PRESENTATION OF THE AGASSIZ MEDAL TO DR. THOMAS WAYLAND VAUGHAN

THOMAS WAYLAND VAUGHAN, long a member of the academy, is so well known to most of you here tonight that there is no occasion to outline his biography, or to dwell on his many scientific publications; my privilege is, rather, to present to you the essence of why he has been adjudged most worthy recipient of the Agassiz Medal for eminence in the science of the sea. The oceanographer is constantly reminded that understanding of the margins of the oceans, and of the parts of the earth's crust on which the latter rest, is as integral a part of his science as is examination of the waters themselves, for these geologic features determine the extent, depths and circulatory systems of the oceans, with all that this applies. Conversely, we

can not hope to understand the geology of continents or of islands until we understand the structure and history of continental shelves, of ocean floors or of the great corrugations of the latter. It is, therefore, eminently fitting that the academy should honor one who, commencing his career as a geologist, soon turned to the geological history of shore lines and of the sediments of the sea—especially when we remember that the donor of the medal, Sir John Murray, was himself the most eminent student of oceanic deposits. We see Vaughan's genius and the part he has played in the progressive unfolding of submarine geology in his studies of the corals and coral reefs of past ages, of the history of the islands of the West Indies and of the Floridian almost-island; of the organic skeletons that accumulated on the sea floor in past geologic ages,