

miles from the capitol building and three miles from the Department of Agriculture.

18. The location of the arboretum at a distance of several miles from the city has been proposed. In such a location the cost of administration would be greater, the work of research and discovery less effective, and the arboretum would be less useful for public education and recreation.

On December 7, 1925, Representative Robert Luce, of Massachusetts, introduced in the House of Representatives the following bill (H. R. 3890), which was referred to the Committee on Agriculture. An identical bill (S. 1640) was introduced in the Senate by Senator George Wharton Pepper, of Pennsylvania, and referred to the Committee on Agriculture and Forestry.

A BILL

AUTHORIZING THE SECRETARY OF AGRICULTURE TO ESTABLISH A NATIONAL ARBORETUM, AND FOR OTHER PURPOSES

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of Agriculture is authorized and directed to establish and maintain a national arboretum for purposes of research and education concerning tree and plant life. For the purposes of this Act, (1) the President is authorized to transfer to the jurisdiction of the Secretary of Agriculture by Executive order any land which now belongs to the United States within or adjacent to the District of Columbia located along the Anacostia River north of Benning Bridge, and (2) the Secretary of Agriculture is authorized in his discretion to acquire, within the limits of the appropriation authorized by this Act, by private purchase, condemnation proceedings, or gift, land so located.

Sec. 2. There is hereby authorized to be appropriated a sum not to exceed \$300,000, to be expended under the direction of the Secretary of Agriculture for the acquisition of land as specified in section 1. No payment shall be made by the United States for any such land until the title thereto is satisfactory to the Attorney General and is vested in the United States.

Sec. 3. In order to stimulate research and discovery, the national arboretum established by the Secretary of Agriculture in accordance with the provisions of this Act shall be under competent scientific direction. The arboretum shall be administered by the Secretary of Agriculture separately from the agricultural, horticultural, and forestry stations of the Department of Agriculture, but it shall be so correlated with them as to bring about the most effective utilization of its facilities and discoveries.

Sec. 4. The Secretary of Agriculture is authorized to recognize and consult an advisory council in relation to the national arboretum to be established under this Act, to include representatives of the following organizations: National Academy of Sciences, National

Research Council, Smithsonian Institution, Carnegie Institution of Washington, Garden Club of America, Wild Flower Preservation Society, Botanical Society of America, American Society of Landscape Architects, American Association of Nurserymen, National Association of Audubon Societies, American Forestry Association, Society of American Foresters, American Pharmaceutical Association, and American Association for the Advancement of Science.

FREDERICK V. COVILLE

SCIENTIFIC EVENTS

THE PAN-PACIFIC RESEARCH INSTITUTION

THE Pan-Pacific Union, an international organization having its center at Honolulu, has served an excellent purpose in two main directions. The first, in its mission of good-will to the various peoples whose lands border on the Pacific, and second, in the several international conferences, educational, journalistic, economic and scientific, called to meet under its auspices and under the general direction of its director, Alexander Hume Ford.

Last year a new departure was planned, that of an international research station, after the fashion of the one at Naples and the one at Woods Hole. With certain disadvantages of remoteness from centers of population, it has the advantage of access to a marine fauna of unparalleled richness. In addition to this, it affords a remarkable opportunity for the study of tropical fruits, of insect pests and the parasites which destroy them, of a tropical flora and of volcanic geology.

For the present summer, Dr. David Starr Jordan, as honorary president of the institution, has assisted Mr. Ford in its permanent organization. Its board of trustees is made up of leading men interested in the project from the various countries included in its scope. Its actual government is vested in a local council of scientific men engaged in actual research, in the employment as experts by the United States government, by the Territory of Hawaii, the Queen's Hospital or by some one of the great associations interested in sugar, pineapples, coffee or other industries. The headquarters of the institution are in a commodious residence in the Manoa valley, dedicated to this purpose by its owners. Here the council meets weekly at dinner, being followed by a scientific lecture, to which the public is invited. The chief purpose of the institution is the promotion of research in any field, in which local conditions are favorable. For the time being, only a small number of workers can be accommodated free of charge at the headquarters and no funds are yet available for special assistance. A bulletin is published monthly, but until a permanent endowment for publication is secured no records of new species of animal or plant will be

received for printing. The facilities for advanced work in the Bishop Museum, the University of Hawaii and the Queen's Hospital will in general be at the service of any worker.

The first scientific publication of the institution is "A Check-List of the Fishes of Hawaii," by Dr. David Starr Jordan and Dr. Barton Warren Evermann. This list includes 583 species, including pelagic and bathybial forms.

The present council consists of the following persons, each of these being at the same time chairman of some special research committee:

Chairman, Dr. Nils P. Larsen, medical director of the Queen's Hospital.

Vice-chairman, Dr. Frederick G. Krauss, professor of agronomy, University of Hawaii.

Recording Secretary, Wm. Weinrich, chemist.

Honorary President for 1925-26, David Starr Jordan, chancellor emeritus of Stanford University.

E. A. Beals, meteorologist, U. S. Weather Bureau.

Colonel J. M. Brown, judge advocate, U. S. A.

Dr. C. B. Cooper, ex-president of the Board of Health.

L. A. Henke, professor of animal husbandry, University of Hawaii.

Dr. James F. Illingsworth, research associate in entomology, Bishop Museum.

H. Atherton Lee, pathologist, Sugar Planters' Association.

Kilmer O. Moe, agriculturist, Kamehameha Schools.

Willis T. Pope, horticulturist, U. S. Experiment Station.

PLANS FOR INCREASING THE FUNDS OF THE NATIONAL ACADEMY OF SCIENCES

THE National Academy of Sciences has appealed to a body of prominent public men to join leading scientists of the country in an endeavor to secure larger resources for research in pure science.

It is hoped that an annual income of \$2,000,000 can be secured to establish national research professorships and in other ways to cooperate with universities and other institutions.

The academy has created for these funds a special board of trustees, the membership of which consists of the following:

Herbert Hoover, *chairman*; Dr. Albert A. Michelson, president of the National Academy of Sciences; Gano Dunn, chairman of the National Research Council; Dr. Vernon Kellogg, permanent secretary of the National Research Council; John W. Davis; Colonel Edward M. House; Cameron Forbes; Felix Warburg; Henry S. Pritchett; Dr. Robert A. Millikan, foreign secretary of the National Academy of Sciences; Dr. John C. Merriam, president of the Carnegie Institution of Washington; Owen D. Young and Henry M. Robinson; Elihu Root; Charles E. Hughes; W. H. Mellon; Dr. Simon Flexner, director of the laboratories of the Rockefeller Institute for Medical Research; Dr. John J.

Carty, vice-president of the American Telephone and Telegraph Company; Dr. William H. Welch, director of the School of Hygiene and Public Health of the Johns Hopkins University; Dr. James H. Breasted, director of the Oriental Institute of the University of Chicago; Professor L. R. Jones, of the University of Wisconsin; Professor A. B. Lamb, of Harvard University; Professor Oswald Veblen, of Princeton University; Dr. Thomas H. Morgan, of Columbia University, and Dr. George E. Hale, of the Mount Wilson Observatory.

The chairman of the board, Mr. Hoover, made the following statement:

While we have in recent years developed our industrial research upon a scale hitherto unparalleled in history we have by no means kept pace in the development of research in pure science. The sudden growth of industrial research laboratories has in itself endangered pure science research by drafting the personnel of pure science into their ranks. Thus, applied science itself will dry up unless we maintain the sources of pure science. We must add to knowledge, both for the intellectual and spiritual satisfaction that comes from widening the range of human understanding, and for the direct practical utilization of these fundamental discoveries.

THE STERLING RESEARCH FELLOWSHIPS AT YALE UNIVERSITY

WITH the assistance of a fund of \$1,000,000 provided by the trustees of the estate of the late John W. Sterling, of New York City, Yale University will begin next fall an intensive effort to stimulate advanced research and graduate study in all fields of knowledge according to an announcement outlining the plans for the allocation of the million dollar fund.

The Sterling fellowships will be divided into two classes: Research or senior fellowships and junior fellowships. Candidates for senior fellowships, who will be expected to undertake advanced research, must have already received the degree of doctor of philosophy or its equivalent. It is anticipated that the maximum annual amount awarded to such fellows will be perhaps \$2,500 or \$3,000.

Junior fellowships will be open to students who have accomplished a substantial part of the work for the Ph.D. degree. It is expected that they will receive between \$1,000 and \$1,500.

These fellowships will be open equally to graduates of Yale University and other approved colleges and universities in the United States and foreign countries. They are open to graduate students or teachers on leave of absence who desire to carry on studies and investigations under the direction of the graduate faculty of Yale University or in affiliation with it. Since these fellows are expected to devote their entire time to research, they will not be permitted to engage in teaching during their appointments.