

is mainly a research institution, operating laboratories in mineralogy, paleontology, botany, marine life, entomology, herpetology, ornithology and Indian archeology. The greater part of this work is conducted in the field. It also has a broad educational program in the public and private schools, as well as in other institutions of the state. This work is conducted by a special department of education.

The organization has conducted expeditions in Haiti, Santo Domingo and the Bahamas, as well as in various parts of Maryland. Through these expeditions the society has added several new species and a genus to our fauna and has worked out, for the first time, life histories of a number of vertebrates. It has also discovered minerals hitherto unreported in Maryland and has unearthed new fossils.

At present the society is engaged in important projects of special interest to our state, a few of which will suffice to give some idea of their scope. For the past summer and fall, the department of marine research has been studying the life histories of the fish of the Chesapeake Bay and its tributaries, in connection with the Chesapeake Biological Laboratories at Solomons Island, Maryland. The undersea work is being done by utilizing an undersea tank called the "Bentharium" devised by two of the members.

In herpetology work is going on in conjunction with the American Museum of Natural History. Studies made in southern Maryland concern the courtship of the lizards.

A survey of the fossil life of the state is being carried on vigorously. For the past two years the work has been in the Eocene deposits. The Miocene has been completed after seven years of untiring energy.

A similar survey is being made of the insect life, and a leaflet is now in preparation on the butterflies as an accompaniment to the previously published leaflet on "The Familiar Moths of Maryland."

In botany, a check list is being compiled of our trees.

A list of minerals has just been completed to be published shortly, and a like list is under way in ornithology; a check list of the birds of the State Forest Reserve is ready for publication.

For years the department of Indian archeology has been spotting our former Indian village sites, work in several of the counties having been so far completed.

The department of education, besides its program of school lectures, exhibitions, and loan material, will this spring open a Nature Trail of several miles, culminating in a Trail Side Museum in the Forest Reserve. This work is in cooperation with the State Department of Forestry and the Civilian Conservation Corps.

The publications of the society include a monthly bulletin (mimeographed), proceedings and guide leaflets.

PROFESSOR AMES AND PROFESSOR JACK OF THE ARNOLD ARBORETUM

THE following resolutions in appreciation of Professors Oakes Ames and J. G. Jack, respectively, who have retired from the Arnold Arboretum, Harvard University, were passed at a recent meeting of its

staff. The resolutions are signed by Alfred Rehder, associate professor of dendrology and curator of the herbarium; J. H. Faull, professor of forest pathology, and Hugh M. Raup, research associate.

Professor Ames

Dr. Charles Sprague Sargent, the first director of the Arnold Arboretum, passed away in the spring of 1927. During the more than fifty years of his directorship he had established a unique, world-renowned institution, a great arboretum for the scientific study of woody plants. Hence a heavy responsibility rested on the administrators of Harvard University when it came to choosing his successor.

The choice fell on Professor Oakes Ames and he accepted the undertaking under the title "Supervisor of the Arnold Arboretum." The outcome has more than fulfilled anticipations. Beginning with a clear understanding of the functions and the policies of the arboretum, he has both successfully maintained the traditions of the arboretum and skillfully carried through a sound, progressive program of development.

While it may not be possible at this time to measure accurately the relative values of his various accomplishments, several unquestionably take rank as of eminent importance. At the very outset he led a movement among friends of the arboretum which quickly resulted in a large increase of its endowment. This enabled him to guide the arboretum safely through the many years of severe business depression which the country was soon to experience and at the same time to accomplish a remarkable expansion of its scientific activities. Among the latter, special mention should be made of the enlargement of the scientific work of the arboretum to include research in anatomy, ecology, genetics and pathology of woody plants. Likewise there was added to the arboretum a tropical station in Cuba and there was effected a working connection with the Harvard Forest. Finally, a warm, cooperative spirit was cultivated, expressed in part by the contribution of various courses to Harvard College that bound the arboretum more closely than ever before to the other biological interests of the university.

Noteworthy among other features of Professor Ames's incumbency as supervisor have been construction of new greenhouses and a laboratory for plant pathology on the Bussey grounds, the addition of many new plants to the outdoor collections and to the herbarium, the improvement of the physical condition of the grounds, a great enrichment of the library, a widening of the scope of the *Journal*, and the inauguration of a handsome series of memoirs under the title "Contributions from the Arnold Arboretum." Besides all of these there are certain intangibles that can only best be appreciated by those so fortunate as to be directly associated with him.

We, the staff of the Arnold Arboretum, gratefully express our recognition of these many services rendered by Professor Ames. We cherish the recollections of his supervisorship and our happy associations with him. We shall keenly miss the presence of his genial personality and the advantages of his wise counsels, and regret that

in lightening his load of official duties he has deemed it best to relinquish his fruitful connections with the arboretum. With his retirement as supervisor there is now brought to a close a second notable chapter in the history of the arboretum.

Professor Jack

After having been connected with the Arnold Arboretum for nearly fifty years, Professor J. G. Jack retired on October 1, 1935. On this occasion the staff of the Arnold Arboretum wishes to express its great appreciation of the efficient services he rendered to the institution during this long time. Coming to the arboretum in 1886, he saw it grow from modest beginnings to its present size and importance; in this development he played no small part and did his full share in the work. One of his chief duties was the keeping of the exact records of all the plants introduced into the ever-growing collections to which he himself added considerably. He was the first to introduce, during a voyage to the Far East in 1905, plants of the then little known flora of Korea, among them the handsome Korean azalea; he also brought back from collecting tours in the Rocky Mountains and

the Pacific Coast many interesting trees and shrubs new to the garden. As teacher, consultant and lecturer, he succeeded in interesting a wide circle of men and women in the work of the arboretum and gained for it many friends who, in turn, were of great help to the institution financially and in other ways. More recently he played an important part in the development of the tropical branch of the Arnold Arboretum, the Atkins Institution of the Arnold Arboretum in Cuba; for a number of years he spent several months each winter in Cuba, collecting plants and seeds for the garden and creating an herbarium representing the flora of the surrounding country, which is of great help to the students of the university working there. The herbarium of the arboretum itself also profited greatly from his activity in Cuba and from his travels abroad and in this country.

We rejoice in his long term of fruitful and honorable connection with the arboretum and express our deep regard for him personally and for what he has meant to the institution. The members of the staff are pleased to see that after his retirement he has not lost interest in the arboretum but continues to help in its work, and they hope they will have the pleasure of seeing him here for many years to come.

SCIENTIFIC NOTES AND NEWS

THE presentation of the Catherine Wolfe Bruce Gold Medal of the Astronomical Society of the Pacific to Professor Armin O. Leuschner, of the University of California, was made on the evening of February 24. Dr. Seth B. Nicholson, of the Mount Wilson Observatory, made the presentation. Dr. Leuschner delivered an address entitled "The Story of Andromache—An Unruly Planet."

THE Lamme Medal of the American Institute of Electrical Engineers has been awarded to Dr. Vannevar Bush, vice-president of the Massachusetts Institute of Technology and dean of the School of Engineering, "for his development of methods and devices for application of mathematical analysis to problems of electrical engineering." The medal and certificate will be presented to him at the annual summer convention of the institute, which is to be held in Pasadena from June 22 to 26.

DR. PETER H. BUCK (TE RANGI HIROA), who was recently elected to succeed Professor Herbert E. Gregory as director of the Bernice P. Bishop Museum, Honolulu, has been awarded the Rivers Memorial Medal for 1936. The award is for "meritorious field work in physical and cultural anthropology."

THE Moulton Gold Medal of the London Institution of Chemical Engineers has been awarded to R. W. Powell and Dr. Ezer Griffiths for their paper on "The Evaporation of Water from Plane and Cylindrical Surfaces."

ON the occasion of the celebration of the sixtieth anniversary of the founding of the Johns Hopkins University on February 22, Dr. Isaiah Bowman made his first address as president of the university. There were no formal installation ceremonies. The honorary degree of LL.D was conferred on Dr. Irving Langmuir, associate director of the Research Laboratory of the General Electric Company; on Dr. Westel W. Willoughby, professor emeritus of political science at the Johns Hopkins University, and on Dr. William Holland Wilmer, until his retirement last year director of the Wilmer Institute of Ophthalmology.

DR. JOHN A. FLEMING, director of the Department of Terrestrial Magnetism of the Carnegie Institution of Washington, was elected on January 21 a corresponding member of the Chr. Michelsen Institute of Science and Intellectual Freedom of Bergen, Norway.

DR. STEPHEN TIMOSHENKO, of the University of Michigan, has been appointed professor of theoretical and applied mechanics at Stanford University.

DR. E. V. APPLETON, Wheatstone professor of physics in the University of London and formerly fellow of St. John's College, Cambridge, has been elected to the Jacksonian professorship of natural philosophy at the University of Cambridge from October 1, 1936.

DR. WILBERT J. HUFF, head of the department of gas engineering of the Johns Hopkins University, has