

attend one of his lectures to receive anew the inspiration of earlier days. Although Dr. Hill was absorbed in his research the major part of his lecture work was with freshmen, and no one knows how many of these young men were inspired by his wonderful qualities as a teacher.

Aside from his superb ability as an instructor he was an indefatigable worker in his own research laboratory. Many graduate students have worked under his direction. He was not content, however, unless he too was actually carrying on research. His investigations were largely of an inorganic or physical nature, including analytical problems and the solubility relationships in binary, ternary and quaternary systems. His most important publications were with respect to the application of the phase rule to heterogeneous systems.

Although absorbed in his teaching and research he

found time to serve as dean of the College of Arts and Pure Science in 1932-33 and in 1935-36.

He became a member of the American Chemical Society in 1901 and served as chairman of the New York Section, councilor of the section, chairman of the physical and inorganic section, associate editor of the *Journal* and was a member of the Chemists Club.

We, his colleagues, his students and his associates in chemistry, will miss the inspiring presence of Dr. Arthur E. Hill. His place can not, we feel, be filled as he would have filled it. We all, however, feel grateful to have known such a man, to have been associated with him and to have been helped by him. He has left us a fine example of rectitude and devotion to duty which will be a vital force for many years to come.

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SCIENTIFIC EVENTS

THE SWEDISH STATE INSTITUTE OF NATIONAL HEALTH

IN 1936 the Swedish Government instructed certain authorities on different aspects of hygiene to study and report on the possibilities of creating a representative State Institute of National Health.

The British Medical Journal reports that the plan recommended by the authorities consulted has now been published in the form of a 78-page report supplemented by architects' drawings. It is proposed that the three main activities of the new institute shall concern (1) general hygiene, (2) occupational hygiene and (3) dietetics and food control. In each of these three main spheres the institute will conduct investigations and will serve as an adviser both to the authorities and to the general public. It must also give instruction in social welfare and medicine to doctors, nurses and health inspectors, and must also organize health propaganda. A most important activity will be the health aspects of housing. Maternity and child welfare, the care of the tuberculous, medical statistics and medical and social legislation will also be the concern of the institute. It will further deal with the injuries and ailments resulting from faulty conditions of employment. The working conditions of young people and women, working hours and the public health aspects of rationalization in industry will also be dealt with. The control of the manufacture and sale of foodstuffs will be supplemented by certain educational activities with regard to the composition of household dietaries. All these and many other activities are to be conducted in one and the same block of buildings, which will house the administrative staff, the library and the museum. The architect's plans provide for some 170 rooms. It is calcu-

lated that the buildings will cost Kr. 1,800,000, and the furnishing about Kr. 400,000. The annual cost of salaries will be Kr. 240,000, and other expenses Kr. 110,000. It is not expected that the buildings will be completed at the earliest before some time in 1940.

STUDY OF THE DISTRIBUTION OF THE FERNS AND FLOWERING PLANTS OF PENNSYLVANIA

WITH a number of institutions cooperating, a comprehensive study of the distribution of the ferns and flowering plants occurring naturally in Pennsylvania is being made in the department of botany of the University of Pennsylvania. The study involves the handling of approximately 300,000 botanical records and has been made possible by the assignment of a special technical and clerical staff from the Works Progress Administration.

Dr. John M. Fogg, Jr., assistant professor and curator of the herbarium, is directing this study. Other members of the faculty and a group of graduate students in botany are assisting in scientific aspects of the project. In addition to the University of Pennsylvania, other institutions in the state, including Pennsylvania State College, the Carnegie Museum and the University of Pittsburgh, the State Herbarium at Harrisburg and the Academy of Natural Sciences in Philadelphia are cooperating by making available all pertinent records and information.

According to Dr. Fogg, a separate card upon which is printed the entire list of sixty-seven Pennsylvania counties is being used to record detailed information concerning each one of the 3,000 or more species of ferns and flowering plants which must be covered in the survey.

Thus, if specimens of a certain plant have been collected in Wayne, Lehigh and Westmoreland Counties, that information is entered on the card under those counties. In each instance, there is recorded the exact locality where the specimen was found; the collector's name, date of collection and the institution having the specimen on deposit. Accompanying each card, which measures ten by fourteen inches, there is a second card bearing an outline map of the state with county divisions and outstanding physical features. On these maps small dots are placed to designate localities at which the specimens of a particular species have been found. The completed map therefore enables students to visualize at a glance the exact known distribution of a given species within the state and to determine the physical factors controlling its occurrence.

Only one set of maps and cards is being prepared for each species, but they are so designed as to lend themselves readily to reproduction on micro-film. Thus it will be possible to furnish to interested institutions and individuals a copy of all records made. Eventually, the entire results of the study will be published in a volume which will include not only the information on the cards and maps, but also data concerning soil conditions, climatic factors and other dynamic influences affecting distribution of the native plants.

The 300,000 specimens upon which records and information essential to the study are based are distributed approximately as follows: The Carnegie Museum and the University of Pittsburgh, 100,000; the Academy of Natural Sciences in Philadelphia, 100,000; the University of Pennsylvania, 50,000, and the State Herbarium and Pennsylvania State College, 25,000 each.

HONORARY MEMBERS OF THE HORTICULTURAL SOCIETY OF NEW YORK

THE Horticultural Society of New York, in tribute to outstanding horticulturists of the United States, has elected the following to honorary membership:

Professor Liberty Hyde Bailey, professor of horticulture at Cornell University from 1888 to 1903; dean and director of the New York State College of Agriculture from 1903 to 1913 and now emeritus professor of agriculture at Cornell.

Dr. David Fairchild, member of staff of the Bureau of Plant Industry, United States Department of Agriculture, from 1889 until his recent retirement as senior agricultural explorer.

Dr. U. P. Hedrick, until his recent retirement director for many years of the New York State Agricultural Experiment Station at Geneva. He was the recipient of the White Medal for horticultural work in 1926 and the Wilder Medal in 1930.

William Hertrich, superintendent of the Huntington Garden, San Marino, Calif.

Dr. J. Horace McFarland, leader in conservation and development of parks; president emeritus of the American Rose Society; lecturer, author, developer of Breeze Hill Gardens for testing roses and other ornamental plants and recipient of George Robert White Medal of honor for horticulture.

B. Y. Morrison, principal horticulturist in charge of the division of plant exploration and introduction of the United States Bureau of Plant Industry since 1934; acting director of the National Arboretum in 1937 and since 1926 editor of the *National Horticultural Magazine*.

Professor A. P. Saunders, professor of chemistry at Hamilton College, Clinton, N. Y., since 1900, and dean of the faculty from 1909 to 1926; noted for his work in plant breeding and the promotion of horticulture.

John C. Wister, secretary of the Pennsylvania Horticultural Society for many years and director of the Arthur Hoyt Scott Foundation for Horticulture.

THE DUNDEE MEETING OF THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

THE British Association for the Advancement of Science will meet at Dundee, Scotland, from August 30 to September 5. The inaugural general meeting will take place in Caird Hall, City Square, at 8:30 P.M. on Wednesday evening, August 30, when Sir Albert Seward will deliver the presidential address on "The Western Isles through the Mists of Ages."

The preliminary program states that having in view the aims, which are among those prescribed for the association in the first statute adopted on its foundation, namely, "to obtain more general attention for the objects of science, and the removal of any disadvantages of a public kind which impede its progress," the council, in cooperation with the sections and the Division for the Social and International Relations of Science, have considered the growing strength of the public demand for a more systematic presentation of selected subjects of scientific investigation in their bearing on the life of the community. It calls special attention to this division, which was established at the Cambridge meeting in 1938 and which will hold sessions during the Dundee meeting. The following provisional program is being arranged:

Thursday, August 31. Afternoon session for papers and discussion on the coordination of scientific research on population and other topics.

Sunday, September 3. Evening meeting, open to members and the public, at which Sir Richard Gregory, Bart., chairman of the division, will deliver an address on "Science and Social Ethics."

Wednesday, September 6. Morning session devoted to discussion on nutrition.

The division is empowered to hold sessions at times