

Historically, its preservation is most fitting, for this tract is part of the actual forest that gave the name Pennsylvania to the province when it was granted to William Penn in 1681. Indeed, the association began its work for the preservation of this tract as its part of the program of celebration in 1932 of the 250th anniversary of the coming of William Penn to his province. Philadelphia and other cities along the Delaware celebrated that event in various beautiful and appropriate ways, but for lovers of the out-of-doors, and Penn himself was one, the preservation of this large tract of Penn's own woods will be counted perhaps first in such a memorial program.

GRANTS OF THE ELLA SACHS PLOTZ FOUNDATION

DURING the eleventh year of the Ella Sachs Plotz Foundation for the Advancement of Scientific Investigation, eighty-three applications for grants were received by the trustees, forty of which came from the United States, the other forty-three from thirteen different countries in Europe, Asia and Africa. The total number of grants made during 1934 was twenty-seven, one of these being a continued annual grant. Fourteen of the new grants were made to those working in science outside of the United States.

In the eleven years of its existence, the foundation has made two hundred and twenty-seven grants, and investigators have been aided in Argentina, Austria, Belgium, Chile, China, Czechoslovakia, Esthonia, France, Germany, Great Britain, Hungary, Italy, Jugoslavia, Latvia, Netherlands, Palestine, Poland, Portugal, Roumania, South Africa, Sweden, Switzerland, Syria and the United States.

The list of investigators and the purpose of their researches aided during 1934 is as follows:

Dr. Z. M. Bacq and Dr. M. Florkin, Liège, Belgium, study of the action of various drugs, in relation to the autonomic nervous system, and to the potassium content of the blood serum; Dr. S. J. Crowe, Johns Hopkins Hospital, continuation of experiments on the physiology of the ear; Professor Ludwig Braun, Vienna, Austria, continuation of studies of heart disease; Dr. Douglas R. Drury, University of Southern California Medical School, investigation of experimental renal insufficiency; Dr. Hans Dworzak and Dr. Kurt Podleschka, Prague, Czechoslovakia, study of the growth of ovaries transplanted into the eyes of rabbits as influenced by different hormones; Professor Dr. Philipp Ellinger, London, England, continuation of work on the physiology, pathology and pharmacology of the kidney, and research on microscopical observations of the beginnings of cancer by method of intravital staining; Dr. Giovanni Favilli, Florence, Italy, work on *Brucella* polysaccharides; Professor René Gayet, Paris, continuation of researches on the output of blood from various organs; Dr. Arthur Grollman, Johns Hopkins University Medical School, continuation of chemical studies on the nature of the adrenal cortical hormone and an investigation of its physiological interrela-

tionships in the organism; Dr. Ellis H. Hudson, Deir-ez-Zor, Syria, investigation of the Arab type of childhood syphilis; Dr. H. D. Kay, Berks, England, investigation concerning the relationship of phosphorus deficiency to rickets; Dr. Edgar Lederer, Paris, continuation of work on carotinoids and vitamins; Dr. David Marine, Montefiore Hospital, further study of experimental exophthalmos and thyroid hyperplasia together with the effect of the antioxydant agent (ascorbic acid) on these conditions; Dr. Ernst Mueller, Presbyterian Hospital, New York City, capillary pressure estimations; Dr. John P. Peters, Yale University School of Medicine, certain studies of water and salt metabolism, with special reference to nephritis; Dr. Hermann Pinkus, University of Michigan Medical School, investigations with cultures of human tissues, particularly in connection with cancer work; Dr. Eugene Pollak, Vienna, Austria, study of lipid catabolism in the central nervous system; Professor Hans Pringsheim, Paris, researches in the chemistry and biochemistry of polysaccharides; Dr. Samuel H. Proger, Boston Dispensary, continuation of work on the effect on patients with heart disease of lowering the level of energy metabolism by means of prolonged dietary restriction; Dr. Jane Sands Robb, Syracuse University Medical School, study of the conduction paths in the mammalian ventricles; Professor Rothberger, Vienna, Austria, electrocardiographic research; Thorndike Memorial Laboratory, Boston City Hospital (Professor George R. Minot, director), continued since 1927 in recognition of Dr. Francis W. Peabody's services to the foundation; Professor Waldschmidt-Leitz, Prague, Czechoslovakia, study of the ferments in cancer; Dr. Carl J. Wiggers, Western Reserve University, continuation of work on the dynamics of the coronary circulation; Dr. William F. Windle, Northwestern University, study of the development of behavior in the embryo correlated with the development of intrinsic structure in the nervous system; Dr. M. M. Wintrobe, Johns Hopkins Hospital, studies of the morphological changes in red blood corpuscles in animals; Professor René Wurmser, Paris, continuation of studies of oxidation reduction phenomena in cells.

The maximum size of grants will usually be less than \$500. Applications for grants to be held during the year 1935-1936 must be in the hands of the executive committee before May 1. There are no formal application blanks, but letters asking for aid must state definitely the qualifications of the investigator, the character of the proposed research, the size of grant requested and the specific use of the money to be expended. Only applications complying with the above conditions will be considered. It is also highly desirable to include letters of recommendation from the directors of laboratories or clinics in which the work is to be done.

THE ANNUAL MEETING OF THE SMITHSONIAN INSTITUTION

NOTABLE scientific advances in the face of seriously curtailed income were reported to the Board of Re-

gents of the Smithsonian Institution, at their annual meeting on January 17. Dr. Charles G. Abbot, the secretary, reports that while it has been necessary to curtail seriously research, explorations and publications, the year has been exceptionally fruitful. Very significant progress is believed to have been made in the study of the dependence of weather upon variations in the sun's heat and also much accurate data have resulted in the Division of Radiation and Organisms. Notable archeological progress was made by CWA projects in charge of members of the institution's staff. Otherwise field work was reduced to a minimum, owing to lack of funds.

Dr. Abbot announced one bequest, amounting to more than \$58,000, from William Herbert Rollins, of Boston, to establish a fund "for exploration beyond the boundary of knowledge." New specimens to the number of 340,780 were added to the collections of the National Museum. These included valuable anthropological materials from Africa, Honduras, Nicaragua, Australia, Alaska and various regions of the United States; large collections of mammals, birds and other forms of life from China and Siam; unusually large collections of insects, one alone numbering 69,000 specimens; and many important plant specimens from North and South America, Hawaii, Poland and French Indo-China.

Among the large number of rocks, gems, meteorites and fossils obtained, special mention was given by Dr. Abbot to the collection of 25,000 rocks assembled by the late Dr. Henry S. Washington, one of the world's leading petrologists, and to the Tellef Dahll collection of minerals from Norway. An important addition to

the Arts and Industries collection was the airplane in which Galbraith P. Rodgers completed the first flight across the United States in 1911. To the historical collections Mrs. Herbert Hoover added a costume worn by her at the White House.

The collections of the Freer Gallery of Art were increased during the year by specimens of Arabic bookbinding, Chinese bronzes, Chinese and Persian ceramics, Arabic glass, Chinese gold work, an Armenian manuscript, and Chinese, Byzantine, Indian and Persian paintings. The need was stressed for more adequate buildings for the National Zoological Park, with more than 2,000 valuable animals.

Work has continued during the year, he reported, on intensive study of the biological specimens obtained by the Johnson-Smithsonian Deep-Sea Expedition to the Puerto Rican Deep last year, and fifteen papers describing new forms have been published. The year marked the conclusion of the research of Dr. C. U. Clark in European archives for material concerning the early history and exploration of America. Some very valuable manuscripts were brought to light, which would be published if funds were available.

Chief Justice Charles Evans Hughes, chancellor of the Smithsonian Institution, presided at the annual meeting of the regents. The board is composed of the following members: Vice-president Garner; Senators Joseph T. Robinson and M. M. Logan; Representatives T. Alan Goldsborough and Charles L. Gifford, and Irwin B. Laughlin, Frederic A. Delano, John C. Merriam, R. Walton Moore, Robert W. Bingham and Augustus P. Loring.

SCIENTIFIC NOTES AND NEWS

THE council of the British Institution of Electrical Engineers have awarded the Faraday Medal to Dr. Frank B. Jewett, president of the Bell Telephone Laboratories and vice-president of the American Telephone and Telegraph Company.

THE two gold medals of the American Institute, established more than a century ago, have been awarded this year to the Rev. Julius A. Nieuwland, Notre Dame University, and to Dr. Carl D. Anderson, the California Institute of Technology, it has been announced. Presentation of the medals took place at the annual dinner of the American Institute at the Hotel Astor on February 7. The award to Father Nieuwland is for his discovery of a process for making synthetic rubber. Dr. Anderson is honored for his discovery of the positron, of the positive electron, a new fundamental unit of matter, having the mass as the electron but carrying a positive unit of electric charge.

THE 1935 gold medal of the Royal Astronomical

Society of London has been awarded to Professor E. A. Milne, Rouse Ball professor of mathematics at Oxford University, "for his work on radiative equilibrium and theory of stellar atmospheres." The gold medals for the previous two years were awarded to Professor V. M. Slipher, of the Lowell Observatory, in 1933, and Dr. Harlow Shapley, of the Harvard College Observatory, in 1934.

PROFESSOR HAROLD C. UREY, discoverer of heavy water and winner of the Nobel Prize in chemistry for 1934, was honored at a farewell dinner on the night of February 1 by the Chemists' Club in New York City. Professor Urey, accompanied by Mrs. Urey, sailed on February 2 on the *S. S. Gripsholm* for Sweden, where he will deliver the Nobel address before the Swedish Royal Academy of Science on February 14. About 125 metropolitan chemists, including the board of trustees of the Chemists' Club, attended the dinner. Professor Victor K. LaMer, of Columbia University, de-