

schools, colleges and universities throughout the Commonwealth. This pamphlet summarizes the basic principles of geology and presents a condensed résumé of the geology of Pennsylvania. Following its distribution, return-reply cards were mailed to persons likely to be interested in field trips in two selected regions. It was thought advisable to begin with a limited number of trips until it was determined how the scheme would be received. Three excursions were subsequently held. On May 4, two trips were conducted, the first in the morning and the second in the afternoon, in the region of Chambersburg. These were in charge of R. W. Stone and Dr. Bradford Willard, of the Geologic Survey, and Walter E. Hess, of the Department of Public Instruction. Mr. Hess handled practically all the distributing of the literature and notifying the science teachers in high and normal schools. On May 11 a single trip was conducted by Dr. Willard at Stroudsburg. Mr. Hess again represented the Department of Public Instruction.

Elements of physiography, structural geology, paleontology, stratigraphy, mineralogy and economic geology were discussed on the trips with actual illustrations in the field. An average of 40 attended each of the three trips. The relatively small number made for easier handling of the parties and greater individual attention to questions. On the whole the trips were considered satisfactory both by the persons attending them and those who were instrumental in their planning and execution. Because of their success it is hoped to conduct similar trips in different parts of Pennsylvania in the future.

BRADFORD WILLARD

#### GRANTS FOR RESEARCH OF THE AMERICAN ACADEMY OF ARTS AND SCIENCES

At its meeting on April 10, the American Academy of Arts and Sciences announced grants-in-aid from the Permanent Science Fund as follows:

To Frank M. Carpenter, Museum of Comparative Zoology, Cambridge, \$350, for expenses in connection with a collecting expedition to Kansas for the purpose of adding material necessary for his work on a "Revision of the Lower Permian Insects of Kansas."

To Tenney L. Davis, Massachusetts Institute of Technology, \$300, for technical assistance in the preparation and analysis of certain compounds essential to the completion of his study of the reaction of phosphorus trichloride with cuprous chloride.

To Fred W. Emerson, New Mexico Normal University, Las Vegas, \$100, for aid in defraying expenses in connection with a study of the plant associations in the White Sands area near Alamogordo, New Mexico, and in collecting material for the study of palisade cells in desert plants.

To Walter S. Hunter, Clark University, \$150, for apparatus, assistance and other expenses to be incurred in investigating the inhibition and disinhibition of conditioned reflexes in human subjects.

To J. W. McBain, Stanford University, \$250, for material and equipment to be used in a study of adsorption in the air-water interface of various solutions.

To Arthur S. Graves, Brooklyn Botanic Garden, \$250, to help meet expenses in an investigation designed to produce a chestnut resistant to *Endothia parasitica*.

To Professor Robert Weill, of the Faculty of Sciences of the University of Paris, \$300, for aid in defraying expenses of a visit to the Bermuda Biological Station to study the nematocysts of Coelenterates.

Applications for grants-in-aid from the Permanent Science Fund of the American Academy of Arts and Sciences will be received by the committee until September 15, 1935, for action at the October meeting of the academy. Applications should be made to Professor E. M. East, *Chairman*, Permanent Science Fund Committee, Bussey Institution, Forest Hills, Boston, Mass.

#### AWARDS OF LATIN AMERICAN FELLOWSHIPS

THE award of six fellowships of the John Simon Guggenheim Memorial Foundation to Latin American scholars who will come to the United States has been announced.

These fellowships are granted on terms generally similar to those governing the John Simon Guggenheim Memorial fellowships awarded to citizens of the United States. They are awarded to men and women, married or unmarried, without distinction of race, color or creed. The stipends both for Latin America and for the United States are usually \$2,000 a year.

At the present time Latin American fellowships are available to citizens of Argentina, Chile, Cuba and Mexico, and also to Porto Ricans. The selection of the fellows whose names are now announced was made by a committee which met in New York, with the advice and assistance of leading scholars and advisory committees in the countries concerned. Two hundred applications were presented this year.

The awards now announced to assist the investigations specified are as follows:

PROFESSOR ALFREDO BAÑOS, JR., professor of theoretical physics, National University of Mexico: Studies of the physical nature of dielectric constant and of the conductivity of dielectrics, at the Massachusetts Institute of Technology.

DR. PEDRO J. BERMÚDEZ HERNÁNDEZ, assistant in zoology and paleontology, University of Havana, Havana, Cuba: Studies of Foraminifera, especially from the paleontological point of view, with the purpose of contributing to a correlation of the Eocene faunas of Cuba