topography off the Atlantic coast, beyond the 1,000-fathom line.

\$6,300 to Alfred C. Lane, Cambridge, Massachusetts, for continuing determination of ages of rock specimens by the helium method.

\$750 to G. Marshall Kay, New York City, for a study of the structure of northeastern Ontario with view to correlating the peneplane of central Ontario and revising paleogeographic maps.

\$500 to Frank M. Swartz, State College, Pennsylvania, study of ostracoda from Lower Devonian-Upper Silurian beds, chiefly from southeastern New York and New Jersey.

\$405 to Raymond E. Peck, Columbia, Missouri, covering collecting and studying oogonia and ostracoda from late Cretaceous and early Tertiary beds of Wyoming, eastern Idaho and Montana.

\$1,200 to Robert T. Hill, Dallas, Texas, to continue investigation of the history of geological exploration of the southwest.

\$2,000 to Frank F. Grout, Minneapolis, Minnesota, contribution to the support of the University of Minnesota Laboratory for Rock Analysis, in the service of petrologic science.

\$300 to William C. Putnam, Los Angeles, California, completion of physiographic study of the Ventura region, California.

\$1,200 to Roger Revelle, Scripps Institution of Oceanography, of the University of California at La Jolla, California, systematic study of sediments from the floor of the Pacific.

\$100 to Horace R. Blank, Waco, Texas, for analyses supporting investigation of the occurrence and nature of an unusual feldspathoid dike rock encountered in one of the many tunnels in the Manhattan schist under New York City.

\$340 to Nelson H. Darton, Washington, D. C., to continue an investigation of overlap relations of Tertiary and Cretaceous formations in eastern Maryland and Virginia.

PHYSICS IN THE AUTOMOTIVE INDUSTRY

THE many applications of the science of physics in the automotive industry will be the subject of a symposium to be held under the auspices of the American Institute of Physics at the University of Michigan, Ann Arbor, on March 14 and 15. The meeting will be open to physicists and to all other scientific or technical men interested. Only a preliminary announcement can be made at this time of the extensive program of papers which will be presented. Any one interested may receive a final announcement by mail on request to the office of the institute in New York.

The tentative list of speakers includes:

Lyman J. Briggs, director, National Bureau of Standards.

K. T. Keller, president, Chrysler Corporation.

Charles F. Kettering, vice-president of General Motors

Corporation and director of General Motors Research Laboratory.

- M. Muskat, Gulf Research and Development Corporation.
- J. S. Thomas, president, the Chrysler School of Engineering.
- E. J. Martin, the General Motors Research Laboratory.
- Paul Huber, Proving Grounds, the General Motors Corporation.
- Lloyd Withrow and Gerald Rassweiler, the General Motors Research Laboratory.
- F. A. Firestone, department of physics, the University of Michigan, and others.

The subjects to be discussed will include the general relationship of physics to the automotive industry, scientific training and a number of technical topics, such as seeing and lighting in connection with highway hazards, lubrication, noise measurement and other phases of automotive acoustics, physical methods of studying engine combustion, instruments, spectrochemical analysis, theory of materials and others. Many of the papers presented will be published later in the Journal of Applied Physics.

The department of physics at the university will act in the capacity of host. Excellent and economical facilities will be available for lodging and meals. There will be a dinner for all attending the symposium on the evening of March 14. Dr. Charles F. Kettering will deliver the principal address on the subject "Scientific Training and its Relation to Industrial Problems." An inspection tour of the laboratory is being arranged showing the facilities for research and instruction with particular emphasis on current or completed researches of industrial importance. Ann Arbor is situated about forty miles west of Detroit, the principal railroad being the Michigan Central (New York Central Lines).

THE AMERICAN PHILOSOPHICAL SOCIETY

A JOINT meeting of the American Philosophical Society, Philadelphia, with representatives of organizations and institutions concerned with the publication of research will be held on February 18 and 19.

On Friday morning and afternoon round-table conferences will be held, over which Dr. Edwin G. Conklin, vice-president of the society, will preside. Jacob R. Schramm, editor-in-chief of *Biological Abstracts*, professor of botany and director of the department of botany at the University of Pennsylvania, and Robert C. Binkley, chairman of the Joint Committee on Materials for Research of the American Council of Learned Societies and Social Science Research Council, will open the discussion of the following subjects: "Possible Economies in the Conventional Methods of Publishing" and "Auxiliary Methods of Publishing."