before. The funds consisted of a deed of trust for \$700,000, left in 1847 by James Lick.

GRANTS FOR RESEARCH OF THE VIRGINIA ACADEMY OF SCIENCE

At the recent meeting of the Research Committee of the Virginia Academy of Science, the following grants were made in aid of scientific research in Virginia:

To Dr. J. W. Beams, of the University of Virginia, \$150.00 for the study of the initiation of lightning discharges. He plans to photograph lightning discharges with a special camera which will make a million or more exposures each second.

To W. B. Bell, of the Virginia Polytechnic Institute, \$28.50 to enable him to purchase a LaMotte blood pH outfit with which to study the reaction of the blood of normal and leukotic fowls. This work will be done in connection with Dr. E. P. Johnson, who won the academy prize last year for his work on the leukosis of fowls.

To Dr. Walter S. Flory, of Bridgewater College, \$70.00 with which to purchase an oil-immersion objective and other accessories for the microscope needed in his study of the genetic cytology of the genus gilia of the phlox family. This is part of an extensive study of the character and significance of the chromosomes of various plants which is in progress at the Blandy Experimental Farm of the University of Virginia under the direction of Dr. O. E. White.

To Dr. H. B. Haag, of the Medical College of Virginia, \$50.00 with which to purchase pigeons needed in the development of his new method of assaying preparations of digitalis.

To Dr. Carl C. Speidel, of the University of Virginia, \$50.00 with which to purchase supplies for photomicrographic work in his study of living cells.

To Dr. Edward Steidtmann, of the Virginia Military Institute, \$100.00 with which to purchase an electric hydrogen-ion apparatus for use in his study of the relation of hydrogen-ion concentration of the water to the formation of travertine deposits in the streams near Lexington, Va.

The money thus appropriated is the income from a trust fund which was raised for the academy a few years ago by Dr. J. Shelton Horsley when he was president. The purpose of the trust fund is to encourage and develop scientific research in Virginia.

Besides these grants made directly to research workers, the Research Committee, which administers the fund, also awards a prize of \$50 each year at the annual meeting of the academy for an especially meritorious paper presented at that meeting.

These grants are made only to members of the Virginia Academy of Science, but the Research Committee is greatly interested also in the development and encouragement of scientific research in Virginia outside of its own membership and invites persons

who have problems on which they need advice or assistance of any kind to communicate with any member of the committee or with the secretary of the academy.

The members of the Research Committee and their fields of interest are: Dr. William G. Guy, of the College of William and Mary, chemistry; Dr. J. Shelton Horsley, of St. Elizabeth's Hospital, Richmond (chairman), medicine; Dean Earle B. Norris, of the Virginia Polytechnic Institute, engineering; Dr. T. McN. Simpson, Jr., of Randolph-Macon College, mathematics, and Dr. O. E. White, of the University of Virginia, biology.

E. C. L. MILLER, Secretary

GRANTS FOR RESEARCH OF THE GEOLOG-. ICAL SOCIETY OF AMERICA

THE council of the Geological Society of America, meeting in New York in October, approved the following grants in aid of geologic research:

A grant of \$3,000 to L. B. Slichter, for assistance and field expenses in connection with an investigation of the elastic properties of the upper crust of the earth.

A grant of \$800 to John P. Buwalda, to cover field expenses in connection with geophysical investigation by seismic methods of the depth of fill in the Yosemite Valley.

A grant of \$150 to Adolph E. Sandberg, to cover field expenses in study of the Keweenawan lavas of the north shore of Lake Superior.

A grant of \$800 to Margaret Fuller Boos, to cover transportation, field and laboratory expenses in study of the youngest pre-Cambrian batholiths in the Front Range, Colorado

A grant of \$230 to P. S. Warren, for field expenses in connection with study of the Mississippian rocks of the Rocky Mountains of Canada, particularly near Crow's Nest Pass, Nordegg and Jasper.

A grant of \$450 to F. Fitz Osborne, for field and laboratory expenses covering investigation of sills intruding the Lower Grenville near Shawinigan Falls, Quebec.

A grant of \$250 to C. E. Resser, to cover field expenses in study of the Cambrian in the southern Appalachians.

A grant of \$350 to Adolph Knopf, to cover the cost of chemical analyses of rocks from the Spanish Peaks, Colorado, in connection with study of the igneous geology of the region.

The council also made the following additional allowances in connection with researches which had received prior support from the society:

An additional grant of \$500 to Paul MacClintock and Horace G. Richards, for completion of study of correlation of the marine deposits of Pleistocene age with those of known glacial origin, along the Central Atlantic Seaboard.