estate is divided into two parcels. The first, comprising General Orton's cone manufacturing business, known as the Standard Pyrometric Cone Co., will be used to establish the foundation. The second will consist of the residue of the estate and is left to Mrs. Orton.

The proceeds of a life insurance policy for $10,000 are left to the Ohio State University for the maintenance there of the Edward Orton Memorial Library of Geology, which General Orton had established in memory of his father, the first president of the university, and to which he had annually given $500 for books.

The will sets up a self-perpetuating board of trustees to administer the foundation. It will consist of the following: The president of the Ohio State University, a representative of the U. S. Bureau of Standards, the head of the engineering experiment station of the Ohio State University, the head of the department of Ceramic Engineering of the Ohio State University, the secretary of the American Ceramic Society and one other representative of the society chosen for a three-year term, and an attorney. The trustees will receive $1 a year and expenses. The trustees are to organize within 90 days and take over the cone business and provide for its operation. The will designates Colonel Simeon Nash, General Orton's attorney, as the attorney member of the board.

If for any reason it becomes impossible to continue to operate the business successfully, the trustees are authorized, with approval of the probate court, to close the business and to turn the assets over to the Ohio State University as part of the irreducible debt of the state of Ohio, the income therefrom to be used for ceramic research either through the university's department of ceramic engineering or its experiment station.

The research division of the foundation may be set up as a part of the cone manufacturing establishment or separately, at the discretion of the trustees. In the latter case, the will suggests, it "would be used principally to stimulate and assist research, and to coordinate, supervise and supplement researches undertaken in the ceramic department and engineering experiment station of the Ohio State University, or by other laboratories or groups of laboratories. . . ." In such case also the research director would be authorized to "furnish personnel or loan equipment to laboratories cooperating with him." The will further provides that results of research promoted by the foundation shall be published "to the end that said results shall be given freely to the public and made available for ceramic engineering use."

The board of trustees is directed not to "sell or permit its agents and employees to sell, or to make any charge, direct or indirect, for any information furnished through or by said research department, to the end that all surplus over and above the cost of production made upon the sale of Standard Pyrometric Cones shall be returned to the ceramic industries in the form of technical knowledge."

The will further provides that, since the estate is "severely depleted" because of the creation of the trust and there has thus been taken from it "its chief income producing element," for five years there shall be paid to Mrs. Orton specified sums from current earnings of the cone business. Mrs. Orton and Colonel Nash were named coexecutors of the will, which requested that they be not required to furnish bond.

MARINE EXPEDITION TO THE WEST INDIES

THE International Expedition to the West Indies completed its work at Miami on March 19. The major results of the expedition include 4,000 miles of sonic sounding and 64 gravity stations at sea and on the island. The maximum depth registered in the Bartlett Trough was 4,000 fathoms, which is supposed to be 400 fathoms deeper than shown on any previous soundings. Twenty-nine of the gravity stations at sea have already been computed and, while it is perhaps too early to make a definite statement as to the major structural characteristics of the West Indian region and especially of the Bahamas, it would appear as if the Bahama region as a whole was acting as a single block of the earth's crust and that this block has undergone vertical movements of the first order.

The determination of gravity on the islands has been under the direction of Lieutenant Joseph P. Lushene, who operated from the yacht *Marmion*, loaned and navigated by Mr. Hugh Matheson, of Miami. Owing to the skill of Mr. Matheson and Lieutenant Lushene, this unit of the expedition succeeded in making 12 gravity stations in approximately 30 days.

The council and personnel of the expedition are deeply indebted to the U. S. Navy, and especially to the personnel of the submarine S-48 and the rescue vessel *Chewink* for their interest and extreme helpfulness in carrying out the program of sonic sounding and determination of gravity at sea. Dr. F. A. Vening Meinesz, who was in charge of the most important part of the program, was assisted by a representative of the Naval Laboratories and Mr. Harry Hess, Procter fellow of geology at Princeton University. Dr. Meinesz and Mr. Hess are at present of the opinion that, while the Bartlett Trough is, as has already been supposed, largely a structural feature and at present probably the main zone of weakness

in the region, the relatively deep areas of the sea, such as Exuma Sound, the Tongue of the Ocean and Providence Channel, suggest the possibility of being drowned river valleys. It will probably be two or three months before the gravity stations and isostatic deductions have all been computed, and it is hoped that the geological significance of the expedition can be reported at that time.

RICHARD M. FIELD

PRINCETON UNIVERSITY

THE PULLMAN MEETING OF THE PACIFIC DIVISION OF THE AMERICAN ASSOCIATION

A PRELIMINARY announcement of the Pullman meeting has just been distributed to members of the American Association for the Advancement of Science resident in British Columbia, California, Hawaii, Idaho, Montana, Nevada, Oregon, Utah and Washington.

Two of the principal addresses to be presented during the meeting will be given by Professor A. O. Leuschner, president of the Pacific Division, and Professor J Harlen Bretz, of the University of Chicago. The subject of Professor Leuschner's address will be "The Astronomical Romance of Pluto." The events that led to the discovery of Pluto, the investigations on its orbit and mass and the question of its nature as a celestial object will be discussed. Professor Bretz's address, which will be on "The Scablands of the Columbia Plateau in Washington," is of special interest in view of a general symposium to be held on "Scientific Problems of the Columbia Plateau."

Under this heading, four topics will be introduced for discussion in the session of Thursday morning, June 16:

Interesting Botanical Areas, Dr. F. L. Pickett, professor of botany, the State College of Washington.

Geological Problems, Mr. M. G. Hoffman, assistant professor of petrology, the State College of Washington.

Economic and Agricultural Problems of the Wheat and Apple Industries, Dr. E. F. Dummeier, professor of economics, the State College of Washington.

Engineering Problems, Dean Ivan C. Crawford, dean of the College of Engineering, the University of Idaho.

In accordance with the custom of recent years, the opening session on Wednesday, June 15, will be devoted to research reviews. The purpose of these is to survey the progress of scientific research on the Pacific Coast and in the Far West, the subjects under investigation being reviewed in the light of their relation to problems of major interest in the sciences at large. Attention will be centered upon a few of the most noteworthy accomplishments in each field. The reviews will be presented as follows:

Astronomy and Astrophysics: Dr. J. S. Plaskett, Dominion Observatory, Victoria, B. C.

Chemistry: Dr. J. B. Ramsey, University of California at Los Angeles.

Physics: Dr. W. V. Houston, California Institute of Technology.

Animal Sciences: Dr. J. E. Guberlet, University of Washington.

Plant Sciences: Professor G. J. Peirce, Stanford University.

The greater part of Thursday and Friday will be given over to the programs of the participating societies. Members proposing to present papers are reminded that titles received later than May 2 can not be published in the association program.

A visit to the University of Idaho, and excursions to Kamiak Butte, Almota Canyon, Moscow Mountain, Bald Butte, Snake River Canyon, Wallowa Mountains and the Scablands are under arrangement. Areas of considerable interest to the biologist and geologist will be visited.

SCIENTIFIC NOTES AND NEWS

THE honorary doctorate of laws was conferred on March 23 by the University of California on Dr. William Wallace Campbell, formerly director of Lick Observatory and from 1923 to 1930 president of the university.

DR. GRAHAM LUSK, professor of physiology in the Cornell Medical College, was recently elected a corresponding member of the Prussian Academy of Sciences.

DR. CHARLES B. DAVENPORT, director of the Station for Experimental Evolution of the Carnegie Institution of Washington, has been elected a member of the German Academy of Sciences at Halle.

THE Priestley Medal of the American Chemical Society has been awarded to Dr. Charles L. Parsons, since 1907 secretary of the society.

THE prize of $1,000 of the American Chemical Society, founded in 1931 by Dr. A. C. Langmuir, has been awarded to Dr. Oscar K. Rice, instructor in chemistry at Harvard University. The prize is awarded to the most promising chemist in North America, less than thirty years old, in recognition of outstanding research in pure chemistry. Dr. Linus Pauling, of the California Institute of Technology, received the award last year.

AT the annual meeting of the Physical Society,