

figures of a Hawaiian surf rider, a Solomon Islander climbing a tree, a Semang pygmy of the Malay Peninsula, an aboriginal Australian man, woman and boy, and a group depicting types of Madura, Borneo, Java and Bali. Busts and heads represent the Dyaks of Borneo, Sakai and Jakun Malays, the Samoans and the Javanese.

A revised edition of the pamphlet, "The Races of Mankind," by Henry Field, assistant curator of physical anthropology, dealing with the exhibits in this hall and with the subject in general, has been issued by Field Museum Press.

#### GRANTS IN AID OF RESEARCH OF THE AMERICAN ACADEMY OF ARTS AND SCIENCES

THE American Academy of Arts and Sciences, at its meeting of October 10, 1934, announced grants-in-aid from the Permanent Science Fund as follows:

To Dr. Joseph A. Cushman, director of the Cushman Laboratory for Foraminiferal Research, Sharon, Mass., \$300 to assist in his work on the foraminiferal fauna collected by the ship *Atlantis* of the Oceanographic Institute.

To Drs. C. V. Green and C. C. Little, Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Maine, \$750 for the care of experimental animals and the preparation and study of microscopic sections of tumors in their work on cancer research.

To Professor Willem J. Luyten, associate professor of astronomy, University of Minnesota, \$250 to assist in an investigation of the proper motions of faint stars in the southern hemisphere.

To Professor Bret Ratner, clinical professor of pediatrics and lecturer in immunology, New York University and Bellevue Medical College, \$375 to aid in his experiments on asthma in the guinea-pig.

To Dr. Robertas Rugh, Hunter College, New York, N. Y., \$100 for the purchase of material needed for the study of induced ovulation and egg transport in the Urodeles, and for the preparation of moving picture films of this process.

To Mrs. Mabel Ruttle-Nebel, New York Agricultural Experiment Station, Geneva, N. Y., \$300 to assist in her study of the chromosome matrix in plants of *Allium*, *Crepis*, *Hordeum*, *Tradescantia*, and *Zea* under various temperatures and nutritive conditions.

To Professor Karl Sax, associate professor of plant cytology, Harvard University, Cambridge, Mass., \$250 to assist in his study of the effect of variations of temperature on certain cytological processes.

To Professor Harry R. DeSilva, professor of psychology, Massachusetts State College, Amherst, \$100 for electrical apparatus needed in his study of metabolism, and

To Mr. V. M. Slipper, director of the Lowell Observatory, Flagstaff, Arizona, \$750 to aid in his work on the spectra of the planets.

Applications for grants-in-aid from the permanent science fund of the American Academy of Arts and

Sciences should be addressed to Professor E. M. East, Bussey Institution for Research in Applied Biology, chairman of the permanent science fund committee, Forest Hills, Mass.

#### SIGMA PI SIGMA CONVENTION

THE third triennial convention of Sigma Pi Sigma was held at Purdue University on October 11, 12 and 13. Several significant questions of national policy were altered, in addition to an unusually extensive program of invited scientific papers. The title "fraternity" was dropped from the name, the association being designated in the future by the term "society." This was thought to be more in keeping with the nature of the society, which has always been an honorary and professional physics organization. At the same time all features involving secrecy were eliminated and additional emphasis will be placed upon the professional objectives of the combined local groups. The society now has a total membership of over 1,400 with about 500 active members in its 27 chapters.

Plans were approved for assisting each initiate to become a member of one or more of the professional physical societies and to encourage subscriptions to their magazines. A subsidy from the national treasury was provided for the purpose of assisting the chapters in bringing in outside speakers for open meetings.

The scientific papers included the following:

Dr. M. N. States, Central Scientific Company, "The Uses of Graphs in Physics."

Dr. I. Walerstein, Purdue University, "New Types of Demonstration Experiments" (with demonstrations).

Dr. H. C. Robertson, Purdue University, "Gyroscopes and Boomerangs" (with demonstration).

Dr. Otto Stern, Carnegie Institute of Technology, "Wave Properties of Molecular Beams."

At the close of the convention the following officers were elected: *President*, Dr. R. C. Colwell, West Virginia University; *Vice-president*, Dr. D. W. Cornelius, University of Chattanooga; *Executive Secretary*, Dr. Marsh W. White, The Pennsylvania State College. Those elected to the council were: Dr. M. N. States, Central Scientific Company; Dr. R. B. Abbott, Purdue University; Dr. J. C. Stearns, University of Denver, and Professor F. A. May, St. Lawrence University.

#### THE CLEVELAND MEETING OF THE NATIONAL ACADEMY OF SCIENCES

As has already been announced in *SCIENCE*, the autumn meeting of the National Academy of Sciences will be held on Monday, Tuesday and Wednesday, November 19, 20 and 21, at the Case School of Applied Science and Western Reserve University. The scientific sessions on Monday and Wednesday will be held in the lecture room of the physical lab-