From these studies Noble drew up a revised classification illustrating the parallel modifications in the different suborders and from the vantage ground thus gained he went on to review the batrachian faunas of the different continents, tracing their spread from a northern origin.

Noble's exhibition work in herpetology culminated in 1927 with the opening of the Museum hall of living amphibians and reptiles; so far as possible at that time this hall embodied his conviction that the proper scope of a museum of natural history was not only to present faithful and beautiful representations of things as they are but especially to stimulate the quest for knowledge of underlying principles.

While Noble was growing up, so to speak, in his Department of Herpetology, he, with the rest of the scientific world, was becoming acutely aware of the importance of the endocrine glands and their secretions from infancy to old age. He soon saw the possibilities in this line as bearing on his own field of metamorphosis, growth and evolution in the amphibians and reptiles. The Department of Experimental Biology was created in 1927 in order to give him room and scope to carry on investigations into the complex effects of the endocrine secretions upon animal life and hundreds of thousands of experiments were conducted and recorded in papers by himself and his staff. Noble observed especially the strange ways of courtship and mating among animals and supported his observations by moving pictures of fishes, amphibians, lizards, snakes and birds, making their own unquestionable records of their lives. Observations which were formerly distributed among many different departments of science were brought by him into a general clearing-house of knowledge of living animals. More than any other man Noble was rapidly integrating these fragments into a continuous and understandable picture. Yet he was never in danger of confusing the part with the whole. Because hormones from the endocrine glands were, at least in some cases, the activating agents, he did not fail to search for other leading factors in the always complex results. Vertebrate animals being endowed with highly organized central nervous systems, it was next in order to study the reactions between the activating hormonal substances and the responding nervous controls. The complexity of a subject never intimidated Noble and he did not easily lose himself even in that incomparable labyrinth, the human brain.

From 1927 until his death near the end of 1940 Noble was directing and leading two active and successful departments, with their rapidly expanding parts and aspects, while at the same time keeping up his own researches and his published reports. In the midst of this broad program he was suddenly laid low. The entire scientific world will be one with his colleagues and friends in hoping that his work may go on as he planned it.

WILLIAM K. GREGORY
AMERICAN MUSEUM OF NATURAL HISTORY

SCIENTIFIC EVENTS

THE UNION OF AMERICAN BIOLOGICAL SOCIETIES

THE annual meeting of the Council of the Union of American Biological Societies was held in Philadelphia on Monday, December 30, at four o'clock in the afternoon.

During the past year the Union has continued to support projects of broad interest, as the promotion of *Biological Abstracts* and the teaching of biological sciences. Due to World War II, *Biological Abstracts* has suffered through cancellation of foreign subscriptions and has been operating on a reduced budget. This decrease in foreign income has been offset to a marked degree by increased subscriptions in the Americas due to the splendid efforts of the staff, section editors, collaborators, trustees and interested societies, as well as the individual biologists themselves. The American Society of Zoologists, Society of American Bacteriologists, American Physiological Society, American Society of Naturalists, Genetics Society of America and Society of American Foresters are contributing financially as well as editorially to the support of *Biological Abstracts*. Other societies are considering action. Further cooperative arrangements are desired by *Biological Abstracts,* since this organization is a cooperative, non-profit enterprise that was created to serve biologists the world over.

The Union's Committee on Biological Science Teaching, financed by a grant from the Carnegie Foundation for the Advancement of Teaching, is under the chairmanship of Dr. Oscar Riddle and includes the following members: E. V. Cowdry, F. L. Fitzpatrick, H. B. Glass, B. C. Gruenberg and E. W. Sinnott. This group, with the cooperation of its representative, D. F. Miller, earlier established the National Association of Biology Teachers, which has become a thriving organization sponsoring a journal, *The American Biology Teacher.* During the present year it distributed 16,000 questionnaires to teachers of biology in high schools of the United States and an analysis of the large amount of data secured from 3,200 replies is nearing completion. At least a preliminary report on certain important results of this investigation will be made to the Union at the annual meeting in Philadelphia.

During the course of the year the Union publicized,

through its secretary, an appeal for help for the National Central Library of China. Recently Mr. Chiang Fu-Tsung, the director of the National Central Library, requested further cooperation, as follows:

> Due to the restrictions on the purchase of foreign currencies by the Chinese government, the National Central Library is rendered helpless to buy foreign books to meet the increasing demands of our intellectually starved students and scholars. I have been writing to various friends in the U. S. A. to sound their opinion if a drive for book funds can be started. With those funds deposited in a bank in the U. S. A. the National Central Library will be thus enabled to buy the necessary books in America and Europe.

The Union will gladly serve as a collecting agency for these funds. Checks drawn to the China Book Fund may be sent to the secretary of the Union who will deposit them with the U. A. B. S. Treasurer pending the purchasing of books by the National Central Library of China.

GEORGE W. HUNTER, III
UNION OF AMERICAN BIOLOGICAL SOCIETIES

SCIENTIFIC EXPEDITIONS

A SCIENTIFIC expedition sponsored by Mrs. Anne Archbold in her yacht "Cheng Ho" left Suva, Fiji, for other islands in Melanesia on or about November 21. The party consists of Mrs. Archbold, Captain Skolfield, physician and master of the yacht; Miss Mary Keegan, registered nurse; R. Gucker Abbott, malacologist from Harvard; Otto Degener, representing the New York Botanical Gardens, and his assistant Emilio Ordonez; John Wesley Coulter, geographer, University of Hawaii, and John Swingle, photographer. The party will spend about four months in the field, visiting Gilbert and Ellice Islands, Ocean Island, Solomon Islands, Santa Cruz, New Hebrides and New Caledonia. Land shells collected by the malacologist will be sent to Dr. Montague Cooke, of the Bishop Museum, Honolulu, and to Professor J. W. Clench, Harvard University. Botanical specimens will be sent to Dr. Elmer D. Merrill, of the Arnold Arboretum, to Dr. William J. Robbins, of the New York Botanical Garden, to the U. S. Department of Agriculture in Washington and to other institutions.

An Associated Press dispatch states that three members of the Fahnestock expedition, Mrs. Bruce Fahnestock, her son, Sheridan, and his wife, have returned from the South Seas and are organizing a new cruise in search of rare Pacific birds. The expedition, sponsored by the Whitney Memorial Hall of Pacific bird life on behalf of the American Museum of Natural History, left New York in February. The proposed two-year cruise was cut short on October 18 when the 140-foot schooner *Director II* struck a reef east of Australia and sank.

It is reported in *The New York Times* that the resources of Latin America will be studied this winter, in the interests of Western Hemisphere defense, by eight experts sent by the Department of the Interior to survey the deposits of such minerals as manganese and chromite, tin, tungsten and antimony. Of the eight geologists, all of whom are members of the staff of the Geological Survey, five already are in the field, one is on the way and two are awaiting the completion of arrangements with the government of the country to which they have been assigned.

S. R. Capps will make a three-months survey of the manganese deposits of Brazil, where W. D. Johnson, Jr., already is looking for chromite. C. F. Parks, Jr., and T. P. Thayer are in Cuba, studying deposits of manganese and chromite there, while in Bolivia surveys for tin are being made by E. Callighan, with J. F. McAllister making surveys on tungsten and antimony. Through the State Department the Cuban and Brazilian Governments have offered their cooperation in the geological investigations, extending the courtesy of travel on the railroads without cost to the United States Government.

HIGH-VOLTAGE TRANSMISSION LABORATORY AT CORNELL UNIVERSITY

CONSTRUCTION of a new $150,000 laboratory for the College of Engineering of Cornell University designed primarily for research in problems of high-voltage transmission has been authorized by the Board of Trustees.

The laboratory will be used for research into the properties of air and other electrical insulating materials. According to Dr. W. A. Lewis, Jr., director of the School of Electrical Engineering, who will supervise the program, "One of the important problems to be investigated is that of corona, the halo or glow which may surround conductors at high voltages, indicating leakage of electricity to the surrounding atmosphere. Between the empirical work of the practical engineer and the small-scale experiments of the physicist is a large unexplored region where precise investigation and analysis may reveal much of importance in power transmission and throw light on the general properties of materials under electrical tension."

The building, according to Dean S. C. Hollister, will be 72 by 120 feet, and 55 feet high, of steel construction throughout, providing an electro-static shield to keep the effects of high voltages within the laboratory. Connected with it will be a half-mile voltage transmission line. The laboratory will be built on university property near the East Ithaca station, with highway and rail facilities.

It will be provided with both 60 cycle and impulse testing equipment. The former will be used in re-