

whose death has since been announced. On this occasion the Robert Koch-Stiftung for the combating of tuberculosis, which had been destroyed by the period of inflation, was reestablished. The new organization, however, will be devoted not only to combating tuberculosis but also to other scientific research for the combating of infectious diseases. Donors of substantial

sums may possibly become members of the honorary committee or may be permitted to inscribe their names in the so-called Goldenes Buch. Thus far 100,000 marks (\$40,000) has been collected, and further sums are being added from time to time. The basal donation is a gift of a group of Japanese physicians, dating from 1932."

SCIENTIFIC EVENTS

AN OXFORD EXPEDITION

IN the latter part of July the Oxford University Arctic Expedition, 1935-36, arranged under the auspices of the Oxford University Exploration Club, left England to spend fourteen months on the unknown coast of the barren, ice-clad North-East Land. The expedition, according to the *London Times*, consists of the following members: A. R. Glen, glaciologist and leader; Andrew Croft, dog driver and second-in-command; A. Dunlop-Mackenzie, organizer; A. S. T. Godfrey, R.E., surveyor; R. A. Hamilton, physicist; D. B. Keith, ornithologist; R. Moss, physicist; A. B. Whatman, Royal Corps of Signals, wireless; J. W. Wright, surveyor, and Dr. A. Ballantine. The average age of the members is twenty-three years.

Of these, Croft and Godfrey were members of last year's British expedition which sledged across Greenland and southwards along the eastern mountains, while Keith and Wright have been on summer Cambridge Iceland expeditions. Glen was leader of the 1933 Oxford Spitzbergen expedition, and it was while he was in Spitzbergen during the summer of 1934 that the idea of this present expedition was suggested to him by the Swedish explorer, Dr. Ahlmann, of Stockholm. The preparations for the expedition have been decentralized so that each member of the personnel was responsible for some branch of the plans. The University of Oxford, the Royal Society and the Royal Geographical Society have supported the expedition generously, as have various other societies and funds, notably Oxford and Cambridge colleges. The War Office has attached two officers and has lent a great deal of wireless equipment, and scientific equipment has been lent by the Admiralty, the Meteorological Office and the National Physical Laboratory. Moreover, the expedition has been presented by British firms with goods of the estimated value of no less than £2,000.

Although only three expeditions have worked in the interior of North-East Land and although no expedition has yet wintered there, the west coast was surveyed by the Swedish-Norwegian Expedition as long ago as 1899-1901, and as one of their trigonometrical points was near North Cape it is hoped that it will be

possible to join the survey to theirs, and continue the theodolite framework eastwards, filling in the detailed topography by plane table. As the coast is open to the full strength of the Polar Sea, there is some danger that a south wind may bring down the pack ice, with heavy pressure near the coast, in which case the party will have to make all speed in running for shelter to one of the small inlets which are often to be found inside the lateral moraines of the glaciers, and which generally give safe landing places.

The sun dips below the horizon for the first time on August 23 and early in September the first of the winter storms may be expected. As two stations are to be maintained on the inland ice over the winter and into the spring of 1936, it is of the utmost importance that these should be established, with full supplies of food, fuel and equipment, by the end of August. One of the stations will be on the summit of the eastern area of inland ice at a height of some 2,600 feet, about 60 miles direct from the base hut, which will be established at Rijps Bay, midway along the north coast of North-East Land, and the other between the higher station and the base, near the edge of the ice cap on one of the glaciers flowing into Dove Bay.

Although every effort will be made to change the personnel periodically at each one of these stations, it is not improbable that the weather may make this impossible. In that event the two men at each station will have to be prepared to spend at least six months by themselves, four months of which will be total darkness, relieved only by moonlight and the periodical displays.

It is expected that the expedition will return to England on *The Polar*, the expedition ship, in September, 1936.

EXPEDITIONS OF THE ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA

THUS far this year the Academy of Natural Sciences of Philadelphia has sponsored twenty-four expeditions for collecting and field work in thirteen foreign countries and various parts of the United States, according to an announcement made by Charles M. B. Cadwalader, managing director. Mr. Cad-

walader states that collections and studies had been made or now are being carried on in Tibet, Western China, Siam, Alaska, Bolivia, Guatemala, Mexico, Panama, Cuba, Jamaica, Newfoundland and Siberia, also in Pennsylvania, New Jersey, New Mexico, Wyoming, Florida, Louisiana and other states.

Of special interest, because of the gorillas and okapis secured for new habitat groups in the museum, are the results of the African expedition headed by George Vanderbilt, of New York, who returned with unusually fine specimens for these exhibits and with large collections of other mammals and birds, insects, fishes and reptiles secured in Kenya, Uganda, the Belgian Congo, French Middle Congo, the Cameroons and the French Sudan. Mr. Vanderbilt was accompanied by James A. G. Rehn, curator of entomology, and Harold T. Green, curator of exhibits.

In western China and eastern Tibet, Brooke Dolan, II, of Philadelphia, now is completing a year's work on his second expedition. With a large caravan of yaks and coolies, Mr. Dolan, whose party includes Ernst Schaefer, of the University of Göttingen, has covered several thousand miles, explored districts hitherto unvisited and has made valuable collections of birds, animals and plants. This work has been made possible largely through the cooperation of the Chinese central government and the courtesy of tribal heads.

Cruising in West Indian waters among the Bahamas and the Virgin Islands on the Diesel ketch *Antares*, Colonel Edwin M. Chance, of Philadelphia, is leading a party that is collecting fishes and making a study of the habits of the swordfish and other large game fish.

In the central highlands of Guatemala Rodolphe M. de Schauensee, curator of birds of the Eastern Hemisphere, spent two months collecting birds, fishes and orchids and studying aquatic life in Lake Atitlan, 5,000 feet above sea level. In Siam where, after his third expedition to that country for the academy, Mr. de Schauensee organized a permanent field staff with headquarters in Bangkok, collecting of general zoological and plant specimens is being continued. This intensive work extends into every part of Siam.

Two expeditions now are in the high plateau of central Mexico, for study and collecting under a grant from the American Philosophical Society. Under Dr. Henry A. Pilsbry, curator of mollusks, search is being made for fossil and present-day snails, while Dr. Francis W. Pennell, curator of botany, is seeking certain species of plants.

In the mountains of Panama, A. J. Drexel Paul, Jr., of Philadelphia, and Dr. Robert K. Enders, professor of zoology at Swarthmore College, are collecting mammals and fishes.

For further additions to the representative collection of birds of Cuba and the West Indies, James Bond, ornithologist, has completed his ninth and tenth expeditions to the Caribbean—one to Jamaica and the other to the Zapata Swamp in Cuba. He also spent several weeks on the Magdalen Islands off the coast of Newfoundland.

In Russia, Dr. Edgar B. Howard, under the joint auspices of the academy and the University Museum, is continuing his search for evidence that the "Folsom men," the earliest inhabitants of North America, crossed into this continent from Siberia by way of Bering Strait some 15,000 years ago.

To continue the search for artifacts and possible skeletal remains by Dr. Howard in New Mexico, Mrs. Richard G. L. Ayer, of the department of vertebrate zoology, is spending several weeks in that state.

On her third expedition to British Columbia Mrs. J. Norman Henry, accompanied by her daughter, Miss Josephine deN. Henry, is collecting plants and minerals in regions hitherto unexplored, and in the northwestern part of the United States Dr. Walter M. Benner, of the department of botany, is spending several weeks in collecting plant specimens.

After seven months in Bolivia, where he made a large collection of birds, M. A. Carriker, Jr., curator of birds of tropical America, has returned with a large group of specimens among which are a number of birds never before recorded in that country. This work was also provided for by a grant from the American Philosophical Society.

Ernest Hemingway, the well-known author, has been making a study of the blue marlin and other large fishes in Cuban waters, carrying on work started last summer when Henry W. Fowler, curator of fishes in the academy, and Charles M. B. Cadwalader cruised with him.

R. R. M. Carpenter, of Wilmington, Del., a trustee of the academy, has returned from an expedition to Alaska, where he sought further facts concerning the so-called blue bear. He collected fine specimens of black bear, and Alaskan brown bear, and also of birds and small mammals.

To collect natural accessories for new habitat groups of wapiti and pronghorn antelope, soon to be installed in the North American Hall of the museum, Harold T. Green, curator of exhibits, is leaving for Wyoming, where he will secure the necessary material in the exact localities in which were secured the specimens to be mounted in the large groups.

Dr. Witmer Stone, vice-president, made a collecting trip to southwestern Louisiana, where he secured a number of birds, fishes, insects and plants, and now is continuing his study of bird migration at Cape May. In New Jersey and eastern Pennsylvania, Bayard

Long, research associate in the department of botany, has made a number of field trips to secure additional specimens for the local herbarium. In Hawaii H. Burrington Baker, research associate in the department of mollusks, is collecting and studying mollusks, and in Natal, Africa, H. W. Bell-Marley continues the collecting of fishes for the academy.

The late Prentiss N. Gray, of New York, a trustee of the academy, who died in a boat explosion early in the year while collecting in Florida with David Newell, secured on that last of a long series of expeditions fine specimens of panther which live in the cypress swamps in that state.

MEMBERS OF THE WATER RESOURCES COMMITTEE

ABEL WOLMAN, chairman of the Maryland Planning Board, has been named chairman of a newly appointed Water Resources Committee, which will deal with PWA projects involving power developments, flood control and the like.

The new committee, of which Harold L. Ickes is chairman, will function as a unit of the National Resources Committee, which last winter submitted a comprehensive report on the development of public lands, forestation, water projects and minerals.

"The committee," according to a statement made by Mr. Ickes, "is engaged in outlining a long-range plan for the more effective use of all the water resources of the nation and for continuance and application of the policies set forth in the report of the Mississippi Valley Committee and the December, 1934, report of the National Resources Committee." Various water projects pending before the Work Relief Administration will be considered by the committee in connection with construction proposals and for collection of basic data.

Other members of the committee are:

Thorndike Saville, of the American Society of Civil Engineers and associate dean of the College of Engineering, New York University.

N. C. Grover, chief hydraulic engineer, water resources branch, U. S. Geological Survey.

Elwood Mead, director of the Bureau of Reclamation.

Jay N. Darling, chief of the Biological Survey.

H. H. Bennett, chief of the Soil Conservation Service.

R. Y. Tarbett, sanitary engineer, of the U. S. Public Health Service.

Major-General Edward M. Markham, chief of the U. S. Army Engineers.

Thomas R. Tate, director of the National Power Survey, Federal Power Commission.

H. H. Barrows, professor of geography at the University of Chicago and formerly a member of the Mississippi Valley Committee and the National Resources Committee.

Edward Hyatt, state engineer, of California.

The new committee will have as an advisory body the former water planning committee which was a unit of the National Resources Committee.

THE NORWICH MEETING OF THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

THE London *Times* reports that arrangements for the meeting at Norwich in September of the British Association for the Advancement of Science are now practically completed. The association has only once before, in 1868, met at Norwich, but it is said that the city and the surrounding country have much to engage the attention of the various sections, and the excursions of the eight-day gathering will be unusually attractive. Norfolk is classical ground for the geologist, there is much to interest the archeologist and the botanist and the county has a special agricultural standing. Prehistoric man, the Gael and the ancient Briton dwelt on the site of Norwich before the Romans built a road through it to serve their settlement at Caistor. The Saxons developed the town and the Normans built the Cathedral and Castle. In the Tudor period, when Flemish and French refugees founded a flourishing textile industry, Norwich came to rank as the second city of the kingdom.

The president of the association this year is Dr. W. W. Watts, emeritus professor of geology at the Imperial College of Science and Technology, South Kensington. His address to the inaugural general meeting on September 4 in the Agricultural Hall will have for its subject "Form, Drift and Rhythm of the Continents."

The list of sectional presidents and the subjects of their addresses were given in the issue of *SCIENCE* for May 24. Among the matters to be discussed in the Section of Mathematical and Physical Sciences are atomic physics, noise and new stars. The Section of Chemistry will hear papers and discussions on the chemistry of grass crops, surface phenomena and magnetic properties and chemical constitution. The geologists and anthropologists will hold a joint discussion on "Early Man in East Anglia." In Section D—Zoology—there is to be a discussion on the centenary of the landing of Darwin on the Galapagos Islands and the birth of the Darwinian hypothesis of the origin of species. Papers will also be read in this section on "The Problem of the Herring" and animal migration.

The Section of Economic Science and Statistics has an agenda which includes, among other questions, the chronology of the world crisis, economic aspects of diet, population problems since Malthus, problems of amalgamation and decentralization and probable future trends of scientific management in Great Britain. The Sections of Physiology and Psychology will