

THE FIFTIETH ANNIVERSARY OF THE U. S. GEOLOGICAL SURVEY

THE U. S. Geological Survey, one of the veteran bureaus of the government, celebrated on March 21 its fiftieth anniversary. Members of the survey were received by President and Mrs. Hoover at noon. During the afternoon a meeting was held at the National Museum and addressed by Ray Lyman Wilbur, secretary of the interior; Henry Fairfield Osborn, John C. Merriam, Arthur E. Morgan and other distinguished scientists. Director George Otis Smith presided. This meeting was followed in the evening by a dinner at the Washington Hotel in which some six hundred friends of the survey participated.

Summarizing the growth of the bureau in these fifty years, speakers pointed out the fact that it came into being with the appointment of its first director, Clarence King, on March 21, 1879. Thirty-five years ago President Hoover was a member of its staff working as a field assistant in geologic mapping in the Sierra Nevada between college terms at Stanford University. During its half century of activity, it was said, the survey has graduated thousands of trained engineers and scientists who are now working in all parts of the world.

The appropriations for the work of the survey have increased from \$100,000 for the fiscal year 1880 to over \$2,000,000 for the fiscal year 1930. The total expenditures during the life of the survey have been about \$75,000,000, including nearly \$10,000,000 of state cooperative funds. The published reports by which the Geological Survey's work are made available aggregate over 400,000 pages and occupy 120 feet of shelf space. Other organizations which are in a real sense children of the Geological Survey, their work having been started by the survey, include the Bureau of Reclamation, the Bureau of Mines, the Bureau of American Ethnology, the Forest Service and the Geophysical Laboratory of the Carnegie Institution.

SCIENTIFIC NOTES AND NEWS

THE executive committee of the American Association for the Advancement of Science will hold its regular spring meeting at the Cosmos Club in Washington on Sunday, April 21, with a forenoon, an afternoon and an evening session. Business to come before the committee at this meeting should be in the permanent secretary's office in Washington by April 15.

ROBERT RIDGWAY, curator of the division of birds in the U. S. National Museum since 1876, died on March 25, in his seventy-ninth year.

ARTHUR MASTICK HYDE, formerly governor of Missouri, who was appointed Secretary of Agriculture by President Hoover, took the oath of office in the administration building of the department in Washington on March 6, in the presence of the outgoing secretary, William M. Jardine.

ON the occasion of the fiftieth birthday of Professor Albert Einstein on March 14, the city of Berlin presented to him a tract of land on Havel Lake near Potsdam where a summer home will be erected. Among the scientific honors conferred upon Professor Einstein on his anniversary was his election to honorary membership in the natural science faculty of the University of Paris.

PROFESSOR FRANK SCHLESINGER, director of the Yale University Observatory, has been awarded the Bruce medal of the Astronomical Society of the Pacific for his work on photographic parallaxes and in other departments of astronomy. The medal is awarded on the recommendation of the directors of the Harvard Observatory, Lick Observatory, Yerkes Observatory, the Observatory of Berlin, the Observatory of Greenwich and the Observatory of Paris. It will be presented to Professor Schlesinger at a special meeting of the society which is to be called at New Haven on April 12.

DR. CHARLES F. BRUSH, of Cleveland, Ohio, distinguished for his work on electric arc lighting, celebrated his eightieth birthday on March 17.

THE Iron and Steel Institute, London, has awarded the Bessemer gold medal to Sir Charles A. Parsons, in recognition of his distinguished services in advancing the science of engineering as applied to the manufacture of iron and steel.

FELLOWS of the Royal Society of Edinburgh have been elected as follows: Dr. S. G. Barker, director of research, British Research Association for the Woolen and Worsted Industries, Leeds; Dr. F. Bath, lecturer in mathematics, University of St. Andrews; Mr. G. Bennet, lecturer in mechanical engineering, Heriot-Watt College, Edinburgh; Dr. A. Calder, assistant in the animal breeding research department, the university, Edinburgh; Dr. G. Coull, pharmaceutical chemist, Leith; Professor E. W. H. Cruickshank, physiology department, Dalhousie University, Halifax, Nova Scotia; Mr. David Kennedy Fraser, psychologist to the education authority, Glasgow; Mr. T. Henderson, actuary of the Savings Bank of Glasgow; Dr. Sunder Lal Hora, senior assistant superintendent, Zoological Survey of India, Calcutta; Professor J. Kendall, F.R.S., chemistry department, Uni-

versity of Edinburgh; Mr. J. R. Little, general manager and secretary of the Century Insurance Company, Edinburgh; Professor D. N. M'Arthur, department of agricultural chemistry, West of Scotland Agricultural College, Glasgow; Mr. J. Mackie, mathematical master, Leith Academy, Leith; Mr. W. Mercer, lecturer in clinical surgery, University of Edinburgh; Mr. H. Moir, president, United States Life Insurance Company, in the city of New York; Professor F. W. Ogilvie, department of political economy, University of Edinburgh; Dr. J. F. V. Phillips, botanist in government service, Tanganyika Territory; Mr. S. Read, schoolmaster, Edinburgh Academy; Mr. R. A. Robb, lecturer in mathematics, University of Glasgow; Principal J. C. Smail, Heriot-Watt College, Edinburgh; Professor Sydney Smith, department of forensic medicine, University of Edinburgh; Dr. Thomas Southwell, lecturer in helminthology, School of Tropical Medicine, Liverpool; Mr. A. C. Stephen, assistant, natural history department, Royal Scottish Museum, Edinburgh; Dr. B. P. Wiesner, lecturer in sex physiology, University of Edinburgh.

A BANQUET was given in Chicago on March 15 in honor of the fiftieth anniversary of professional service of Dr. Albert R. Mitchell. The principal address was given by Dr. Morris Fishbein, editor of the *Journal* of the American Medical Association, of which Dr. Mitchell has long been a trustee.

JAMES A. GAMBLE has returned to the Bureau of Animal Industry as milk technologist after an absence of ten years, during which time he was professor of dairy husbandry in the University of Maryland.

PROFESSOR DONALD M. MATTHEWS, professor of forestry management in the school of forestry and conservation of the University of Michigan, has accepted an appointment as forester on the staff of the Tropical Plant Research Foundation, Washington, D. C. Professor Matthews will continue his work at the university and, in addition, will serve as general adviser on the forestry projects of the foundation.

REAR-ADMIRAL WALTER S. CROSLY will be a national delegate to the supplementary conference of the International Hydrographic Bureau at Monaco beginning on April 9. Rear-Admiral A. P. Niblack, retired, is president of the directing committee of the bureau. P. de Vanssay de Blavous, France, and Captain di Vascello L. Tonta, Italy, are directors. Commander G. B. Spicer-Simson, of Great Britain, is secretary-general.

RICHARD J. LOUGEE, of Malden, Mass., formerly a member of the faculty of Dartmouth College, will take the place this summer of Professor William H.

Hobbs, head of the department of geology of the University of Michigan, who has been director of the Greenland expedition for the last three years.

DR. ALWIN M. PAPPENHEIMER, professor of pathology at Columbia University, is spending the current winter at the School of Tropical Medicine at San Juan, Porto Rico.

DURING the coming spring Professor I. Borcea, of Yassy University, accompanied in all probability by M. Calinescu, inspector of Rumanian state fisheries in the Dobruja, will follow up his discovery of last year of the bones of a mammoth near Ekrene.

THE Cutter lecture on preventive medicine was given by Dr. Edwin O. Jordan, professor of hygiene and bacteriology in the University of Chicago, on "The Epidemiology of Paratyphoid Infections" on March 27, at the Harvard Medical School.

PROFESSOR WALTHER STRAUB, professor of pharmacology at Munich, will deliver the seventh Harvey Society lecture at the New York Academy of Medicine, on Wednesday evening, April 3. His subject will be "The Pharmacology of the Digitalis Substances."

PROFESSOR HENRY NORRIS RUSSELL, of Princeton University, addressed the Swarthmore Chapter of the Society of Sigma Xi on March 19, on "The Composition of the Sun."

DR. W. H. LONGLEY, professor of biology at Goucher College and executive officer of the Tortugas (Florida) Laboratory of the Carnegie Institution of Washington, will give an illustrated lecture before the institution on the evening of April 2 on "The Coloration of Fishes in Relation to their Habits and Distribution."

DR. JAMES A. DOULL, of the Johns Hopkins School of Hygiene and Public Health, delivered the first Delta Omega lecture at the Yale School of Medicine on March 8, under the auspices of the Epsilon Chapter of the society. The subject was "Factors in the Selectivity of Diphtheria and Scarlet Fever." Professor C.-E. A. Winslow presided.

PROFESSOR EDWARD W. BERRY, of the Johns Hopkins University, lectured on "The Origin and Evolution of Floras" before the Royal Canadian Institute on March 16.

JEROME ALEXANDER spoke at McGill University on March 21 to the chemical engineering students on "Colloids" and to the McGill Chemical Society on "Some Physico-chemical Aspects of Life, Mutation and Evolution." In the evening he addressed the

Montreal section of the Society of Chemical Industry on "Vanadium and Some of its Commercial Applications."

Nature reports that in commemoration of the bicentenary of Josiah Wedgwood in 1930 the British Ceramic Society proposes to publish a volume of essays, for which two prizes are offered.

SIDNEY S. BUCKMAN, distinguished for his work in geology, particularly on the ammonites and brachiopods of the Inferior Oolite, died on February 26. Mr. Buckman was the son of a well-known geologist, Professor James Buckman.

CONGRESS has provided a pension of \$125 a month for Mrs. Mary H. Goldberger, widow of Dr. Joseph Goldberger, late surgeon of the U. S. Public Health Service, in recognition of his service in the study of pellagra. Mrs. Goldberger was a volunteer subject during the experimental period when it was desired to inject certain substances to test the transmissibility of the disease. The widow of Dr. Rudolph H. Von Ezzdorf, yellow fever worker in the U. S. Public Health Service, receives a pension of \$50 a month.

PLANS looking toward the erection of a monument to the memory of David Livingstone, missionary and explorer, have been started by the central council of the Federated Caledonian Society of South Africa. At their congress held in Bloemfontein, Orange Free State, last August it was decided to erect a bronze statue of Livingstone and to place it in the vicinity of the Victoria Falls, as this is considered his greatest discovery. A fund of from \$60,000 to \$80,000—\$10,000 of which has been raised—is being sought from sympathizers of the project throughout the world.

THE Seismological Society of America will hold a meeting, arranged by its eastern section, at Fordham University, New York City, from April 30 to May 2.

THE fifth annual meeting of the Pennsylvania Academy of Science was recently held at the Pennsylvania State College under the presidency of Dr. Frank D. Kern. The academy now has a total membership of three hundred and fifty.

Engineering and Industrial Chemistry recently called attention to the establishment of a prize at Washington and Lee University by Dr. S. C. Lind, consisting of a membership in the American Chemical Society to be awarded to an undergraduate at that school. It now announces that the Pi Chapter of Alpha Chi Sigma at Syracuse University has voted to award a year's membership in the American Chemical Society to that chemistry student at Syracuse University who at the end of the first semester of his

junior year is deemed the most representative man of his class.

A NEW field laboratory for investigations of tropical, subtropical and ornamental plant insects has been established at Sumner, Washington, by the bureau of entomology of the Department of Agriculture. The buildings have been erected by Pierce County, through the efforts of growers in the northwest. The laboratory plant consists of a group of buildings comprising the main laboratory, shop and storage shed, greenhouse and insectary. The main building contains laboratories and offices and space for storage. Approximately an acre of ground is available for field tests. Sumner is about thirty miles south of Seattle and ten miles southeast of Tacoma. The location is quite representative of the climatic conditions which prevail throughout western Washington and western Oregon, sections in which the different branches of the industries interested are most highly developed.

COMPREHENSIVE surveys of most desirable bird sanctuary sites will be made before executing the provisions of the Migratory Bird Act, according to a report made by W. C. Henderson, associate chief of the Bureau of Biological Survey. Federal bird refuges are needed in at least one hundred and twenty-five concentration areas, he states. The act will be carried out in fulfilling treaty obligations with Canada for protection of birds that spend part of their time in one country and part in the other. For the first time a national system of inviolate bird sanctuaries will be established.

DR. LAUGE KOCH, the Danish Arctic explorer, will undertake again a scientific expedition to Greenland. The cost of the expedition will be borne two thirds by Danes in England and the remaining third by the Carlsberg Fund. The expedition will start from Sabine Island, off the northeast coast of Greenland, working southward till it is slightly north of Scoresby Sound, all the operations taking place from the sea with the vessel *Godthaab* as a basis. In addition to the leader there will be six geologists, one botanist and two specialists in volcanic studies.

THE *U. S. Daily* reports that, operating in conjunction with a vessel of the Australian Navy, an amphibian plane of the Royal Australian Air Force has just completed a survey of the Great Barrier Reef, off northeastern Australia. The survey, which extended over one and a half years, is said to have demonstrated the utility of aircraft in expediting hydrographic work. The famed Great Barrier Reef, which extends for hundreds of miles parallel to the northeastern coast of Australia, contains many perils to navigation. During the past year and a half the

naval vessel and amphibian plane have been working together to increase the charted knowledge of the waters about the reef. The plane provided aerial mosaic pictures by taking vertical photographs from an altitude of eight thousand feet, which revealed the depth of the water beneath. The survey ship will proceed to sound all shallow waters revealed in the mosaic.

THE New York *Times* reports that the new vessel for Antarctic exploration being constructed in Glasgow by the British government will be the last word in efficiency for deep-sea sounding and biological and chemical investigation of southern waters. Not only will the vessel be capable of covering nine thousand miles without refueling, but echo-sounding gear will be installed and a special winch carrying five thousand fathoms of wire rope will enable working large nets at any depth. Three auxiliary machines will be carried for smaller nets and hydrological observations. There will also be large biological and chemical laboratories, a photographic room and a survey office. Six investigators will accompany the expedition. The officers and crew will number fifty. The vessel will be 232 feet long, steam propelled and be commissioned under the auspices of the Discovery Committee, which recently placed Captain Scott's old vessel *The Discovery* at the disposal of Sir Douglas Mawson and already has another vessel, *The William Scoresby*, working in the Antarctic.

SPACE on the fourth floor of the science building at the University of Southern California has been given over to experimental marine biology and survey work, with installation of running sea-water aquaria and other appropriate facilities, according to a report from Professor Francis M. Baldwin, in charge of marine biology work. Marine survey and invertebrate zoology are included in the summer session program, and space may be had by a limited number of independent investigators who have definite problems in hand, by application to Professor Baldwin. Two permanent tanks for sea-water and four auxiliary tanks for forcing the water around have been installed, and a reserve tank for the supply. The original supply of about 500 gallons came from four miles out in the Catalina Channel, and was dipped up in wooden buckets so that there would be no metal contact. As evaporation occurs, rejuvenation is effected by water added every week or ten days, and air is forced through to oxygenate it according to requirements stated on an automatic indicator.

THE will of the late Ogden Mills, of New York, who died on January 29, provides for the following

bequests: The Home for Incurables, at 183d Street and Third Avenue, receives \$500,000 under the will and an additional \$500,000 under the codicil. Mr. Mills had been president of this institution and had given substantial sums to it during his lifetime. The American Museum of Natural History, to which he also contributed during his life, receives \$100,000 under the will and an additional \$400,000 under the codicil. The Mills Memorial Hospital at San Mateo, California, receives \$200,000; Harvard College, \$200,000; Grace Cathedral Corporation of San Francisco, \$250,000; the Metropolitan Museum of Art of New York, \$100,000; the New York Zoological Society, \$50,000, and Phillips Exeter Academy of Exeter, N. H., \$50,000. Mr. Mills was educated at Phillips Exeter and at Harvard.

DR. THOMAS BARBOUR, director of the Harvard University Museum, has left for Florida where he will join A. V. Armour for an extensive cruise, which will include Harvard biological and botanical foundations in southern latitudes. It is planned to proceed to Haiti, San Domingo, Porto Rico, then south through the West Indies to Trinidad, where the Imperial College of Tropical Agriculture will be visited. From there the course will be west through the Dutch Lesser Antilles to Venezuela, Colombia and Panama, stopping in the Panama Canal Zone for Professor Barbour's annual inspection of the Barro Colorado Island Tropical Research Station of the Institute for Research in Tropical America, of which he is chairman. On the way back a stop will be made at Tela, Honduras, where the expedition will visit the snake farm maintained by Harvard, the Antivenin Institute of America and the United Fruit Company. From there the expedition will proceed to Cuba to the Harvard Biological Laboratory and Botanical Garden at Soleidad, Cienfuegos, Cuba. While cruising through the West Indies it is planned to visit the various tropical agricultural gardens and several of the smaller islands not touched by the regular trade routes, and, therefore, not visited by naturalists for many years. It is hoped to collect specimens of plants and seeds for introduction in the experimental stations at Summit, Canal Zone, Tela, Honduras and the Harvard Gardens in Cuba, and zoological specimens for the collections of the Museum of Comparative Zoology.

UNIVERSITY AND EDUCATIONAL NOTES

THE alumni and directors of the University of Akron, Ohio, have raised \$175,000 toward the build-