

Society of Washington, the Anthropological Society of Washington, the American Ornithological Union, the Audubon Society, and the Writers Club of Washington.

Mr. Gronberger wrote an exhaustive monograph on the "Palearctic Birds of Greenland," the first thorough study attempted of the subject, being a review of the occurrence of European and Asiatic species in Greenland from the middle of the eighteenth century to the present time, publication of which is in charge of the United States National Museum. He published a study of "Birds near Washington," in *Forest and Stream*. A paper by him on "The Origin of the Goths" deals with the Gothic migration from Scandza, or Scandinavia, as described by Jordanes and the corroborating evidence of a celebrated runic inscription in Sweden; probably to be brought out in Stockholm. Publication of a recent study of the Batrachia Salientia or Anura of the District of Columbia is in charge of the National Museum. He left also a life of the religious mystic, "Saint Bridget [Brigitt] of Sweden," based on the best historical sources available. An address by Mr. Gronberger on "Modern Swedish Literature" will be published by the Writers Club of Washington, with a biographical sketch and portrait of the author.

F. E. FOWLE

#### SCIENTIFIC NOTES AND NEWS

DR. EDWARD S. MORSE has been reelected president of the Boston Society of Natural History.

UNDER the retiring clause in the faculty regulations of Stanford University, Dr. David Starr Jordan has, as has already been noted in *SCIENCE*, been made chancellor emeritus; Dr. Oliver Peebles Jenkins has been made professor emeritus of physiology and histology, and Dr. Lillian Jane Martin, professor emerita of psychology.

SIR T. CLIFFORD ALLBUTT, regius professor of physics at the University of Cambridge, has been nominated by the council to be president of the British Medical Association. On account of the war the annual meeting at Cam-

bridge will be postponed, but the statutory general meeting will be held in London, on July 28.

WE regret to learn that Professor Elie Metchnikoff, head of the Pasteur Institute at Paris, France, who has been ill since January with heart trouble has become worse.

PROFESSOR WM. BULLOCK CLARK, head of the department of geology at the Johns Hopkins University, has been appointed by the Chamber of Commerce of the United States a member of a committee of five to discuss with the representatives of organized labor a modification of the anti-trust laws by which co-operative agreements under the regulation of the Federal Trade Commission might be allowed in those industries dealing with the primary natural resources.

At the annual dinner of the Geological Journal Club, of Columbia University, on May 17, the students and members of the departmental faculty presented to Professor Amadeus W. Grabau a copy of Suess's "The Face of the Earth," in commemoration of the completion of fifteen years of active service as a teacher in Columbia University and as a philosophical student of geology. Mr. S. H. Knight, fellow in paleontology, made the presentation. Professor Grabau also received an anonymous gift of \$150 from a former student for the furtherance of his research in stratigraphy and paleontology.

PROFESSOR AUGUST VON WASSERMANN, head of the Royal Institute for Infectious Diseases at Berlin, will become director of the Institute for Experimental Therapy at Frankfort, in succession to the late Professor Paul Ehrlich.

DR. F. F. MARTINEZ, who has published several works on tropical medicine, has been appointed director of the newly organized Institute of Tropical Medicine at Granada.

DR. WILLIAM PALMER LUCAS, San Francisco, professor of pediatrics in the University of California Medical School, has gone to Europe to aid in the organization of children's work for the American Commission for Relief in Belgium.

PROFESSOR EDWARD W. BERRY, of the geological department of the Johns Hopkins University, will do work in Mississippi and Texas for the U. S. Geological Survey during the coming summer.

THE British Science Guild held its annual meeting on May 17, when an address was given by the Hon. Andrew Fisher, high commissioner for the commonwealth of Australia, on "The Establishment of a National Institute of Science and Industry in Australia."

WITH the aid of a grant from the National Geographic Society Dr. Robert F. Griggs, of the Ohio State University, will continue this summer his researches in the Katmai District of Alaska. He hopes to explore the hitherto unvisited volcanoes of the district but will devote his attention primarily to a study of the revegetation of the region devastated by the great eruption of Mt. Katmai in 1912.

ABNER HOWARD POWERS, professor of surgery in the school of medicine of Boston University, died on May 13, aged sixty years, from injuries received in an automobile collision.

DR. JAMES ROBERT JONES, professor of theory and practise of medicine in Manitoba Medical College, Winnipeg, has died at the age of sixty-seven years.

DR. M. STRAUB, professor of ophthalmology at the University of Amsterdam, has died, aged fifty-seven years.

PROFESSOR H. P. WIJSMAN, who held the chair of toxicology at Leyden, died on March 19.

M. JULES GOSSELET, professor of geology at Lille from 1865 to 1902, died at Lille on March 20, aged eighty-four years.

THE death is announced of E. Jungfleisch, professor of organic chemistry at the College of France, with a chair also at the Academy of Arts and Trades.

THE Indiana Academy of Science is holding its spring meeting at Valparaiso, on June 1, 2 and 3, as guests of Valparaiso University and the local members.

THE Maryland Geological Survey will have a number of parties in the field during the summer gathering data for systematic reports

on the Silurian and Carboniferous formations, economic reports on the coals and fire clays, and on the underground waters. The following instructors and graduate students of the Geological Department will be engaged in this work: Professor Swartz and Dr. H. Bassler will be in the Silurian and Carboniferous region of western Maryland. G. M. Hall will be at work gathering materials for a report on the fire clays of the state. W. A. Baker will gather data regarding the equipment of the coal-operating companies for a report on the Coals of Maryland. J. P. D. Hull will spend part of the summer mapping the soils of Howard County and the balance in working on the geology of the Piedmont area of the same county. H. Insley will work on the Piedmont area of Harford County and on the underground waters of the northeastern tier of Piedmont counties. D. G. Thompson will work on the underground waters of portions of central and western Maryland.

THE Biological Station maintained by the University of Michigan at Douglas Lake, Michigan, will be opened for its eighth season from July 3 to August 25. The laboratory is provided with all the apparatus usually found at summer stations, but possesses also a considerable amount of equipment not ordinarily found elsewhere. The purpose of the institution is to provide instruction and facilities for research in animal and plant ecology under conditions as nearly natural as possible. For the coming session the zoological part of the program includes studies on the ecological relations of the aquatic vertebrate and invertebrate fauna, insects, birds and parasites, whereas the botanical courses will deal with forest botany, plant anatomy, general systematics and ecology. In addition to these more or less formal courses, students may elect special work adjusted to their individual needs. Independent investigators and others who desire to make use of the station are invited to communicate with the director at the University of Michigan.

WE are requested by the Surgeon-General of the Navy to print the following statement:

"Among the various items of increase in national preparedness which it is hoped will be afforded by the present session of Congress is that authorizing an appropriate increase in the personnel of the military services. One item of interest to the medical profession of the country is that calling for an increase in the medical corps of the Navy from its present strength of 347 to approximately 500. The openings at present afforded young graduates in medicine for entering the medical corps of the Navy will be materially increased in prospects and rewards, therefore, if such an increase is provided. An examination will be held on June 19 next, for appointment in the medical corps to vacancies already existing. A candidate for appointment must be between twenty-one and thirty years of age, a graduate of a reputable school of medicine, and must apply for permission to appear before an examining board. These boards are convened at various places over the country, and assignments to such boards are arranged to suit the convenience of the candidate. Duty in the medical corps of the navy is one that affords plenty of rewards to the ambitious worker, as well as attractions of a varied nature in personal and professional work. Pay begins at the rate of \$2,000 per annum, with ample allowances, and promotion and increase in pay and allowances follow every few years. It is hoped that the young men of the United States will take advantage of this attitude of the nation, now on the threshold of expansion in national ideals of preparedness, and find in the service of their country an outlet for their future life work. For detailed information as regards the coming examination on June 19, 1916, applicants should address the Surgeon-General, U. S. Navy, Navy Department, Washington, D. C."

Radium, uranium and vanadium are closely connected in occurrence in the principal fields, Colorado and Utah, but in 1915, although the European war caused a great slump in the production of ores of radium and uranium, it caused a considerable increase in the production of ores of vanadium. According to re-

ports for 1915 received by the United States Geological Survey and compiled by Frank L. Hess the output was 23.4 tons of uranium oxide and 6 grams of radium contained in the carnotite ores produced, and 635 tons of vanadium contained in the carnotite ores shipped and in the chemical concentrates from the roscoelite ores. In 1914 the ores produced contained 87.2 tons uranium oxide, 22.3 grams radium, and 435 tons vanadium. The United States has much the largest known radium-bearing deposits of the world, but the market for radium is mostly in Europe, for, though Americans like to feel that they are sufficiently progressive to take hold of and use to the full new discoveries, inventions and processes, yet the European municipalities and hospitals have been buying and utilizing most of the radium produced. When the war began, therefore, causing European money to flow into other channels the demand for radium fell off so greatly that there was practically no market for radium or uranium ores in the early part of 1915, and very little market during any part of the year. Mining of carnotite ores, except by the National Radium Institute (Inc.) under the supervision of and in co-operation with the Bureau of Mines, and except for such work as was necessary for assessment work to hold claims, was nearly stopped. The institute mined nearly the 1,000 tons of ore contracted for from the Crucible Steel Mining & Milling Co.'s claims in Long Park, Montrose County, Colo., and obtained 70 tons of concentrates, carrying about 3 per cent. of uranium oxide, by concentrating material carrying 0.7 per cent., which had been thrown on the dumps. The institute fully accomplished its purpose to work out a practical process of producing radium at a cost much below the market price of the element and crystallized out radium salts containing 6 grams of the element. It delivered during the year 3.006 grams of radium (element) at a cost of \$37,599 per gram. Near the close of the year 1.1 grams of radium (element) was contracted for by a private company for \$132,000, or \$120,000 a gram. This comparison shows the great success of the work of the Bureau of

Mines. Its ore concentration method seems to have also been highly successful. After mining its quota of ore from the Crucible Steel Mining & Milling Co.'s property, the institute came into the market as a purchaser of ore. In the later half of the year Dr. W. A. Schlesinger and associates established a radium reduction plant in Denver. They acquired an interest in the Copper Prince claims, from which ore was mined, and bought a further quantity. Ore carrying about 5,000 pounds of uranium oxide, containing about 640 milligrams of radium, was treated during the year. The Carnotite Reduction Co., made up of Dr. H. N. McCoy of the University of Chicago and associates, purchased from Galloway and Belisle a quantity of ore which had been stored in Placerville, Colo., and the radium will be extracted in Chicago. The company will mine ore from claims it has bought. The Standard Chemical Co. did no work on its claims except that required by law, but in this work produced and shipped a quantity of ore from its properties in Colorado and Utah, and purchased, it is stated, a considerable number of claims. It was reported in December that the company had produced a total of 14 grams of radium (elemental) and that its ore had averaged 1.7 per cent. uranium oxide. Probably between 4 and 5 grams of this quantity were produced during 1915. The production of radium salts in this country during the year was probably nearly 11 grams.

MR. BARNUM BROWN returned to the American Museum of Natural History in January, bringing a carload of fossil dinosaur bones, chiefly from the Belly River Cretaceous formation of Alberta. The collection comprises two complete skeletons; one of the horned dinosaur *Ceratops*, of which the museum previously possessed only skulls; the other of the helmeted dinosaur *Stephanosaurus*, not before represented in the museum's collection. Other notable specimens are a complete skull and jaws of the horned dinosaur *Monoclonius*; a skull and part of the skeleton of an armored dinosaur; and the largest skull yet discovered (five feet in length) of the duck-billed dinosaur, *Trachodon*. Another very rare specimen

is a complete lower jaw of a cretaceous marsupial mammal. In addition to the vertebrate remains, two large silicified tree trunks were secured, over forty feet in length. When these are sectioned it will be possible to determine the genus to which they belong. They are of especial interest because the center of the tree is silicified, while surrounding it the outer portion had carbonized, forming lignite. Several large slabs were also obtained on which impressions of many species of leaves are beautifully preserved. This material will be displayed to show the type of foliage contemporaneous with the dinosaur life of Alberta. After bringing to completion the museum's work on the Red Deer River, which has extended over a period of six years and been productive of four and a half carloads of valuable fossils, Mr. Brown went to Northern Montana. Here he secured a large collection from the Upper Cretaceous beds on Milk River. Work was continued in this field until zero weather compelled cessation of operations.

THE Philadelphia Academy of Surgery announces that essays for the Samuel D. Gross prize of fifteen hundred dollars will be received until January 1, 1920. The conditions are that the prize "shall be awarded every five years to the writer of the best original essay, not exceeding one hundred and fifty printed pages, octavo, in length, illustrative of some subject in surgical pathology or surgical practise, founded upon original investigations, the candidates for the prize to be American citizens."

#### UNIVERSITY AND EDUCATIONAL NEWS

DR. JOHN C. DUNCAN has been appointed professor of astronomy and director of Whitin Observatory of Wellesley College. Professor Sarah F. Whiting retires at the close of the present academic year as does also Professor Ellen Hayes. Professor Whiting, a pupil of Professor E. C. Pickering at the Massachusetts Institute of Technology before he became director of Harvard Observatory, gave the first lectures in astronomy at Wellesley College in