

Ferdinand V. Hayden, one time director of the United States Geological Survey, "as a reward for the best publication, exploration, discovery or research in the sciences of geology and paleontology." The award consists of a gold medal, and is made every three years. Previous to 1900 the award consisted of a bronze medal and was made annually.

Professor Lacroix was born February 4, 1863, at Mâcon, province of Saône-et-Loire, France. Educated at the Lycée of Mâcon, at the Sorbonne and at the Collège of France, he received the degree of doctor of science in 1889. In 1893 he was made professeur at the Muséum d'Histoire Naturelle, and in 1896, director of the Laboratoire de Minéralogie, École des Hautes Études. In 1904 he was elected a member of the Académie des Sciences, and ten years later he became Secrétaire perpetual of the Section of Physics of the Académie. Professor Lacroix's numerous and important publications and discoveries, as well as his exhaustive studies of Mont Pelée, of the phenomena of contact metamorphism and endomorphic metamorphism are familiar to all geologists.

The committee by whom the nominee for the 1923 award was selected consisted of Dr. Richard A. F. Penrose, Jr., *chairman*, Dr. John M. Clarke, Dr. Henry Fairfield Osborn, Dr. Charles D. Walcott and Dr. Edgar T. Wherry.

Previous recipients of the Hayden award were: 1890, James Hall; 1891, Edward D. Cope; 1892, Eduard Suess; 1893, Thomas H. Huxley; 1894, Gabriel August Daubrée; 1895, Karl A. von Zittel; 1896, Giovanni Capellini; 1897, A. Karpinski; 1898, Otto Torrell; 1899, Gilles Joseph Gustave Dewalque; 1902, Archibald Geikie; 1905, Charles D. Walcott; 1908, John Mason Clarke; 1911, John C. Branner; 1904, Henry Fairfield Osborn; 1917, William M. Davis; 1920, Thomas Chrowder Chamberlin.

SCIENTIFIC NOTES AND NEWS

A PORTRAIT of Sir Joseph Thomson, by Mr. Fiddes Watt, has been presented by a number of subscribers to the Royal Society.

DR. FRIDTJOF NANSEN, who recently received the Nobel peace prize, received a further award

when it was announced by the Nobel Committee that Christian Erichsen, of Copenhagen, had granted another award to Dr. Nansen equal in value to the Nobel peace prize, in recognition of his work on behalf of the starving millions of Europe. Dr. Nansen proposes to use the prizes for relief work.

DR. IRVING LANGMUIR, research chemist of the General Electric Company, has been elected an honorary member of the Royal Institution, London.

EDWARD LONGSTRETH MEDALS were presented by the Franklin Institute, Philadelphia, on December 20 to Dr. A. H. Pfund, of Baltimore, for his cryptometer, paint film gauge, colorimeter and rotating sector, and to Mr. Edward J. Brandt, of Watertown, Wis., for his automatic cashier.

WE learn from the *Bulletin* of the American Mathematical Society that on the occasion of the celebration of its seven hundredth anniversary the University of Padua conferred its honorary doctorate on Professors R. C. Archibald, of Brown University, J. Lipka, of the Massachusetts Institute of Technology, and V. Snyder, of Cornell University.

THE University of Frankfurt and the Zurich Technical School have conferred honorary degrees on Dr. David Hilbert, professor of mathematics at Göttingen, on the occasion of his sixtieth birthday.

DR. E. H. STARLING, professor of physiology in the University of London, has been appointed the first Foulerton professor under the foundation of the Royal Society created by the will of the late Miss L. A. Foulerton.

SIR GEORGE GREENHILL has been awarded a pension by the British government in recognition of his services to science and his ballistic work.

ON December 8 the members of the department of botany of the Ohio State University and friends celebrated with a dinner the completion of twenty-five years of service of Professor John H. Schaffner in the department.

DR. FRANCIS CARTER WOOD, director of the Institute of Cancer Research, Columbia Uni-

versity, received an "honorary degree" from the Radiological Society of North America, on December 7, 1922, in recognition of his experimental researches on X-ray and cancer.

FRANKLIN THOMAS, professor of civil engineering at the California Institute of Technology, was recently elected a member and vice-chairman of the Board of Directors of the City of Pasadena, Calif. He is first vice-president of the Pasadena Chamber of Commerce.

PROFESSOR EDSON S. BASTIN, chairman of the department of geology in the University of Chicago, has been appointed a member of the State Board of Natural Resources and Conservation by the governor of Illinois. Professor John Merle Coulter, head of the department of botany, is already a member of the board.

PROFESSOR JOSEPH EUGENE ROWE, head of the department of mathematics in the College of William and Mary, was the official delegate from the State of Virginia at the annual meeting of the American Society of Mechanical Engineers held in New York City during the week of December 4.

At the annual general meeting of the Faraday Society, London, held on November 20, Sir Robert Robertson was elected president. The vice-presidents are: Professor C. H. Desch, Professor F. G. Donnan, Dr. J. A. Harker, Professor T. M. Lowry, W. Murray Morrison, Professor J. R. Partington and Dr. G. Senter.

JOHN OLIVER LA GORCE, associate editor of the *National Geographic Magazine* and trustee of the National Geographic Society was elected a vice-president of the society on December 13.

At a general meeting of the members of the Royal Institution held on December 4, Sir Arthur Keith was elected secretary in succession to the late Colonel E. H. Grove-Hills.

DR. I. P. TOLMACHOFF, formerly chief keeper of the Geological Museum at Petrograd, has been appointed curator of invertebrate paleontology in the Carnegie Museum at Pittsburgh, Pa. Dr. Tolmachoff, who has been in Vladivostok for some time, has arrived in Pittsburgh and assumed his new duties.

JULIUS MATZ, pathologist of the Insular Station of Porto Rico, has been engaged to conduct research in agriculture for Central Porto Rico, San Pedro de Macoris, Dominican Republic.

PROFESSOR L. KAHLENBERG, of the chemistry department of the University of Wisconsin, lectured at the University of Illinois on December 7 on "The chemical replacement of the metals by one another."

THE Academy of Sciences and the Philosophical Society of Washington held a joint meeting on December 21, when Dr. H. A. Clark, physicist of the Taylor Instrument Companies, Rochester, N. Y., delivered an address on "The manufacture of thermometers."

DR. LUDWIK SILBERSTEIN, mathematical physicist, Eastman Kodak Company, Research Laboratory, gave the following lectures at Harvard University on December 18, 19 and 20: "Oriented quantum emission and the selective principle of spectroscopy"; "Perplexities in the domain of non-hydrogenic spectra"; "Rotational terrestrial optical experiment and its bearing upon fundamental physical questions."

DR. WILLIAM T. BOVIE, assistant professor of biophysics at Harvard University, will deliver the fourth Harvey Society lecture at the New York Academy of Medicine, on January 13. His subject will be "The physiological effects of light rays."

PROFESSOR R. G. HOSKINS, head of the department of physiology of Ohio State University, will deliver the annual address before the Portland, Oregon, Academy of Medicine on January 11 and 12.

SPENCER BAIRD NEWBERRY died on November 28 at the age of sixty-five years. Dr. Newberry, a son of John Strong Newberry, was at one time professor of chemistry at Cornell University and in 1893 founded the Sandusky Cement Company. He made important contributions to the scientific study of cement.

HENRY JOHN ELWES, distinguished for his contributions to forestry and other sciences, died on November 26, at the age of seventy-six

years. Mr. Elwes was a fellow of the Royal Society and had been president of the Royal Entomological Society of London and of the Royal English Arboricultural Society.

JOHN HENRY GURNEY, the English naturalist and ornithologist, died at his residence, Keswick Hall, near Norwich, on November 9, aged seventy-five years.

THE first of the customary lectures arranged by the Central Ohio Chapter, at the Ohio State University, of the Society of Sigma Xi, following its usual program for the encouragement of research, was a lecture with experimental demonstrations by Mr. Thomas Midgely, Jr., and Mr. T. A. Boyd, research fuel engineers of the General Motors Research Corporation of Dayton, entitled, "The chemical control by catalysis of detonation." Experimental demonstrations of the use of selenium and lead derivatives were made with internal combustion engines. The program is under the direction of the new officers of the local chapter, namely, James R. Withrow, professor industrial chemistry, president; Edward Mack, Jr., assistant professor of physical chemistry, secretary, and C. A. Norman, professor of machine design, retiring secretary.

THE directors of the Fenger Memorial Fund have set aside \$500 for medical investigation. The work should have a clinical bearing and if possible it should be carried out in an institution that will furnish facilities and ordinary supplies free of cost. Applications with full particulars should be sent to Dr. L. Hektoen, 637 S. Wood Street, Chicago, before January 15, 1923.

MR. ARTHUR H. HELME, whose gift to the Museum of the Brooklyn Institute of Arts and Sciences of a large collection of Long Island birds and mammals was announced during the spring, has been engaged since summer in affixing labels bearing name, locality and date to all of his specimens, which, instead of the original estimate of 3,000, it has now been shown number about 4,000. This donation, together with that of Mr. Peavey, Mr. Puttfarcken and others, represents the addition of fully 5,000 specimens, all received during the present year and this signifies that the Brook-

lyn Museum has attained its goal in now possessing the most exclusive and authentic collection of birds and mammals from Long Island.

THE Hurley expedition, which left Australia in August with a flying boat and seaplane to explore the country at the head of the Fly River, Papua, has had its plans dislocated by climatic conditions. The air pilot, who has reached Brisbane, reported that the machines were found unsuitable. Rain every night and terrific heat by day destroyed the fabric covering and made it unsafe to proceed. The only planes possible in such country must be of metal, with high horse-power.

THE first number of a new Italian mathematical journal, entitled *Bolletino della Unione Matematica Italiana*, was issued under the date of October, 1922. S. Pincherle, of Bologna, is provisional president of the union.

It is announced by the United States Geological Survey, that the price of radium has decreased owing to the discovery of radium bearing ores in Africa, which are easily worked at a much lower cost than the American mines. This caused a drop from \$120,000 a gram to \$70,000, which is the lowest price at any time since radium has been used. In connection with Cancer Week, the Survey announced, the state of New York and the city of Philadelphia have each bought two grams for the use of their citizens, and the city of Quebec one gram.

THE Seismos-Gesellschaft, of Hanover, Germany, has lately issued a pamphlet on the determination of underground geological structures and ore deposits by seismic methods, apparently an outcome of devices used in locating heavy guns in the war. The needed apparatus can be carried by two men. The work is said to be more expeditious and economical than exploration by borings. A number of sectional illustrations of investigated structures are included.

THE Swedish Parliament, as reported in *Eugenical News*, voted, May 13, 1921, to establish a Swedish Institute for Race-Biology with 82,500 crowns (Swedish) in addition to the salary of the director. Of this sum, 24,000 crowns are to be utilized for the first equip-

ment of the institute, 26,500 for working expenses, and the remainder for salaries for assistants during 1922. Work began January 1, 1922. The institute has its own council, appointed by the king and standing directly under the government. At present it is located at Upsala and the director is nominally on the university staff; but the institute is governmental rather than university department or agency. The first council comprises: H. Hammar skjöld, lord lieutenant of Upland; A. af Joeknick, Esq., director general in the Royal Committee for Pensions, Stockholm; F. Lennmahn, M.D., rector of the "Karolinska Institutet," Stockholm; Mrs. Emilia Broomé, Stockholm; J. V. Hultkranz, M.D., professor of anatomy, Upsala University; H. Nilsson-Ehle, M.D. and Ph.D., professor of heredity in Lund University (at Åkarp); H. Lundborg, M.D., director of the institute. The present staff includes: Dr. F. J. Linders, statistician, archivist and vice director; G. Dahlberg, M.D., medical assistant, at present doing anthropometric work; Dr. W. W. Krauss (formerly of Vienna), assistant anthropologist; E. Heckseher, genealogist; Mrs. G. Dahlberg, who helps her husband in anthropometric work, recorded as social worker; and Mr. E. A. Ohlsén, photographer.

UNIVERSITY AND EDUCATIONAL NOTES

GROUND has been broken for the new laboratory of the department of hygiene and bacteriology at the University of Chicago to stand between the psychological laboratory on the north and the university press on the south. The building, of brick, will front 110 feet on Ellis Avenue and will contain a general laboratory, a laboratory devoted to the bacteriology and chemistry of water and foods, five research rooms, a room equipped with sterilizing devices, and an animal room.

By the will of the late General Frank Sherwin Streeter, Dartmouth College receives \$50,000. A bequest of \$10,000 is left to Dr. Ernest M. Hopkins, president of the college.

THE council of the senate of the University

of Cambridge has issued a report on the allocation of the Special Government Grant, which has now become a recurrent grant of £30,000. This is divided as follows: Professorships, £14,675; readerships, £5,304; university lectureships, £3,750; university officers, £3,240; grant to Geographical Education Fund, £250; university library, £2,000; Museum of Classical Archeology, £750.

AT Indiana University, Associate Professor U. S. Hanna has been promoted to a full professorship, and Assistant Professor Cora B. Hennel to an associate professorship of mathematics.

THE *Bulletin* of the American Mathematical Society states that, on the return of pre-war conditions, the U. S. Naval Academy has reduced the number of its civilian officers of instruction in academic departments by about one third. From the department of mathematics, Assistant Professors R. P. Johnson and G. F. Alrich have accepted assistant professorships at the Carnegie Institute of Technology, and Mr. L. S. Johnston an assistant professorship at Pennsylvania State College.

DR. RAYMOND A. DART, formerly of Sydney University, Australia, and recently of the anatomical department, University of London, has accepted the professorship of anatomy in the University of Witwatersrand, Johannesburg, South Africa, where a new medical college building has recently been completed. Dr. Dart came to the United States two years ago on the invitation of the Rockefeller Foundation to examine American laboratories and methods of teaching, and to help encourage the development of a better understanding and closer relations between English and American scientists teaching in medical schools. As traveling fellow of the foundation, Dr. Dart spent some time in our laboratories, and at the Marine Biological Laboratory at Woods Hole, Mass., where he was married to Miss Dora Tyree, assistant in anatomy at the University of Cincinnati.

DR. HOLBURT J. WARING has been elected dean of the faculty of medicine of the University of London.