Sir Joseph Larmor, who has long held a leading position in the British school of mathematical physics. It may fairly be said that his preliminary work was of the utmost value in paving the way to the modern developments of the theory of relativity. A Royal medal to Dr. Frederick Frost Blackman, distinguished for his contributions to plant physiology, and especially to knowledge of the process of photo-synthetic assimilation of carbon dioxide. A Royal medal to Sir Frank Dyson, who has devoted special attention to investigations of the movements and distances of the stars and of the bearing of these upon the structure of the stellar universe. It was mainly to his foresight and organizing ability that we owe the successful observations of the deflection of light by the sun's gravitational field during the eclipse of 1919. The Davy medal to Prof. Phillipe Auguste Guye, in recognition of his work on optically active organic substances, on molecular association, and on atomic weights. The Hughes medal to Prof. Niels Bohr, the author of the conception to which the name "Bohr-atom" has been attached. This conception gave a solution of the long-standing puzzle of the Balmer series of hydrogen, and appears likely to provide a complete explanation of the spectra of the various elements.

SCIENTIFIC NOTES AND NEWS

DR. L. O. HOWARD, chief of the Division of Entomology of the U. S. Department of Agriculture, gave at Toronto on the evening of December 27 the address of the retiring president of the American Association for the Advancement of Science, which is printed in the present issue of SCIENCE. We hope to print in subsequent issues the addresses of the chairmen of the sections and other addresses and proceedings that are of general interest.

At the last meeting of the Indiana Academy of Science held at Indianapolis, Indiana, Dec. 1 and 2, 1921, the following officers were elected:

President: F. M. Andrews, Indiana University.

Vice-president: C. A. Behrens, Purdue University.

Secretary: W. N. Hess, De Pauw University.

Assistant Secretary: H. T. Dietz, Indianapolis, Indiana.

Treasurer: W. M. Blanchard, De Pauw University.

Editor: F. Payne, Indiana University.

Press Secretary: F. B. Wade, Shortridge High School, Indianapolis, Indiana.

THE recent election of the Optical Society of America resulted in the choice of the following officers for terms beginning January 1, 1922:

President (2 year term): Leonard T. Troland, Harvard University.

Vice-president (2 year term): Herbert E. Ives, Western Electric Company, New York.

Secretary (5 year term): Irwin G. Priest, National Bureau of Standards.

Treasurer (5 year term): Adolph Lomb, Bausch and Lomb.

Members of the Executive Council (2 year term): Adelbert Ames, Jr., Dartmouth College, W. E. Forsythe, Nela Research Laboratories, Henry G. Gale, University of Chicago, Ernest Merritt, Cornell University.

The retiring president, Professor J. P. C. Southall and all of the above-named officers are ex-officio members of the Executive Council.

AT its 1921 meeting at New Orleans, the American Pharmaceutical Association awarded the 1921-22 grant from the A. Ph. A. Research Fund to Dr. David I. Macht, of the Johns Hopkins University, for pharmacological work on the benzyl compounds found in certain galenicals. The first grant made in 1919 was awarded to Dr. George D. Beal, of the University of Illinois, for work on alkaloidal assays, while the 1920 award was made jointly to Dr. Herber W. Youngken, of the Philadelphia College of Pharmacy and Sciences, for work on aconite varieties and Dr. E. Kremers and Miss Lila Winkelblech, of the school of pharmacy of the University of Wisconsin, for work on derivatives of guaiacol.

R. L. AGASSIZ, of Boston, was elected president of the Copper and Brass Research Association, at its first annual meeting held in New York, December 6.

DR. WALTER LAWRENCE BIERRING, Des Moines, Iowa, has been elected an honorary member of the Royal College of Physicians of Edinburgh, "to mark its sense of his distinguished services in connection with reciprocity" between the United States and Great Britain in matters of medical education.

DR. NIELS BOHR (Copenhagen), Dr. Johan Hjort, head of the Norwegian Fisheries, and Professor Paul Langevin (Paris) have been elected honorary members of the Royal Institution.

DR. B. E. ELDRED of New York has reently been awarded the Elliott Cresson gold medal of the Franklin Institute, Philadelphia, for his development of the low-expansion leading-in wire for incandescent electric lamps.

THE Journal of the Washington Academy of Sciences states that Mr. George M. Rommel, chief of the animal husbandry division of the Bureau of Animal Industry, U. S. Department of Agriculture, has resigned to become editor-in-chief of the American International Publishers, New York City. Mr. Rommel had been with the Department since 1901, and had been chief of his division since its organization in 1910.

CAPTAIN ERNEST L. BENNETT, formerly in command of the battleship *New York*, has been designated by the Navy Department as director of the naval experimental and research laboratory now nearing completion at Belleview, on the Potomac River below Washington.

Dr. GEORGE H. WHIPPLE, dean of the University of Rochester Medical School, will deliver the fourth Harvey Society Lecture at the New York Academy of Medicine, on Saturday evening, January 7. His subject will be "Pigment metabolism and regeneration of hemoglobin in the body."

BEFORE a meeting of the Chemical Society of the District of Columbia, at the Cosmos Club in Washington on December 8, Dr. H. V. Moore, chief chemist of the Bureau of Mines, spoke on "Radium," Dr. Howard A. Kelley on "The Therapeutic Use of Radium in the Treatment of Cancer," and Miss Armstrong of the Bureau of Standards on "The Quantitative Measurement of Radium."

AT a meeting of the Faraday Society on December 13, Professor F. O. Rankine delivered an address on "The Structure of Gaseous Molecules."

THE Anglo-Batavian Society has proposed an extension of the scheme for the interchange of lectures between England and Holland and has suggested a course of eight lectures from the British side this session. The University of London has nominated Professor F. G. Donnan and Dr. J. F. Thorpe as lecturers in chemistry.

JOSEPH E. GOODRICH, head of the agricultural department of the Loomis Institute, Windsor, Conn., died on December 21 at the age of forty years.

MR. JAMES ROBERT APPLEYARD, of the Royal Technical Institute, died on November 26, in Manchester, England, at the age of fifty-two years.

WALLACE LEE has been appointed chief geologist to the Government of Siam. For the present his address is in care of the Commissioner General, Royal Railroad Department, Bangkok, Siam.

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 L. Hektoen, 637 S. Wood Street, Chicago, before January 15, 1922.

STANLEY FIELD, president of the Field Museum, Chicago, and nephew of Marshall Field, has contributed \$265,000 to the museum. Captain Marshall Field has pledged \$50,000 a year for five years; Charles R. Crane has given \$30,000 and Arthur B. Jones \$25,000.

THE seventeenth annual New England Intercollegiate Geologic Excursion was held October 15 at Attleboro, Massachusetts, under the leadership of Professor J. B. Woodworth of Harvard University. Forty-eight persons representing thirteen institutions were present. The institutions represented were as Associated Petroleum Engineers, follows: Brown University, Colby College, College of Education, Providence, Harvard University, Massachusetts Agricultural College, Mount Holyoke College, Tufts College, University of Vermont, University of Washington, United States Geological Survey, Wesleyan University, and Yale University. The group visited the exposures of Dighton conglomerate in the vicinity, of Attleboro, the Wamsuuta series consisting of red shales, felsites and diabases in South Attleboro, the Cambrian outcrops at Hoppin Hill, the shale series of the Coal Measures near the station at Plainville containing fossil plants and amphibian footprints, and other minor localities in the vicinity of Red Rock Hill and Oldtown. Plans were discussed for the eighteenth excursion which will be held in the vicinity either of Amherst or Worchester, Massachusetts.

WE learn from the Journal of the American Medical Association that the board of directors of the Gorgas Memorial Institute at the national headquarters in Washington has elected the following officers: Dr. William C. Braisted, president; Dr. Franklin Martin, vice-president; Dr. Arthur P. Robbins, Burlington, Iowa, executive secretary, and Mr. Edward J. Stellwagen, president of the Union Trust Company, Washington, treasurer. The purpose of the organization of an executive committee is to further a movement to introduce the sanitary methods devised by the late Surgeon-General Gorgas in all the civilized countries of the world. Word was recently received by the institute that Dr. Richard P. Strong, dean of the department of tropical medicine of Harvard University and former director of the biologic laboratory at Manila has accepted the post of scientific director of the Gorgas Memorial Institute of Tropical and Preventive Medicine to be built at Panama City on a site presented to the United States by Dr. Belisario Porras, president of the Republic of Panama. The presentation of the site was made recently in Philadelphia by José Lefevre, chargé d'affaires of Panama at Washington.

DR. CHARLES H. GILBERT, of the Bureau of Fisheries, and Field Assistant Henry O'Malley have returned from an extensive trip to Alaska, which was devoted to a study of the runs of salmon in the southeastern and central districts. Special attention was given to the salmon of Kodiak Island, where a rack had been constructed in Karluk River early in the season and the counting of red salmon ascending the stream was being carried on. It is reported that up to September 17, the total escapement of red salmon up the river was 1.322,000. Dr. Gilbert advises that the investigations in the Karluk region were most interesting and profitable. Every spawning stream tributary to Karluk Lake was examined.

EDUCATIONAL NOTES AND NEWS

THE American Association of University Professors meet at Pittsburgh on December 29 and 30 in association with the national societies devoted to the economic and social sciences.

DR. THEODORE LYMAN, director of the Jefferson Physical Laboratory of Harvard University and professor of physics since 1913, has been made Hollis professor of mathematics and natural philosophy. He is the ninth incumbent of this foundation, which was established by Thomas Hollis in 1727. Lyman's three immediate predecessors were Joseph Lovering, 1838-1888, and Lyman's teachers and friends, B. O. Pierce, 1888-1914, and Wallace C. Sabine, 1914-1919.

PROFESSOR HAROLD J. LOCKWOOD has been appointed professor of electrical engineering in the Thayer School of Engineering of Dartmouth College, to fill the vacancy caused by the resignation of Professor F. E. Austin.