

Frankel; secretary, Dr. C. St. Clair Drake; acting treasurer, Dr. William F. Snow; acting executive officer, Dr. Donald B. Armstrong.

THE AMERICAN METEOROLOGICAL SOCIETY

THE fifth meeting of the American Meteorological Society will be held on April 20 and 21 at the Central Office of the Weather Bureau, Washington, D. C. Including the six papers to be presented at the meeting of Section (c), meteorology, of the American Geophysical Union on April 19, the program as published in the April *Bulletin* of the society contains 27 titles of varied interest. Abstracts of all these papers and of such discussions as may follow them will be published in the *Bulletin of the American Meteorological Society*; and most of the papers themselves will probably be published in the *Monthly Weather Review*.

The proceedings of the first annual meeting of the society at Chicago on December 29, 1920, were published in the January issue of the *Bulletin*. A motion to increase the annual dues from \$1 to \$2 was lost because of the desire not to curtail the membership merely for money, which could be raised in other ways. A resolution favoring the Weather Bureau's estimates for increased appropriations was passed, but it had no effect in persuading Congress to recognize the dire straits of the bureau with its present program of service. Rather full information about the 32 papers on the scientific portion of the program appeared in the February and March *Bulletins*. Many of these papers have since been published in the *Review*.

CHARLES F. BROOKS,
Secretary

WASHINGTON, D. C.

THE EDINBURGH MEETING OF THE BRITISH ASSOCIATION

FROM *Nature* we learn that for the meeting of the British Association, which will be held in Edinburgh on September 7-14 next, the following presidents of Sections have been appointed: Section A (Mathematics and Phys-

ics), Professor O. W. Richardson; B (Chemistry), Dr. M. O. Forster; C (Geology), Dr. J. S. Flett; D (Zoology), Mr. E. S. Goodrich; E (Geography) Dr. D. G. Hogarth; F (Economics), Mr. W. L. Hichens; G (Engineering), Professor A. H. Gibson; H (Anthropology), Sir J. Frazer; I (Physiology), Sir W. Morley Fletcher; J (Psychology), Professor C. Lloyd Morgan; K (Botany), Dr. D. H. Scott; L (Education), Sir W. H. Hadow; and M (Agriculture), Mr. C. S. Orwin. Sir Richard Gregory has been appointed president of the Conference of Delegates of Corresponding Societies. Among the subjects of general interest which are being arranged for discussion at joint sectional meetings are: The Age of the Earth, Biochemistry, Vocational Training and Tests, The Relation of Genetics to Agriculture, The Proposed Mid-Scotland Canal, and The Origin of the Scottish People. The president of the association, Sir Edward Thrope, will deliver his address at the inaugural meeting on Wednesday evening, September 7, and discourses will be given at general evening meetings by Professor C. E. Inglis on The Evolution of Cantilever Bridge Construction, involving a comparison between the Forth and Quebec bridges, and by Professor W. A. Herdman, the present president, on Edinburgh and Oceanography. Measures are being taken towards a more effective co-ordination of the daily programs in order to avoid the clashing of subjects of kindred interest.

SCIENTIFIC NOTES AND NEWS

PRINCE ALBERT of Monaco, sailed on April 9 for New York on his way to Washington to receive the Alexander Agassiz gold medal awarded by the National Academy of Sciences to him in recognition of his promotion of oceanographic research. He will give an address before the academy on the evening of April 25.

PROFESSOR ALBERT EINSTEIN will be the guest of Princeton University from May 9 to 15, and will give five lectures on the theory of relativity. Professor Einstein and Dr. Weiz-

mann have been given the freedom of the City of New York.

VILHJALMUR STEFANSSON, on motion of the prime minister of Canada, has recently received the thanks of the Canadian government for his public services during the years 1906-1919. The action was based partly on his work in science and in geographic discovery, and partly on his having called to the attention of the country great economic resources in the north that had been previously unknown or undervalued. "He has turned men's minds towards the north country as a possible source of food supply and home for colonists, and his work and advice have proved the greatest incentive in promoting public and private development of our northern resources." For his geographic work, Mr. Stefansson had already received several gold medals from learned societies in America and Europe.

THE Boyle medal of the Royal Dublin Society has been awarded to Dr. George H. Pethybridge, botanist of the department of agriculture, Dublin.

SIR WILLIAM J. POPE has been elected an honorary member of the French Chemical Society.

DR. H. K. ANDERSON, master of Gonville and Caius College, Cambridge; Professor W. M. Bayliss, professor of general physiology, University College, London; and Sir William H. Bragg, Quain professor of physics, University of London, have been elected members of the Athenæum Club, London, for eminence in science.

DR. SOLON SHEDD, professor of geology at the State College of Washington, Pullman, has been appointed state geologist. Dr. Shedd will retain his position as professor of geology at the State College.

MR. C. R. DELONG has been appointed chief of the chemical division of the U. S. Tariff Commission, succeeding Dr. Grinnell Jones, who has returned to Harvard University, but retains a connection with the commission in an advisory capacity. The other members of

the chemical staff are: S. D. Kirkpatrick, W. N. Watson and A. B. Willis.

THE annual general meeting of the Chemical Society was held on March 17, when, as we learn from *Nature*, Sir David J. Dobbie, the retiring president, delivered his address. The following officers and members of council were declared elected: *President*: Sir James Walker. *Vice-presidents who have filled the office of president*: Professor H. E. Armstrong, Sir James J. Dobbie, Professor W. H. Perkin, Sir William J. Pope, Dr. Alexander Scott and Sir William A. Tilden. *Other Vice-presidents*: Professor F. G. Hopkins, Professor F. S. Kipping and Professor J. F. Thorpe. *Ordinary Members of Council*: Professor J. S. S. Brame, Dr. C. H. Desch, Mr. E. V. Evans, Mr. H. B. Hartley, Dr. T. S. Patterson, Dr. T. Slater Price, Mr. W. Rintoul, Dr. R. Robinson and Dr. N. V. Sidgwick.

DR. WALTER E. COLLINGE, of St. Andrews University, has been appointed keeper of the York Museum.

DR. COLIN G. FINK, organizer and for the past four years director of the Research Laboratories of the Chile Exploration Company has resigned his post. Formerly Dr. Fink was in charge of research at the Edison Lamp Works.

MR. W. M. SMART, Trinity College, chief assistant at the Cambridge Observatory, has been appointed to the John Couch Adams astronomership, recently founded under a bequest by the late Mrs. Adams.

COLLIER COBB, professor of geology at the University of North Carolina, Chapel Hill, is on a year's leave of absence under the Kenan Traveling Fund. He is studying shore-lines and shore-line processes in Japan.

PROFESSOR HERBERT OSBORN, of the Ohio State University, has recently returned from a two months' stay in Florida, during which he collected entomological material at different points in the state with cooperation of the State Plant Board of Florida.

DR. FRANK APP, of Rutgers College, has been given a year's leave of absence to become sec-

retary of the New Jersey State Council of County Boards of Agriculture.

FRIENDS of Professor Chandler presented in 1910 to Columbia University a sum of money which constitutes the Charles Frederick Chandler Foundation. The income from this fund is used to provide a lecture by an eminent chemist and to provide a medal to be presented to the lecturer in further recognition of his achievements in science. Previous lecturers on this foundation were L. H. Baekeland, W. F. Hillebrand and W. R. Whitney. The lecturer this year will be Frederick Gowland Hopkins, professor of biological chemistry, Cambridge University, England. The Chandler Medal will be presented to Dr. Hopkins in order to recognize his pioneer and very valuable work in the study of food accessories, such as vitamins. Professor Hopkins' subjects will be "Newer Aspects of the Nutrition Problem." His lecture will be in Havemeyer Hall, Columbia University, on the evening of April 18.

DR. A. J. LOTKA, who is working as a guest in the department of biometry and vital statistics of the school of hygiene and public health of John Hopkins University, gave in April a series of four lectures on "The dynamics of evolution and the foundations of physical biology."

SIR WALTER FLETCHER, secretary of the Medical Research Committee of Great Britain, will deliver the Tenth Harvey Society Lecture at the New York Academy of Medicine, Saturday evening, April 16. His subject will be: "The state's relation to medical activities in Great Britain."

DR. HERBERT HAVILAND FIELD, who in 1895 founded at Zurich the Concilium Bibliographicum, died suddenly of heart disease on April 5, at Zurich, where he had lived. He was born in Brooklyn in 1868, graduated from Harvard in 1888.

DR. THOMAS BENJAMIN DOOLITTLE, of Branford, Conn., said to be the originator of the first telephone switchboard and associated in the organization of the original Bell Telephone Company in Boston, died on April 4, at

the age of eighty-two years. Dr. Doolittle in 1898 received the Edward Longstreth medal from the Franklin Institute of Philadelphia for developing the process of producing hand-drawing copper wire.

DR. ALFRED DOOLITTLE, professor of mathematics and instructor in astronomy at the Catholic University since 1898, died on February 23.

WE learn from the *Journal* of the Washington Academy of Sciences that Mr. Frederic Perkins Dewey, assayer of the Bureau of Mines of the Treasury Department, died on February 10, in his sixty-sixth year. Mr. Dewey after graduation from Yale University became instructor in chemistry at Lafayette College. From 1881 to 1889 he was connected with the U. S. Government, first as chemist with the Tenth Census, then as mineralogist with the Geological Survey, then as curator in the National Museum. After 24 years in chemical and metallurgical patent practise he became assayer of the Mint in 1903.

DR. E. BÉRANECK, professor of biology at the University of Neuchâtel, has died at the age of sixty-one years.

THE death is also announced of Dr. León Becerra, chief health officer of Guayaquil, Ecuador, a member of the Rockefeller commission studying the yellow fever situation.

A COURSE of four public lectures on the history of plant delineation was given during March in the botany department of University College, London. The first two, on the art of the ancient empires and the dark and middle ages, was delivered by Dr. Charles Singer, and the other two, bringing the subject down to recent times, by Dr. Agnes Arber.

THE United States Civil Service Commission announces an examination for the position of scientific assistant in the U. S. Bureau of Fisheries at \$1,200 (plus \$20 a month), to be held on April 27. Applicants will be rated chiefly upon zoology in its relation to the fisheries, and general biology.

A REGULAR meeting of the American Physical Society will be held in Washington, at

the Bureau of Standards, on Saturday, April 23. If the length of the program requires it, there will also be sessions on Friday, April 22. Other meetings for the current season are as follows: August 4, 5, Pacific Coast Section at Berkeley; November 25, 26, Chicago, December 27-31, Toronto, annual meeting.

PENIKESSE ISLAND, Buzzards Bay, was abandoned as a leper colony on March 10. The thirteen lepers on the island with three from Bridgeport, Conn., and two from Richmond, Va., were transferred to the federal leprosarium recently established at Carville, La.

UNIVERSITY AND EDUCATIONAL NEWS

A BUILDING plan for its medical school in Chicago has been adopted by the University of Illinois in cooperation with the state department of public welfare. What was formerly a ball park, just south of the Cook County Hospital, Chicago, is to become the campus. The buildings now under construction are a clinical institute, a new building for the Illinois Charitable Eye and Ear Infirmary, a psychiatric institute and an institute for crippled children. Later, the clinical institute and the orthopedic institute will be enlarged and additional buildings will be erected for infectious diseases, venereal diseases, a research institute, a library, class rooms, research laboratories and a dental institute. The Elizabethan style of architecture has been selected.

THE Senate of the University of London has adopted a resolution to continue the physiological laboratory at South Kensington until the end of 1923.

DR. L. EMMETT HOLT, Carpentier professor of the diseases of children at the College of Physicians and Surgeons, Columbia University, has resigned this chair and the administrative conduct of the department, and has been appointed chemical professor of the diseases of children.

At the Harvard Medical School Dr. Philip Drinker, of the Buffalo Foundry and Machine

Co. and Dr. Douglas A. Thom have become instructors of applied physiology and psychiatry, respectively. Dr. Frederick L. Wells, director of the Psychological Department of the Psychopathic Hospital, Boston, has been given an appointment as instructor in experimental psychopathology.

MR. F. C. THOMPSON, Sorby research fellow of the Royal Society, has been appointed to the chair of metallurgy in the University of Manchester.

DISCUSSION AND CORRESPONDENCE POSITIVE RAY ANALYSIS OF LITHIUM

APPLYING the method of positive ray analysis previously used¹ to the element lithium, I have recently found that it is composed of two isotopes. With positive ions from heated lithium salts G. P. Thomson and F. W. Aston have also obtained two components.² In my experiments the metal itself was evaporated in a small iron capsule, heated electrically. The two rays corresponding to atomic weights 6 and 7 were widely separated and appeared simultaneously as the heating current was increased. The absolute atomic weights could be checked by comparison with hydrogen atoms which were driven off from the metal; the setting on the maxima of the two components was so accurate that assuming a molecular weight of exactly 6 for the lighter, the heavier atomic weight was 7.00 within 2 units in the second decimal place, thus excluding the possibility of a simple element with the chemical atomic weight 6.94. Any further isotopes at 4, 5, 8 or 9 must be less than 2 per cent. of that at 7.

It was also observed that the proportion of the two components varies with the experimental conditions. The lighter at 6 is sometimes one quarter as strong as that at 7, but under other conditions of heating and pressure, it appears weaker and sometimes is only one twelfth as strong. To obtain a mean atomic weight of 6.94 the lighter should be only one sixteenth as strong as the heavier,

¹ SCIENCE, December 10, 1920.

² *Nature*, February 24, 1921.