

SCIENTIFIC NOTES AND NEWS

FOR the Roosevelt Memorial Association, President Harding presented on June 15 gold medals to Miss Louisa Schuyler, known for her philanthropic work; Professor Henry Fairfield Osborn, president of the American Museum of Natural History, and Major General Leonard Wood. In presenting Professor Osborn, Mr. Hagedorn said that Theodore Roosevelt had sought him out again and again "as the highest authority in a field that was dear to his heart."

A PORTRAIT of Professor A. A. Michelson, for over thirty years head of the department of physics in the University of Chicago, which was painted by Ralph Clarkson of Chicago, is to be a gift to the university from a large number of Professor Michelson's former students and friends. The portrait has been temporarily placed in the Quadrangle Club.

THE University of Cambridge will confer the degree of Doctor of Science on Wilder Dwight Bancroft, professor of chemistry in Cornell University; Ernst Julius Cohen, professor of chemistry in the University of Utrecht; Albin Haller, president of the Academy of Sciences of the Institute of France; Charles Moureu, professor of chemistry in the Collège de France; Raffaello Naisni, professor of chemistry in the University of Pisa; Amé Pictet, professor of chemistry in the University of Geneva; and Frédéric Swarts, professor of chemistry in the University of Ghent.

THE University of Oxford will confer at the forthcoming commemoration on June 27 the honorary degree of doctor of science on Sir E. Rutherford, F. R. S., Fellow of Trinity College and Cavendish professor of experimental physics in the University of Cambridge, and on Dr. Louis Lapicque, professor of physiology in the University of Paris.

THE British Institution of Electrical Engineers has presented its Faraday medal for "notable scientific or industrial achievement in electrical engineering, or for conspicuous services rendered to the advancement of electrical science," to Sir Charles Parsons, the distinguished engineer.

THE David Livingstone Centenary Medal for 1923 has been awarded to Griffith Taylor, asso-

ciate professor of geography in the University of Sydney, Australia. This medal, founded by the Hispanic Society of America and awarded by the American Geographical Society, is given "for scientific achievement in the field of geography of the southern hemisphere." The second Pan-Pacific Scientific Congress will meet in August and September of this year in Australia at which time presentation of the medal to Dr. Taylor will be made by the American Geographical Society's representative.

THE honorary degree of doctor of science was on May 31 conferred on Dr. Karl F. Kellerman, associate chief of the Bureau of Plant Industry of the Department of Agriculture, by the Kansas State Agricultural College. Dr. Kellerman is the son of William A. Kellerman, professor of botany in the college from 1883 to 1891.

PROFESSOR WARREN G. WATERMAN has been elected president of the Illinois State Academy of Science for 1923-24.

PROFESSOR D. M. MOTTIER, of the University of Indiana, has been appointed chairman of a committee for the state for the conservation of rare wild species of ferns and flowering plants.

THE Sigma Xi fellowship for the year 1923-24, with a stipend of \$1,500 and \$500 for expenses, has been granted to Professor Roy L. Moodie, of the College of Medicine, University of Illinois, Chicago. Professor Moodie expects to continue his studies in paleontology, working in various museums in California and the southwest.

THE Ricketts Prize of the University of Chicago for research in pathology, hygiene and bacteriology for 1923 is divided between Lauretta Bender and Robb Spalding Spray. Miss Bender receives a first prize of \$300 for "Hematological studies in experimental tuberculosis of the guinea pig," and Mr. Spray a second prize of \$50 for "A bacteriological study of pneumonias of sheep."

DR. R. B. MOORE, retiring chief chemist of the Bureau of Mines, was guest of honor at a luncheon on May 29, which was attended by a large number of his associates at the bureau.

WALTER M. BERRY, who has been chief of the gas engineering section of the Bureau of Standards, has resigned effective July 1 to be-

come engineer in charge of research of the California Gas Research Council.

A. H. HOOKER, of the Hooker Electrochemical Company, was elected president of the Manufacturing Chemists' Association at the annual meeting held in New York on June 5.

DR. VICTOR F. HESS, chief physicist of the United States Radium Corporation, has resigned to assume the chair of experimental physics at the University of Graz in Austria.

PROFESSOR COLIN G. FINK, head of the division of electro-chemistry, Columbia University, has been elected to honorary membership in the honorary engineering fraternity Tau Beta Pi. Dr. Fink has recently been granted letters patent on his insoluble cupro-silicon anode now in successful operation at the large copper works at Chuquicamata, Chile.

ERIC A. LOF, who since 1909 has been connected with the power and mining engineering department of the General Electric Company as industrial engineer and specialist, has resigned to take up work with the American Cyanamid Company.

THE representatives of the American Association for the Advancement of Science at the twenty-sixth annual meeting of the American Society for Testing Materials, to be held at Atlantic City, New Jersey, from June 25 to 29, are: George K. Burgess, director of the United States Bureau of Standards, and C. L. Warwick, secretary-treasurer of the society. At the exercises held during commencement week at the Carnegie Institute of Technology, Pittsburgh, Pennsylvania, the association is to be represented by Edward K. Strong, Jr., professor of education and head of the department of educational reference and research in the institute.

OFFICERS of the Linnean Society, London, have been elected as follows: *President*, Dr. A. B. Rendle; *treasurer*, Mr. H. W. Monekton; *secretaries*, Dr. B. Daydon Jackson, Dr. W. T. Calman and Captain J. Ramsbottom; *other members of council*, Dr. W. Bateson, Dr. G. P. Bidder, Mr. R. H. Burne, Professor F. E. Fritch, Professor E. S. Goodrich, Dame Helen Gwynne-Vaughan, Sir Sidney F. Harmer, Dr. A. W. Hill, Mr. L. V. Lester-Garland, Baron

Rothschild, Dr. E. J. Salisbury, Mr. R. J. Tabor, Mr. T. A. Sprague, Professor F. E. Weiss and Dr. A. Smith Woodward.

DR. W. J. MAYO, of the Mayo Clinic, Rochester, Minnesota, who had conferred on him the honorary doctorate of laws at the recent commencement of McGill University, has sailed for Europe where the degree of master of surgery will be conferred on him by Trinity College, the University of Dublin and the degree of doctor of science by the University of Leeds. Dr. Mayo will present a paper on July 17 before the International Surgical Congress.

DR. HUGH S. CUMMING, surgeon general of the United States Public Health Service, has been attending meetings of the committee on health of the League of Nations held in Paris at the end of May.

A SCIENTIFIC mission, composed of Professor Moureu, chemist at the Collège de France, his son and an assistant, has left Marseilles for Madagascar to examine the radio-active deposits which have been discovered on the island and to ascertain the properties of the thermal waters at Antsirabe.

DR. ARTHUR D. LITTLE, of Cambridge, spoke on June 13 before the New York State Bankers' Association on "The chemistry behind the dollar."

DR. W. D. BANCROFT, professor of physical chemistry in Cornell University, gave an address entitled "A plea for research" at the house of the Royal Photographic Society, London, on June 5.

PROFESSOR H. R. KRUYT, who occupies the chair of physical chemistry in the University of Utrecht, recently gave a lecture upon the electric charge of colloids before the medical chemistry department of the University of Edinburgh.

MR. J. T. SAUNDERS, demonstrator of animal morphology at the University of Cambridge, is giving at Basle a course of twelve lectures on the "Basis of fresh water biology" in the university. Mr. Saunders is lecturing in French. These lectures are a return for those delivered by Professor Zschokke, of Basle University, last term in Cambridge on the "European fauna."

PROFESSOR E. W. D. HOLWAY, of the University of Minnesota, died at Phoenix, Arizona, on March 31, aged seventy years. He had recently returned from Brazil with large collections of fungi and flowering plants.

DR. A. LOOSS, formerly professor of parasitology in the School of Medicine, Cairo, died on May 4, aged sixty-two years.

MR. M. DE C. S. SALTER, superintendent of the British Rainfall Organization, died on May 21, aged forty-two years.

CAPTAIN CARL HARTVIG RYDER, director of the Danish Meteorological Service, died on May 3.

COLONEL GEORGE FALCONER PEARSON, distinguished for his work on forestry in India, died on April 25, at Kington, Herefordshire, aged ninety-six years.

ON June 7, at the Brooklyn Botanical Garden, was unveiled the Alfred T. White Memorial. This consists of a semi-circular seat of stone facing a tablet of serpentine rock bearing a bronze bas-relief six feet high by five and one half feet wide, by Mr. Daniel Chester French. At the right of the design is the figure of a woman, seated, with a small child beside her. In her lap is a partly completed wreath of mountain laurel, and she is reaching forward to pluck a branch from a laurel bush in blossom on the opposite side of the plaque beneath an oak. The seat and tablet were designed by Mr. Henry Bacon, who was the architect of the Lincoln monument in Washington. The memorial was a gift from former associates and friends of Mr. White.

WE learn from *Nature* that at the annual meeting of the Institution of Electrical Engineers May 31, there was presented to the institution: (1) an oil painting of the late Dr. Silvanus Thompson (presented by Mrs. Thompson); Dr. Thompson's library (presented by a number of members of the institution and others); and (2) a bronze bust of Dr. Thompson, by Mr. Gilbert Bayes (presented by the Finsbury Technical College Old Students' Association).

A PRELIMINARY announcement regarding the general discussion on the electronic theory of valency arranged by the Faraday Society, to be held at Cambridge on July 13-14, has been is-

sued and is summarized in *Nature*. Professor G. N. Lewis, of the University of California, will open the proceedings on the Friday afternoon with a general introductory address and he will probably be followed by Mr. R. H. Fowler, with a paper intended to open discussion on the physical and inorganic side of the subject. Among those expected to speak are Sir J. J. Thomson, who will be in the chair; Sir Ernest Rutherford, Sir William Bragg and Professor W. L. Bragg. The Saturday morning session will be devoted chiefly to applications of the theory in organic chemistry. Sir Robert Robertson, president of the society, will preside, and opening papers will be given by Professor T. M. Lowry and Dr. N. V. Sidgwick. Among those expected to speak are Professor W. A. Noyes, Sir William Pope, Professor A. Lapworth, Professor I. M. Heilbron, Dr. W. H. Mills, Professor J. F. Thorpe and Professor R. Robinson. On the Friday evening a complimentary dinner will be given to Professors Lewis and Noyes and other guests at Trinity Hall.

DR. FRANCIS G. BENEDICT, director of the Nutrition Laboratory of the Carnegie Institution of Washington, Boston, is visiting research institutions and particularly physiological laboratories in the principal countries of Europe. An address on the work of the Carnegie Institution of Washington in general and the Nutrition Laboratory in particular was given by Dr. Benedict in the new amphitheater of the Société Scientifique d'Hygiène Alimentaire in Paris on April 14. At a joint meeting of the Biochemical and Medical Societies of Berne, on April 30, a lecture on the recent work of the Nutrition Laboratory on basal metabolism and insensible perspiration was given. An address on the simple method of determining the gaseous metabolism in man, recently devised by Dr. Benedict and Mrs. Cornelia Golay Benedict, was delivered on May 14 at Heidelberg, before the Naturhistorisch-medizinischer Verein, together with a discussion of normal basal metabolism. In Halle on May 16 an address was given before the faculty and students of the medical department of the university on the determination and significance of basal metabolism in clinical medicine. After visiting Berlin, Sweden, Finland, Denmark, Holland, Belgium and

England, Dr. and Mrs. Benedict will attend the International Congress of Physiology at Edinburgh, returning to Boston in August.

THE station budget for the year 1923-24 of the New York Agricultural Experiment Station at Geneva, New York, carries a total of \$250,035, an increase over that for the past year of \$31,585. Of this sum, \$16,800 is specifically appropriated for special research in horticulture in the Hudson River Valley. No permanent sub-station is to be established, only temporary field laboratories wherever the problems demand close attention. The work will be under the direction of the station at Geneva and three new positions on the station staff have been created to take care of the new lines of work. These positions will include associates in research in entomology, horticulture and plant diseases. These appointments will take effect July 1 next. Three new positions have also been created on the staff at Geneva, beginning with July 1. Two of these will be assistants in research in dairying and one a laboratory technician. Provision is made for the publication of "The small fruits of New York," the next in the series of fruit books published by this station. Work is already under way on this book. The bill providing for the administration of the Geneva station by the trustees of Cornell University has been signed by the governor and will take effect July 1. The present board of control will be abolished and the station will be administered by Cornell University, but with a director and staff as heretofore.

THE Mexican government is making special arrangements for the several scientific expeditions expected to visit Mexico to make observations of the total eclipse of the sun next September. Camille Flammarion, director of the Paris Observatory, has notified the Mexican government that he will head an expedition which probably will establish headquarters in Durango. Dr. Albert Einstein may go to Mexico to observe the eclipse. Among Americans who will visit Mexico are Dr. John Miller of Sproul Observatory, Swarthmore, Pennsylvania, and Dr. Douglas of the University of Arizona. The eclipse will have a path of about 105 miles, passing from the islands off the coast of California through Sonora to

Durango. Dr. Douglas expects to establish his expedition in Lower California. The northern limit of totality will lie one mile to the northeast of Santa Barbara.

ANNOUNCEMENT of personnel and plans of the committee which is to direct a national investigation of the storage of coal in cooperation with the United States Coal Commission, the Department of Commerce and the Bureau of Mines is made by the Federated American Engineering Societies. The committee members are: H. Foster Bain, director of the United States Bureau of Mines, Washington; David Moffat Myers, former fuel administrator, New York; Perley F. Walker, dean of engineering, University of Kansas; W. H. Hoyt, chief engineer of the Duluth, Missabe and Northern Railway, Duluth, Minn.; S. W. Parr, professor of applied chemistry, University of Illinois; Edgar S. Nethercut, secretary of the Western Society of Engineers, Chicago; Roy V. Wright, editor, New York. The chairman is W. L. Abbott, chief operating engineer of the Commonwealth Edison Company of Chicago. This main committee, it was stated by Dean Mortimer E. Cooley, of the University of Michigan, president of the Federated American Engineering Societies, will work with committees in every state, studying local conditions through local engineers in an effort to find a solution for the problems of coal consumers from the small households to the largest industries. Thirty national and local engineering societies, members of the federation, have been enlisted in the work and will be aided by other engineering groups, state administrative committees, federal and state agencies, private enterprises, civic bodies, corporations and individuals. The investigation, the first of its kind to be undertaken in this country, will deal with the whole range of problems affecting the storage of coal.

THE Tortugas Laboratory of the Carnegie Institution of Washington will be open for two or three months during the present summer in order that investigators who have formerly undertaken researches in association with the department of marine biology of the institution may be afforded an opportunity to continue such investigations with a view to the completion of their studies for purpose of publication. It is expected that Dr. Paul Bartsch, of the

United States National Museum; Dr. W. H. Longley, of Goucher College, and Dr. A. A. Schaeffer, of the University of Tennessee, will pursue investigations at Tortugas in accordance with this plan. The equipment of the laboratory will be in charge of Mr. John W. Mills, engineer of the Department of Marine Biology.

THE second annual session of the Rocky Mountain Biological Station began on June 11 and continues until August 24. The second half begins on July 19. The station is located at Gunnison, Colorado, close to the continental divide and is conducted as a part of the Western State College of Colorado. The staff for 1923 is: Dr. John C. Johnson, of Western State College, director; Dr. J. D. McDonald, of California State College; Mr. J. P. Eskridge, formerly of Silliman Institute, Philippines; Mr. C. R. Walker, of Western State College; Mr. C. T. Hurst and Miss Virginia McCleary, assistants; Dr. Charles A. Kofoed, of the University of California, special lecturer, July 23-27. The greatest emphasis will be placed upon parasitology and animal and plant ecology, although the standard courses in botany and zoology will also be given.

THE National Association of Manufacturers of Carbonated Beverages has established at the Iowa State College a fellowship in food and sanitary chemistry which will carry a stipend of from \$2,000 to \$2,500 for the next two years. Professor Buchanan, in charge of food and sanitary chemistry, will direct the work.

THE Hammermill Paper Company, through their chemical director, Dr. Bjarne Johnson, has offered to the trustees of the New York State College of Forestry a fellowship for the coming year of the value of \$1,200 to be known as the "Hammermill fellowship in pulp and paper manufacturing." The fellowship has been awarded to Mr. Burton L. Kassing, of Utica, New York.

MESSRS. NORTON AND GREGORY, Limited, London, manufacturers of drawing and mathematical instruments, etc., are offering two engineering scholarships to be competed for annually, one value £100 per annum and one value £50 per annum, tenable for three years at any university in the United Kingdom or British

Dominions approved by the honorary committee, of which Sir Joseph Petavel, F.R.S., director of the National Physical Laboratory, Teddington, is the chairman. The object is to assist those who are unable to take up a complete course of engineering at a university owing to lack of the necessary funds.

GOVERNOR COX has signed a bill to authorize the trustees of Northeastern University of the Boston Young Men's Christian Association, "to confer such degrees as are usually conferred by colleges and universities in this commonwealth, except medical and dental degrees and degrees of bachelor of science and bachelor of arts, and to grant diplomas therefor."

Nature writes: "Scientific workers are too well acquainted with the value placed on their services to be surprised at an advertisement for a university assistant lecturer in a department of science at a salary of £300 a year. Recently, however, such an offer provoked an indignant protest from a disinterested member of the general public, who stated to us that the remuneration of his chauffeur was on a more liberal scale. While it is true that any educated man with aspirations would prefer a university teaching post, with its vague promise of an interesting and useful career, to the more mundane occupation, it is nevertheless a matter of the gravest concern that those educational institutions which are engaged in the task of increasing and disseminating knowledge are in such a parlous financial position that they are forced to offer salaries bearing no relation to the status of the posts, and imposing on their holders an unfair burden of financial sacrifice. The greatest benefactors of the universities are still the members of the teaching staffs themselves."

THE British Colonial Office has announced that the vessel *Discovery* has been purchased by the Crown agents for the colonies on behalf of the government of the Falkland Islands, to be employed principally in research into whaling in South Georgia and the South Shetlands. The London *Times* notes that there is a very large whaling industry in these dependencies and knowledge in regard to the numbers and habits of the whales is insufficient to enable the industry to be controlled in such a way as to

afford security against depletion of the stock. The principal task for which the *Discovery* will be employed is to ascertain the geographical limits of the whales, to trace their migrations and to form some idea of their numbers and the rate of reproduction. But the expedition will also afford opportunities for adding to scientific knowledge in many other directions and particularly in oceanography, meteorology and magnetism. As the *Discovery* will require extensive reconstruction, it is not anticipated that she will be ready to sail before next year. The enterprise will be carried out under the instructions of the Colonial Office, and the Duke of Devonshire is taking steps for the appointment of an executive committee to undertake the management. It is proposed that the Colonial Office, the Admiralty, the Ministry of Agriculture and Fisheries, the British Museum (Natural History) and the Royal Geographical Society should be represented upon the executive committee. The committee will keep in close touch with other institutions and individuals who are interested in Antarctic research. The *Discovery*, a strong wooden ship of about 700 tons register, was built at Dundee for Captain R. F. Scott's expedition to the Antarctic, which started in 1901. The ship was frozen in at its winter quarters and Scott received orders to abandon her and return in the relief ships sent, but the *Discovery* broke out of the ice in February, 1904, and Scott brought her home in perfect order.

THE governments of South Africa, Australia, the Argentine Republic and possibly the United States will cooperate with Great Britain in an Antarctic expedition, preliminaries of which are being discussed. In all probability plans will be completed in London.

UNIVERSITY AND EDUCATIONAL NOTES

ANNOUNCEMENT was made at commencement at Lafayette College, by President John H. MacCracken, of the gift of \$200,000 by Mr. John D. Larkin, of Buffalo, to endow "The John D. and Frances H. Larkin professorship of chemistry." In accordance with the conditions of the trust, four fifths of the income is

subject to an annuity for one life, the other one fifth of the income will be immediately available for the work in chemistry.

THE Michigan College of Mines has received a gift of \$10,000 from Dr. Edgar Kidwell, head of the Kidwell Boiler Company, of Milwaukee, for the founding of a scholarship in memory of his son, who was killed in the war. Dr. Kidwell was formerly professor of engineering in the college.

DR. EDGAR FAHS SMITH, formerly provost of the University of Pennsylvania, laid the cornerstone of the new chemical laboratory of the Rice Institute, Houston, on June 4. The laboratory, which will be erected at an approximate cost of \$1,000,000, will be ready in September, 1924.

PROPOSALS for the removal of Randolph-Macon College to Norfolk and for its consolidation with American University at Washington have been rejected by the board of trustees, following a meeting attended by members of the faculty and alumni of the institution.

JOHN H. MUELLER, Ph.D., associate professor at the College of Physicians and Surgeons, Columbia University, has been appointed assistant professor of bacteriology at the Medical School of Harvard University.

DR. LESLIE A. KENOYER, assistant professor of botany in the Michigan Agricultural College, has been chosen professor of biology at the Western State Normal School, Kalamazoo, Michigan.

MR. J. T. SAUNDERS, senior fellow of Christ's College, Cambridge, and demonstrator of animal morphology, has been elected tutor of Christ's College, in succession to Dr. F. H. A. Marshall, F. R. S., who has resigned.

DISCUSSION AND CORRESPONDENCE

NOTE ON PREPARING COLOR STANDARDS

WHEN it is desirable to develop a colorimetric method for measurement of the small amounts of substances met with in biological studies the worker must frequently devise his own color standards. After a color has been matched to that produced by the substance to be