

of the service which the retiring administrative head of the Sheffield Scientific School has rendered since he succeeded Dr. George Jarvis Brush in 1898. The latter was the first incumbent of an office which offered unusually large opportunity to a man of energy and imagination. That Dr. Chittenden has taken advantage of the opportunity is strikingly demonstrated by a review of the development of the school under his far-seeing administration. This sympathetic interest has covered not alone his own special field of physiological chemistry, in which he as well as other members of the Scientific School faculty group have accomplished important results, but also other departments, including those in engineering. It is doubtful if any administrative officer of the university has ever followed more intimately the work of his office or brought to his task a more generous measure of loyal and intelligent effort. The qualities which distinguish the Scientific School and elevate it to the front ranks of institutions of its class must be attributed largely to the man who now quietly lays down duties which he has unremittingly carried on for almost a quarter of a century. Graduates of the university, whatever their school affiliations and interests, will unite in paying tribute to such a record of service. They will look for years to come for the results of the successive contributions of Director Brush and Director Chittenden and will certainly find those results in an ever more useful Sheffield Scientific School.

### SCIENTIFIC NOTES AND NEWS

SIR ERNEST RUTHERFORD, Cavendish professor of experimental physics in the University of Cambridge, has been named as president of the British Association for the Advancement of Science for the annual meeting to be held at Liverpool next year.

A DINNER in honor of Dr. Mansfield Merriam, editor of the *American Civil Engineers' Handbook* and former professor of civil engineering at Lehigh University, is to be given by the New York alumni of that institution at the Aldine Club, New York City, on April 18. John R. Freeman, George H. Pegram, Robert Ridgway, Henry S. Jacoby, Frank P. McHibben and Ralph J. Fogg will be the speakers.

RAMON Y CAJAL will reach the retirement age on May 1, and a committee has been formed

in Spain to organize a national demonstration showing the high regard in which he is held. An organizing committee has been appointed, the president of which is Dr. C. M. Cortezo, president of the Royal Academy of Medicine, and the secretary, Dr. C. Pittaluga. The plans of the committee include a special edition of Cajal's works, the construction of a monument and an increase in the appropriation allotted by the government for the maintenance of the Instituto Cajal.

SIR FRANK DYSON was elected president of the British Optical Society at the annual meeting held on February 9. At the same meeting Professor A. A. Michelson, of the University of Chicago, and Dr. M. von Rohr, of Messrs. Carl Zeiss, Jena, were elected honorary fellows of the society.

MR. G. V. COLCHESTER has been appointed to the post of geologist on the Geological Survey of the Anglo-Egyptian Sudan in succession to Mr. C. T. Madigan, who now holds a lectureship in geology at Adelaide University.

DR. CHARLES D. WOODS, who for nearly 25 years was director of the Maine Agricultural Experiment Station and more recently consultant in agriculture in the United States War Department, has accepted the directorship of the Division of Agricultural Information with the State Department of Agriculture of the Commonwealth of Massachusetts.

MR. C. S. BRINTON has been appointed chief of the Philadelphia Food and Drug Inspection Station of the Bureau of Chemistry, effective March 1, 1922. This appointment is made to fill the vacancy caused by the transfer of Mr. Arthur Stengel to the Bureau of Chemistry in Washington.

MR. D. D. BEROLZHEIMER, assistant technical editor of the Chemical Engineering Catalog and co-author of the Condensed Chemical Dictionary, has been appointed manager of the information bureau of the Chemical Catalog Company, Inc., and of the service department of the *Journal of Industrial and Engineering Chemistry*.

MR. ARTHUR D. HOLMES, who has been research chemist with the E. I. du Pont de

Nemours & Co. at the Jackson Laboratory, has resigned to accept a position with the E. L. Patch Company, Boston, Mass., to establish a research laboratory which will be concerned with investigations along biological and physiological lines.

DR. PERLEY SPAULDING, of the Bureau of Plant Industry, sailed on April 4 for Europe, where he will make a prolonged investigation of the white-pine blister rust. He will spend about eight months in Europe, covering the entire growing season, and visiting all parts except Spain, Russia and the Balkans. He will also represent the United States Department of Agriculture at the general assembly of the International Institute of Agriculture at Rome on May 8 to 18.

*Nature* reports that an expedition, consisting of Professor J. W. Gregory, of Glasgow University, and his son, Mr. Christopher J. Gregory, which has for its primary object the investigation of some features in the mountain structure of northwestern Yunnan and western Szechuan, expected to leave for Burma at the end of March. The area is one of special geological and biological interest. It includes some mountains of which the height varies, according to the available information, from 20,000 to 25,000 feet; and as these mountains occur in line with the Himalaya and the mountains south of Assam it has been suggested that they represent a prolongation of the Himalaya. Some zoological and botanical collections will be made which it is hoped will be worked out in the British Museum of Natural History and in the India Museum, Calcutta. The expedition will travel via Rangoon, and hopes to start from Bhamo, near the northwestern frontier of Burma, at the beginning of May.

WE learn from the *Journal* of the Washington Academy of Sciences that Secretary of Agriculture Wallace has appointed a committee of six scientific men from the department to consider the problem of land utilization. The committee consists of Messrs. L. C. Gray, of the Office of Farm Management and Farm Economics; C. V. Piper, of the Bureau of Plant Industry; G. M. Rommel, of the Bureau of Ani-

mal Industry; C. F. Marbut, of the Bureau of Soils; E. E. Carter, of the Forest Service; and S. H. McCarty, of the Bureau of Public Roads.

GOVERNOR W. D. STEPHENS, of California, has appointed the following as a committee to investigate the agricultural colleges of the United States and report on a plan for improving the agricultural work of the state: G. H. Powell, Los Angeles; W. S. Guilford, Butte City; Elwood Mead, professor of rural institutions, University of California; James J. Hollister, Gaviota; Samuel G. Mortland, Fresno; Sheridan W. Baker, Santa Rosa, and R. G. Sproul, comptroller of the University of California.

ON the request of W. D. Bancroft, the National Research Council has appointed the following committee on theory of reactions of non-electrodes: Julius Stieglitz, of the University of Chicago, Roger F. Brunel, of Bryn Mawr College, H. S. Fry, of the University of Cincinnati, L. W. Jones, of Princeton University, James Kendall, of Columbia University, G. N. Lewis, of the University of California, and W. A. Noyes, of the University of Illinois.

THE National Canners' Association has just contributed to the University of Chicago \$10,000 a year for two years for investigation into the causes of disease connected with their work. The investigation is to be under the direction of Professor Edwin Oakes Jordan, chairman of the department of hygiene and bacteriology, and will be in cooperation with the United States Public Health Service. Dr. J. C. Geiger has been detailed by the surgeon general of the United States to carry on this work under Professor Jordan, and for this purpose he has been appointed for two years to an associate professorship of epidemiology in the department of hygiene and bacteriology.

DR. F. W. ASTON, of the University of Cambridge, delivered an address on "Isotopes and the structure of the atom" before the joint meeting of the Washington Academy of Sciences, Philosophical Society of Washington and the Chemical Society of Washington, on March 29. Dr. Aston also gave lectures on March 30 and 31 before the North Carolina Chapter of the Society of Sigma Xi.

THE Harben lectures will be given during the meeting at Plymouth of the Royal Institute of Public Health from May 31 to June 5 by Dr. T. Madsen, director of the State Serum Institute, Copenhagen.

THE death is announced of Professor V. I. Palladin, the well-known plant physiologist, at the age of 63 years. Palladin published many scientific contributions, notably on the fundamental molecular phenomena of respiration. An English translation of his text book of plant physiology is used in many American universities.

JULES SCHEVITZ, secretary of the Oklahoma Public Health Association, died on March 22, 1922, at the age of twenty-four years. A correspondent writes: "During the four years of his association with the work, he built up a statewide organization for the promotion of the public health, established tuberculosis dispensaries, initiated infant and child welfare activities, conducted a state-wide public health survey of urban conditions and succeeded in getting legislative action for the construction of three tuberculosis sanatoria."

THE Pacific Division of the American Phytopathological Society will meet in Salt Lake City, Utah, from June 22 to 24, in conjunction with the summer session of the American Association for the Advancement of Science. It is hoped that any members of the parent society who are contemplating a trip to the Rocky Mountains or the Pacific Coast will arrange to be at Salt Lake for this meeting. Those who wish to present papers should notify S. M. Zeller, secretary-treasurer, Pacific Division, American Phytopathological Society, Oregon Agricultural College, Corvallis, Oregon.

THE fourth annual meeting of the American Society of Mammalogists will be held in New York City from May 16 to 18. The sessions on the first two days, May 16-17, will be devoted to the reading of papers, discussion and business, and will be held from 10 A.M. to 4:30 P.M. in the American Museum of Natural History. A session will also be arranged for the evening of May 17. On May 18 the society will visit the New York Zoological Park as the

guest of the New York Zoological Society. Headquarters will be at the Hotel Majestic, 72d Street and Central Park West.

The second national convention on commercial engineering called by the United States commissioner of education will be held on May 1 and 2 at the Carnegie Institute of Technology in Pittsburgh. Dr. Thomas S. Baker, acting president of the institute, has invited about 200 colleges in the United States and Canada to appoint delegates, many of which have already announced appointees. Invitations have also gone out from Washington to engineering professional societies, to individuals, and to more than 1,400 chambers of commerce and trade organizations. Dr. Glen Levin Swiggett, of the United States Bureau of Education, is chairman of the national committee, which includes prominent representatives of commerce and engineering interests throughout the country.

THE National Committee on Mathematical Requirements announces that, owing to unfortunate delays in printing, its complete final report, "The Reorganization of Mathematics in Secondary Education," will not be ready for distribution before May, 1922. Requests for free copies of this 500 page report may be sent to J. W. Young, chairman, Hanover, New Hampshire. Owing to the labor and expense involved, the receipt of applications for copies of the report is not in general being individually acknowledged. Applicants may rest assured, however, that their requests will be filled when the report is ready for distribution.

THE *Journal* of the American Medical Association reports that establishment in Washington, D. C., under permanent federal support of an institution where problems of disease and health may be attacked cooperatively along general chemical, physical, biologic, pharmacologic and other necessary lines, with the object of mastering these problems for the common good of humanity, are the proposals of a bill shortly to be introduced in the House of Representatives by Representative Roy O. Woodruff of Michigan. Dr. Woodruff is a physician as well as a dentist and he asserts that the practical advantage of such an insti-

tution was demonstrated during the World War by the existence of the American University experimental station.

THE Bureau of Foreign and Domestic Commerce, in cooperation with the Bureau of Mines, has completed arrangements to produce in this country motion picture films showing methods of production and employment of American machinery and similar products. The actual cost of the photography, as well as the expenses incurred in the making of additional prints of the films, is borne by the cooperating company. After the picture has been completed and approved, the work of distributing the films, both in this country and abroad, is taken care of by the Bureau of Foreign and Domestic Commerce without any further expense to the company.

FURTHER information in regard to radium in the Congo is quoted from the bulletin of the Belgian Chemical Society to the effect that the sample of minerals assayed by Professor Schoep of the University of Ghent yield 424 kg. of uranium and 139 mg. of radium to the ton. The minerals came from the Upper Katanga, in the concession of the Union Minière which has entrusted the industrial treatment of the uranium to the Belgian Société Générale Métallurgique de Hoboken, which has put up a factory for the purpose in the Antwerp district. Other deposits of the same minerals have been found at other points specified, and Professor Schoep has found two new kinds of minerals among them, extremely radioactive. He has named one "curite" and the other "kasolite," and announces that the crystals are soluble in nitric acid, and the radium salt can then be extracted from the fluid without passing through the usual calcination process.

IMPROVEMENTS of the wireless plant at the University of Iowa have increased the range of station 9YA to 1,000 miles under average conditions and 2,000 miles when conditions are favorable. The university is now broadcasting regular weekly programs under the direction of the extension division. Besides the regular programs all noteworthy happenings on the university schedule are broadcasted as they take place. Thus far nothing of a strictly edu-

cational nature has been attempted, the programs being arranged with entertainment rather than instruction in view.

DR. HENRY NORRIS RUSSELL, professor of astronomy, Princeton University; Dr. Robert A. Millikan, of Chicago, head of the Norman Bridge Laboratory, California Institute of Technology; Mr. Charles W. Brown, professor of geology, Brown University, and Dr. Gilbert N. Lewis, professor of physics, University of California, have completed a series of lectures at Pomona College, covering recent advances in physical science. Their subjects were: "The evolution of the stars," "Modern atomic theories," "The energy, composition and structure of the earth," and "The chemistry of the stars."

THE annual meeting of the Nebraska Academy of Science will be held at Nebraska Wesleyan University on April 21 and 22. On the evening of April 21 Dr. G. W. Stewart, of the University of Iowa will deliver an address on "Achievement in science." Weather permitting, this will be broadcasted by radio-phone. The annual address of the president, Professor J. C. Jensen, will be delivered at the general session on Saturday morning, the subject being "Recent research in atomic structure." In addition to a large number of papers, plans have been made for the showing of twelve reels of the finest scientific motion pictures available, and six or seven large manufacturers of scientific apparatus have agreed to send some of their latest models for exhibition.

At the regular meeting of the Biological Society of Washington, to be held on April 29, at 8 p.m., at the Cosmos Club, Washington, D. C., Dr. William E. Ritter, of the Scripps Institution for Biological Research, will address the society on "The usefulness and the peril of laboratory methods in biology."

### UNIVERSITY AND EDUCATIONAL NOTES

MCPHERSON COLLEGE, McPherson, Kansas, is building a four story science hall modern in every way. The estimated cost is \$160,000. It is expected to be completed by August.

A CONTRACT has been let for a new medical building at the University of Alabama, Tusca-