

of distribution of size of particles: ALFRED J. STAMM, University of Wisconsin.

The centrifugal method for determination of the distribution of size of particles in colloidal solutions: J. B. NICHOLS, University of Wisconsin.

The motion picture machine as an aid to colloid research demonstrations: E. O. KRAEMER, University of Wisconsin; W. J. KELLY, Goodyear Tire and Rubber Co.; W. G. FRANCE, Ohio State University.

TOWNSHEND STITH BRANDEGEE

TOWNSHEND STITH BRANDEGEE, honorary curator in the herbarium of the University of California, died in Berkeley, California, on April 7, 1925, in the eighty-third year of his age. Mr. Brandegee was born on February 16, 1843, in the village of Berlin, Connecticut. He was a veteran of the Civil War, a graduate of the Sheffield Scientific School of Yale University in 1870 (Ph.B.), by profession a civil engineer. He was assistant topographer on Hayden's survey of the territories, with work largely in southwest Colorado. He was also connected with the northern transcontinental survey, being situated in the Yakima Region in what was then Washington Territory. He came to California in the winter of 1886-87 to superintend the collection of rare or troublesome tree trunks for the Jesup collection at the American Museum of Natural History in New York City. He explored the islands off the coast of California and Mexico and made extensive journeys throughout the peninsula of Lower California. He was a resident member of the California Academy of Sciences in San Francisco and an active worker in that institution for many years. He later lived in San Diego, California, where his herbarium and garden were visited by all botanists making trips to that portion of the country. His wife, Katherine Layne Brandegee, herself a distinguished botanist, died in 1920. The collections of Mr. and Mrs. Brandegee were presented to the University of California in 1906 and since that time both Mr. and Mrs. Brandegee were closely associated with the work of that institution.

W. A. S.

SCIENTIFIC NOTES AND NEWS

THE Barnard Medal for Meritorious Service to Science, awarded by the trustees of Columbia University on nomination of the National Academy of Sciences, has been given to Dr. Niels Bohr, professor of physics at the University of Copenhagen, in recognition of his researches on the structure of atoms. Previous recipients of the Barnard Medal are: Lord Rayleigh and Professor William Ramsay, 1895; Professor Wilhelm Conrad Von Röntgen, 1900; Professor Henri Becquerel, 1905; Professor Ernest Rutherford,

1910; Professor William Henry Bragg and Professor Lawrence Bragg, 1915; Albert Einstein, 1920.

THE Elliott Cresson gold medal has been awarded to Francis Hodgkinson, chief engineer of the South Philadelphia works of the Westinghouse Electric & Manufacturing Company, who has been prominently identified with steam-turbine design and construction work during the past thirty-one years.

GIFFORD PINCHOT, governor of Pennsylvania and formerly forester of the U. S. Department of Agriculture, and George Bird Grinnell, editor of *Forest and Stream*, have been awarded Roosevelt medals for distinguished service by the Roosevelt Memorial Association.

DR. HERBERT S. JENNINGS, professor of zoology at the Johns Hopkins University, has been elected a corresponding member of the Russian Academy of Sciences.

DR. W. W. KEEN, of Philadelphia, and Professor Sanarelli, of Rome, have been elected honorary foreign members of the Royal Academy of Medicine of Belgium.

DR. GEORGE GRANT MACCURDY, of Yale University and the American School of Prehistoric Research, has been elected a correspondent of the Società Romana di Antropologia.

DR. CLARK WISSLER, curator-in-chief of the division of anthropology of the American Museum of Natural History, has been elected to honorary membership in the Michigan Academy of Science, Arts and Letters.

SIR WILLIAM BRAGG, Fullorian professor of chemistry at the Royal Institution, and director of the Davy-Faraday Research Laboratory, and Dr. F. G. Donnan, professor of inorganic and physical chemistry in the University of London, are among those on whom the senate of St. Andrews University has voted to confer honorary degrees.

THE University of Edinburgh will in July confer its doctorate of laws on Dr. A. S. Eddington, Plumian professor of astronomy and experimental philosophy in the University of Cambridge.

THE Paris Academy of Sciences has elected as corresponding member Sir John Russell, director of the Rothamsted Experiment Station in the section of agriculture; M. Luc Picart, of Bordeaux, in the section of astronomy, and M. René Koehler, of the faculty of sciences at Lyons, in the section of anatomy and zoology.

DR. J. E. ACKERT, professor of zoology at the Kansas State Agricultural College and parasitologist of the experiment station, was elected president of

the Kansas Academy of Science at the recent meeting in Manhattan.

DEDICATION exercises were held recently to celebrate the beginning of operation of the Champaign and Urbana (Ill.), sewage disposal plant. As part of the exercises a tablet was unveiled with the following inscription: "On this site, 1897, the Champaign septic tank was built; designed by Professor A. N. Talbot. It was among the first of its kind in this country. Dr. Edward Bartow, 1913-1916, carried on the first experiments in this country on the activated sludge process of sewage treatment."

DR. H. F. NACHTRIEB, since 1887 head of the department of animal biology at the University of Minnesota, has been appointed professor emeritus.

PROFESSOR JAMES H. BREASTED, of the Oriental Research Institute of the University of Chicago, who has spent the last three months at Luxor and Cairo, has returned to the United States.

DR. J. P. BAUMBERGER, assistant professor of physiology at Stanford University, is leaving for Europe on an eighteen months' sabbatical leave. He will attend the National Colloid Symposium at Minneapolis and will then proceed to Europe where he will spend nine months in Brussels on a C. R. B. Educational Foundation fellowship in physiology.

DR. C. R. ORTON, plant pathologist at the Pennsylvania State College, has been granted leave of absence for a year of research work with seed-borne parasites at the Boyce-Thompson Institute for Plant Research at Yonkers, N. Y.

DR. S. C. LIND has resigned as chief chemist of the Bureau of Mines to become associate director of the Fixed Nitrogen Research Laboratory of Washington, under the direction of Dr. F. G. Cottrell.

DR. GEORGE R. HILL, JR., professor of botany and dean of the school of agriculture, of the Utah Agricultural College, has resigned, effective July 1, to accept a position as director of the agricultural department of the American Smelting Refining and Mining Company with headquarters at Salt Lake City.

DR. ARTHUR C. STRACHAUER, for seven years professor and chief of the department of surgery in the University of Minnesota Medical School, has resigned to become director of the new George Chase Christian Cancer Institute at the university, which will be opened on July 1.

At the seventh annual meeting of the American Society of Mammalogists held in Washington, from April 7 to 11, Dr. Hartley H. T. Jackson, of the U. S. Biological Survey, was elected editor of *The*

Journal of Mammalogy, and Mr. A. Brazier Howell, of the U. S. National Museum, corresponding secretary. The other officers of the society were reelected.

DR. WILLIAM DE B. MACNIDER, professor of pharmacology at the University of North Carolina, served as physician-in-chief *pro tempore* at the Peter Bent Brigham Hospital, Boston, during the week beginning April 12.

MISS ALICE H. FARNSWORTH, assistant professor in the department of astronomy at Mount Holyoke College, has been granted leave of absence from the department for the year 1925-26, and has been appointed to an instructorship at the University of Chicago for that period. She will spend the year in research in the department of stellar photometry at the Yerkes Observatory.

DR. RHODA ERDMANN, professor of zoology and cytology at the University of Berlin, has founded a journal devoted to the cultivation of tissues outside of the organism. The publisher is Gustav Fischer of Jena. Articles can be published in German, English, French or Italian. The journal will be published irregularly, as material accumulates.

THE members of the British Physiological Society visited Holland, during the first week of April, holding their monthly meeting in the laboratory of Professor Willem Einthoven, at the University of Leyden. Professor Einthoven, who is a member of the society, presided over the meeting.

DR. WOLFGANG KOHLER, professor of psychology in the University of Berlin, has been appointed visiting lecturer on psychology at Harvard University for the first half of the academic year 1925 to 1926.

HOFERAT PROFESSOR DR. F. X. SCHAEFFER, professor of geology at the University of Vienna and recently director of the Vienna Natural History Museum, is in residence at Pomona College for the second half of the present semester. Professor Schaffer will give the Joseph H. Johnson lectures and will discuss topics connected with the Mesozoic and Cenozoic of Europe.

DR. GEZA DOBY, visiting professor from Hungary, assigned to the botanical department of the Michigan Agricultural College, is to give an address on his work with plant enzymes before the botanical and biochemical groups at the University of Chicago on April 27, Iowa State College on April 29, the University of Wisconsin on May 5 and to a joint meeting of the Sigma Xi and the Nebraska Academy of Science at the University of Nebraska on May 7. Dr. Doby, professor of biochemistry in the economic faculty of the University of Budapest, and Professor Alexander Kotlan, of the Royal Veterinary College of Budapest, came to the Michigan Agricultural College, the latter

as "visiting professor" in the department of bacteriology under the auspices of the American-Hungarian Foundation whose headquarters are at East Lansing, Michigan. No exchange professor was sent to Hungary this college year, but in the coming college year Dr. H. J. Stafseth, of the department of bacteriology, goes to Budapest as the exchange professor from the Michigan Agricultural College. The visiting professor from Hungary has not yet been appointed. Plans are under way for extending the activities of the American-Hungarian Foundation to other institutions, in addition to the Michigan Agricultural College, and to include graduate students of high scholarship as well as professors. Before their return to Hungary this coming summer, Dr. Doby and Dr. Kotlan will be available to give addresses on their subjects at such institutions as would be interested.

DR. ROBERT A. MILLIKAN, director of the Norman Bridge Laboratory of the California Institute of Technology at Pasadena, gave on April 6, 7 and 8 the first lectures under the newly established Robert Lardin Fulton Lecture Foundation of the University of Nevada. The titles of the lectures were "The electron," "Light waves" and "Stripping the atom."

THE Mellon Lecture of the Society for Biologic Research of the school of medicine of the University of Pittsburgh will be given by Dr. Frank B. Mallory on April 30 on "Hemochromatosis and chronic poisoning with copper."

DR. CHAS. T. KNIPP, professor of experimental electricity at the University of Illinois, gave a lecture illustrated by experiments before the faculty and students of the Missouri School of Mines, Rolla, on April 16, on "The vacuum as an aid in research."

DR. MERRITTE W. IRELAND, surgeon-general, United States Army, will be the principal speaker at a dinner concluding the celebration of the one hundredth anniversary of the founding of Jefferson Medical College. The celebration will occur on May 29, immediately following the sessions of the American Medical Association at Atlantic City.

DR. WILLIAM ALLEN PUSEY, Chicago, president of the American Medical Association, will give the commencement address at the University of New Mexico in June.

A MEETING of the Sigma Xi Alumni Association at the University of Pittsburgh was held on Monday evening, April 20, when the following program was presented: "The travertine of Oklahoma," by Dr. W. H. Emig; "Chromosomes in the genus trillium," by Mr. J. L. Cartledge; "Basis of classification of plant societies in western Pennsylvania," by Dr. O. E. Jennings.

THE Massachusetts State Senate has unanimously rejected an adverse report of the Committee on Ways and Means and has passed to be engrossed a bill establishing Egg Rock Island near Nahant as a refuge for wild birds, to be known as the Henry Cabot Lodge Bird Sanctuary.

A COMMITTEE has been formed for the erection of a monument to the Italian physiologist, Angelo Mosso, in his native town of Chieri.

HARRY KING, former chief draftsman for the United States Geological Survey and the General Land Office and for many years professor of topography and cartography at the old Columbian College, now George Washington University, died on April 20, aged seventy-six years.

DR. WILLIAM EDGAR GEIL, the American explorer, lecturer and author, died in Venice on April 12 on his way home from Jerusalem where he was conducting research for the British Museum. Dr. Geil was in his sixtieth year.

THE annual meeting of the Royal Society of Canada will be held in Ottawa on May 19, 20 and 21. In Section V—Biological Sciences—the presidential address will be delivered by Professor Andrew Hunter, of the University of Toronto, his subject being "Proteolysis and the structure of proteins." The program includes fifty-eight titles grouped under three headings: Zoological, medical, physiological and biochemical, and botanical.

THE American Medical Association will hold its annual meeting at Atlantic City, beginning on May 25, some twenty other medical societies holding meetings before or after the main convention.

DR. EDWARD PLAUT, president of Lehn & Fink, Inc., has, in memory of his father, former president, appropriated a sum of money for the establishment of a research foundation, to be known as The Plaut Research Laboratory. This will be housed within the laboratories of Lehn & Fink, Inc., at Bloomfield, N. J. Commodious new laboratories have been provided, equipped in the most modern manner. The work to be undertaken will be a continuation of a series of researches which have been carried on by a group of men in the Research Laboratory of Lehn & Fink, Inc., for a number of years. The results of these researches will be published from time to time in the appropriate current journals. The staff comprises William H. Gesell, director; Moritz Dittmar, Ph.D., pharmacognosy; Emil Klarman, D.Sc., organic chemistry; Victor Ross, Ph.D., biological chemistry; John T. Stern, D.Sc., physical chemistry; John L. Ulrich, Ph.D., physiology; Mary Jacobsen, D.Sc., librarian. K. George Falk, Ph.D., and Herman Sharlit, M.D., have been retained as consultants.

THE French government is proposing to erect an observatory and wireless station on Mount Salève which towers 4,000 feet above Geneva. The observatory is to be installed with all modern instruments for meteorological and seismographic observation and research work. A telescope with a lens diameter of two and a half meters is now being constructed in the United States. Eventually it is hoped the station will become the seat of a meteorological office, and it is for that reason the wireless station proposed will be powerful enough to communicate with any part of the world.

THE trustees of the Polar Research branch of the Captain Scott memorial—the Lord Mayor, Sir Charles Sherrington, president of the Royal Society, and Lord Ronaldshay, president of the Royal Geographical Society—have decided to offer to hand over the balance of their fund, amounting to £13,000, to the University of Cambridge towards the erection, endowment and maintenance of a “Captain Scott Polar Research Institute.” The institute, established in 1920, has so far been housed in the Sedgwick Museum, and has done good work in advising and assisting in connection with some smaller expeditions in the last four years. It has also, from grants made from the Scott Fund, been acquiring maps, sketches and publications connected with Polar research.

THE United States Civil Service Commission announces competitive examination for the position of chemical engineer to fill a vacancy in the Fixed Nitrogen Research Laboratory, Department of Agriculture, Washington, D. C. The entrance salary is \$3,800 a year and advancement in pay may be made without change in assignment up to \$5,000. Competitors will not be required to report for examination at any place, but will be rated on their education, training, experience, fitness and writings to be filed with the application, which should be filed before May 19.

TENTATIVE plans have been made for the organization of the American Refractories Institute, to provide a satisfactory contact between all the industries that use and manufacture refractories, in order to meet their various economic and technical problems with respect to heat-resisting materials and to maintain a research laboratory to study the problems of the consumer and the manufacturer. MacDonald C. Booze, senior incumbent of the Multiple Industrial Fellowship on Refractories at the Mellon Institute of Industrial Research, Pittsburgh, has been appointed temporary secretary of the organizing committee.

THE Norwich Castle Museum Committee of the City Corporation has under consideration, as we learn from *Nature*, the celebration of the centenary of the foundation of the museum under the presidency of the

Norwich botanist, Sir James Edward Smith, F.R.S., in 1825. The history of the museum shows that its fortunes were of a varying character until 1894, when the corporation took over the collections of the Museum Society and housed them in the spacious galleries adjacent to the castle.

THE *Chemical Bulletin* states that a bill has been introduced in the Wisconsin legislature the purpose of which is to give scientific assistance to district attorneys in the investigation and solution of crimes. According to the terms of the bill power is to be given, under the provisions of the contemplated act, to the attorney general to appoint a group of scientific men who by education and experience are qualified to render impartial and valuable assistance in the investigation of crimes occurring in that state. Chemists, physicians, toxicologists, bacteriologists, pathologists, metallographers, finger-print and hand-writing experts, psychiatrists, and so forth, would be included in the list. No new commission is to be created nor are such experts to receive compensation from the state. The county calling for their services is to pay them a per diem fee as may be arranged in each case.

THE British Safety in Mines Research Board, in the course of an inquiry into the possibility of improving the present official tests of explosives intended for use in gassy or dusty coal mines in Britain, has arranged for seven typical British “permitted” explosives to be put to the official American tests, which differ in many respects from the British tests. The British explosives have passed the American tests, but the British “permitted” explosives were not so strong as the American when judged by the specified strength tests, nor so sensitive to detonation as judged by the explosion by influence test. This is attributed to the fact that the British explosives contain as a rule a far higher proportion of cooling salts.

UNIVERSITY AND EDUCATIONAL NOTES

THE University of Chicago has received a gift of \$500,000 from the Wiebolt Foundation toward the development fund of \$17,500,000, which is now being collected by the university.

THE New Jersey Legislature has appropriated two hundred thousand dollars for the erection of a new physics building for Rutgers College.

THE Iowa Child Welfare Research Station of the University of Iowa has received a grant of \$133,500 from the Laura Spelman Rockefeller Memorial Fund to be used for research in the development of children.