

estry, who will also study the part played by insects in the disintegration and disappearance of logging slash and of the possible danger of breeding insects injurious to living trees in such slash. Cooperation between the Forest Experiment Station and the Maine Forest Service in studies of the spruce budworm and other destructive forest insects will be continued.

Dr. Perley Spaulding, a graduate of the University of Vermont and a member of the Office of Forest Pathology in the Bureau of Plant Industry, will be assigned to the Northeastern Forest Experiment Station for the studies of tree diseases. Dr. Spaulding's investigations will stress particularly the chestnut blight, which has destroyed immense quantities of chestnut trees in the northeastern states, and which is now present throughout practically the entire range of chestnut. His studies will be directed particularly to the location and propagation of all trees which are apparently more or less immune to or are able to recover from the effects of the blight. It is hoped that certain blight-resistant individuals may be found from which it will eventually be possible to reforest areas where the chestnut has been destroyed with trees that are able to withstand the disease. Chestnut has been so important a source of fence posts, telephone poles, railroad ties and tannin extract, as well as a general utility farm timber, that it is exceedingly important to make every effort to save it from complete extermination. Dr. Spaulding's activities will also include, so far as time permits, studies of the white pine blister rust and of the decay of logging slash of different kinds of trees and under different conditions.

SIGMA XI AND THE CALIFORNIA INSTITUTE OF TECHNOLOGY

A NOTABLE event in the history of science took place on April 2 with the installation of a Sigma Xi Chapter at the California Institute of Technology at Pasadena. The installation ceremony was conducted by the national president, Dr. F. K. Richtmyer, who came to California for this purpose. The charter membership includes forty-one members of the institute staff, twenty-three graduate students and eighteen members of the Mount Wilson Observatory staff. The following officers were elected for the new chapter:

- R. A. Millikan, *President*.
- A. A. Noyes, *Vice-president*.
- W. N. Lacey, *Secretary*.
- E. W. Sorensen, *Treasurer*.

Following the installation ceremonies a dinner was served to 250 alumni of Sigma Xi, and responses were made by J. C. Shedd, president of the Sigma Xi Alumni Association of Southern California; W. L.

Hardin, past president of the Sigma Xi Alumni Association; Dr. D. C. Miller, president of the American Physical Society, and Dr. P. Debye, of Zurich, Switzerland.

At the close of the dinner a notable address was given by Professor Richtmyer, before an appreciative audience, on the subject of "Some aspects of X-ray work." The lecture was illustrated with apparatus furnished through the courtesy of the General Electric Company.

JOHN C. SHEDD,
National Secretary, pro tem.

THIRD NATIONAL COLLOID SYMPOSIUM

THE provisional program of the Third National Colloid Symposium at the University of Minnesota, to be held on June 17, 18 and 19, is as follows. Dr. Harry N. Holmes is chairman of the symposium.

Molecular weight and solution: W. D. BANCROFT, Cornell University.

Some new aspects of the surface tension of colloidal solutions which have led to the determination of molecular dimensions: LECOMTE DU NOÛY, Rockefeller Institute for Medical Research.

The orientation and distribution of molecules: IRVING LANGMUIR, General Electric Company.

Photographic sensitivity: S. E. SHEPPARD, Eastman Kodak Company.

Adsorption: DR. FREUNDLICH.

Catalysis by Metallized Silica Gels: L. H. RYERSON, University of Minnesota.

Colloidal water and ice: HOWARD T. BARNES, McGill University.

Colloidal chemistry of rennet coagulation: L. S. PALMER, University of Minnesota.

The viscosity of protoplasm: L. V. HEILBRUNN, University of Michigan.

Antigenic properties of bacterial toxins neutralized by surface tension depressants: W. P. LARSON, R. S. EVANS, H. O. HALVERSON, University of Minnesota Medical School.

Physico-chemical studies on blood coagulation: I. N. KUGELMASS, Yale University Medical School.

The effect of anions on the colloidal and chemical properties of aluminum hydroxide: LEWIS B. MILLER, U. S. Public Health Service.

The nature of soil colloids: PHILIP L. GILE, U. S. Bureau of Soils, Washington, D. C.

The colloid chemistry of soils: E. TRUOG, University of Wisconsin.

Soil water: F. J. ALWAY, Division of Soils, University of Minnesota.

Colloids in geology: W. J. MEAD, University of Wisconsin.

Lithopones: C. A. MANN, University of Minnesota.

The plasticity problems of rubber: W. J. KELLY, Good-year Rubber Co.

An experimental study of emulsification on the basis

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