

Public Library, Astor, Lenox and Tilden Foundations, eleven of said shares. I give and bequeath unto The Groton School, now located at Groton, Mass., two of said shares. I give and bequeath unto the president and fellows of Yale University, five of said shares. I give and bequeath unto the Nassau Hospital Association, one of said shares. It would be agreeable to me that each of the above legacies should constitute a part of the endowment fund of the institution receiving the same, the income to be used for its corporate purposes; but this expression of my wish shall not be taken to prevent the institution from applying any part of the capital of its legacy to the acquisition of additional real estate, buildings, equipment, facilities, furnishings or other property which its governing board may deem desirable for the development and extension of its public service.

(b) I give and bequeath unto the Society of the New York Hospital, to be applied to the development and maintenance of neurological or psychiatric work in New York City, eleven of said shares.

(c) I give and bequeath unto my son-in-law, Charles S. Payson, five of said shares.

(d) I give and bequeath the remaining forty-six of said shares unto Lewis Cass Ledyard, Lewis Cass Ledyard, Jr., and Edward W. Sheldon, in trust, to take possession, control and management thereof, and to invest and reinvest the same, and to collect and receive the rents, issues and profits thereof, and, from time to time, to use and apply the principal and income of said trust fund for the furtherance and development of such charitable, benevolent, hospital, infirmary, public educational, scientific, literary, library or research purposes as said trustees shall, in their absolute discretion, determine to be in the public interest. Such application may be made either by donations to institutions of the character above mentioned, or through the formation of corporations or associations for the development of such purposes, and contributions to such corporations or associations. It would be agreeable to me that this fund should be used for the aid or development of such of the above enumerated purposes as I have been interested in during my lifetime, but this expression of my wish shall not be taken to control or limit the absolute discretion above conferred upon the trustees of said fund.

EXPEDITIONS OF THE AMERICAN MUSEUM OF NATURAL HISTORY

At a meeting of the board of trustees of the American Museum of Natural History, on June 9, arrangements were completed for a number of different expeditions. The expeditions as outlined were:

The Taylor-Sudan expedition, which will collect birds and mammals along the White and Blue Nile under Harold E. Anthony. Rollo H. Beck will direct the Whitney South Sea expedition to collect birds of the Pacific.

The Ruwenzori-Kivu expedition, headed by Dr. James Chapin, DeWitt L. Sage and F. P. Matthews, will collect birds of subtropical Africa, and the sixth Bernheimer expedition will search for anthropological

material in New Mexico and Arizona. George H. Tate and T. Donald Carter will start on a trip to Roraima, a mountain in Venezuela, where they will collect birds and mammals. Dr. Chester A. Reeds will conduct the Nevada meteorite expedition.

North Africa will be visited by George C. Valiant, assistant curator in Mexican archeology. A field expedition from the University of Chicago for an archeological reconnaissance of Asia Minor has been joined by Erich F. Schmidt, of the department of anthropology. The Putnam Baffin Bay expedition will visit Baffinland and other northern points under George Palmer Putnam.

The Trail-Side Museum and Nature Trails at Bear Mountain are under the direction of the resident naturalist, William R. Carr, and the insect station at Tuxedo is being continued by Dr. E. E. Lutz. Several expeditions are being arranged by Childs Frick for the department of vertebrate paleontology, among them being one to Nebraska under Albert Thomson and another to Colorado, Wyoming and Montana under Barnum Brown.

A resolution transferring the Aztec ruins at Aztec, N. M., to the United States government to form a part of the Aztec Ruin National Monument previously presented by Archer M. Huntington was adopted.

THE INSTITUTE OF CHEMISTRY AT THE PENNSYLVANIA STATE COLLEGE

TWENTY-TWO conferences on "Chemistry in World Affairs" will be held at the new Institute of Chemistry of the American Chemical Society, which begins its sessions July 4 at the Pennsylvania State College. The conferences, at which scientific men from both America and Europe will speak, will be similar to those at the Institute of Politics, Williamstown, Mass. Following each conference there will be a discussion by men prominent in the chemical industry and in education.

The chairman of the opening conference on July 5 will be Dr. Harrison E. Howe, of Washington, D. C., editor of *Industrial and Engineering Chemistry*. The principal speaker will be Dr. John E. Teeple, of New York, treasurer of the American Chemical Society. Dr. Teeple will speak on "Economic Factors in the Chemical Industry." His address will be discussed by Dr. Charles H. Herty, of New York, adviser to the Chemical Foundation, and William Haynes, of New York, editor of *Drug and Chemical Markets*.

"Economic Factors in Industrial Research" will be the topic of the July 6 conference, and "The Use of X-rays in Research on Structure of Non-Metallic Materials" that of July 7, when the speakers are Dr. Ancel St. John and Dr. W. P. Davey.

Other conferences and their speakers, so far as chosen, were announced as follows:

July 8, "Modern Research on Structure of Metals," Dr. Davey.

July 9, "The Control of Corrosion," William Blum, U. S. Bureau of Standards.

July 11, "The Control of Corrosion," W. B. Mitchell, Central Alloy Steel Corporation.

July 12, "The Training of Research Chemists."

July 13, "Training of Routine Plant Chemists and Continuation Education," Dr. R. E. Rose, E. I. du Pont de Nemours & Co.

July 14, "The General Theory of Catalysis," Professor E. K. Rideal, Cambridge University, England.

July 15, "Ammonia Synthesis."

July 16, "Ammonia Oxidation," G. B. Taylor, E. I. du Pont de Nemours & Co.

July 18, "High Pressure Synthesis," Professor H. S. Taylor, Princeton University.

July 19, "High Pressure Technique," F. A. Ernst, Fixed Nitrogen Research Laboratory, Washington.

July 20, "Modern Spectrum Analysis."

July 21, "Spectro Photometry," W. C. Holmes, U. S. Department of Agriculture.

July 22, "Chemical Microscopy," Professor E. M. Chamot, Cornell University.

July 23, "New Organic Solvents."

July 25, "Determination of Particle Size," S. E. Sheppard, Eastman Kodak Company, Rochester, N. Y.

July 26, "Oxidation-Reduction in the Living Cell," Dr. W. M. Clark, Hygienic Laboratory, U. S. Public Health Service.

July 27, "General Status and Problem of Nutrition," Professor H. C. Sherman, Columbia University.

July 28, "Vitamins," Professor J. C. Drummond, University College, London.

July 29, "Biochemistry."

The discussion group on July 14 will include Dr. Irving Langmuir, physical chemist of the General Electric Company, Schenectady, N. Y., Professor Taylor and Dr. C. H. Kunsman, of the Fixed Nitrogen Research Laboratory, and on July 13 Dr. C. M. Mackall, of George Washington University, and Dr. R. E. Bowman, of the Wilmington, Del., Trade School. This symposium will be presided over by Professor Neil E. Gordon, of the University of Maryland. Other discussion groups will be drawn from the universities and the industries.

Besides the conferences and the intensive courses, popular lectures on chemistry have been arranged under the direction of Professor Frank C. Whitmore, head of the department of chemistry in Northwestern University. Motion pictures will also be used to illustrate the progress of chemistry.

THE INTERNATIONAL SOIL CONGRESS

THE first International Congress of Soil Science is being held in Washington, D. C., from June 13 to 22,

in the headquarters building of the Chamber of Commerce. Dr. Oswald Schreiner, senior biochemist in charge of soil-fertility investigations in the Bureau of Soils, is chairman of the executive committee of the congress.

President Coolidge was expected to open the congress. Secretary of Agriculture Jardine and Dr. A. F. Woods, director of the scientific work of this department, are to make addresses.

Abstracts of the papers have been prepared in English, German and French. These abstracts were distributed to the delegates on the first day of the congress so that they could have opportunity to familiarize themselves with the program in advance of meetings.

The program of the congress include local excursions about Washington, a reception at the Pan-American Union and a trip through the National Gallery of Art.

On the evening of June 22 the delegates will board a special train in Washington and start on a trans-continental tour which will cover a period of thirty days and will give the visitors an opportunity to study the soil regions and cropping conditions over a wide area of the United States and Canada.

In addition to the delegates from abroad, the experiment stations of the United States will be well represented by delegates appointed from their soils staffs. During the progress of the tour a number of the state experiment stations will be visited. Among these stations will be those of Tennessee, Georgia, Kansas, California, Oregon, Minnesota, Iowa, Indiana and perhaps a few others.

Dr. A. G. McCall, professor of geology and soils of the University of Maryland and in charge of soil investigations of the Maryland Experiment Station, is the executive secretary of the congress.

AWARD OF THE JOHN SCOTT MEDALS

AWARD of the John Scott Bronze Medal and \$1,000 to each of six scientific men for "useful inventions for the use and benefit of mankind" was announced on June 3. The fund for the award was established in 1816 by John Scott, of Philadelphia. Winners of the award are:

Strickland L. Kneass, Philadelphia engineer, for the invention and development of an exhaust feed water heater injector.

Dr. Afranio Do Adaral, Bahia, Brazil, for his preparation of anti-snakebite serums.

Dr. Alfred Fabius Hess, professor of children's diseases at Columbia University, New York, for his studies on the influence of ultra-violet light on rickets and on various foods, showing that the vitamin values in these substances could be increased.

Herbert E. Ives, physicist, Bell Telephone Laboratories,