

sources of the state \$20,000; for investigation in the spraying and dusting of potatoes on Long Island, \$16,500; for extension work in potato growing, \$5,500; for investigation in grading and handling of vegetable crops, \$5,800; for investigation in control of insects affecting muck soil crops, \$6,010; for investigation in control of insects affecting potatoes, \$4,000; for an experiment to determine the optimum percentage of protein in a dairy ration, \$5,900; for equipment and maintenance of The Western New York Egg Laying Contest, \$30,000; for equipment and maintenance of The Central New York Egg Laying Contest, \$30,000; for additional state support of County Farm and Home Bureaus and Junior Extension Work, \$40,500.

Another legislative enactment of outstanding importance to the State Colleges at Cornell University was a bill admitting all of the staff and employees of these institutions to the privileges of the State Retirement System. Because of the generous character of this system, this provision is considered to be a distinct benefit by members of the staff.

THE UNIVERSITY OF MEXICO AND DR. HOLLAND

DR. W. J. HOLLAND, on May 2, 1930, completed the installation of a replica of the skeleton of *Diplodocus carnegiei* donated by Mrs. Andrew Carnegie through the Carnegie Corporation of New York and the Carnegie Museum of Pittsburgh to the National Museum of Natural History in Mexico City. Dr. Holland had with him as his chief mechanical assistant Mr. Louis S. Coggeshall, of the section of paleontology in the Carnegie Museum.

On the morning of May 2 a convocation of the trustees and faculty of the National University of Mexico was held in the Casa del Lago in Chapultepec Park, the rector of the university, Señor Dr. Ignacio García Téllez, presiding, supported by Professor Dr. Isaac Ochoterena, the director of the Natural History Museum, and president of the Instituto de Biología. The rector of the university at the commencement of the meeting announced that the University of Mexico by the action of its duly constituted authorities had made Dr. Holland "Professor Extraordinario de Biología," and handed Dr. Holland a diploma to that effect. The position is purely honorary and has only been conferred a few times upon distinguished men of science in Europe and Mexico.

In response to the address of the rector Dr. Holland said that he was acting as "the unofficial ambassador of one of the queens of American society, whose husband, the late Andrew Carnegie, had shown in more than royal manner his desire for the establishment of cordial and everlastingly pacific relations be-

tween all nations of the Western Hemisphere through his gift to the Pan American Union of a palatial home in Washington." He dwelt upon the important part which men of science may take in promoting a good understanding among the nations. He said that, "while in the past men who bear arms by sea and land had been relied upon to preserve peace, he hoped the day is not far off when men whose weapons are the microscope, the telescope, and the chemist's retort, may prove their superiority to lethal weapons." He concluded by expressing his deep interest in the scientific researches which are now being carried on in Mexico by men whose methods and spirit are thoroughly abreast of modern times.

HONORS CONFERRED BY THE FRANKLIN INSTITUTE

At the Medal Day exercises of the Franklin Institute, held on May 21 in the hall of the institute, the following honors were conferred:

Honorary membership was bestowed upon Dr. M. E. Cooley, dean emeritus of engineering of the University of Michigan, in recognition of inspiring guidance in engineering education, and of friendly reasonableness, enlightened judgment and fearless integrity in the principles of his profession. Dean Cooley had been a professor of mechanical engineering since 1881 and dean of the College of Engineering, University of Michigan, since 1904.

Dr. Henry Leffman, retired chemist, also received honorary membership, in recognition of valuable services to science in research, in teaching, as former port physician of the City of Philadelphia and as a discriminating but good-tempered critic.

A Certificate of Merit was presented to Mr. Heyman Rosenberg, Parker-Kalon Corporation of New York City, in consideration of the successful modification of screws, consisting of hardening the threads, thus permitting them to thread their own way when driven or turned into the material to be joined, and the invention whereby the diameter of the body at the base of the thread is less than that of the cylindrical end.

Edward Longstreth Medal—founded in 1890 by Edward Longstreth, Philadelphia.

Mr. Ervin George Bailey, president of the Fuller-Lehigh Company, Fullerton, Pennsylvania, in consideration of his invention and development of regulating and controlling devices and measuring and recording instruments.

Professor Charles Weyl, University of Pennsylvania, in consideration of the ingenious adaptation of mechanical and electrical principles to the operation of an X-ray apparatus which has proved useful in the diagnosis of certain diseases in their early stages of development.

John Price Wetherill Medal—founded in 1925 by the family of the late John Price Wetherill.

Mr. C. S. Chrisman, formerly with the United Gas Improvement Company and now retired, of West Chester, Pennsylvania, in consideration of his ingenious and economical improvements in the apparatus for, and methods of, gas manufacture.

Mr. W. N. Jennings, business photographer, Philadelphia, in consideration of his pioneer work in the photography of flashes of lightning.

Walton Clark Medal—founded in 1926 by the United Gas Improvement Company, in honor of Dr. Walton Clark, former chief engineer of that company and for many years president of the Franklin Institute.

Mr. Henry L. Doherty, president of the Cities Service Company, New York City, in consideration of his outstanding and valuable work in the development of the manufactured gas industry.

George R. Henderson Medal—founded in 1924 by Mrs. Virginia P. C. Henderson, in memory of her husband, a consulting engineer in Philadelphia and a member of the Board of Managers of the Franklin Institute.

Mr. George Hannauer and Mr. Edgar M. Wilcox, jointly, in consideration of the development of the Car Retarder System and contributions to railway engineering. The work for which the medals are awarded was done jointly by these two gentlemen. Unhappily, Mr. George Hannauer died before the award was completed. Mr. Wilcox, secretary of the Hannauer Car Retarder Company, of Gibson, Indiana, will be present to receive his medal in person, while the late Mr. Hannauer will be represented by his son.

Louis Edward Levy Medal—founded in 1923 by the family of Louis E. Levy, of Philadelphia. Mr. Levy was a member of the institute's Committee on Science and Arts, and vice-president of the institute. He was an inventor and photoengraver.

Professor Floyd K. Richtmyer, department of physics, Cornell University, because of the excellence of his paper which appeared in the *Journal* of the Franklin Institute in September, 1929, entitled, "Some Secondary Phenomena in X-ray Spectra."

Elliott Cresson Medal—founded in 1848 by Mr. Elliott Cresson, who was very much interested in the work of the Franklin Institute. This award is very highly prized and is next to the Franklin Medal in importance.

Mr. Norman Rothwell Gibson, vice-president and chief engineer of the Niagara Falls Power Company, in consideration of his originality in first adapting a well-known law of mechanics to the measurement of flowing water, his skill and ingenuity in developing apparatus for accurately recording the required data, the simplicity, accuracy and economy of his method, the wide scope of its application in measuring the flow of liquids and its very general adaptation in commercial work.

Mr. Irving Edwin Moulthrop, chief engineer, the Edison Illuminating Company of Boston, in consideration of the engineering skill displayed in the design and construction of the high-pressure installation of the Edgar Station,

whereby a marked advance in the art of steam electric generation was accomplished and a reliable source of information for advance predication, not only of performance but of initial cost of such stations, was made available, and in which courage of high order was manifested.

Franklin Medal—founded in 1914 by Samuel Insull, Esq., of Chicago, to be awarded to those workers in physical science or technology, without regard to country, whose efforts, in the opinion of the institute, acting through its Committee on Science and the Arts, have done most to advance a knowledge of physical science or its applications.

Dr. John Frank Stevens, retired engineer, former chief engineer, the Panama Canal, in recognition of his unifying solutions of widely varying and difficult engineering problems met in the planning of the great Panama Canal, of the marked power shown by him in the organization of the engineering forces which later built that canal and of his eminent success in the location, construction and administration of railroads in this country and in foreign lands.

Sir William Bragg, director, the Royal Institution of Great Britain, London, in recognition of a life work in the study of X-rays and radioactivity, in the course of which he made fundamental contributions to that realm of physics, of his development of a method of determining molecular and crystal structure by the reflection of X-rays and of his fruitful guidance of the Davy-Faraday Research Laboratory and the Royal Institution of Great Britain.

Immediately after the presentation of the medals, Dr. John Frank Stevens read a paper entitled, "A Momentous Hour at Panama," in which he recounted some hitherto unpublished happenings in the building of the canal. Sir William H. Bragg delivered a paper on "The Meaning of the Crystal," a short article based upon his own researches of the meaning of the crystal in nature. On the evening of Medal Day, the Franklin Institute had as its guests of honor the medalists of the day at a dinner held at the Bellevue-Stratford.

Following his appearance in Philadelphia, and under the auspices of the Franklin Institute, Sir William H. Bragg will deliver a series of three lectures, based upon his own important work and discoveries in the realm of physics. He will speak at Columbia University, Johns Hopkins and Princeton. He will also be the guest of honor at a colloquium to be held at the Bartol Research Foundation Laboratory of the institute. Sir William will also broadcast over WCAU on the afternoon of Thursday, May 29. He plans to remain in this country for several weeks, attending various scientific meetings. He will be accompanied by his daughter.