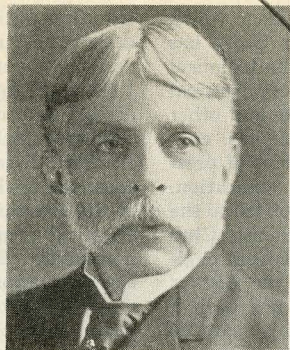


EDWARD WESTON



G. A. HAMILTON



W. L. R. EMMET

in 1895. In the years 1895-96, he attended the universities of Berlin and Göttingen. He has received the degrees of doctor of science, doctor of laws, and doctor of philosophy from several universities in the United States and other countries. From 1891 to 1893 he tutored in physics at Oberlin College, and in 1896 became assistant in physics at the University of Chicago, becoming assistant professor in 1902; from 1906 to 1910 he was associate professor, becoming professor in the latter year, and remaining at the University of Chicago until 1921. Since 1921 he has been director of the Norman Bridge Laboratory of Physics and chairman of the executive council of the California Institute of Technology, Pasadena. Probably the best known of Doctor Millikan's earlier works are his oil drop experiments, whereby the absolute value of the charge on the electron was determined. His work on the accurate determination of the so-called h constant by experiments on the photoelectric effects also are of considerable importance in the structure of the atom. He later did considerable work toward the definite bridging of the gap between light and X ray phenomena, and more recently has become well known for his experiments on the so-called "cosmic" or Millikan ray. His contributions to experimental physics have been of special importance to electrical engineers. In his work of instruction, he has evidenced rare ability to impart his own extraordinary scientific knowledge to others. Doctor Millikan is the author of several books, most of them dealing with physics and education, and has written many technical papers on physical topics. He is a member of many societies in the United States and other countries, and has served as president of the American Association for the Advancement of Science, 1929, and the American Physical Society, 1916-18. Since 1917, he has been vice-chairman of the National Research Council, of which he was one of the initiators. In 1922, he was an exchange professor to Belgium. He was commander, lieutenant-colonel, Signal Corps, U.S. Army, 1918, and chief of the science and research division of the Signal Corps. Among the medals and awards which he has received are: Comstock Prize of the National Academy of Sciences, 1913; Edison Medal of the A.I.E.E., 1922; Hughes Medal of the Royal Society of Great Britain, 1923; Nobel Prize in physics, 1923; Faraday Medal of the London Chemical Society, 1924; Matteucci Medal

of the Societa Italiana della Scienze, 1925; gold medal of the American Society of Mechanical Engineers, 1926; Messel Medal of the Society of the Chemical Industry (British) 1928; gold medal of the Society of Arts and Sciences (for his theory of creation of cosmic rays) 1929; Chevalier de l'Ordre National de la Legion d'Honneur, 1931.

E. W. RICE, JR. (A'87, M'88, F'13, Member for Life, and past-president) was born at LaCrosse, Wis., in 1862. While attending school in Philadelphia, Pa., in 1876, he came in contact with Prof. Elihu Thomson, then a teacher in the high school. In 1880 when Professor Thomson went into electrical manufacturing, young Rice became his assistant. After 3 years with Professor Thomson in New Britain, Conn., both went to Lynn, Mass., upon the organization of the Thomson-Houston Electric Company. Here he was plant superintendent from 1883 until 1888, when he became technical director. In 1892 upon the formation of the General Electric Company, Doctor Rice became vice-president; then president, 1913; and honorary chairman of the board, 1922; he now holds the latter position. He has received the honorary degrees of master of arts from Harvard University 1903, doctor of science from Union College 1906 and the University of Pennsylvania 1924, and doctor of engineering from Rensselaer Polytechnic Institute 1917. In connection with his receipt of the A.I.E.E. Edison Medal for 1931, a biographical sketch of Doctor Rice was given in *ELECTRICAL ENGINEERING* for January 1932, p. 61, and a sketch of his career prepared by Dr. Elihu Thomson was given in the March 1932 issue, p. 195-6.

EDWARD WESTON (A'84, M'84, Member for Life, and past president) was one of the distinguished group of individuals whose election as an Honorary Member of the Institute was announced during the summer convention at Chicago, Ill., June 26-30, 1933. Doctor Weston was born in Shropshire, England, in 1850, coming to New York City in 1870. Since then he has been active in the electrical industry in this country. In 1877 the Weston Company was incorporated to engage in the manufacture of dynamo electric machines; the need for practical instruments, however, caused him

to establish the Weston Electrical Instrument Company in 1888. He was vice-president and general manager of this company from 1888 to 1905; president from 1905 to 1924; and since that time chairman of the board. A more complete biographical sketch of Doctor Weston's career, including his activities in the Institute and other technical organizations was presented in *ELECTRICAL ENGINEERING* for April 1933, p. 282, in connection with the announcement of the award for the 1932 Lamme Medal of the A.I.E.E.

W. L. R. EMMET (A'93, M'94, Member for Life and past-vice-president) has been elected an Honorary Member of the Institute, as announced at the summer convention held in Chicago, Ill., June 26-30, 1933. This is the highest grade of membership in the Institute, and Doctor Emmet is well qualified for this rank. He was born at Pelham, N. Y., in 1859, graduating from the U.S. Naval Academy in 1881. In 1887 he joined the Sprague Electric Company, being active in electric railroad development, and for a short time after 1890 he was with the Westinghouse Electric and Manufacturing Company. He later joined the Edison General Electric Company, and in 1900 started his work in the development on the Curtis steam turbine, on which he made many important improvements. He was the first to point out the great importance of high vacuum in the operation of turbines, and also initiated the use of the turbine for ship propulsion (1907). More recently, he has been active in the development of turbines using mercury vapor instead of steam. A biographical sketch of Doctor Emmet was presented in *ELECTRICAL ENGINEERING* for November 1932, p. 818, in connection with his having received the John Scott Medal award.

G. A. HAMILTON (A'84, M'84, F'13, and Member for Life, and past vice-president) has been elected an Honorary Member of the Institute, as announced at the summer convention held in Chicago, Ill., June 26-30, 1933. Mr. Hamilton, a charter member of the Institute and its first vice-president, was born in Cleveland, Ohio, in 1843. He early showed great interest in electricity and while still a boy built a modest telegraph line himself. Between 1860 and 1873, he was in telegraph and railway signaling service, being a messenger at Salem, Ohio, in 1861, and later in the same year manager of the Atlantic and Great Western Railroad office at Ravenna, Ohio. After a brief illness in 1863, he went to Pittsburgh, Pa., as operator and manager of the Inland Company, and in 1865 he became manager of the United States Telegraph Company's office at Franklin, Pa. He returned to Pittsburgh in 1866 as chief operator and circuit manager, remaining until 1873 when the Western Union Telegraph Company absorbed this company. Between 1873 and 1875 he was assistant to Prof. Moses G. Farmer of Boston, Mass., a pioneer electrical inventor engaged in the manufacture of general electrical apparatus and machinery. Here he received much valuable experience. In 1875 he became assistant electrician of