## WILLIAM STANLEY

Born November 22, 1858, in Brooklyn, N.Y.

Prepared for college at Williston Seminary, East Hampton, Mass.; entered Yale with class of 1881, but left college in his freshman year to take up the study of electricity by himself.

Engaged in nickel-plating in New York, and then in work for the United States Electric Light Company, New York, becoming principal assistant to Hiram Maxim, founder and chief engineer of the company. In 1881 he resigned from that company and was engaged as an assistant to Edward Weston, with the old Weston Electric Light Company, at Newark, N.J. In 1882, while connected with the Swan Electric Light Company of Boston, Mr. Stanley invented and perfected an improved method of exhausting incandescent lamp bulbs.

In 1883 he established a private laboratory in Englewood, N.J., where he carried on experimental work on storage batteries and other apparatus. In the following year he undertook for George Westinghouse certain investigations which were to be taken up as business enterprises if successful.

In 1885, while in Pittsburgh, he devised the "multiple" system of alternating-current distribution, designing transformers and generators, and developing the system. Mr. Westinghouse being unwilling to invest money in this development work, Mr. Stanley carried it on at his own expense, hiring an abandoned rubber factory in Great Barrington, Mass.

In the spring of 1886, he installed his alternating-current system of distribution, and transformers and lamps were placed in several of the Great Barrington stores and a regular commercial service successfully begun.

In April 1886, Mr. Westinghouse inspected the Stanley plant, with some of his friends, and this led to the development of the Westinghouse Electric Company and its construction of a second plant at Buffalo, N.Y., in the fall of the same year. Mr. Stanley designed a new type of alternator for his system.

From 1888 to 1890 Mr. Stanley continued as general consulting engineer for the Westinghouse interests, but severed the connection in 1890 to establish the Stanley Laboratory in Pittsfield, Mass., in association with Mr. Cummings C. Chesney and Mr. John F. Kelly. Together they worked out the famous "S.K.C. system" of long-distance transmission of alternating-current from an inductor type generator. In 1894, the first power transmission was put into operation by this system, a water power at Algeria, formerly the Stockbridge Iron Works, supplying energy for a system which transmitted electrical power to mills at Housatonic and Great Barrington. The Stanley Electric Manufacturing Company, which Mr. Stanley organized in the winter of 1890 and 1891, manufactured this equipment, and later became the Pittsfield Works of the General Electric Company.

Later on Mr. Stanley organized the Stanley Instrument Company for the manufacture of a new form of watt-meter, and for several years he devoted his energies almost entirely to the development of this enterprise.

Mr. Stanley made many other inventions, including condensers, two-phase motors, generators, and an alternating-current meter employing magnetic suspension of its moving parts. In his later years he was engaged in consulting work with the General Electric Company, developing an electric range designed to operate at unity load factor.

Mr. Stanley was elected an Associate of the American Institute of Electrical Engineers December 6, 1887, transferred to the grade of Member October 26, 1898, and to the grade of Fellow May 20, 1913. He served as a Vice-President of the Institute for the term 1898-1900.

He was awarded the 1912 Edison Medal of the A.I.E.E. "for meritorious achievement in invention and development of alternating-current systems and apparatus".

Mr. Stanley died in Great Barrington, Mass., May 14, 1916, after a long illness.