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9050**ELMER A. SPERRY**

at St. John's Hospital, Brooklyn, New York

June 16th, 1930

Mr. Sperry was born at Cortland, New York, October 12th, 1860, son of Stephen Decatur and Mary (Borst) Sperry. He was a lineal descendant of Richard Sperry, who in 1666 secreted and maintained in the Judge's Cave at New Haven Colony three of the judges who had condemned Charles the First of England to death.

Mr. Sperry was educated in the State Normal School of Cortland, New York, and by attendance at a course of lectures given by Professor Anthony (deceased) at Cornell University during the 1879-1880 term, and that this craving for advancement might not be a financial burden to his parents, he sought and obtained a part-time job in a bindery to help pay for his studies, but nearly lost this when he took apart a complicated machine in order to improve its working conditions. He accomplished the feat, his employer giving him a monetary bonus in recognition, which he expended in a trip to the Centennial Exposition at Philadelphia in 1876, where he spent most of his time in the Machinery Hall.

One of Mr. Sperry's earliest contributions to the electrical industry was his first form of improved Gramme dynamo for arc lighting, when but nineteen years of age, its design influenced by Professor Anthony's teachings that the outside coils only of the armature windings were active. Mr. Sperry's design embodied an armature having the form of a hollow cylinder, being supported on its shaft at one end only, revolving between poles that produced activity in both the outside and inside windings. This "Sperry" arc dynamo, with its rack form of brush shifting mechanism, was the progenitor of the arc machine built by the Edison General Electric Company at the Schenectady Works in 1890-91. An improved arc lamp to be used with his dynamo was also a product of Mr. Sperry's fertile brain. In fact his entire training after leaving school was due to his own initiative.

In 1880 he founded the Sperry Electrical Company of Chicago, manufacturers of arc lamps, dynamos, motors and other electrical appliances, and a few years later, in 1883, he erected on Lake Michigan an electric beacon 350 feet high and equipped it with 40,000 Candle Power in arc lights. He owned and operated the first large Central Station for arc lights in the City of Chicago with all conductors underground, that later was sold to the Chicago Arc Light and Power Company.

In February, 1885, the first Convention of the arc lighting interests of the United States and Canada was held at the Grand Pacific Hotel, Chicago, Ill., and Mr. Sperry was made Chairman of the committee for calling the Convention.

While a great part of his activities between 1880 and 1888 were in connection with arc lighting, the development of the independent feed arc lamp, the automatic current regulator, and the perfection of the reactionary effect between armature and field to permit control of the dynamo potential by rotating the brushes, it was during the latter part of this period that he became actively interested in the development of electrical mining machinery, inaugurating a distinct advance in the mining of coal and its handling underground. Many of his devices are in successful use, and many are the valuable papers he has read before the Mining and Electrical Institutes on this subject.

It was largely the experience gained in designing and successfully manufacturing electric locomotives for underground and surface mining haulage, that in 1890 brought Mr. Sperry into the street railway field, then an infant industry, designing and building electric street railway cars, and his founding the Sperry Electric Railway Company of Cleveland, Ohio, to build and market his productions.

In 1894 the patents covering these were sold to the General Electric Company, embodying as they did the motors being totally elastically supported, free from axles and vibrating parts of the truck frame, with single reduction gearing driving both axles.

At about this period Mr. Sperry commenced the designing and manufacturing of electrical automobiles, or "carriages" as they were then called, in which he was engaged for several years. In 1894 he drove the first American built electric automobile in Paris, France, and a number of his electric carriages were sold there.

It was about this time (1896) that Mr. Sperry gave his attention to making practical use of the principles underlying the toy known as the Gyroscope. Possibilities of great usefulness were perceived, and by diligent, tedious and expensive investigation, coupled with great ingenuity, he skillfully combined electrical and mechanical effects into successful Gyroscopic Compasses and Stabilizers for ships and airplanes which have been of such

inestimable value to safety and comfort of navigation, whether on the sea or in the air.

Mr. Sperry has been President of the Sperry Gyroscope Company of Brooklyn, New York, an organization formed in 1910 to manufacture the Gyroscope Compasses, Ship and Airplane Stabilizers, High-intensity Searchlights, Fire-Control Apparatus, Internal Combustion Engines, and other products invented by him, which was sold to the North American Aviation Company in 1929.

At the time of his regretful demise he was President of the Sperry Development Company which he organized in 1926, the Sperry Products, Inc., and the Sperry Rail Service Corporation, all of Brooklyn, New York. He was the holder of some 400 patents, both domestic and foreign, and aside from his well-known Gyroscopic and Stabilizing devices, so extensively used in marine and aerial navigation, as well as by the military establishments of the world, he was a valuable contributor to the science of electrochemistry, machinery for the production of a number of essential requisites used in the electrical industry, and to the development of the Compound Internal-Combustion Engine using low-grade fuel oil. One of his most recent contributions to science, for which he received the Judge Elbert H. Gary Medal awarded by the American Iron and Steel Institute in 1929, was the invention and perfecting of an instrument to detect the flaws in steel rails without destruction of material, something metallurgists have sought for years.

In 1914 he was awarded the First Prize of the Aero Club of France for his Airplane Stabilizer. In that year also he received the Franklin Institute Medal, the Collier Trophies in 1915-16; the John Fritz Medal in 1927; the Holley Medal 1927; the Elliott Cresson Medal of the Franklin Institute in 1929; two decorations from the Emperor of Japan; two from the last Czar of Russia; and the Grand Prize, Panama Exposition.

Mr. Sperry was a member of the following technical societies and clubs: American Institute Electrical Engineers (Founder Member); American Society Mechanical Engineers (Past-President); American Physical Society; American Academy of Sciences; American Association for the Advancement of Science; American Petroleum Institute; Society Naval Architects and Marine Engineers; New York Electrical Society (Past-President); National Aeronautical Association; Aero Club of America; National Electric Light Association; Franklin Institute; Engineers Club; Japan Society; Member of the Naval Consulting Board; Director Museum Peaceful Arts; Chairman of the American Committee World's Engineering Congress, Japan, 1929.

Honorary Degrees of Doctor of Engineering had been conferred upon him by Stevens Institute and Lehigh University, and the Degree of Doctor of Science by the North-Western University.

Mr. Sperry was married in 1887 to Miss Zula A. Goodman of Chicago, and it was her regretful passing at Havana, Cuba, but a short time ago, together with the loss of his son Lawrence in an aviation accident in 1925, that brought to this remarkable man afflictions which probably weakened his physical resistance to combat a surgical operation, when that became a necessity.

Mr. Edison has paid glowing tributes to his memory, regarding him as a prolific inventor of great resourcefulness and capacity, whose death will be a great loss to the country.

Mr. Sperry is survived by his daughter Mrs. Robert Brooke Lea, his sons Edward G. and Elmer A. Sperry, Jr., and five grandchildren, Lawrence and Winifred, children of Lawrence Sperry, Ellicott Sperry Lea, son of Mr. and Mrs. Robert Brooke Lea, Elmer A. Sperry, 3rd and Paula, son and daughter of Elmer A. Sperry, Jr., all of Brooklyn, New York.

Funeral services were held at 10:30 A. M., June 19, 1930, in Plymouth Church, and he was laid to rest at noon the same day in Greenwood Cemetery, Brooklyn, New York.

Mr. Sperry was an esteemed Associate Member of the

EDISON PIONEERS.

40 West 40th Street,
New York City.