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EDISON MEDAL AWARDED TO W. L. R. EMMET

At the meeting of the Board of Directors of the American Institute of Electrical Engineers held December 12, the Edison Medal Committee reported that the Edison Medal for the year 1919 had been awarded to Mr. W. L. R. Emmet, "for inventions and developments of electrical apparatus and prime movers." Arrangements will be made for the presentation of the Medal to Mr. Emmet at a convenient later date.

The Edison Medal was founded by the Edison Medal Association, composed of associates and friends of Mr. Thomas A. Edison, and is awarded annually by a committee consisting of twenty-four members of the American Institute of Electrical Engineers "for meritorious achievement in electrical science, electrical engineering, or the electrical arts."

William LeRoy Emmet, engineer and inventor, was born at Pelham, N.Y., July 10, 1859, son of William Jenkins and Julia Colt (Pierson) Emmet, grandson of Robert and Rosina (Hubley) Emmet, and great-grandson of Thomas Addis Emmet (q.v.), the first one of the family in America. The latter was the distinguished Irish patriot and leader in the Society of United Irishmentin 1798, and an elder brother of the ideal patriot of the Irish race, Robert Emmet, who was executed in Dublin in 1803. He came to America in 1804 and soon became a leader of the New York bar. His son Robert was a prominent lawyer and judge in New York City.

Mr. Emmet was educated at schools in Canada, New York, and Maryland, and subsequently entered the United States Naval Academy, where he was graduated in 1881. He served as a cadet midshipman until 1883 at Annapolis and on board U.S.S.Essex, and re-entered the navy as junior lieutenant in 1898, serving as navigator on the U.S.S. Justin during the period of the Spanish war.

His principal civil employment has been with the Sprague Electric Railway and Motor Company and the General Electric Company. He has achieved fame as an electrical engineer and as an inventor, and has obtained many patents for inventions in electricity, mechanics, and thermo-dynamics, most of which have been incidental to his undertakings as an engineer. His most important electrical work has been in the development of the general use of alternating currents and in the invention and design of machinery to further the practical application of alternating currents, while his most important mechanical work has been in connection with the development and introduction of the steam turbine. He designed and directed the development of the Curtish turbine by the General Electric Company, a very large work, every detail of which was radically new, and which was carried on with a rapidity almost unprecedented in such undertakings. He designed the machinery for the first ships driven by electric motors; and he was the first serious promoter of electric ship propulsion, conducting a series of experiments with the United States Collier Jupiter which are destined to be epochmaking in the history of marine transportation.

He is the inventor of several types of transformers, including a form of air-blast type which has been extensively used; of several types of insulation of alternators, and of other details of the design of alternators which have met with general acceptance. He is the original inventor of the oil switch, a device which is now almost universally used in large electrical work. In 1907, when large alternating current uses were in rapdd course of development, there was no safe and satisfactory means of current opening. Very small circuits and fuses had been opened under oil, but the possibilities were unknown. After experimentally investigating the possibilities at Brooklyn and Niagara Falls, the heaviest circuits then existing, he was the first to design and use switches of this type. The varnished cambric cable, which is widely used, is also an Emmet invention. He is the inventor of the vertical shaft steam turbine, of which a very large number have been built; and many details of turbine design in general use are to his credit. Mr. Emmet was responsibdd for most of the later and most successful and largest electrical work of the Niagara Falls Power Company, also for the design and introduction of the Curtish steam turbine for electric uses.

His achievements have been those of an engineer and a pioneer of new methods rather than those of an inventor, and much of his most original and most useful work could not be effectively patented nor perhaps even classified as invention. Most of his work has been connected with operations of the General Electric Company and has been done in close association with other G-E engineers; and he has made it his special business to find new scope for the talents

and facilities which the G-E organization affords.

Mr. Emmet is the author of "Alternating Current Wiring and Distribution" (1894), and of numerous important papers presented before the American Institute of Electrical Engineers and other engineering societies. He is a member of the American Philosophical Society, American Institute of Electrical Engineers, American Society of Mechanical Engineers, Society of Naval Architects and Marine Engineers, and of the Naval Consulting Board of the United States. He is also a member of the University and Engineers' Clubs of New York, the Mohawk Golf, Tobique Salmon, Mohawk, Edison, and Schenectady Boat Clubs. He received the degree of D.Sc. from the Union College.