the principal cities and towns, and general municipal engineering practice. Mr. Stuart will leave about May 1st, going by way of the Mediterranean, and north through Greece and Hungary. Three months will be spent on the study of European municipal methods.

J. H. LARMONTH, who for some time has been engaged in private practice as a consulting engineer in Toronto, has been appointed superintendent of the Edmonton street railway, to succeed Mr. W. T. Woodroofe, resigned, on April 1st. Mr. Larmonth is a graduate of McGill University. He has had considerable previous experience in electric railway construction and operation, having had charge of the construction of, and later the management of, the Peterborough street railway. He was general manager of the Electric Power Company before opening an office as consulting engineer.

OBITUARY.

The death is announced of MR. GEORGE WESTING-HOUSE, engineer and inventor, who expired from heart disease at his New York residence on March 12th.

Mr. Westinghouse, whose inventions have for many years had a world-wide reputation and use, was himself the son of an inventor. He was born in 1864 in the State of New York. Before he was 15 he had invented and constructed a rotary



The Late Mr. Geo. Westinghouse.

engine, and at an early age he became an assistant engineer in the U.S.N. In 1865 he invented a device for replacing railway cars upon the track.

The Westinghouse air brake, for which he is famous, is the product of a series of improvements upon what was first intended to be an automatic brake attached to the couplers. This was found unsatisfactory. The application of steam also proved unsuccessful, but was followed in 1869 by the use of compressed air and immediate success leading to manufacture. The many changes and improvements which have been made since that time have been practically all the result of Mr. Westinghouse's own investigation.

In 1880 his interest was directed toward the operation of railway signals and switches by compressed air, and the development and patenting of a system followed shortly.

In 1886 the company for the manufacture of electric lightapparatus was organized, and in 1891 became the Westinghouse Electric and Manufacturing Company, which now employs over 22,000 people.

In connection with turbine development Mr. Westinghouse brought out the mechanical reduction gear for reducing the inherently high speed of a turbine to the slow speed of a ship propeller or d.c. generator. In other important phases of power development, such as alternating current transmission; use of natural gas; electric railway apparatus, etc., Mr. Westinghouse has played an important part. Owing to his many achievements he has been the recipient of numerous honorable distinctions, among which might be mentioned, the Scott medal of the Franklin Institute, the Edison gold medal, and the Grashof gold medal of the Society of German Engineers.

We regret to record the death of MR. ALEC. J. Mc-MILLAN, of Victoria, B.C. Mr. McMillan, formerly a native of Pictou, N.S., has been engaged for a number of years in railway construction in Canada and the Western States. At the time of his death he was Chief Engineer of Construction for the British Columbia Mills and Timber Company, Vancouver, B.C.

The death is announced in England of MR. JOHN SCOTT, chief electrical engineer of the Commercial Cable Company, and one of the pioneer submarine telegraph engineers.

The death is announced at Boston, Mass., of MR. CHARLES MARSH CLAY, who for some time was engaged in Civil Engineering in Manitoba and the Canadian West. Mr. Clay was connected with early railroad construction in Western Canada.

PRIZES FOR HIGHWAY STUDY.

To encourage investigation of methods and materials for road and street construction and to interest engineering students in highway problems, the Barber Asphalt Paving Company has offered prizes of \$100 for the best paper written by a member of the graduating classes of the leading engineering schools.

The title suggested is "Asphaltic Materials for Highway Construction." The paper and its conclusions may be based upon service tests and the lessons of experience; the physical qualities or chemistry of asphalt; or it may combine any two of these lines of investigation. The length of the paper is limited to 3,000 words and all manuscripts must be received not later than June 1, 1914.

The purpose of this prize offer is to turn the attention of engineering students to street and road construction as a field of work in which there is great need and great opportunity for trained men.

BACK COPIES WANTED.

Copies of July 21st, 1910, and November 3rd, 1910, issues of *The Canadian Engineer*, are required to complete a volume for binding. Any subscriber who has one or both of these copies for sale will please communicate with the Editor.

One of our subscribers, anxious to bind his copies of *The Canadian Engineer*, is minus the following copies: July 21st, 1910; November 17th, 1910; May 11th, 1911; May 3rd, 1912, and August 1st, 1912, and would be glad to pay 25 cents per copy for any of them. Will subscribers who happen to have these copies, and who do not care to keep them, kindly send them to this office, and we will see to it that they are put into the hands of the party interested.