

ating Co., lighting St. James Street, Beaver Hall Hill, part of Dorchester street, and part of St. Lawrence Main street, but the first permanent installation for street lighting in Montreal was that supplied from a Brush dynamo owned by the Harbour Commissioners, who by this means lighted the Harbour, wharves and approaches.

In the Fall of 1883, some 50 arc lights of the Hochhausen and Van deputé systems were placed in the streets of Toronto, and Winnipeg also had some arc lights put into operation about the same time. In May, 1885, Ottawa adopted the Thomson-Houston arc light for its streets, replacing thereby both gas and oil, and in 1887 Quebec followed its example, and Halifax and other places followed suit.

In 1889, Montreal gave a contract for the electric lighting of the whole of its streets to the Royal Electric Co. for a period of five years, a portion of the city having been lighted by the same Company since 1886. Hamilton is now also lighted by the arc light, and St. John, N.B., has recently contracted for the lighting of the whole city, dividing the lighting between the companies operating the Thomson-Houston and the Brush systems, so that now the following cities may be said to have adopted exclusively the arc light in place of gas or oil:—Montreal, Ottawa, Quebec, Hamilton, London, Winnipeg, Victoria, Vancouver, Halifax, St. John, N.B., St. John's, N.F., Moncton and Sherbrooke, besides the majority of the towns throughout the Dominion, so that now comparatively little work remains to be done in arc lighting, incandescent lighting for residences and stores being the principal field remaining unoccupied, and there can be no question that the large majority of this work will be done on the alternating current system, which is so admirably fitted for the lighting of our widely-built cities and towns, and for the utilization of our numerous water powers for this purpose.

In 1882, two private installations of incandescent lights were made in the city of Montreal. The system employed was the Maxim, which was put into the St. Lawrence Hall and Bank of Montreal. So crude was the construction of these plants that they proved unsatisfactory, and after a very short time both were discontinued. In the St. Lawrence Hall only one lead was carried from the dynamo to the lamps, the return being made through gas and water pipes, a method which, it need hardly be pointed out, would not now be permitted by the Board of Fire Underwriters. The wire used in the Bank of Montreal for mains did not even have the coating of paint which would have gained for it the misnomer of "Underwriters wire," but was merely single cotton-wound magnet wire. This is not pointed out as reflecting in any way on the Maxim Co.: all companies' systems about that time were about equally crude.

In the fall of 1882, a contract was made for lighting the Canada Cotton Co.'s mill at Cornwall with the Edison light. A plant of 500 16 c. p. lamps capacity, constructed under the superintendence of Mr. Hyllesby, now Vice-President of the Westinghouse Co., was started on the 28th day of February, 1883. In June, 1883, an exhibition Edison incandescence plant was placed in the "Mail" building, Toronto, but was subsequently discontinued.

The Montreal Cotton Co.'s mills at Valleyfield were next lighted in September of the same year, 800 lights being placed: which number was subsequently increased to about 1100 lights. The Canada Cotton Co.'s plant was also increased at the end of the year to 1200 lights, and it is now the largest private installation in Canada. In January of 1884, two competitive plants of small capacity were placed in the Parliament Buildings at Ottawa, for the lighting of which the writer furnished, in 1886, Edison machinery of a total capacity of 1000 lights.

The first incandescent electric light station in Canada was started at Victoria, B.C., in January, 1887, and was followed by that at Vancouver, B.C., completed in September of the same year. The distribution from both stations is on the three-wire system.

The station at Calgary, N.W.T., was completed and started in October, 1887, and in January, 1888, the station at Valleyfield, with overhead conductors—at that time the best constructed of all the Edison stations in Canada—was put into operation. For these four stations the writer supplied all the machinery.