

Please read and send in as full a
discussion as possible at earliest date.

The Canadian Society of Civil Engineers.

INCORPORATED 1887.

ADVANCE PROOF—(*Subject to revision.*)

N.B.—This Society, as a body, does not hold itself responsible for the statements and opinions advanced in any of its publications.

THE USE OF ELECTRICITY ON THE LACHINE CANAL.

By L. A. HERDT. A.M. Can. Soc. C. E.

(Read before the Electrical Section, 24th March, 1904.)

The Lachine Canal is part of the large waterway which connects the great lakes with the Gulf of St. Lawrence. This waterway, comprising the mighty St. Lawrence River and the chain of lakes of the Canadian West, is, as regards the beauty of its shores, the grandeur of its scenery and the majesty of its falls, without any rival. But above all, as an inland water route, it is unsurpassed in the world for its commercial usefulness.

Having a total length of 2,400 miles, 1,000 miles from the Atlantic Ocean to Montreal, the metropole of Canada, and 1,400 miles to the head of Lake Superior, it allows free and safe navigation to large vessels up to fourteen feet draught.

The St. Lawrence River, the canals and the great lakes, have become the great artery of commerce, serving to carry the freight of the West of Canada, to Europe, besides supplying the local traffic of the cities, towns and villages lying along their shores.

Such facilities for navigation, however, were not obtained without considerable outlay of money, of time and of labor, also engineering works of the highest order. Among such works are to be included the magnificent system of canals, comprising the Lachine, Beauharnois, Cornwall, Soulanges and Welland canals. The aggre-