

THE CANADIAN NIAGARA POWER COMPANY.

The annual report of the Queen Victoria Niagara Falls Park Commission states that in the month of August, 1911, the Canadian Niagara Power Company, Niagara Falls, Ont., asked permission of the commissioners to proceed with certain alterations and improvements at the entrance to their forebay. The officers and engineers of the company represented to the commission that they had encountered serious difficulties in operating their plant when the ice conditions in the river rendered it practically impossible to keep their intake clear. These conditions were acknowledged to exist by the superintendent of the park, but before taking action the commissioners thought it desirable to submit the matter to an hydraulic expert of large experience, Mr. Henry Holgate, C.E., of Montreal. The nature of the relief asked for by the Canadian Niagara Power Company was:

First.—The building of an ice shield some sixty feet in front of the present ice racks or about one hundred and fifty feet distant from the centre line of the bridge spanning the intake, and parallel with it.

Second.—The construction of an open canal to extend from the water's edge of the Niagara River to the southerly extremity of the forebay for the purpose of increasing the current of water across the intake arches northward to the ice sluiceway, in order to force the ice entering the forebay to pass out into the river.

Third.—The alteration to the entrance of the ice sluiceway so as to provide for more easy access for the water currents carrying ice.

Fourth.—Placing a submerged weir from the northerly side of the intake into the rapids at an angle with the lines of current, so as to provide for the mean water being raised about three feet.

Mr. Holgate reported upon the plans submitted and practically agreed with the company that the works of improvement were necessary for the efficient operation of the plant. He also expressed the belief that they might be carried out under proper restrictions without doing violence to scenic effects.

The commissioners, however, while fully realizing the importance of the company of ameliorating the ice difficulties, could not see their way to adopting the entire scheme of improvements without certain modifications. It was represented by the commissioners that an open canal, however important from an hydraulic point of view, was not a desirable feature for the park at this point, particularly when so much bridge work already existed, and they suggested that the company should construct underground conduits in place of an open canal. Apprehension was also felt that the construction of a submerged weir would tend to destroy the naturally turbulent condition of the surface of the rapids for some distance upstream, and create an artificial mill-pond appearance. Approval, therefore, of the construction of a submerged weir was withheld until definite expert information could be received on this phase of the matter. To that end the company obtained expert opinions on that special feature of the proposed works from Mr. William Kennedy, Jr., hydraulic engineer, Montreal, acting on behalf of the city of Niagara Falls; Mr. Louis Coste, engineer, member of the International Waterways Commission, and their own hydraulic engineer, Mr. C. C. Egbert, to the effect that, if the design of building a solid submerged weir was abandoned, and a structure formed by depositing concrete blocks or boulders upon the rock bottom with no portion of the structure within some feet of the surface of the water were substituted, the existing condition of the water surface might be maintained. This plan received the approval of

the advisory hydraulic engineer for the board, and the whole matter is now being reduced to an agreement accompanied by plans and specifications. The commissioners, however, are safeguarded by a clause in the agreement distinctly stipulating that, in the event of the irregular blocks not accomplishing the object sought, after a reasonable test, the work shall not be proceeded with.

Simultaneously with the intake improvements the Canadian Niagara Power Company conveyed to the commissioners its intention of proceeding with the power house building to its entire completion, instead of finishing the work by sections as the development and sale of power necessitated. The company also presented a plan for altering the architectural outline of the riverward elevation of the power house, showing a new structure in the centre of the building to be used for office purposes. This slight addition, which was at once approved, completely changes the forebay facade of the building and breaks the lines of a building six hundred feet long without any relieving features. While the company is not adding to the capacity of the station beyond the sixth unit, the additional equipment from time to time required will be placed without serious disturbance to the park, so that the complete restoration of the park surface surrounding the power house may be now finished.

The company now has the following installation completed:—

Generators.	Normal Capacity.	Total.
5.....	10,000 h.p.	50,000
1.....	12,500 h.p.	12,500

FORTIER & KILPATRICK, LIMITED.

The prospectus has been issued of Fortier and Kilpatrick, Limited, incorporated under the Dominion Companies Act and licensed to do business in Ontario. The company's authorized capital is \$250,000. This company has been formed for the purpose of taking over, for the province of Ontario—excepting Port Arthur and the territory lying north of the Canadian Pacific Railway between Port Arthur and Mattawa—the patent rights and also the sole right to manufacture sewer pipe with the Thomas glazed cement sewer pipe machine, also, the sole rights to manufacture and deal in Trojan partitions and ceilings, stonewood plastic flooring, sarco asphalt and waterproofing. The company have several side lines, such as washable water paint, asphalt, etc., and the right to engage in any other manufacturing and mercantile business which may be conveniently carried on therewith.

Patent rights for the Thomas glazed cement sewer pipe machine and the right to manufacture Trojan partitions and ceilings and stonewood and Trojan flooring and Sarco asphalt and waterproofing and Trojan washable water paint are being purchased and acquired by Thomas Mills for \$90,000, payable as follows:—\$20,000 in the capital stock of Fortier and Kilpatrick, Limited, consisting of 200 fully paid and non-assessable shares and \$70,000 in cash.

Fortier and Kilpatrick, Limited, in addition to the purchase of the Thomas glazed cement sewer pipe machine, and all rights connected therewith for the territory named, have also purchased the rights, patents, formulas, secret processes, etc., of the Interior Construction Company of Winnipeg for the following utilities: "Trojan" partitions, ceilings, etc., "Trojan" plastic sanitary floors, and Thomas glazed cement sewerpipe.

An offering of \$150,000 stock of the company is being made at par. The proceeds from the sale of this stock will be devoted to acquiring the above named rights and patents