charges through a similar venturi meter into the present clear-water reservoir connected with the slow sand filtration plant by a 72-inch conduit now being installed.

Fig. 1 and Fig. 2 give a clear idea of the structures as they will be when completed, and of the connections which the plant will have with the water supply of the city.

Work was commenced in September, 1914, and practically 6 per cent. of the total contract was completed before the close of last year. Operations began again on April 1st and on October 31st, 1915, approximately 65 per cent. of the contract had been completed. During the last four months the rate of progress has amounted to about \$100,000 per month. Of the work that remains to be done, about 20 per cent. of the total contract comprises filter equipment. All of the main buildings have been completed with the exception of the suction well and



Fig. 3.—Filter House During Installation of Pipe Connections in Central Gallery. View Looking North.

the chemical house buildings, and these, it is to be noted, are well under way. At present, the work is at such a stage that the winter weather ahead will not interfere with construction progress, as all the buildings have been covered in and heating apparatus installed. Practically all the material required for its completion is at the site, with the exception of the filter sand. Island sand will not be used for the purpose of filtration, as its content of iron stone makes it unsuitable. The sand which has been selected will come from the pits of the York Sand and Gravel Company, on Kingston Road, east of Toronto. This sand is very suitable and is the sand that was used in the official tests already referred to. As about 6,000 cubic yards of this material are required, and as it must be transported across the Bay, it will be impossible to effect a total delivery before next spring. As the supply of sand to the filters is practically the last operation before completion, the plant is expected to be in full running order early in May, 1916.

Many interesting construction details might be mentioned, one of which is the manner in which materials were transferred to the Island from the mainland. All brick, cement, steel and machinery involved in the con-



Fig. 4.—Interior View of Section of Filter Tank.

struction and equipage of the plant was transferred by scow, and in the case of brick, etc., the freight cars were thereby transported across the Bay and unloaded at the site, thus saving an immense amount of rehandling and deterioration of material.

Fig. 3 is an interesting interior view of the filter house, from the south end. It shows the circular steel filters on each side of the central gallery and gives a general idea of the type of construction used in the building. It also shows some of the pipes and connections to filters. The interior of a portion of a filter tank is shown in Fig. 4.



Fig. 5.—Installation of Boilers in Progress.

A construction view of the boiler room is shown in Fig. 5. These boilers, supplied by the International Engineering Works, Limited, Amherst, N.S., have each a capacity of 300 horse-power. Fig. 6 is a view of the southern portion of the pumping station with the three centrifugal pumps, direct connected to motors, and the