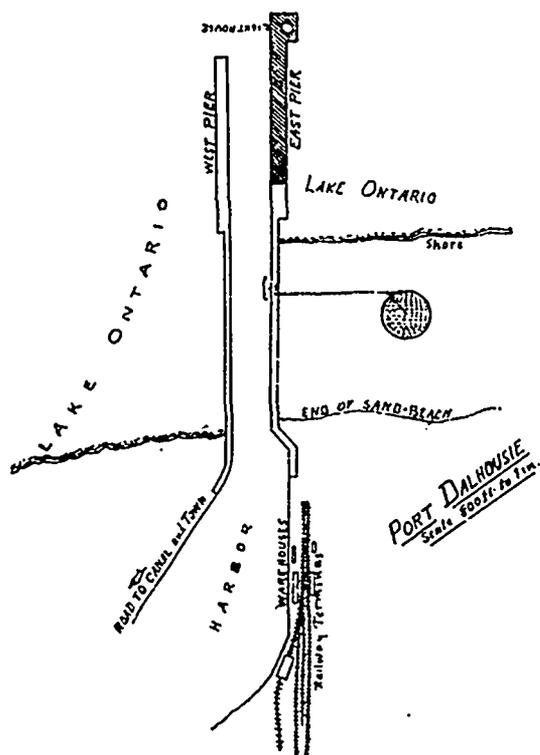


## HARBOR IMPROVEMENTS AT PORT DALHOUSIE.

Some interesting pioneer work in a certain style of pier building is now being carried out at Port Dalhousie, Ont. We should qualify the expression "pioneer" by saying that work of this kind has been done at Buffalo in the United States, and in various European harbors, but so far no work of this kind has been done in Canada, owing to the plenitude and cheapness of timber. This work is now being done by Battle and Newman, of St. Catharines and Thorold, and consists in the substitution of blocks of concrete for the present timber piers. An attempt was made to do the work by another contractor last year, but it was thrown up, and the present contractors have undertaken the continuance of it in a systematic way which augurs success. The work is being done on the east pier as far as the



shaded part indicated in the accompanying plan; the work for the balance to be carried out in future seasons. The narrow part of the pier is 20 feet, and the wide shaded part 30 feet. The concrete is made in blocks 4 feet by 4 feet and 6 feet deep. These are prepared on the shore near the pier, and moulded on a large circular table, so that 100 blocks can be made at once within the swing of a derrick-boom of 50 feet. The blocks after being made are swung on a tram car and carried thereon to the channel, where they are swung on to a scow by means of a stiff-legged derrick, and thence carried to their places in the pier. A layer of these large blocks is made in white Portland cement on each side of the pier, and all the intervening space is filled up with a bed of solid concrete from hydraulic cement, made by the Estate of Battle at Thorold. In the present contract 1,500 barrels of Portland cement and 3,000 barrels of hydraulic cement will be used. The top of the pier is finished with a floor  $1\frac{1}{2}$  ft. thick of concrete, nicely rounded at the edges of the pier, and having mooring rings cemented in at distances of 60 feet. The present season's contract applies to about 900 feet of the pier and has a fine appearance. The work is under the superintendence of James Battle, assisted by two able foremen, G. W. Read, of Port Dalhousie, and Geo. Boyd, of St. Catharines. The Government supervising engineer is W. G. Thompson.

## THE NEW ELECTRICAL INSPECTION ACT.

Canada is the first country on this continent to adopt an Act for the inspection of electric light. The only step the United States has taken is to legalize the units agreed upon at the recent conference, which almost every other country in Europe and America has done. But in Canada provision is now made for the inspection of electric light and current the same as for gas. The new Act came nominally into force in April, but the organization was only completed last month under the direction of O. Higman, who has not only put his administrative machinery in motion without friction, but has framed it on lines of the greatest possible economy. He has taken the gas inspection services, and by teaching the gas inspectors the use of the instruments and the test board which he has devised, has made his new department simply an evolution of the gas inspection department. No new branch of our complex system of governmental machinery has ever been erected at so little expense.

For the information of our readers we give a list of the staff, and the districts over which each inspector has jurisdiction:

John Williams, London.—Inland Revenue Divisions of London, Windsor and Stratford.

D. McPhie, Hamilton.—Inland Revenue Divisions of Hamilton, Brantford and St. Catharines.

J. K. Johnstone, Toronto.—Inland Revenue Divisions of Toronto, Guelph and Owen Sound.

Wm. Johnson, Belleville.—Inland Revenue Divisions of Belleville, Kingston, Prescott, Cornwall and Peterborough.

H. G. Roche, Ottawa.—Inland Revenue Divisions of Ottawa and Perth.

A. Aubin, Montreal.—Inland Revenue Division of Montreal, Three Rivers, Terrebonne and Joliette.

N. Levasseur, Quebec.—Inland Revenue Division of Quebec.

A. F. Simpson, Sherbrooke.—Inland Revenue Divisions of Sherbrooke, St. Hyacinthe, St. Johns and Sorel.

A. Rowan, St. John, N.B.—Inland Revenue Divisions of St. John and Chatham.

A. Miller, Halifax, N.S.—Inland Revenue Division of Halifax, Yarmouth, Pictou, Cape Breton and Charlottetown, Prince Edward Island.

The work of inspection is being inaugurated by Mr. Higman, as chief electrician; his headquarters being, of course, at Ottawa. These inspectors are experts in the use of the photometer, and the apparatus for testing gas and gas meters, and Mr. Higman states that the task of instructing them in the use of the necessary electrical testing appliances has not been a difficult one. A summary of the Act appeared in last issue.

Power is given by the Act for the testing of incandescent lamps for candle power, and it is understood that companies will be required to send to the department a sample of each style or make of lamp given out to their consumers.

There is a scale of fees for the verification of meters from 75 cents up to \$3.50, according to the capacity of the meter. This verification is made once every five years, but the company or consumer may have meters tested oftener if they have reason to believe the meter is not correct. In the periodical verification the company pays the fee; in the case of special tests, the party at fault pays the fee.