

other hand, the problem of sufficiently purifying the sewage before it enters the lake is a complicated and difficult one, owing to the large proportion of offensive trade effluents in comparison to the amount of domestic sewage. Mr. Andrew F. Macallum and Mr. T. Aird Murray, engineers, Toronto, are now jointly engaged on plans, in order to present to the township a proposed scheme to deal with the question.

WATERLOO.—Messrs. Harvey Bros., well drillers, of Petrolea, who have been engaged in drilling another well for the Waterloo waterworks during the past week, were successful in striking a splendid flow of water at a depth of 110 feet, resulting in a flow of about 150,000 gallons per day. There are now five artesian wells with a capacity of nearly 800,000 gallons per day. The Commission will now be in a position to furnish outside parties with water during the coming summer.

British Columbia.

VICTORIA.—The Committee on Waterworks have submitted the following new rates: Flat Rate—Four rooms, \$1.10; with discount, \$1; five rooms, \$1.10; with discount, \$1; six, seven and eight rooms, \$1.10; with discount, \$1; nine and ten rooms, \$1.40; with discount, \$1.25. Meter Rates—First 1,000 gallons, \$1.10; residences, all over 1,000 gallons, 12 cents per thousand gallons. All other amounts as follows: Under 75,000 gallons per month, per thousand gallons, 22½ cents; 75,000 to 100,000 gallons per month, per thousand gallons, 20 cents; 100,000 to 200,000 gallons per month, per thousand, 17½ cents; 200,000 to 300,000 gallons per month, per thousand, 15 cents; over 300,000 gallons per month, per thousand, 12½ cents. All meter accounts subject to ten per cent. discount if paid within fifteen days after becoming due. Meter rentals to remain as at present. Frontage tax for all pipes of four-inch and upwards to be levied at the rate of three cents per foot.

FINANCING OF PUBLIC WORKS.

Nova Scotia.

HALIFAX.—Halifax county council have decided to guarantee the bonds of the Halifax and Suburban Electric Co., Limited, to the amount of half a million dollars. Parties interested in the Waverley Gold mine are ready to furnish the capital for utilizing the Fall River water power and transmitting to Halifax, via Dartmouth and Bedford, for manufacturing and other purposes.

Ontario.

BRANTFORD.—The ratepayers of Brantford, Ont., will vote on January 4th on a by-law to issue \$5,000 4½ per cent. 20-year debentures for the purpose of additions to the John H. Stratford Hospital; and on January 5th on a by-law to issue \$20,000 4 per cent. 20-year electric plant debentures.

FORT WILLIAM.—The ratepayers of Fort William will vote on January 4th on a by-law to issue \$10,000 4½ per cent. 15-year debentures for electric light purposes. The existing debenture debt of the city, exclusive of the local improvement debentures is \$1,501,444.48.

FORT WILLIAM.—Fort William will apply at the next session of the Provincial Legislature for the validation of a by-law to raise \$170,000 for the purpose of extending and improving the electric railway system, and the validation of by-laws for \$6,000 for the purchase of lands from the Dominion Government, and \$9,000 to complete a contract with the Mount Mackay and Kakabeka Falls Railway Co.

SIMCOE.—A by-law to raise \$6,000 for waterworks extension will be voted on January 4th.

WATERLOO.—A vote will be taken on a by-law to authorize the issue of debentures for \$15,000 to build and equip a ward public school.

WINDSOR.—Tenders for debentures will be received by the undersigned up till 5 o'clock p.m. on the 30th day of December, 1908, for \$15,000 twenty-year five per cent. Windsor waterworks debentures, consisting of twenty debentures for \$1,203.64 each. Stephen Lusted, City Clerk.

Foreign.

NEW YORK.—A special meeting of American Telegraph and Telephone Co. stockholders has been called for

January 7th to authorize an increase in capital stock from \$250,000,000 to \$300,000,000. This action is taken to allow a sufficient margin for conversion into stock on and after March 1st next of the \$150,000,000 four per cent. convertible bonds, which will then be outstanding.

TELEPHONY.

Ontario.

LONDON.—Superintendent Nixon, of the G.T.R. at London, Ont., has announced that the telephone system is to be put in for the despatching of trains on that division. The staff of telegraph operators will be retained for the present at least.

Manitoba.

WINNIPEG.—At the New Year it is expected the Manitoba Government will reduce the telephone rates, the approximate profits for the year being \$225,000.

Alberta.

CALGARY.—The Alberta Government telephone system now covers 1,400 miles of trunk line and 600 miles of farmers' rural line. Since May 1st 1908, 200 miles of trunk line and 400 miles of farmers' rural line have been constructed. There are 165 telephone exchanges.

MISCELLANEOUS.

Ontario.

KINGSTON.—The report of City Engineer Craig for the year just closing shows that \$61,632 was spent on the streets. The largest amount spent in any one year before was \$40,000. Over six miles of concrete walk was laid, and a mile and a half of macadam roadway made.

PETERBORO.—City Engineer Hay has submitted to the city council plans for 3-arched span of 100 feet each for the Smith Street Bridge. Estimated cost for 18 feet roadway and two walks, \$37,500; 24-foot roadway and two walks, \$46,500.

Manitoba.

WINNIPEG.—Nearly all the quarrying firms in Manitoba have merged in the Garson Quarries, Limited, with a capital of a quarter of a million. This amalgamation is likely to have an important bearing on building material prices in Western Canada.

Alberta.

CALGARY.—The city council are advertising for a city engineer.

Foreign.

PHILADELPHIA.—The United States Government dredge "Clatsop" passed down the Delaware River recently on a 15,000 mile journey to Portland, Oregon. The dredge is only 183 feet long. The voyage will be made by way of the Straits of Magellan.

LONDON.—The general offices of "Concrete and Constructional Engineering" have been removed to Dewar House, Haymarket, S.W. (Telephone 6577 Gerrard), and the January issue will be published from that address.

PERSONAL.

MR. C. W. NOBLE, formerly of Winnipeg, has removed to Toronto, where he has assumed the general management of the Preston Metal Roofing and Siding Co.

MR. J. B. TYRRELL, M.E., Toronto, Ont., remembered many of his friends on Christmas Day and sent them an attractive Christmas card, the cover design of which comprised a view of Fort Churchill in winter.

MR. REGINALD W. BROCK, M.A., of Ottawa, has been appointed Director of the Geological Survey. For a number of years Prof. Brock occupied a chair at Queen's University and did field work for the Geological Survey in the summer. For the past year he has been separated from Queen's and has been acting Director of the Geological Survey. He is now confirmed in the directorship, and will act under Mr. A. P. Low, Deputy Minister of Mines.