

rentals directly to owner of property; to charge cost of installing services against land owner and require payment in advance; to install water service lines prior to street paving and charge cost to land owner:—

(a) The water board is empowered to fix, regulate and change rates and charges for water supplied to all consumers, and to adopt and prescribe rules and regulations which shall be observed and obeyed by all consumers in reference to the use and consumption of water taken from the city mains; the terms and conditions upon which connections to the said mains shall be permitted, and the place and manner of making the same; to fix penalties by way of additional charges for failure to pay water rents promptly, and to this end may discontinue the supply of water of any consumer who fails to pay for the same as required; to require all users of water for temporary purposes to pay for the privilege in advance; to refuse to furnish water to any building or habitation in the city unless the owner thereof shall assume liability for the payment of the charges for the water so furnished; to charge the cost of installing water service lines from the curb line to the mains against the land owner, and to require the payment in advance for installing such line and making connection with the water main; whenever the city council shall determine to pave or repave any street in the city, the water board is authorized to make a proper connection and lay a water service line from the main to the curb for each and every lot or for any part of a lot under separate ownership, although no water service may at the time be necessary or required for any such lot or part of lot, and to charge the cost of making such connection and laying such water service line against the owner of the property, and the cost of laying such water service lines and making such connections shall in every instance be a lien upon the lot or part of lot to be benefited thereby, and the water board shall have the right in the name of the city to institute and prosecute any proper suit in the circuit court of Harrison County, West Virginia, for the collection of such charges by a sale of the property on which the same constitutes a lien.

Plumbers Required to Pass Examination and Obtain Certificate of Competence

(j) The city may require all persons who engage in the business of plumbing to pass an examination and obtain a license or certificate for such purpose. For this purpose there is here created a board of examiners of four persons to consist of the superintendent of public welfare and the general manager of the water board and of two other persons selected by them, one of whom shall be a master plumber and the other a journeyman plumber. The license shall be for such term or period as may be prescribed by the examining board. The superintendent of the department of public welfare and the general manager of the water board shall not receive any compensation for serving on the board of examiners, but the additional members shall be entitled to a sum not exceeding five dollars per day for each day of actual service, to be paid out of the funds of the water board. The general manager of the water board shall be *ex officio* secretary of the board of examiners, and he shall make out and certify, and the superintendent of the department of public welfare shall countersign, all certificates of licenses, and said secretary shall keep and preserve all papers and records relating to the work of said board. The board shall be governed by any ordinance in force in the existing city of Clarksburg when this act goes into effect, or which may be passed by the Water Board.

FILTRATION PLANT AT AYLMER, P.Q.

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use of four cubic feet of free air per minute, under $3\frac{1}{2}$ pounds pressure. The effluent controllers are designed to vary the rate 25 per cent. either way from the normal, 333,000 U.S. gallons in 24 hours.

As an extra precaution, and conforming to modern practice, the Aylmer filter plant is also provided with an apparatus for adding chlorine to the water. The particular apparatus installed is of the Wallace & Tiernan make, known as their manual control chlorinator, solution feed, type "A". This apparatus controls and accurately measures the flow of liquid chlorine from steel containers to the water suction of the high-lift pumps. This apparatus is particularly interesting. The pulsating meter is capable of feeding at the rate of one pound of chlorine in twenty-four hours, which would equal .000694 pound per minute, a quantity so small that it is hardly conceivable. While the plant has not yet been officially tested it is probable that the quantity of chlorine that it will be necessary to add to the filtered effluent, in order to turn out a practically sterile water, will not exceed two-tenths of a part per million.

The new high-lift pumping unit consists of one direct connected, motor-driven, two-stage centrifugal pump, having a capacity of 700 U.S. gallons per minute. This pump replaces one of the old original steam reciprocating pumps. Its suction is connected to the clear-water basin and also to the raw-water intake. This is true also of the remaining old steam reciprocating pump. Therefore, the high-lift pumping machinery, both steam and motor-driven, can be operated and pump filtered water, or in case of necessity can pump raw water.

The cost of the plant was approximately \$38,000. The contract was carried out under the direction of Orr Wilson for R. T. Smith & Co., Victor A. Fournier for the New York Continental Jewell Filtration Co., and Mr. Allee as erecting engineer for the filter company, all work being under the supervision of Jas. O. Meadows as consulting engineer for the town.

TO IMPROVE HAMILTON

Noulan Cauchon, C.E., of Ottawa, addressed the Hamilton Town Planning Commission last week, outlining a programme for increasing the attractions of Hamilton. Mr. Cauchon said that the mountain-top should be annexed by the city without delay, and used as a residential table land, with the installation of proper sanitary facilities.

There are natural parks in Hamilton which should be developed to the utmost. Dundas should be absorbed, said the speaker. The marsh should be drained and developed for an aviation campus. A sluice gate should be installed in the Desjardins Canal. Red Hill Creek Valley and Chedoke Valley should be secured for parkways. A harbor driveway should extend along the entire north shore of the bay.

Mr. Cauchon urged that Hamilton should co-operate with the municipalities in the Grand River Valley, as well as the Niagara municipalities, stating that great opportunity exists for a co-operative plan to unify the whole district under a town planning scheme. Mr. Cauchon later addressed a meeting of citizens of Paris, Galt, Preston and Waterloo at Kitchener, Ont., with reference to this scheme.