

# THE Sanitary Review

SEWERAGE, SEWAGE DISPOSAL, WATER SUPPLY AND  
WATER PURIFICATION

## DOMESTIC WATER SUPPLY BY METER.

The Water and Gas Review for the current month quote and comment upon an article we lately published, entitled "Toronto Water Supply and Waste."

Several authorities are quoted by the above Review in favor of a meter supply system. The quotations appear to be in answer to a statement made by an Assistant Commissioner of Health of the city of Chicago, wherein the policy of metering the supply for business purposes is advocated, but for domestic supply is condemned on sanitary grounds.

The authorities quoted are fairly unanimous in concluding that the above Assistant Commissioner's conclusion is not warranted in assuming that decrease in health efficiency will follow the introduction of a domestic meter supply system.

Two points of view are strongly held, viz. :—

(a) Sewers receive practically no cleansing benefit from casual waste.

(b) The amount of supply for legitimate domestic purposes is not diminished by the introduction of meters as long as "a minimum charge per annum," guaranteeing the user all the water he can possibly use at a moderate figure is adopted.

The Water and Gas Review, referring to our statement that it is not usual to adopt meter service in Great Britain, where the per capita supply is low, states that this is owing to thoroughness of inspection, which in American cities would be a practical impossibility owing to political complications arising from frequent changes in administration.

As far as the United States is concerned, we have no quarrel with the latter statement, but we cannot see that it holds good in Canada. Continuity of municipal policy is just as much a factor in Canada as in Great Britain. The argument of chaotic politics does not hold good on this side of the line.

With reference to the point of view (a): "Sewers do not benefit," etc., we quite agree, and it is our point that the 21,500,000 gallons pumped to waste every day in Toronto serve no good purpose whatever.

With reference to (b), the adoption of the meter system for domestic supply in Toronto would certainly have the effect of causing scores of householders to call in a plumber to repair fittings, and show a consequent reduction in the gross amount of water supply at an early date, while the per capita supply would, no doubt, continue on the average to show a sufficiency of water for each individual, it would remain impossible, however, to arrive at minimum per capita supplies.

In Toronto we have a large population who are termed "roomers." These people generally occupy one or more rooms, with the use of the bath room. With

the meter system we can conceive of the parsimonious landlord or landlady preferring to let rooms to people who are content to miss the morning tub, rather than indulge.

The point, however, remains that with proper and efficient supervision of plumbing fixtures and good, sound mains, the per capita supply for domestic purposes need not exceed thirty gallons per day, and this without the trouble and expense of fixing meters to each individual house service. Not having similar political conditions to those in the States to contend with in Canada, can we arrive at the same point in efficiency decrease in waste here as in Great Britain?

Nothing is said in the Gas and Water Review of the cost, maintenance and depreciation in connection with a meter system. Nothing is said of the trouble and worry in connection with untruthful meters.

In Toronto to provide an universal domestic meter supply in accordance with the city waterworks engineer, C. L. Fellowes, would entail a capital expenditure of \$720,000. At 4 per cent. this sum represents annually \$28,800. A sinking fund for depreciation at 2 per cent. represents a further annual sum of \$14,400. Repairs at 2 per cent. entail a further annual payment of \$14,400. A meter system based on the above figures would cost Toronto an annual sum of \$57,600.

The above sum, of course, includes no part of the cost to the individual in keeping in repair taps and fittings, and the introduction of meters would certainly cause a huge annual expenditure in this direction.

Now, the question appears to us to be simply this as far as Toronto is concerned: Are the people willing to pay the annual sum of \$57,600 to maintain a meter system, or would they rather pay half this sum to ensure the establishment of a thorough system of water appliance supervision such as exists in most British cities and towns?

Twenty-eight thousand eight hundred dollars would, roughly, provide for a staff of twenty-eight qualified inspectors at \$1,000 per annum each, and should result in water fittings being put in of such a character that annual maintenance in rectifying defects would be reduced to a minimum.

There is at times apt to be a tendency in connection with municipal supplies to the public to assume the total cost of the supply only as equivalent to the rates, etc., paid direct by the public to the municipality and ignore all the incidental costs which are entailed to the individual as a consequence of the supply.

For example, a municipality may introduce a meter system, charge rent for the meter, and call this "income," and deduct the sum from "expenditure."

All such tricks are only on a par with taking a sum of money from a man's pocket and returning it to an-