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JAMES J. SALMOND

President and General Manager

HEAD OFFICE: 62 CHURCH STREET, TORONTO, ONT.

Telephone, Main 7404. Cable Address, "Engineer, Toronto."

Western Canada Office: 1208 McArthur Blog., Winnipeg. G. W. Goodall, Mgr

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## STOP THE WATER WASTE!

Many Canadian cities are wasting water which, if saved, would increase pressure, reduce operating costs, save fuel or electrical power, and in many instances would postpone costly extensions to plant.

Every city and town engineer should make certain that none of the water which he is pumping is running to waste through leaks in his mains. Water-waste surveys will nearly always pay for themselves, even where the water-works are in good condition, as there are invariably some small leaks which can be found and stopped. As a

general rule such surveys will save large sums.

No extensions to waterworks plants are warranted in war time until it has been made certain that water is not being wasted. In Montreal, for instance, the city is being urged to finish the aqueduct sufficiently for it to be used as a source of additional water supply, or to build another conduit at a cost of hundreds of thousands of dollars. The daily capacity of the existing single conduit is about 75,000,000 gallons. The average consumption last month was over 66,000,000 gallons and went as high as 70,000,000 gallons on two days. As the consumption is increasing at the rate of about 10,000,000 gallons per annum, the civic authorities are alarmed at the urgency of the situation

It is probable that a duplicate conduit or some other alternative source of supply should be available at Montreal, but, aside from standby capacity to meet accident requirements, it can be fairly assumed that Montreal's 75,000,000-gallon conduit would supply that city for some time to come, aided as it is by the private company which supplies part of the city, if thorough water-waste surveys were vigorously prosecuted and all leaks stopped, and if meters were more widely used.

In a recent editorial, Engineering News-Record, of New York, said: "Besides cutting down useless and harmful waste, meters afford the only just means of apportioning the cost of a public water supply among the consumers, which alone is convincing argument for their use in these times when every man's burden should not only be kept to a minimum but should also be as equitable as possible."

The Bureau of Municipal Research, of New York, in a recent report on conditions in Montreal, says: "The present schedule of water rates is inequitable and discriminatory, and should be discontinued in its entirety. Water tax is in effect a flat rate for service, and is open to criticisms that have been applied to flat rates in all forms of utility service, and which has led to their general discontinuance. The city should adopt a policy looking to the universal metering of the service. No further flat rate customers should be accepted, and the metering should be installed first on the premises of customers whose use and abuse of water is known to be the greatest, and the metering of the domestic consumers postponed to the last."

## AFTER-THE-WAR PROGRAMS

English cities and towns are preparing comprehensive programs of work to be done after the war. Ideal plans are drawn, and schedules of work are prepared which will obviate local difficulties in finding employment for returned soldiers.

Such well-conceived plans of growth are long steps toward municipal efficiency and are highly desirable apart entirely from the war and its problems. Their need was emphasized last week in the report of the New York Bureau of Municipal Research to the board of control of Montreal.

"The distribution of public improvements throughout the city of Montreal," says the Bureau, "has not been in accordance with any well-conceived plan based on a comprehensive study of the city's needs. In fact, in many cases the controlling elements in securing appropriations for public works appear to have been political expediency. As a natural result of this ill-advised policy, particularly in regard to street improvements, there has been extensive construction of permanent pavements in sections of the city where the need in no way justified the expenditure.

"The seriousness of this matter would be far less were it not for the fact that the city has paid the entire cost of street improvements, no assessment being made against the property benefited. Expenditures of this character during the past decade have aggregated millions of dollars for which the city has received no direct return. This practice has contributed materially to the present financial embarrassment of the city and cannot be too severely criticized. It is imperative that the city government of Montreal without delay take appropriate action to make mandatory the levying of special assessments against the abutting property for street improvements, including resurfacing.

"The present street paving problem is one of resurfacing and construction, rather than maintenance. It is urged that immediate action be taken to organize a maintenance force, adequate to keep in repair those pavements which have recently been constructed and have not yet fallen into that condition of disrepair which is so common in many parts of the city."

The most important defects in Montreal's civic government, says the Bureau, are the general policy followed in