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MONTREAL WATER SUPPLY.

While we write a discussion is going on in the daily press with reference to the facts brought forward and the arguments used at the recent meeting of the Citizens' Public Health Association. On the one side it is urged that the water we drink is of the worst kind, that it abounds in organic and mineral matter and that living animals are peculiarly abundant in it, on the other side it is argued that the water cannot be so bad as stated by the scientific authorities since it has been drunk by certain individuals for many years and these people still live and enjoy robust health. There is no doubt but that our Montreal water is not clean and that it is to certain constitutions very hurtful. We have personally witnessed its harmful effects on children not accustomed to it and have moreover seen in water we have drawn for ablutionary purposes, animals that caused an involuntary shudder when we thought of the last glass of water we drew and drank off in the dark. With respect to purity it has been urged by Dr. Baker Edwards the lecturer at the meeting referred to above, and also by the experienced and able editor of the *Canada Medical Journal* that the water should be filtered at the public expense. This could be done at an expense of about \$5.75, per annum per million gallons, and we should then have a water to drink that no one need be afraid to use.

There is one point in reference to water supply wherein Montreal and New York alike seem to be in the wrong and that is in the amount of water wasted. Here in Montreal we consume 65 gallons a day for every man, woman and child in the city; but this is eclipsed by the consumption in New York of not 35 gallons, as stated at the recent meeting but

of 107 gallons which was, by the official figures, the daily amount furnished in 1874 to every human being in the city. From the experience of Liverpool where this subject of waste has been thoroughly and successfully dealt with it seems that an average consumption of 20 to 30 gallons per head is all that is really required and that thus Montreal pumps three gallons and New York five for every gallon needed. In New York the cry is now for more water and a plan is under consideration by which more water will be brought from Lake George, a distance of 200 miles. There is, however, a strong desire on the part of many there to insist on what ought to be done here, too, the establishment of a system of furnishing water by meter to the consumer.

It is estimated that in New York this change alone would render unnecessary any enlargement of the water works for the next hundred years. As for Montreal it is clear from unimpeachable statistics that a system of supply by meter would save so much in the amount of water to be supplied that this could be thoroughly purified and supplied at a less cost than is now incurred for our over abundant supply of impure water. There is a mechanical question also of considerable interest which has been opened by the impurity of the supply. It is stated by Mr. Lesage that a heavy sediment has gathered in the pipes and that an extraordinary expenditure must be incurred to remove this. A similar state of affairs existed at Sydney, N. S. W., about three years ago, and was overcome in a very ingenious manner by the engineer of the water supply there, after trying various methods unsuccessfully he made some large circular brushes of the diameter of the pipes to be cleaned and forced them through the pipes until the sediment was entirely removed. The expense was stated to have been by no means so great as was at first anticipated. At any rate it seems clear that these reforms in our water supply need instant attention and there is every prospect that if properly carried out the result may be a saving and not an extra expense. In the meantime we advise all who can afford to do so to filter all the water they use for drinking purposes in private filters until the public filters are established.

THE KEELY MOTOR.

The undulatory theory seems to apply to plenty of things besides light and sound, in fact it seems to apply to almost everything. We have, in commercial circles, waves of elevation and of depression and we have just such waves in religious circles. Some periods are remarkable for being prolific in great inventions and some for being barren. Then again every now and then a big wave comes along, beating on it what promises to be the greatest and most wonderful invention the world has ever seen: and as the wave breaks on the shore the invention bursts like a bubble and there is nothing left. We are afraid that just such a wave as this last kind is now on the horizon. Like many other waves of this kind it advances very slowly—it has been in sight for nearly two long years but has not yet reached the shore. We refer of course to the new celebrated Keely motor about which such widely varying opinions are being expressed. The general public which puts its trust in the leading articles and descriptions of the *New York Tribune* and *Toronto* or of the *Toronto Globe* may well believe that we are on the eve of the promulgation of an invention which will revolutionize our mechanical world. We are to have a motor which at a nominal cost shall "produce a power to which there seems to be no limit" "a power which if used to drive a modern steamship could split it in