

presented a financial statement, which differs from its predecessors in this township, inasmuch as it shows all our taxes for the year paid on December 15th, all our debts paid, and a substantial balance on hand to be in next year. This is largely due to the fact that the people are recognizing the benefits of well directed efforts and well spent money upon the roads, and signify their approval by their readiness to pay their taxes for these purposes. If there is any specific information or detail that I can furnish you with I will be pleased to do so; but as I said before I cannot cover the ground in this general way to the extent I would like, and I do not know the circumstances under which you are working.

"In 1896 we voted on the question of statute labor. This was carried again by two to one. In closing I might say that the object in reform of this kind is success. One or two live men can carry the thing through with a little push, and very soon you will hear the last of road beats and pathmasters. By all means procure a road grader, and when procured do not overdo the amount of grading. Make haste slowly. Crown and thoroughly build the work for the first year so as to avoid adverse criticism, and enlist sympathy in the beginning. See that your pay lists are kept accurately, and publish them with your auditors' statements, for no doubt you understand the peculiar desire some of your ratepayers may have to know 'where the money goes,' and 'who gets it.' I strongly advocate, and advisedly so, the abolition of statute labor. There can be no doubt about the result. Any of the methods open to you by the Act are better and more businesslike, and as such encourage better men to come forward as councillors; I wish you every success."

The Filtration of the Public Water Supplies.

Continuous sand filtration as practiced in Europe has gone through an experience of nearly fifty years, and one would suppose that this length of time should be sufficient to remove the matter from the domain of doubt. Still, curiously enough, there are some who discuss sand filtration as practised abroad very much as they do the subject of air navigation and perpetual motion—things very interesting in themselves, but quite impossible of any practical results. This indifference to the wonderful performance of sand filtration in European cities is a bar to the development of works of water purification in this country, and is the cause of a large continuous loss of valuable lives and much physical suffering, eighty to ninety per cent. of which might be averted if artificial works of water purification were as largely used in this country as they are abroad.

Some writers in their enthusiasm have declared that sand filters properly constructed and operated will furnish pure

water. This is a mistake. No filter operated upon a practical basis has ever furnished pure water; but the so-called purified water is so much superior to the unfiltered water that it will meet the practical requirements of cities and communities to-day, and when the time is reached that people demand absolutely pure water, methods for furnishing it will doubtless be forthcoming. For the present, and as a practical method of water purification, filtration may be regarded as entitled to full credit at the hands of waterworks managers.

Filtration, as the term is defined and generally understood, consists of an interception or straining out from a fluid such suspended matter as is larger in some dimension than the pores of the filtering medium. The action is supposed to be purely mechanical, and the efficiency of a filter will be measured by the fineness or coarseness of the filtering material. The filtration of water, however, demonstrates that the fineness of the filtering material (sand) is not exactly a measure of the efficiency, and the finest or smallest grain of sand does not always give the best results.

This fact, then, would naturally suggest that the straining action is only a part of the work accomplished by the filter; and in addition to the interception of certain suspended matters at the surface of the sand-bed, some other forces are at work to reduce the suspended matter, including the bacteria, in the water. One of these forces is now known to be the action of the bacteria on the organic matter. This is called the biologic action of the filter.

Inequality in Voting on By-Laws.

The question of voting by ratepayers on money by-laws is one that, under the provisions of the Municipal Act, will bear considerable discussion. If a by-law is passed by the city council to raise money by the issue of debentures, or to grant tax exemption to any manufactory, it has to be submitted to the ratepayers for their assent. Under the Municipal Act, a man owning property in several wards has a vote in every one. This may work unfairly in two different ways. Let us suppose the case of a large wholesale establishment in one ward paying taxes on, say, \$50,000 worth of property. The owner has just one vote. Now, another ratepayer owning, say, five houses assessed at \$1,000 each, but lying in different wards, would have five votes, though his total assessment is only \$5,000. The owner of the wholesale business has to pay ten times as much taxes as the owner of the houses, and yet he has only one vote to the other man's five. On the other hand it might easily happen that one man would own \$10,000 worth of property and another \$500 worth in each of five wards, yet the former would have no more votes than the latter.

In both these cases there is manifest injustice, yet it is hard to see how any improvement can be made on the present

system. If the theory of "one man, one vote," were to govern, then it would be unfair to the man who had a large amount of property in each of several wards, because he could only vote as often as the man who had a small house in one ward. The ward system would seem to work less injustice than the "one man, one vote" system; and yet it is not fair. The Legislature may be able to devise a scheme that will meet the objections to the present system.—*Kingston News*.

Municipal Doubts.

The following is from the *Stratford Beacon*: Mr. H. W. Sinclair, of Owen Sound, is taking steps to upset the election of the town councillors on the ground that as the ward system has been abolished ratepayers were illegally allowed to vote in more than one ward. The result of the action, if it materializes, will be interesting to Stratford people.

Apropos of the above, the *Galt Reporter* has the following: In Galt the ruling of the returning officer was, that a voter could only cast his ballot at one booth, and his instructions were carried out to the letter, although considerable doubt even now exists as to the law of the question. In Guelph the view was taken that the new system gave the qualified citizen the right to vote for aldermen in every ward in which he held property, and, therefore, the council for 1899 refused to give the by-law abolishing the wards its third reading. Apparently Stratford acted as Galt did in January, 1899, and allowed the citizen all the votes he was entitled to under the ward system.

It would seem, in view of the abolition of wards under the new act, that the one-man-one vote principle should apply, and that in the case of money by-laws no difference should be made, property irrespective of wards being adjusted to meet the conditions of the vote for aldermen.

The ratepayers of Orillia township gave a majority of 90 votes in favor of the by-law to commute the statute labor tax. In other words, the township has given up the notion of trying to maintain and keep its roads in repair under the system of statute labor, and will this year try the experiment that has worked successfully in other townships of handing the work over to a paid commissioner, who will superintend all road work, repairs and improvements, for which the ratepayers will be taxed at the rate of 50 cents per day for every day's labor which heretofore they have personally expended on the roads.

Arnprior voted for the waterworks and sewerage works on Jan. 1st, and the work will at once be pushed forward.

The by-law granting a loan of \$50,000 to the McLaughlin Carriage Company, was carried in Oshawa.