

Montreal has learned several lessons from this epidemic. One of these is that lay boards of health are a delusion; and another, that in the appointment of a medical health officer, religion and politics should be rigidly excluded. \* \* The qualifications of a health-officer of a great seaport town should be of a very high order. The appointment should not rest as it now does with a few addle-headed aldermen, but should be entrusted to the Federal Government. The appointment is one which has a direct interest to the whole of Dominion, as many places know to their cost this day. \* \* Dirt, foul smells and mismanagement were the characteristics of St. Roch's Hospital, when visited by the Montreal members of the College of Physicians and Surgeons. They found no ward book, the hospital physician, Dr. Nolin, apparently relying upon his memory to keep him posted as to the condition and treatment of a hundred patients."

#### THE LOCAL IMPROVEMENT RATE.

When the local improvement rate was made a part of the civic economy of Toronto, the theory on which it was advocated was that every one would pay for precisely what he got, and equity would be done in making local improvements. That every street was for the general convenience, not specially for those who lived on it, seemed to be lost sight of; and the desire to do equity, which creditably prevailed with the great body of the rate-payers, bore down all opposition.

The time has come when we can compare the promise with the result. Does everyone who enjoys an improvement under the local improvement system pay for exactly what he gets and no more? That was the promise made in the name of this so-called economic reform. Under the local improvement system, a great deal of block paving has been done: not only King, Yonge and Queen streets, but a great many other streets have been paved. But do the rate-payers on King and Yonge streets all pay for the new improvements? They do not. Some of them not only pay nothing, but receive in addition a bonus for consenting to have the block-pavement made at the expense of the city. Not only does the Dominion Bank pay nothing for the new pavement, but it makes \$30.40 a year by the fact that a new pavement has been made in front of it, at the general cost of the city. This is the way in which the local improvement law works. Any rate-payer who is assessed for a local improvement for, say, a block-pavement, is allowed exemption from the general tax levied for the improvement of roads. The result is that the Dominion Bank, with a frontage of 55½ feet pays—we take the assessment for 1885—for block pavement \$19.10 per annum, and is allowed an exemption of \$49.50; so that it not only pays nothing for the pavement but gets a bonus of \$30.40, for having come under the local improvement. Robert Hay & Co. pay \$29.30 and get back \$39.44; the *Globe* office pays \$11.96 and gets back \$22.58; the *Mail* which pays a little less than the Dominion Bank, gets back \$54.69.

Compare these refunds or exemptions with those in other parts of the city. On Beaconsfield Avenue the refund on 50 feet of block paving, the width of the *Mail* lot, is not \$54.69 cents, it is only 47 cents, which is less than one cent in the dollar of what the *Mail* gets. On the whole business part of King street the local improvement system works unequally, and the block pavements on these streets for which the property on them is supposed to be assessed, are in fact made in whole or in part at the cost of the ratepayers. And this is not all; some owners of property on these streets get a heavy bonus in addition. The higher the assessment, under the local improvement system, the greater the refund or exemption. We have all heard of people living on the interest of their debts; the way in which the local improvement Act is worked out in Toronto comes, perhaps, nearest to realizing this idea. If a man could only be indulged with responsibility for several block-pavements in the parts of the city where property is most valuable, he would be on the high road to fortune.

The cause of the disastrous operation of the local improvement scheme is not far to seek; it is to be found in the attempt to make equivalents of two unequal things. Assessment for a local improvement secures a release from the general tax raised for the same or a similar purpose, and the error arose from making the exemption general. If a piece of property on King street be assessed for a block pavement, it is exempted from the tax for roads throughout the city. The only exemption or drawback to which the owner of such property is equitably entitled is measurable by the relative cost of the two kinds of roadway on the street on which it is laid and not elsewhere. If the new block-pavement had not been laid, the property on which it fronts would have had to pay, on the local assessment principle, for another, and inferior roadway, say of macadam. If the proprietor chooses to have a better roadway he may be allowed to pay the difference in the cost between the two. This is the theory, but in fact, as the thing is worked out, he may pay nothing at all for the new roadway and get a bonus for having allowed it to be put down. It is strange that the unjust working of the By-law has been so long concealed. Now that it has been brought to light no one attempts to defend it. Even the *Mail* which, owing to its having the most costly building on the street, reaps the greatest benefit from the exemption, denounces it as iniquitous."

The effect of the working of the local improvement by-law is to create a new class of exemptions even less defensible than any that existed before. For the old exemptions, though they are not capable of defence, something can be said. Religion, charity, education have claims on the community; property of extra value, which enjoys the benefit of the new exemption, has none. The universal principle of assessment is that property pays rates in proportion to its value, and not on account of its situation. But the effect of the operation of the local assessment by-law is to levy the local taxes unequally; to make some

properties pay, in proportion to their value, a great deal more than others. The Board of Works Committee, to which the question of the unequal working of the law was referred, recommends, as a remedy, as we understand it, the universal adoption of the rule of local assessment. But that this would be a remedy is very doubtful. In some cases it would probably be found to aggravate the wrong. This is a question on which the electors ought to inform themselves before they can make an intelligent choice of representatives in the council next January.

#### IMPROVED METHODS IN THE PRODUCTION OF GAS.

Within the last few years the improvements in gas-making have greatly lowered the cost of production. Mr. Vanderpoel, President of the American Gas Light Association, recently at the thirteenth annual meeting of that body adduced some startling facts illustrating the progress made. The selling price to-day is, in many American cities, twenty per cent. below the cost of production fifteen years ago; the reduction in price frequently being as much as fifty per cent. Labor is now economized in gas works, in every possible way; improved hoists and cars have reduced the cost of handling the coal one-half or two-thirds and in some cases even in a greater degree. Great improvements have been made in the construction of retort houses and furnaces. The quantity of gas obtained from a given quantity of coal is from two to three times as great as formerly, and the labor employed is made more effective in the same proportion; an economy in the fuel used in the carbonization of coal to the extent of one-half or two-thirds has been made, and a largely increased yield from the carbonized coal is obtained. Improved apparatus for removing the tar is used, the ammonia is extracted by a better process, and a better return from the residuum is secured, though in this particular there is room for further improvement. The pipes are now covered with some substance that prevents oxidation; consumers' meters are tested at frequently recurring periods; station governors have been improved, and the gas is distributed more uniformly and under lower pressure. The unaccounted-for gas has been reduced from 15 or 20 per cent. to less than five. The service is more efficient and the light is better.

The future of gas as an illuminant is a matter of great interest. To-day, we are told, illuminating coal gas is made in England for thirty cents per 1,000 feet; this is the cost of production; in some cities, Plymouth for instance, it is sold for less than two shillings per 1,000 feet. Perhaps in the direction of heating we have most to hope for from the future of gas. In New York, at present, a ton of anthracite coal mined with steam, produces 50,000 feet of gas suitable for heating, but without illuminating power. This form of gas is produced at a cost of fifteen cents per 1,000 feet, and can be converted into illuminating gas by the admixture of naphtha. That gas is destined to give us