

generally be a mistake for each mining company to erect reducing works of its own at too early a period. The best plan is, at first, to get the ore tested elsewhere; and go to the expense of costly reducing works only when the profitable nature of the mine and its probable extent have been established. Different financial plans are followed in different mining districts of the States. In California and Nevada the custom has been to issue shares subject to assessment, and as the mines progressed, or the necessity arose of erecting new buildings, stamps or furnaces, calls were made; while in Colorado and Arizona it is usual to raise, at the outset, sufficient capital to sink the main shaft, to open drifts upon the lode, and to provide the stamps or furnaces. Where this has been done, and a small working capital provided, the stock is issued without the liability to future assessment. When mines are paying reasonably well, part of the profit ought to be reserved to recoup the capital. Besides, whatever plan may be adopted, the *Boston Economist* argues with good show of reason, it is necessary, in mining operations, to have a reserve to fall back upon, in case of some unforeseen casualty. An instance is given in the experience of the St. John Del Rey gold mine, one of the richest in Brazil, worked by an English company. When the mine had been worked ten years the timber supporting the roof was burnt; and a reserve of \$800,000 enabled the company again to get at the buried treasure by sinking a new shaft. The mine now sends to the proprietors \$50,000 or \$60,000 a month from a yield of only \$13 to the ton. This valuable mine has never yielded more than \$15 to \$20 to the ton. The average product of the Colorado gold mines, in 1879, was \$93.73 per ton. Some of the Madoc mines are known to be richer than this; though hitherto the difficulty has been to separate the ore from the sulphates. Many well-informed persons believe that Professor Chapman some time ago discovered a means of getting over the difficulty; and when his patent, now tied in some way we do not understand, becomes free, his method will be put to decisive test. It is claimed that there has already sufficient experience of its working in Europe to establish its success. In that case, our Madoc gold mines would without question be of considerable value.

#### THE FRONTAGE TAX REJECTED.

The decision of the freeholders of Toronto is an indefinite postponement of the frontage tax, in any form. Neither for the front-

age tax, nor for local improvement tax was there a majority of votes in a single ward. And the frontage tax was more obnoxious than the local improvement tax; for it received only 856 votes, while for the latter 959 were cast. The majority against the frontage tax was 1,880, and that against the local improvement tax, 1,403. When we add that nearly four times as many people voted for the defeated Irish Relief Fund as could be got to vote for the frontage tax, the hopelessness of this new and additional scheme of taxation becomes evident.

The injudicious advocates of the rejected new form of tax have themselves to blame for the defeat they have encountered. If we are to adopt a new scheme of municipal taxation, its advocates must be prepared to show that they are ready to do everything in their power to prevent the change operating needless injustice. The frontage tax advocates, far from pretending any desire to do justice to all sections of the city, insisted on giving to one part of the citizens roads built at the general cost, and making the other part pay for theirs; those in possession of the old roads were to have them without special payment, while those who have none were to pay for theirs when they got them.

Neither of the rejected plans was defined; and if either had been adopted, there would have been a wrangle over the meaning of the terms in which it was stated. The general idea was that a frontage tax meant so much per foot frontage, without regard to the varying values of different lots or the buildings upon them; and that the local improvement plan implied an assessment on the value, not the mere frontage of the property; some thought the value of the buildings was intended to be included, others that it was to be excluded.

The preference shown by the freeholders was for the better of the two plans; that which had in it the lesser element of injustice. This distinction is conformable to equity; and the rejection of both schemes, by such overwhelming majorities, is a protest against the attempt to impose on the citizens a discrimination in the distribution of burthens for which no justification could be shown. No other result than that arrived at could have been expected. The great majority of the freeholders have no other roadways than that which nature made on the street on which their property is situated; and it was not likely that they would consent to make a present of existing improvements to those whom accident had placed in possession, and at the same time improve their own streets at their own expense.

If a new form of tax is to be adopted, the change must be made in a spirit of equity, and without any desire on the part of its advocates to snatch a special advantage at the general cost. On this condition, which no honest men can reject, a change of system in the not distant future ought not to be impossible.

#### A CANADIAN SCHOOL OF ART.

Believing that the proper education of the rising generation in drawing, modelling and such studies as develop taste and train hand and eye to accuracy and dexterity, is of great moment to Canada, we have, as our readers know, devoted some space to a series of articles upon Industrial Education. Some of our employers of labor have recognized the importance of the subject, and second our efforts to obtain adequate attention to it. Among our teachers, too, are some who have long since grasped its true import.

Commercial men cannot fail to perceive the bearing upon our future of such instruction from our youth. So convinced were the Pennsylvania Railway Company, one of the largest corporations in the United States, of the economy to them of industrial education, that its managers resolved two years ago to select for the responsible positions in its employ only those persons who had received thorough technical training. This is, besides, a commercial value to beauty. A merchant knows that taste in manufacture bestows an increased estimation and price upon fabrics. Older countries than ours have perceived that the changing conditions of modern life these last thirty or fifty years now require that the artisan shall receive a better education than he did, say in 1840, otherwise he cannot advance himself as he should, or even maintain his old position. As an American writer puts it:—"The education of a people is not a fixed quantity, but should always conform to their necessities." The French Commission of 1863 declared that, of all branches of instruction "drawing has been regarded as the one which it is most important to make common." A translation of the report of this commission, presented to Parliament, helped to bring about greater attention on the part of the British Government to technical instruction as a matter of governmental concern and control. And by the more recent educational law of Prussia, that thorough-going and progressive State, drawing is treated as a fundamental study, and a course is prescribed.

The Austrian scheme of art industrial