

but such as comprised complete lists of all its advances, at all points. But such a return would occupy not a single line of the "Gazette," but hundreds of pages of it.

### THE FRONTAGE-TAX QUESTION.

This question shows a tendency to crop up anew, and some go so far as to assert that the City of Toronto, which rejected the tax last year is in favor of it now. We doubt this very much; at least there are no signs of an unconditional acceptance. As ex-Alderman Turner has remarked, in a published letter, the difficulty arises out of the street improvements that have been made. Unless those be paid for by the parties benefitted by them, the consent of those who live on unimproved streets to the change cannot be got. The ex-Alderman makes this suggestion: "Let the Council apply to the Legislature for the insertion in the Municipal Act of a permissive clause authorizing any municipality upon a vote of the qualified ratepayers to apply the frontage tax to the formation and maintenance of streets, sidewalks, &c., with power to pass such by-laws for the protection of such property owners, &c., &c., as may be deemed advisable. . . . Then let a valuation be made of the improvements on each street, and let the property be assessed for it. The payment thereof could be spread over a given period (five or ten years), payment being made annually as in the case of sewers, with the addition of the cost of maintenance. These annual instalments could go to form a fund, out of which could be defrayed the cost of making further improvements."

It is obvious that the change cannot be made except upon an equitable basis. That basis is, we think, furnished in the suggestion that the value of the old improvements should be ascertained and the property assessed for it, just as in the case of new improvements. It is obvious that if there is to be a frontage tax, it should be general and apply to all improvements, old as well as new. This is what we suggested before the question was put to the rate-payers; and if our advice had been taken, the frontage tax would have been adopted.

We don't think it would be advisable to attempt to adopt this tax on any street without the consent of a majority, in property or numbers, or both, of those interested. It is just the kind of thing which cannot be forced; and any attempt to force it on unwilling ratepayers only inclines them the more to resent the attempt. Whether the amount that would be paid for the old

improvements could properly be formed into a fund, out of which to make other improvements, is a question. The proceeds of assessments specially levied on property, for the ostensible purpose of benefitting that property, if administered by the Council at all, should be treated as a trust fund. It is so treated in some American cities; and no doubt that is its true character.

If proprietors were willing to pay cash for such improvements, they ought to be at liberty to make them themselves, as is done in Buffalo and other places, subject of course to the supervision of the City Engineer, acting under by-laws regulating the character of the improvements. When all parties make up their minds to proceed on these equitable principles, there will be no difficulty about putting the proposed frontage tax into force. Till then, it will be nothing more than a periodical subject of futile discussion.

### INDUSTRIAL EDUCATION.

#### THIRD ARTICLE.

There are many who do not admit the need for practical training of the young in such departments as drawing and designing. These persons look upon drawing as a luxury, a useless accomplishment, or at best a minor matter, needful only to such of our youth as are intended for artists or *dilettante* students, but of no utility for those who are to be our machinists, joiners, weavers and the like. We think it can readily be shown that this latter class will be greatly benefitted by learning in early life the principles of beauty and proportion, and being made acquainted with the propriety of plans or designs and the strength of materials.

It will not be denied that a druggist ought to be acquainted with the effect upon the human system of the medicines he sells, or the drugs in a prescription he prepares. So likewise should an engine driver have a knowledge of the parts of his engine, and of the strength of the dangerous motive power which it is his province to control. Nor should a bridge-builder, or a house-builder be ignorant of the breaking strain which the one can bear, or the strength or duration of the material of the other. Some of the greatest disasters to human lives and bodies have been caused by ignorance on just such points. Within this month there occurred at Adrian, Michigan, a disaster, the collapse of a stand on the Fair grounds, by which some twenty persons lost their lives and seventy were injured. This distressing occurrence was the result, we are told, of ignorant and unscientific designing and building; the timbers, too light for their purpose, were merely spiked together where experience or skill

would have morticed and braced them. The builder admitted to the jury that he had never served apprenticeship to a trade, could not build a house, and was not competent to build more than a shed. And in the catastrophe at Ashtabula, Ohio, where a whole train load of people were killed or mangled by the fall of a railway bridge, and the burning of the cars, the jury found that the designer of the bridge, "a prominent railway contractor, dictated the drawing of the plans and the erection of the bridge without the approval of any competent engineer, and against the protest of the man who made the drawings," and that the fall of the bridge was the result of defects and errors made in describing, constructing and erecting it," errors which persons scientifically trained to bridge-building would not have made. Had this contractor or this builder been technically educated or trained to his employment, he could not have made the radical errors which resulted in disaster and death; errors which any tyro in science must have detected and condemned.

There is another reason for broadening the basis of our school education of to-day. This country is developing; the occupations of our people are becoming more varied; manufactures are increasing in number and in extent. In places where a generation ago there was but a cross-road smithy, there is now a foundry and machine shop. The village of twenty years ago, whose principal industry was rag carpet weaving, has become a town with a woollen or a cotton mill. It is not going beyond the truth to say that tracts which, within the memory of their present settlers, knew only the sound of the lumberman or the saw mill, are now smiling farm-lands with agricultural implement factories and planing mills, alternating with creameries and pork packeries. The plain textile fabrics and rude furniture of those primitive days will no longer answer for the improved tastes and longer purses of to-day. So our machinery, novel and delicate, demands year by year greater skill and taste in the operatives who tend it. If we would make progress in manufactures, and not be dependent upon imported workmen, we must educate the rising generation, in the direction of the trades we intend them to follow. The movement in favor of educational reform in the United States notes the fact that the public schools have a direct bearing upon the occupations and the welfare of the entire people: and its advocates desire to so modify the teaching in the schools of all grades "that it shall have a more direct and telling influence upon the common needs of practical life." That, in fact, boys and girls when they leave public schools, should carry with them the elements of knowledge,