

and the kind of material and method of construction to be employed in the erection of railway bridges. Seeing that in no country in the world, in proportion to population, are there so many railway bridges as in Canada, this subject comes home to us with striking interest. The Minister of Railways and Canals might profitably consider whether in the interest of human life, some method of official enquiry into the condition of railway bridges throughout the Dominion should not be made at regular intervals.

A REFERENCE was made last week in one of the Toronto dailies to a test by the firemen of the water pressure in the early morning, before any serious drafts were made upon it either for domestic or business purposes. It was found that the water barely reached the roof cornice of the new Canada Life building, and that only in a fine spray. The writer then goes on to suggest the advisability of purchasing engines of sufficient power to throw an efficient stream over the highest building. But we would suggest a more excellent way. The larger cities have all passed through trying experiences with regard to conflagrations which have raged in high buildings. Whole brigades of powerful engines, handled in the most admirable manner, have failed to cope with the devouring element. The only safeguard is to compel all parties erecting structures higher than say 60 feet, to adopt either slow-burning or fire-proof methods of construction—preferably the latter—and the sooner civic authorities wake up to this fact, the better it will be for the safety of property and the best interests of all concerned.

THE question of letting contracts in bulk or to the separate trades was discussed lately by the New York Armory Board. Mr. Thomas, their architect, warmly espoused the system of letting to separate trades, asserting that the figures would be lower than if received in bulk; also that as he had given a bond guaranteeing that the cost should not exceed a certain amount, his advice should be followed. But the Board ordered otherwise, basing their reasons on the delay caused on another building, where the various trades endeavored to throw the blame upon each other. There is no doubt that as a rule it is to the advantage of the proprietor in every respect (except, perhaps, in regard to that of delay), that the architect should deal directly with the contractor for each trade—a better class of men will tender for the work, knowing that they will have fair treatment and no trouble in obtaining their money. The tendency with a contractor is to increase his profits by securing very low figures from sub-contractors, who in turn will do their work in an inferior manner, hoping that the architect will not be too hard upon them. That unfortunate individual has too often to let work pass for the sake of completing the building in time, that he would otherwise condemn.

THE tests of building stones on the new and interesting machine at the School of Practical Science were commenced last week by Professor Galbraith, with Mr. Rosebrugh as his assistant. The Ontario Association was represented by Mr. Townsend, by whose efforts the collection of stones was obtained, and by Mr. Curry, while other members dropped in from time to time. The work had to be postponed after a portion of the blocks had been tested, the remainder not having been properly squared, a slight inequality even interfering with the accuracy of the tests. We will give, in a later issue, the data obtained, in a form which we hope will prove useful and interesting to all connected with the building trades. It is the aim of Professor Galbraith and the Ontario Association to furnish data which will be thoroughly reliable, and as it is the first scientific attempt in this line, it is not advisable that it should be rushed through with undue haste and at the expense of thoroughness and accuracy. The samples are now being put in proper form. We understand there are still some quarries unrepresented. It will be to the interest of all dealers who have a good article to send sample, as the result will be published far and wide.

THE Building Committee of the Montreal Board of Trade have opened the tenders for their proposed new building, but have not yet let the contract. It is rumored that the tenders have far exceeded the appropriation (by more than \$100,000 in fact), and that all the contractors who tendered have had their

guarantee cheque returned. It is also rumored that one or two Montreal architects who were among the competitors threaten to sue the Board of Trade for the amount of their prospective fees, they having obtained estimates from reliable contractors guaranteeing to erect the buildings from the designs of these rejected competitors for the amount named in the conditions of the competition. It is reported that the Board of Trade will fight these claims with the plea that they made certain modifications or additions to the accepted design, and that they had a perfect right to thus waive the original conditions. It is also whispered that the enormous increase of cost has frightened the subscribers to the building scheme, and that the enterprise is going begging for funds. No doubt the history of the dealings of the Building Committee of the Toronto Board of Trade has put the Montreal men upon their guard. We are of the opinion that if the Montreal Committee had patriotically dealt with Canadian architects the feeling of insecurity in regard to abnormal cost would have been allayed, and that funds would have been forthcoming and contracts let by this time.

CANADIAN city, town, and even village municipalities are rapidly falling into line with the scientific progress of the age by adopting improved systems of water supply, drainage, etc. These improvements have such an important bearing upon the public health and comfort that municipalities which fail to keep pace with the march of improvement in this direction cannot expect to long retain their prosperity. The change which is thus taking place is one which adds very considerably to the importance and responsibility of municipal engineers, who find themselves called upon to solve many new and difficult problems. In view of this, might there not be a field of usefulness awaiting a Canadian association of municipal and county engineers, such as exists in England? We have our Canadian Society of Civil Engineers, and of Medical Health Officers, which in a measure discuss municipal engineering problems, yet we imagine there are many questions with which the municipal engineer will be called upon to deal, that have never engaged the serious attention of the Societies mentioned, and that might be exhaustively and profitably considered by an association exclusively organized for the purpose. From the address of the President at the annual meeting, we learn that the "Incorporated Association of Municipal and County Engineers," was organized with a membership of 33 in 1873. To-day the membership amounts to 400, and embraces not only the municipal engineers of almost every town in England, but also gentlemen holding official appointments in Canada, Australia, China, and other countries.

Fault should not be found with the architect who strives to impart originality of design to his buildings. The streets of most of our towns and cities have been deprived of many interesting features which they might have exhibited if originality had oftener marked the work of architectural designers. Unfortunately, however, there is another side to this subject. It is shown in the increasing attempts of persons with little or no knowledge of the past history of architecture, to produce something new, and the wretched results which in too many instances follow such attempts. A walk around the streets of Toronto will reveal innumerable architectural absurdities, and unfortunately, they are to be found about as frequently in the new buildings under construction as in those of past years. The numerous two-storey frame structures on Yonge street for years served to detract from the importance of that thoroughfare, and citizens who took pride in the progress of the city, looked anxiously to see them supplanted by new buildings of pleasing design. Some of these old buildings are now being removed, but in some instances the new ones taking their place are sadly disappointing. In fact some of them are less attractive than the old ones, which is saying but little to their praise. It is surprising that the owners of such valuable property should be short-sighted to their own interests, and offend the public taste of this and coming generations by permitting such structures to be erected. Let us have originality in design, provided it is of a different order from that to which we have referred. Otherwise, let us continue to copy old examples until we shall have learned something of the history and principles of design.