

ANOTHER example of the ignorance or carelessness displayed by contractors in estimating for work put up to tender, is to be found in the bids sent in recently for the erection of a new public school building in Toronto. There were sixteen bids for the masonry work. Between the highest and lowest of these, there was the startling difference of nearly \$3,000, the highest being \$10,750, and the lowest \$7,987. Again we ask, is it a matter for wonder that there are so many failures in the ranks of the contractors? While in other branches of business the keenness of competition, reducing profits to a minimum, has led men to study more closely the details of their business, and exercise the greatest caution in their calculations in order that the small margin of profit may not be lost, our master builders adhere to the old slipshod methods of a past age. In the easy-going times when profits were sufficiently large to guarantee the most ignorant and careless against loss, men might pursue such methods and even make some money, but it cannot be done now, and the sooner Canadian contractors come to this understanding the better it will be for their chances of success in life. It may safely be assumed that in no branch of business is competition more keen or the margin of profit more narrow, than in the building trades. In many cases a difference of 10 per cent., not to speak of 30 per cent., is sufficient to turn profit into loss. In view of this, the contractor who hopes to succeed must substitute for guess-work in estimating the most approved methods of arriving at exact calculations.

THE distinguished Scientists composing the American Association for the advancement of science will convene in the city of Toronto, on the 27th inst. Daily sessions will be held from that date until September 7th. The morning and afternoon meetings of the Association and of its Sections will be held in the University Buildings, Queen's Park, where will also be the offices of the Permanent and Local Secretaries during the meeting. The Council will meet at the Queen's Hotel at noon on Tuesday, Aug. 27th. The Association will be called to order in General Session, at 10 a.m., on Wednesday, August 28th, in the University Convocation Hall, by the President, Mayor J. W. Powell, of Washington, who will resign the chair to the President elect, Professor T. C. Mendenhall, of Terra Haute, Ind. After the adjournment of the General Session the Sections will organize in the respective halls. In the afternoon the Sections will meet and the Vice-Presidents deliver their addresses. In the evening Mayor Powell will deliver the Presidential address in the Pavilion, Horticultural Gardens. The meetings of the Sections will be held on the following days (except Saturday and Sunday) until Tuesday night, when the concluding General Session will take place. Saturday will be devoted to excursions, complimentary to the Association, including one to Niagara Falls and one to Muskoka. Arrangements are being made for an excursion, starting Sept. 3 or 4, to the Huronian District, and also one to the Pacific Coast. During the week two popular lectures, complimentary to the citizens of Toronto, will be given by prominent members of the Association. The usual daily programmes will be issued by the Local Committee during the week of the meeting.

DURING the past few days there have been two most serious scaffold accidents in Toronto. One resulted in the death of a bricklayer, and the last one may also be attended with equally serious results. Greater care should be taken in the erection of scaffoldings. Where men's lives are endangered it does not pay to adopt a policy of economy in the erection of scaffolds, nor does it do to build them in a careless manner and trust to their being sufficiently strong to answer their purpose. The amount saved in material and time through erecting unsafe scaffolds will not make any man rich. The scaffolder should also remember that on him depends the lives of his fellow-workmen, and that he should do his work well and see that his employer furnishes him with the necessary material for the erection of safe scaffolding. The foreman on the work should see that all scaffolds are amply strong for their purpose, and properly erected. It may do for the workmen to accept a

scaffold as safe, but no foreman should do so. He should examine all scaffolds with the especial object of seeing that they are properly erected, and that all material used is perfectly sound. A cry has been raised for the appointment of a scaffold inspector because a few accidents have occurred which might have been prevented by ordinary care and a knowledge of material on the part of the scaffolder. One would be led to suppose that an inspector would be able to stop the erection of dangerous scaffoldings throughout the city. How many have any idea of the number of scaffolds which are erected in Toronto during one season's building, or of their very temporary character? The most dangerous scaffolds, and those which have been the cause of nearly all the accidents, have been scaffolds erected to do some small piece of work, and which will consequently be removed within a few hours, or at the most a day or two. Such scaffolds are generally erected in as slight a manner as possible, and often come down before they have fulfilled the service for which they were erected. Would it be possible for an inspector to examine every one of these scaffolds throughout the city? And in case he was able, who would be held responsible? as many of these erections are put up and taken down by the workmen themselves without their employer knowing anything about the matter. It may be safely said that accidents to large or important scaffoldings are very rare, and to oversee such erections would be about all the work which an inspector would be capable of doing beyond what indirect good he might effect by the fact that he might possibly come along and find an unsafe scaffold, and then be able to make an example of an employer or of a workman who did not value his own life sufficiently to observe ordinary care in the erection of a scaffold.

With some exceptions, men who work on scaffolds should be able to judge to some extent as to what is a safe scaffold, and if such is the case, why should the general public be put to the expense of seeing that they do not endanger their own lives? If a bricklayer or a carpenter is not capable of judging the strength of a scaffold, who should be? We do not consider that a labourer has that knowledge, but he is never required to go where the properly qualified mechanic does not precede him or follow very soon after. If it was distinctly understood that no labourer should go on a scaffold until the foreman had inspected it and his permission had been obtained, every precaution would be taken that is reasonable for the protection of the lives of men who work on scaffolds. The foreman, along with the scaffolder, should then be held responsible for the occurrence of accidents. We do not believe in the policy of protecting every man from what to a large extent would not occur if he used due care and ordinary intelligence. Individual responsibility should be made a factor in men's lives, instead of encouraging them to believe that their steps should be surrounded by all manner of safeguards to protect them from their own ignorance or carelessness. What the city requires more than a scaffold inspector is an efficient and sensible building by-law, with inspectors to see that its provisions for safe building are faithfully carried out. Where there is so much unsafe and reckless building it is only natural that inferior scaffolds should be erected. A careful examination of buildings and scaffolds will show that good scaffolds are used in the erection of solid buildings, and bad scaffolds for "jerry" buildings. It is only natural that where men are allowed to erect very inferior buildings for the supposed shelter of their fellow men, they will consider any manner of scaffold strong enough. Many more lives are endangered and lost through bad building than through bad scaffolding, and yet not one word is spoken to alleviate the evil. And the lives thus lost did not in any way contribute to the result, except in so far as they may have accepted as true the statement that all was right when all was wrong.

If inspectors are to be appointed let them attend to the work which most requires attention, and not to minor matters, simply because they are brought vividly to mind by unfrequent and thus startling accidents. Scaffold accidents can