

served by sending the architect instead of the committee as the deputation. To employ an architect and then to appoint a committee to instruct him in the duties of his profession seems to be a trifle inconsistent.

WE desire to draw the attention of Canadian quarry owners to the announcement addressed to them by the Ontario Association of Architects, which appears in our advertisement pages. We would also request builders doing business with quarrymen, to bring the advertisement to their notice. We have in Canada sandstones and granites of first-class quality, and such a series of tests as the Ontario Association of Architects propose to make could result in giving widespread prominence to the fact, and afford to quarry owners such a valuable advertisement as they could obtain in no other way. The publication of tables resulting from these experiments would be likely to open up markets beyond the boundaries of the Dominion. Such tables would be of great advantage to architects and engineers, enabling them to obtain at the School of Practical Science full information with regard to any stones in use in the Province. The testing apparatus just erected at the School of Science, proposed to be made use of for the purpose of these tests, is the most perfect of its kind. The committee of the Association having the matter in charge is composed of men eminently qualified to perform the duty in a thoroughly impartial and satisfactory manner. The Council of the Association is assuming a considerable amount of expense in connection with the matter, and the owners of quarries will be consulting their own interests by giving the undertaking their hearty co-operation.

In addition to the general regulations proposed by the joint Committee on Building Ordinances, noticed in our issue for April, the following specific regulations were suggested as of the highest importance:

- (a) "In all buildings of every kind, the space between the stringers of wooden stairs, if plastered or boarded underneath, should be stopped by filling with incombustible material at three places at least in every flight of stairs.
- (b) All hearths in buildings with wooden floor beams should be supported by trimmer arches of brick or stone.
- (c) In every building, the space between all studding and furrings, both of inside partitions and outside walls, in the thickness of the floor, and for 6 inches above, should be filled with incombustible material. Also that the continuous space between the joists of every floor, ceiling and roof shall be effectually cut off at every point where the joists are supported.
- (d) All brick party walls and brick outside walls adjoining neighboring property, should be carried up above the adjoining building.
- (e) At least 4 inches of brick should intervene between the ends of wooden floor beams entering a brick party wall from opposite sides.
- (f) "The walls of brick buildings should be tied at intervals by the floor beams, which, if of wood, should be so anchored to the walls that, in case they are burned off, they will not, in falling, overthrow the walls." The careful observance of these points in the construction of the ordinary type of building would result in a great reduction of fire loss, and if municipalities cannot be made to move in the matter of more advanced regulations for safe building, we imagine it would be in the direct interests of the insurance companies to draw up such a code, upon the observance of which they would agree to so materially reduce the rate of premium that it would become an object with builders to conform to it.

WE must confess to considerable chagrin at the result, or rather non-result, of our proposed competition for bills of quantities. The time given was ample and the prize as great as the average draughtsman would earn as salary in a fortnight, and yet no one has, apparently, thought it worth an effort. Perhaps our young architects and the draughtsmen and students have already reached a high point of excellence and do not need any exercise. But even if they have, it would be an act of charity to help some of our builders. We saw a list of tenders this week where the amounts varied from 25 to 100 per cent., indicating that the estimates were simply guesses. Two competitions instituted by the Ontario Association of Architects have likewise been barren of results. The first, a competition for the Association seal, did not produce a single response. The second, a competition for mission chapels, under the auspices of the Presbyterian Church, resulted in the sending in of designs by two competitors. The committee having the matter in charge were not satisfied with the designs, deeming them unsuitable. Both these projects will be again advertised

for competition. With regard to the seal, it should be a competition entered into with enthusiasm. This seal, if of meritorious design, would probably be permanently retained and would become historical. It should be a case of earnest effort on the part of our younger architects or senior students, to win this coveted distinction. The prize winner in the mission church competition may look forward to considerable work arising out of it. Here, surely is an opportunity for young men desirous of gaining a connection and making a start in life.

THE engineers appointed to examine the Y.M.C.A. building at Montreal, Messrs. Peterson and Keefer, have reported regarding the second question submitted to them, which was "Whether there are any defects in the design or construction of any of the parts of the building which require to be remedied in order to make it absolutely safe and strong." They expressed it as their opinion, from such examination of the structure as they were able to make, that the work generally was well done, citing the fact that in the tearing out of the beams caused by the late accident, the damage to the walls was entirely local, being confined to holes in the walls where the anchors had been pulled through. The composition of the mortar was, according to the inspector, one part Portland cement, two parts common lime and six parts sand. This, the experts report, would not be considered by engineers a good mortar for foundation work, although usual in the practice of Montreal architects. Five piers around the swimming bath, in addition to the one which failed, and which also bear concentrated loads, were reported to show signs of weakness, the cap stones and corbels being too thin, less than thickness specified, not parallel in the dressing, and consequently imperfectly bedded. In two cases the cap stones were much smaller than the piers; these piers were built in lime mortar and the heart was much slower in setting than the outside, the concentrated load from the columns thus coming upon the weakest part. The experts recommended the rebuilding of about three feet of these piers in cement mortar, and the substitution of larger and thicker cap stones. The iron beams were reported to be amply strong and the iron work generally well designed, although some of the details of execution were defective, such as beams with too little bearing, and in one case, lack of filling-pieces where it was necessary to have an equal bearing on a pair of girders. The report concludes by stating that when the foregoing defects have been remedied, the building will be amply strong.

#### INFORMATION WANTED.

Editor CANADIAN ARCHITECT AND BUILDER.

DEAR SIR,—I want to remedy a chimney from leaking soot. Please state general causes and remedy. Is a house veneered with brick safe in case of fire? Are they warm? Tell me what you know of them. What is the best way to treat a hardwood kitchen floor? Will coal oil stop dry rot in timber? I would very much like to see the correct estimate and all other estimates you will receive on the \$20 competition.

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[The first question of our correspondent was fully covered in answer to a similar question in our February number last year, but lest he has not that number we repeat it: "The discoloration on outside of the flue is caused by the condensation of the wood smoke. The wall of flue being probably only 4½" thick, absorbs the dampness from the exterior atmosphere or from a driving rain, is always cold and damp in weather cold enough to need artificial heat. The smoke striking this cold brickwork, is condensed, forming the well-known inky fluid, which is often seen dripping from the stove pipes when of great length. The burning of green wood would probably aggravate the trouble. A flue on an outside wall should have at least 7" thickness on exposed side. An absolute remedy would be to build into the flue 9" glazed drain pipes, if special flue pipes are not obtainable. The brickwork could be cut out from the exterior, and pipes inserted if the chimney-breast inside, is of sufficient size to allow of it."

2nd. A veneer house is no safer from an internal fire than a frame one; it would be as safe externally as any ordinary brick building. A brick cased house is warmer than a frame house only when erected on a solid stone or brick foundation and the walls thoroughly lined with felt behind the brick casing. The cost if carried out in this manner (in localities where brick is easily obtainable) will be nearly as great as if the wall was solid 9" brick. This, if roughly plastered on the brick before strapping, makes a fairly warm and comfortable house.

3rd. Two coats of raw linseed oil well rubbed in.

4th. We have had no experience in regard to the treatment of dry rot with coal oil—ventilation is the prime requisite.

5th. We have received no estimates or bills of quantities in response to our invitation.—EDITOR C. A. & B.]