

have some slight knowledge, of construction. The few weeks have passed and the example can now be cited, and the lesson which it teaches driven home. What effect it may have we do not know, but of this we are assured that no one will now have the hardihood to claim that no serious loss can result through the lack of constructional knowledge on the part of an architect. It has now become an acknowledged fact that the new Board of Trade building in this city is to all intents and purposes a dangerous structure, and that it will in part have to be reconstructed. Some months ago three stories of an inside wall fell carrying with it two stories more which were below, the whole forming a mass of broken brick and girders in the basement. Fortunately the fall of the walls took place after the workmen had left the building or there would have been a serious loss of life. The accident as it was called (but accident it was not), resulted through overloading the brickwork carrying one end of a double girder. The brickwork was rather inferior, the pad stone was very small, and consequently when a load four or five times what it should have been, was applied, the jamb gave way and let the girders down with the load of brickwork. This portion of wall was not the only one overloaded, a pier $2\frac{1}{2}' \times 1'10''$ would have had, if it had not given out, a load of between 80 and 90 tons without the weight of such portion of the roof as would have come upon it. Over 20 tons per square foot was imposed upon brickwork that should not have been loaded over four tons. The furnace chimney, with two large openings in the basement, was built of 9" brickwork from the ground floor to the coping stone, a height of something over 100 feet. The architect not deeming this a sufficiently wonderful feat, actually imposed upon this poor overburdened chimney the additional task of carrying heavy outside walls and a brick vault or square room, and many square feet of floor surface. With this load one would think that only the very best hard brick would be used, but such was not the case, as many soft or medium brick found their way into the work. That cracks resulted and portions of the work fell down is not surprising; it would have been very much more surprising if the cracks had not appeared nor the walls fallen. The building in nearly every part shows a lack of constructional knowledge on the part of the designer that is astonishing. Solids are over voids and voids over solids to an extent that leaves but few portions of the building directly supported in the foundations. Iron columns with heavy loads are placed upon brick walls with small pad stone, and iron girders are placed anywhere and everywhere and loaded without any regard to results. Not one calculation could have been made by the architect during the preparation of the drawings or during the erection of the building, or he would have discovered that he was attempting to do impossible feats in construction. But if the construction of the building was bad in the first instance, the attempts to remedy the mistakes and to make the building safe were simply ludicrous, and did very much more harm than good. What it will cost to make the building a reasonably safe one we do not know, nor are we able to make an approximate estimate of the depreciation in value as the result of the inferior construction. The loss sustained by the Board of Trade may be stated in the following manner: Cost of alterations and improvements necessitated by bad construction, plus depreciation in the value of the building, minus whatever little saving there may have been in erecting the building as it was erected. The loss is a serious one, but the amount of it does not concern us. All that we have to do with is the fact that a building was erected which is now held by those who have knowledge of its defects as being most faulty in its construction, some parts in fact being so faulty that the factor of safety is nothing. It cannot be urged in this case that the same result will not occur again, or that they were exceptional circumstances which brought about this state of affairs. The erection of the building was entrusted to a committee chosen from the council of the Board of Trade. Now the Board of Trade is composed of the most capable business men in the city who should be able to elect a council from among their most capable men. The council one would think would place upon the building committee from among the Board of Trade members those most capable of fulfilling the duties. Notwithstanding that we believe that such was the case, the result is as bad as it well could be. The committee

with all its ability was not able to prevent an incompetent architect from erecting a most faulty building. When such a committee was not able to prevent so ruinous a result, what can reasonably be expected of a committee composed of men of very much inferior abilities and much less experience in such matters, if they should have to do with an incompetent architect? Every circumstance connected with this building has been favorable to a successful conclusion. The competition was one conducted on the most advanced principles—the expert chosen had a wide reputation in the United States for his ability as an expert; the men who were entrusted with the erection of the building were the equals of the most successful business men in the community, and yet when the architects were incompetent the result is disastrous. If matters had been reversed and the architects had been competent and the building committee composed of incompetent men, the building would almost to a certainty have been successful. All of which shows most clearly that it is necessary that there should be some means taken to ensure the competency of every man who professes to be an architect. If the accident which took place at the Board of Trade building had occurred during working hours and several lives had been lost, we should have had the matter most thoroughly investigated. But fortunately as no lives were lost, and although the responsibility is not reduced thereby, no effort has been made to place the responsibility on the proper shoulders, but instead, every effort has been made to keep the matter quiet. No better example could be given of the necessity of an Act to regulate the practice of architecture than the fact that the Board of Trade building, the erection of which was entrusted to business men the equal of any in this city, was constructed without any regard to the well known and accepted laws of stability, as the result of the employment of an incompetent architect.

OUR ILLUSTRATIONS.

THROUGH an oversight, credit was not given to Messrs. Castle & Son, Montreal, the designers of the beautiful memorial window in connection with St. Andrew's Church, Kingston, which was the subject of an illustration in the CANADIAN ARCHITECT AND BUILDER for May. The subject, "St. Andrew Introducing Certain Greeks to Christ," is an original composition, displaying careful study. The colors are a rich ruby, harmonized by greens and blues, with sacred emblems distributed throughout.

THIRD PREMIATED DESIGN FOR CONFEDERATION LIFE ASSOCIATION BUILDINGS, TORONTO—JAMES BALFOUR, ARCHITECT, HAMILTON, ONT.

DESIGN FOR RESIDENCE—J. W. & E. C. HOPKINS, ARCHITECTS, MONTREAL.

CHRIST CHURCH AT MIMICO—GIBSON & SIMPSON, ARCHITECTS, TORONTO.

"CANADIAN ARCHITECT AND BUILDER" COMPETITION FOR FRONT FENCE—DESIGN BY "BROWNIE" (THOS. R. JOHNSTON, TORONTO), AWARDED FIRST POSITION.

TORONTO ARCHITECTURAL SKETCH CLUB.

A HAPPY combination of pleasure and profit formed the programme for the regular meeting on Tuesday, May 27th. An invitation had been received from Mr. Barlow Cumberland to spend the evening at his residence on Wellington street west, where the grand architectural library collected by the late Mr. F. W. Cumberland was to be seen.

Before the departure of the guests light refreshments were served, and the health of the host was drunk. A pleasing diversion was a competition in drawing, corkscrews being the only instruments allowed, and in which some of those present showed a remarkable proficiency.

Possibly wearied with the hard winter's work, the Club relaxed at its closing meeting, Tuesday, June 10th, and devoted the time to lighter pursuits. A capital programme was given by local talent, songs being rendered by Messrs. Herbert Matthews, J. A. Radford, J. J. Woolnough, H. W. Allardyce and J. H. Fawell, the latter doing good service as accompanist on the