failure to keep up in first-class efficiency the fire department and what other means they had for fire protection." The experience of New Westminster should be a sufficient warning to municipalities not to set in the scale the saving of a small yearly expenditure against the safety of millions of dollars worth of property. Any reasonable expenditure is warranted for the maintenance of an efficient fire department, more particularly in new centres of population, where wood construction chiefly prevails. We trust the time is not far distant when fire-proof materials will be employed to a much greater extent than at present. Should this occur, a less expenditure would perhaps be required for fire protective equipment.

THE annual convention of the Province of Quebec Association of Architects, The P.Q.A.A, held at Quebec on September 23rd, was devoid of special interest, and was not largely attended. The most important matter with which the Association is called upon to deal, is if possible to enforce compliance with the Quebec Architects' Act, which provides that no person shall practice architecture in the province who is not registered under the Act as a member of the Association. The report of the Council states that the Association have experienced difficulty in securing the necessary legal proofs to enable them to proceed against offenders, and in dealing with this matter are being guided by the advice of legal counsel. We believe the Council to be fully cognizant of the important bearing of this question upon the future welfare of the Association, and that it will receive at their hands the most careful consideration. It is a vital point, and we trust means will be found to guard it. The officers for the ensuing year have been wisely chosen. Under their direction the Association will doubtless maintain its progressiveness and widen its field of usefulness. It was suggested by Prof. Capper that the Association might profitably undertake the publication of a volume to illustrate the old colonial architecture of Quebec. was further suggested by Mr. Venne that an exhibition of building materials would form an interesting feature of the next convention in Montreal. No action was taken by the Association with regard to these proposals, but they will no doubt receive due consideration from the Council. It is proposed to formally open the new rooms of the Association on the 31st inst.

THERE is needed in Ontario a standard of architects' fees which shall be re-Architects' Fees. cognized by the courts. Further than this, there is required on the part of the architects themselves a spirit of loyalty to one another and a determination to uphold as far as possible the generally nuderstood ethics of the profession. A case which recently came up for hearing in the courts serves to emphasize this contention. An architect sued to recover fees from a client at whose request he had prepared preliminary surveys, sketches and complete working drawings for a factory building, and sketches, working drawings, specifications and estimates for an associated building. For the first he charged 2 per cent. and for the second 21/2 per cent. of the estimated cost. The defence brought as witnesses two architects who testified that their charge for similar work would hvae been one per cent. and one

The judge enquirhalf per cent. respectively. ed of the plaintiff if there was any legal tariff of charges of fees for an architect's services, and was answered in the negative. He then asked on what ground the plaintiff expected to be paid a higher fee than other architects had stated they were accustomed to receive. The plaintiff, seeing that the case would go against him, took advantage of an opportunity which presented itself and secured a settlement out of court, under which the defendant paid a larger amount in legal expenses than the plaintiff would have been willing to accept in full settlement for his services, while the architect got nothing. It is to be regretted that architects should be found willing to go into court and give evidence prejudicial to the interests and rights of a member of the profession. The evidence given in this case was calculated to lower the standard of fees endorsed by the Ontario Association of Architects and other professional bodies-and there is the possibility if not the probability that the gentlemen who permitted themselves to be placed on record with regard to the value of an architect's services may some day find themselves in the unpleasant predicament of being confronted in the courts by their own testimony and asked to accept their own verdict.

The accident at the Coliseum building Defective Construc- in Chicago, on the 28th of August, when twelve steel arch trusses erected to support the roof collapsed, causing injury and death to a number of the workmen, emphasizes the necessity for the exercise of exact knowledge and much care in large constructions such as are common in the present day. Many architects lack the knowledge of strains and stresses which is so requisite a factor in safe building. The disposition is too prevalent to depend upon printed calculations in hand-books. Much of this data was compiled a quarter of a century ago, and is altogether inapplicable to the changed conditions now existing. The architect should himself carefully figure out the requirements of each individual case with which he is called upon to deal, in order that the best and most economical methods at the case with which he is economical methods shall be adopted. Our attention was recently directed to a building in course of construction in which the architect had used as supports on the four floors columns of exactly the same diameter and thickness of iron. The floors were required to carry a load of 150 pounds to the square foot, but proper calculation showed that provision had been made for a load of only 52 pounds. It therefore became necessary to replace the columns with others of varying diameter corresponding to the loads to be carried and also to considerably increase their number. Glaring defects are noticeable in some of the steel construction bolting the end of each iron beam directly to the upright member, thereby tying the structure together, the common practice is to place such beams on three inch angle irons attached by a couple of bolts to the vertical supports. Presumably this method is employed to save the cost of hand drilling. the cost of hand-drilling. It has been noticed that the architects of most experience with iron construction will not permit their work to be put up in this manner.

The building but a sirely The building by-laws in our leading cities are entirely out of date, and do not prescribe the manner in which modern steel construction work shall be carried out, nor is proper inspection made of such work. safeguard against accident is the knowledge and faithfulness of the architect. Under these circumstances it behooves every architect to study with greatest care this phase of his work, and neither permit himself nor those with whom he

those with whom he may be associated to employ half-

hazard methods.