

that in the near future the Council will pass a by-law giving effect to the valuable recommendations made by the architects, which are the outcome of months of effort for the public welfare. We hope that the City Council of 1897 of Toronto, will also feel it to be their duty to either approve or reject the suggestions presented by the Ontario Association of Architects for the improvement of the existing by-law, which is admittedly defective in many important particulars.

**Modern Toronto
Architecture.**

THE many large buildings which have been erected in Toronto within the last six or seven years, and those which are in process of erection at the present time, have given a metropolitan character to the city which it did not formerly possess. The appearance of most of these buildings, including the new City Buildings and the Foresters' Temple, now nearing completion, is satisfactory. It seems to us subject of regret, however, that the important structures last mentioned should have been situated in such close proximity to each other. Both would have gained in appearance had they been farther apart. The view of the new city buildings at present obtainable from Bay street is very meagre and unsatisfactory indeed, partly due to the towering structure at the north-west corner of Bay and Richmond streets, which has reached a height of eleven storeys. It would add very much to the appearance of both of these important buildings if the city should decide to expropriate sufficient land to enable Queen street to be widened opposite the new city buildings, thus removing a number of the dilapidated old structures which at present disfigure the locality and render it impossible to obtain a satisfactory distant view of the new buildings. The new city buildings are now sufficiently advanced to show that they will present, when completed, a character at once imposing, pleasing and refined in comparison with the American creation in Queen's Park. The statement has been published within the past few days that the Duke and Duchess of York will take part next year in the ceremonies attendant upon the formal opening of the building.

**Fire Retardant and
Light Diffusing Pro-
perties of Wired and
Ribbed Glass.**

BRIEF mention was made in our last number of recent tests which show the superior light diffusing qualities of ribbed as compared with plain glass. At the request of our readers we have obtained further information on the subject, for which we acknowledge our indebtedness to the Boston Manufacturers' Mutual Fire Insurance Co. The President of this company is Mr. Edward Atkinson, a well-known authority on methods of fire proofing. Mr. Atkinson's company recently arranged for a complete investigation of the subject at the Massachusetts Institute of Technology. From photometric comparisons made at this institution of the intensity of the light from two windows similarly situated, one glazed with plain glass and the other with ribbed glass, the light-diffusing properties of the latter were shown to be from fifty to two hundred per cent. greater than those of the former. While the general resultant direction of light entering through a window is downward, at an angle of 40 to 50 degrees, the action of the ribbed glass appears to be prismatic, the greater part of the light falling upon it at any point being refracted and spread out into a fan-shaped beam. The horizontal ribs tend to throw the light which would otherwise fall to the floor far into the room, while the vertical ribs

spread out the light on both sides. The relative effectiveness of light is much greater where the light is derived indirectly than where it is derived directly from the sun. Heat appears to be diffused on the lines of the light, and while the same amount of heat may pass the ribbed glass that would pass through clear glass, it is so much better distributed as to give the effect of a cooler temperature. The fire retardent properties of wired glass have also undergone investigation by the same company, and the results obtained are both interesting and valuable. Glass of this description, heated to a red heat, so that a piece of paper held against it on the outside was easily ignited, was in this condition showered with cold water. The result was found to be that while the glass was cracked into countless pieces it still adhered together, forming one sheet. The following conclusions are drawn from the test: (1.) Wire glass can safely be used in skylight (on the main buildings of factories or works) and in such will withstand a severe fire and will not give way when water is thrown on it. A wooden framing for skylight, covered with tin, all seams lock-jointed and concealed nailed, is superior in fire-resisting quality to iron framing. (2.) Wire glass in wooden sash, covered with tin, all seams lock-jointed and concealed nailed, can be safely used for windows toward an external exposure. (3.) Wire glass can be safely used in fire doors to elevator shafts and stairway towers where it is necessary to light said shafts. (4.) In office buildings, hotels, etc., where it is undesirable to have elevator shafts entirely enclosed and dark, wire glass permanently built into brick or terra cotta shaft, or arranged in wood, metal covered frame can be safely used. (5.) Wire glass plates, securely fastened in standard fire shutters, can be safely used toward an external exposure. In this case the fact that a possible fire in a building, all windows of which are protected by fire shutters, can much more readily be detected from the outside through the wire glass, is of importance. We have previously referred to the manner in which buildings are destroyed as the result of the windows cracking and falling in, resulting in currents of air rushing in through the openings, either carrying flame into the building or fanning into life the fire slumbering within it. The use of wired glass, which would be less costly and much more sightly than iron shutters would tend to greatly lessen the danger of the destruction of buildings from this cause.

"MODERN METHODS" OF A "PROGRESSIVE ARCHITECT."

WE have from Hamilton the prospectus of one who calls himself a "progressive architect" doing business by "modern methods." The scheme laid bare of all the puffery with which he surrounds it is simply the issue of plans and specifications in connection with the mail order department of a departmental store. The prospectus contains cuts of several houses, of the merits of which, as there are no plans given, we are not able to form an exact opinion, but the offer frequently repeated throughout the prospectus—"this plan can be reversed free of charge if desired"—not only cannot be said to be consistent with good planning, but is truly unprofessional. The architect is, like the doctor or lawyer, a professional adviser; that is to say, the client comes to him as the repository of special knowledge, and out of his knowledge he advises the client for the client's interest. This progressive architect, however, appears to