THE MONTREAL BUILDING BY-LAW.

The recent amendments to the Montreal Building By-law, 1901, were published in the Municipal Gazette of the city of 9th October, 1905. The complete By-law in its revised form is in preparation, but has not yet been issued.

The amendments naturally take the form of improvements, and, if everything is not yet as perfect as it may be hoped some day to be, yet all such real improvements as have been made must be hailed with satisfaction. The principal alterations and extensions are made with a view to improving the fire-proof quality of buildings, especially those of the first class—theatres receiving most attention. The sections relating to the strength of beams and columns of steel, iron and wood have been revised, the ultimate stress required as a minimum being considerably raised for nearly every material. The raising of the compressional and tensional strength of rolled steel, from a minimum of 48,000 pounds per square inch to that of 64,000 pounds per square inch, is a considerable difference but still not an overstringent requirement.

For bricks the requirement still stands "the bricks used in all buildings shall be good, hard, well burnt bricks," in spite of the circumstance that at the present moment large quantities of bricks are being used which are not burnt at all. If they are suitable for building, there should be some space allowed for such materials in the by-law. It is now provided that "when the thermometer is at or below freezing point, hydraulic cement shall be used in the composition of mortar for brickwork." This is the more essential by reason that the somewhat easy terms allowed for bond in brickwork are in the ordinary practice of the city much honoured in the breach, and therefore the quality of the mortar is of the greater importance. The use of re-inforced concrete as a wall material seems to be still unprovided for in the regulations, though perhaps not necessarily debarred.

The question of fire-proofing has, as already stated, been given most consideration. The materials which are to be considered as fulfilling the conditions of fire-proof coverings are defined as:—First, brick; second, hollow tiles or burnt clay (terra cotta) or any other material recognized as incombustible, applied to the metal structure according to a stated method; third, porous terra cotta of prescribed thickness; and, fourth, cement concrete not less than 1½ in. thick. Cinder concrete is disallowed, unless treated so as to be free from material which would render it combustible at a temperature of less than 1,500 degrees Fahrenheit.

To the clauses which regulate the construction of theatres a number more have been added, and, as they contradict existing clauses in many respects, it is to be hoped that, when the by-laws are printed in amended form, it will be quite clear that these revised clauses take entire precedence of the others. Thus the new clauses provide for doors with "no locks of any kind"; whilst the actual clauses, which presumably are still to remain part of the by-law, call for fastenings upon the inside only. The new clauses take 20 inches of width for each 100 permanent seats of the auditorium as the basis for regulating the width of exits. The old clauses gave eighteen inches per 100 seats as the basis, and it will be necessary to revise these provisions wherever they are mentioned. As regards width of aisles between seats, the old law made better provision than the new one does. The spacing of seating is now for the first time defined:—"Seats shall not be less than twenty inches in width, measured at the top of the seat; back rows of seats shall not be less than two feet six inches from back to back. No more than 12 seats shall be arranged in any one row between aisles; no more than 5 seats shall be arranged in any one row between one aisle and the wall," etc. Nothing is said of continuous seating however.

A good provision now introduced is that the staircases of theatres shall have an independent lighting system of electricity, gas or sperm oil. It is regrettable that the conditions as to staircases remain meagre and unsatisfactory. In assembly-halls, hotels, etc., they must be enclosed by walls on three sides, but there is no such requirement for theatre staircases, though this and more is absolutely essential to public safety. In more than one of the best theatres in Montreal the public habitually enter and leave the dress circle or balcony by an open stair at the back of the ground floor auditorium; the other exits being perilous looking external iron fire-escapes. Theatre stairs should all be built around on four sides surely. The stairs themselves are permitted to have hardwood treads, and, as no thickness is specified, nor anything said about bedding these down on concrete, a thoroughly dangerous stair may comply with the requirements.

The standard of equipment, in case of fire breaking out, has been very much raised.

In describing fire escapes, the words "cloth or metal tubes" might with advantage be omitted, leaving "or other means of egress . . . as may be approved of . . . . . by the Inspector" to cover special cases.

A by-law concerning the erection of buildings in St. Catherine street aims at the improvement in character of buildings in this important thoroughfare and insists on frontages of solid and incombustible character. The requirement that "the new buildings shall not have less than thirty-eight feet from the sidewalk to the top of the roof" ought obviously to be enforced with considerable discretion.

THE WRECKING OF A WORLD'S FAIR.

The work of demolishing the splendid buildings at the Louisiana Purchase Exposition is a colossal task, as indicated by the amount of material collected by the company which purchased the structures from the fair management. In a list sent out to prospective purchasers of the material no less than 100,000,000 feet of lumber is offered for sale, comprising every kind and description, 50,000 sash, 10,000 doors, together with one milllon dollars' worth of copper wire, and other electrical material, vast quantities of pipe, fencing, roofing material, furniture, in fact, an aggregation of second hand goods such as never before was placed on the market. A novel feature is the offering of 25,000 bamboo poles used by the government in the Philippine Reservation, the last memento of the man-eating natives of Uncle Sam's new possession. It would be interesting to know where all of this material will find its destination. Gne may imagine that some of it may go to dwellings in the west, the other parts of it may do service in the east, and still others in the south and in the north, distributing to all parts of the country souvenirs in the shape of building material from this greatest of modern expositions.—*The Ohio Architect and Builder.*