

we know it and have seen it to be, it is yet less of a menace than the steel and wood combination, and worse still, the mill constructed buildings so plentifully scattered all about our larger Canadian cities. The fireproof building is absolutely distinct and different from structures of the Parker building type because in the first place it constitutes a fire barrier where ever it stands. It is either built of solid reinforced concrete or has every particle of steel protected against fire: each storey of the building is a separate unit and that in turn is divided into still smaller units. Or, to use the words of the designer of the Singer building, New York, Mr. Ernest Flagg, "a fireproof building has nothing about its structure that can burn and the damageable parts are in turn protected. In designing the Singer building I was unrestricted as to the materials I should specify, and

MODERN SCIENTIFIC FIREPROOF BUILDING. I selected those that would make the building absolutely safe. The frame, the covering, the floors, the partitions, all of them are unburnable. Steel and terra cotta hollow tile, that is the combination.

The window frames and trimmings are of metal, too, and cannot take fire. If by any chance a flame did start it could not get out of the room where it started. It would have nothing to feed upon."

Had the Parker building had its steel frame completely fireproofed; or its elevator and stair shafts enclosed by fireproof walls, its window openings protected with metal sash and frame, glazed with wired glass and all its partitions of fireproof material; or had it been equipped with a sprinkler system; or had it been used for the purpose it was intended, such a disastrous fire would have been impossible. Anyone of these well-known, recognized precautions would have rendered the building sufficiently fireproof to have made such a fatal and costly fire next to an impossibility.

Our building departments in Canada are less active in demanding builders to conform with the scientific principles of fireproof construction than are those of the larger cities in the neighboring republic and it certainly behooves them to try to have it so that all new structures in business districts shall be of the really fireproof class, whatever the height or the purpose for which it is intended, and that the old ones of the inferior class shall be so improved and protected that as disastrous a conflagration as that of the Toronto fire of 1904 will become an impossibility.

WHILE advocating reforms in connection with fireproof construction it is well to call attention to a much needed amendment to the building laws of all our larger Canadian cities. The building departments, of course, issue permits for all new buildings under the headings of "fireproof" buildings, second, third, fourth and other classes, but

BRAND FAKE FIREPROOF BUILDINGS.

those departments should be called upon to also label all buildings within the congested business districts of cities, within certain prescribed fire limits, labeling them "fireproof," "incombustible," "third," "fourth" classes, and so on. This added responsibility would make those officers particularly keen and discriminating in how they classified the buildings.

Further, it would be well to have it enacted that

it would be a grave misdemeanor and a punishable offence for an owner to call or advertise his building of a superior class when by rights it belongs to an inferior one. That would in great part eliminate one of the worst curses upon and greatest detriment to the safety of our cities. A man turns some old ramshackle of a warehouse into a theatre, puts in a few pieces of metal lath, plasters upon it and dubs it a "fireproof" theatre building; another puts a brick veneering on an old wooden house and advertises it as an "absolutely fireproof" hotel, and cases are not unknown where frame store buildings have been sheathed with galvanized iron and called fireproof. Owners exercise the greatest effrontery in this matter and obtain the confidence of people, high rentals and the storage of valuable goods under absolutely false pretences.

Thus it was to a degree in the Parker building. Its materials were of the best and are those most commonly used in fireproof construction, but they were skimped, the essentials of thorough good building were not there, the very first principle of safe construction was lacking—the perfect protection of the steel work with hollow fireproofing tile. Despite all this the building was called "fireproof" and its partial destruction simply means that the unthinking will say that there is no such thing as fireproof, for, lo and behold, the Parker building is a wreck!

By all means label the buildings properly and thus prevent "constructive lying."

ONE of the most interesting lessons of the Parker building fire is an indirect one. The city council of New York city has for some time been considering the passage of the new building code, many of the provisions of which have been severely criticized because of the undue restrictions placed

PROBABLE VICTORY FOR REINFORCED CONCRETE. on the use of reinforced concrete in the larger class of buildings, and while it is maintained by the Merchants' Association in their appeal to the Board of Aldermen of New York for the immediate passage

of the proposed code, that had the new code been in effect and its provisions complied with such a fire would have been prevented, it is nevertheless a fact that it would not have prevented the erection of a structure built according to the same principles of construction used in the Parker building. Inasmuch as this type of structure has shown itself to be far inferior in fire resisting characteristics to well constructed reinforced concrete buildings, which the proposed code, if adopted, will prevent the erection of, while permitting the construction of the former it is quite possible that the authors of the code will find it necessary to revise it in this respect before it will pass the Board of Aldermen. Thus this fatal and expensive fire may work a victory for reinforced concrete in bringing about a revision of a building code that promised to deal one of the most disastrous blows yet received by cement building construction.

MR. CLARK, Fire Chief of the City of London, Ont., has given notice to all merchants in that city that all doors must be made so as to open outward. This is another move in the right direction and will have an appreciative effect in preventing exits from becoming jammed in case of a precipitate exodus.