CANADIAN CONTRACT RECORD

Modern Fire Resisters.

Every great conflagration acts as a sifter of good, bad and indifferent protective appliances in settling by actual experience the claims to effectiveness made on behalf of many fire resisters by more or less competent critics. The Baltimore, Toronto and San Francisco fires have brought forth volumes of reports and almost endless comment on the value of various forms of construction, building materials, sprinkling systems, fireproof

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lustrations showing a brick wall, the openings of which were protected by two different kinds of doors. The relative power of resistance to fire of the tin clad shutters and the "Kinnear" steel rolling door is indeed noticeable, and whereas the one kind was burst open and practically destroyed, the other stood the test to perfection.

Ordinary steel plate shutters, as well as the tin elad, even though well braced with angle iron and on strong



"KINNEAR" SHUTTER AFTER A FIRE.

doors and partitions, etc. Our attention has been called to an exceedingly interesting series of photographs of more or less ruined buildings in San Francisco which were collected by the Kinnear Manufacturing Company, of Columbus, O., and published by them in catalogue form. We are enabled, through courtesy of their Canadian agents, Messrs. Mussens, Limited, Montreal, to produce one of these ilhinges, will warp and burn out of shape and be rendered entirely useless.

The "Kinnear" door or shutter seems to have many important advantages over other forms of doors. In the first place the system of steel slats is bent in such a way as to develop the greatest strength of the material and at the same time interlocks, so as to form an inpenetratable

front—the whole being designed to set firmly in a rigid frame, thereby reducing the chance of collapse through extreme heat or falling debris to a minimum. In the case of the Volkman Building they were subjected to the heaviest test, and the debris fell against them heavily, but, although bent, they were not forced out of the guide and provided complete protection as far as they were concerned.

It is interesting to note that wired glass was a complete failure in the light court of the Wells-Fargo Building, which was equipped throughout with this material in metal sashes. The wired glass melted out of the frames which were themselves badly warped and distorted by the heat. Moreover, wired glass cannot stand up against falling debris and may be completely demolished, even before the fire reaches its greatest heat.

For the enclosure and protection of all openings in which ease and speed of operation and economy of space are considerations, this form of door is very effective. Moreover, they are applicable to all classes of both new and old building construction, and by their use very large openings may be closed which could not otherwise be conveniently covered. On account of the form of the "Kinnear" slat the coil is much smaller than that of any similar curtain, and it is seldom that there is not sufficient space in the thickness of the ordinary wall to contain it. Where economy of space is desirable they are especially valuable, as goods may be placed in close proximity to the doors without interfering with their operation.

The rapid spread of fire has time and again been shown to have been caused by openings for freight or passenger elevators. For such openings, combined manual and automatic construction is designed, wherein the shutters may be operated at will by hand, but are closed automatically by fire. In the same way window openings in light-courts and large doors opening on narrow alleyways may be protected, though in some cases, particularly in light-courts, the shutters are made automatic and normally re-(Continued on Page m.)

15