SAFETY FOR LIVES AND FIRE PREVENTION IN HOTELS.

Fire prevention begins, when building plans are drawn, said Hon. Joseph Button, Fire Marshal of Virginia, addressing a Fire Marshal's Convention last week. In a very excellent address he said:—

In safeguarding life in a residential building, such as a hotel, the special hazard lies in the fact that the people are in the building at night and that if a fire occurs and fire or smoke spreads rapidly, there is every possibility of some of the occupants being suffocated before they are even awakened.

The first essential, therefore, seems to be that of preventing fire from spreading rapidly. Hardly less important is the providing of adequate exits; the protection of heating and lighting apparatus; good housekeeping generally throughout the building, the isolation of oil, paint, bedding and furniture storage and similar special hazards. Elevator shafts and stairways should, of course, be enclosed with fireproof material. If ornamental stairways are desired in the lobby, engineers do not object to permitting them for one or two stories, provided they are fire-stopped above these points. Several floors in the Hotel Lennox in Boston were burned about four years ago from a fire which started in one room and spread by means of an open stairway, although there was little combustible trim, Stairs enclosed with only thin wooden partitions have in several cases prevented the spread of fires by shutting off the draft.

There should be fire alarm systems and extinguishers. Sprinklers are the best protection. They have been installed in a number of hotels and have extinguished fires in many non-fire-proof structures.

Automatic sprinklers are especially desirable in the basement, even if not installed in the upper part of the building. This is particularly true where there is mercantile occupancy on the first floor or in the basement, as in the Waldorf-Astoria in New York. In 1915 there was a fire in the Niagara Hotel in Toledo, which started in the store-room of the clothing company occupying the first and second stories. Two lives were lost and six persons were injured. Several escaped owing to the fact that they were acrobats connected with a theatrical company. Owing to the flimsy wooden interior and roof, the building was gutted.

If proper care be taken to prevent the rapid spread of fires, the next essential is that of exits. There should be at least two separate exits from each building and these should be at or near the end of corridors. In the larger buildings even if there be three or four stairways, there must be no blind alleys in which a person may be cut off by smoke.

Seventy per cent. of all hotel fires are said to occur during the night and most of these between midnight and 3 a.m. In 1913 it was reported that there was a hotel fire somewhere in the country every thirty hours. Resort hotels are particularly vulnerable.

Defective electric wiring is a common cause of fire, but many blazes also start in the kitchen from careless rendering of fat and ignition of

grease in the vent from the range. If the kitchen is not in a separate building, it should be sprinklered. Heating apparatus also causes many fires. It is suggested that the heating plant be put in a fireproof compartment by itself.

A fire in a Chicago hotel started in a vent duct from a kitchen range which was connected with the ventilating system of the house. The flue extended up a pipe-and-wire shaft, which was tapped at every floor for toilet vents. The fire ran up the ducts and burned out every toilet, also the electric wiring, gas meters, lead water-pipes in the shaft, felt covering on steam-pipes in the attic and wood doors and other material stored there.

In hotels of the older type fire escapes are often found on the outside of the building, which can be reached only through some private room. It is easy to contemplate walking up to a door in daylight, but when a man is crawling along the floor of a corridor in the middle of the night, half blinded by smoke, how is he to tell which door he is to batter down to make his way to the escape? In Wisconsin, in this type of building, there is a strict requirement that there must be no door between the corridor and the fire escape, where that is used as an exit, and wherever the fire escape is to be reached through a room, the door must be taken off such room.

There should be exit lights and signs and careful directions in each room as to action in case of fire, with a diagram showing the location of the room. It is suggested that lights for fire exits should have current supplied from some outside source, so that in case of damage to the power plant guests can find their way out. A fire occurred a few years ago in a Canadian hotel where guests rushed into the halls and many, being unable to locate exits, were suffocated by smoke.

BRITISH FIRE LOSSES.

The London Times says: "It is estimated that during July the principal fires in the United Kingdom resulted in losses amounting to £495,000 as compared with £305,000 in July, 1917. The losses in June this year are estimated at £467,000. A substantial part of July's heavy total-which at one time seemed likely to be much larger-was accounted for by an outbreak, a particularly destructive one, which occurred at a tannery extract works at Widnes. This fire is expected to cost the underwriters over £200,000. Other serious fires during the month occurred at a biscuit factory at Hertford, resulting in a loss of £20,000; at a chemical works at Newport, which is expected to cost £45,000; at a woollen mill at Rochdale, which cost £70,000, and at a printer's works at Aldershot, which resulted in damage estimated at £60,000. For the first six months of the year the principal fires have resulted in damage estimated at about £2,200,000, which is about the same as for the first half of 1917, but £700,000 more than for the first half of 1916.

A little thinking and a little cleaning will help to prevent a great many fires.

The way to get lower insurance rates is to have fewer fires.