

It is desirable that the alarm system should be automatic in action, but owing to the cost of a complete automatic system it would probably not be practicable to install this except in the case of the larger hotels. There are, however, on the market automatic fire-detectors which operate with either smoke or heat, and which could be incorporated in the "rousing" alarm systems already installed. The cost of installing a number of these detectors in passages and stairways through which fire is liable to spread would not be considerable, and they would add greatly to the safety of the travelling public.

HAND FIRE-EXTINGUISHERS.

It will be noted above that a fatal accident occurred during the year owing to the explosion of a hand fire-extinguisher. Inquiries made since this accident indicate that there are a number of fire-extinguishers on the market which are not of sufficient strength to be safe for use under the conditions of maintenance which have been shown to exist in many cases. Arrangements have now been made for a departmental committee to be set up to go into the question and draw up minimum specifications for both construction and maintenance of hand-extinguishers.

MAINTENANCE OF PRIVATE FIRE PROTECTION EQUIPMENT.

Inspections made during the year show that in very many instances fire alarms, extinguishers, and other equipment installed both in public institutions and in private premises have, owing to insufficient or unskilled maintenance, been permitted to reach a condition where they are no longer effective for their purpose. A series of tests of fire-extinguishers, for instance, in hotels and other business premises showed that 54 per cent. failed to operate. In one public institution, of seven extinguishers, five were unsafe to use, and only one was in full working-order. Such conditions are most unsatisfactory, and tend to cause a false sense of security with respect to fire.

Several of the city fire brigades have instituted a system under which for a small annual charge the brigade undertakes the testing and maintenance of private fire equipment, and an extension of this system throughout the fire service would be of great advantage both to the public and to the service. There is little doubt that persons or firms who have shown sufficient recognition of the dangers arising from fire to install protection equipment will be willing to pay a small charge for maintenance if they can be convinced that this is necessary to ensure that the equipment will function properly when required.

It may be objected that the maintenance of this equipment is a matter for private enterprise rather than for a public authority. There are, however, certain definite advantages in having the fire brigade personnel carry out the work. In the first place, the firemen are fully experienced both in the use and maintenance of the equipment, and during their servicing visits they will obtain a knowledge of the buildings in the town which is of great value when a fire occurs. In the second place, it is necessary in the cities to maintain a considerable staff of permanent firemen, and there is normally some difficulty in keeping these men employed during the daytime on useful or remunerative work. The maintenance of private equipment would provide such work, and the additional revenue would enable the Fire Boards either to employ a larger staff of firemen, or to reduce the cost to the ratepayers of the fire service. The volunteer brigades would probably welcome the opportunity of obtaining additional revenue for general brigade purposes. It should be noted that if the work is carried out by private contract the working personnel is not available for fire-fighting duty.

FIRE-PREVENTION.

In view of the extremely promising results which followed the fire-prevention campaign carried out at the end of 1931, it is unfortunate that, owing to pressure of other work, it has not been possible to make Fire-prevention Week an annual feature as was intended. It is generally recognized that fire-prevention is mainly a matter of public education, and to be effective this education must be not spasmodic but a continuous process. At the moment the financial conditions existing have forced on the public a realization of the necessity for greater care with regard to fire, but these conditions will not last indefinitely, and either, as is to be hoped, there will be a recovery in prices, or business will re-establish itself on a new basis of values. In either case the immediate incentive to greater care which at present exists will cease to obtain, and unless some steps are taken to bring the question before the public at regular intervals, it is likely there will be a drift back to the disastrous fire-waste conditions previously existing. The organization of a fire-prevention campaign involves a considerable amount of work, and it is probable that this could be more effectively carried out by the central fire brigade controlling authority, the formation of which is suggested elsewhere in this report.

MUNICIPAL FIRE-PREVENTION BY-LAWS.

The Department has recently been in correspondence with the fire-prevention authorities (Fire Marshals) in a number of the States in Canada and the United States of America, and the opinion appears to be generally held that in their communities the inspection of business premises for fire hazards is having a very valuable effect in the reduction both of the number and severity of fires.

Most of the New Zealand fire-prevention by-laws date back to the period when the principal fire hazards were confined to two- and three-story buildings, mostly of wood, and the stabling and storage of fodder incidental to horse transport. Provision is made, for instance, prohibiting the storage of hay, straw, and other inflammable material within certain distances from buildings, but no power