

time of the fire. It is assumed that the face value of the policy will be recovered, and this incorrect view tends to increase the temptation for persons financially embarrassed to set fire to their property.

In connection with the fire-prevention movement inaugurated during the year a definite attempt is being made to check this class of fire. It is the practice of the Police Department to make inquiries into every fire, and instructions have been given that in all cases where the cause is obscure or the possibility of incendiarism is not eliminated, extended inquiries are to be made and the files forwarded to Police Headquarters. These files are considered by a committee consisting of the Commissioner of Police, the General Manager of the State Fire Office, and the Inspector of Fire Brigades, and where it is considered the circumstances warrant this course a Coroner's inquiry is recommended.

A considerable number of fires have now been investigated under this arrangement and a number of inquests have been held. As is to be expected, conclusive evidence of incendiarism has not been obtained except in a few instances. There is good reason to believe, however, that the publicity given by the police inquiries, which involve in many cases the interrogation and taking of statements from more than twenty persons in connection with a single fire, and by the Court proceedings, is acting as a very real deterrent to persons who might otherwise regard a fire as a happy solution of their difficulties.

CONSTRUCTION OF BUILDINGS.

The modern tendency in building-construction is towards the erection in business areas of buildings with reinforced-concrete frame—either monolithic or steel-frame type—with floors of concrete throughout, and curtain walls of either brick or concrete with steel-framed windows. If properly designed and constructed, this type of building can be made not only earthquake-resisting, but highly fire-resisting, both with respect to the limitation of the effects of fire on any floor, and the passage of fire from floor to floor or from adjoining buildings. In addition to their internal fire-resistance, such buildings form very valuable fire-breaks, and prevent the spread of fire from other buildings through a block.

It is unfortunately a fact that many buildings of this type which have been erected in New Zealand of recent years have been poorly designed from the point of view of fire-resistance. A considerable number of instances have been observed where the fire-resisting character of the building itself has been largely nullified by the presence of unprotected stairways and the use of ordinary glass in light areas and on the sides of the building exposed to fire in adjoining premises. The question is not one of expense, since defects referred to could have been corrected at little or no cost if the necessary installations were made while the building was being erected. Experiment and experience has shown that wired glass when properly fitted is an effective protection against exposure fires, and it is just as satisfactory as ordinary glass with respect to light and visibility. In the same way the separation and subdivision of the different floors of large buildings is inexpensive if provided for in the design.

These facts, and the reference to defects in chimney-construction above, show the necessity for the standardization of building by-laws in New Zealand not only from the point of view of earthquake-resistance, but also with respect to protection against fire. The question is not one of the economic loss only involved in bad construction, but in buildings of any considerable height there is also the possibility of danger to life owing to the difficulties of exit from the upper floors. Provision was made for standardization of by-laws in the Building Construction Bill which was considered by Parliament last session. It is understood that the Government is considering the resubmission of this Bill during the present session amended in accordance with the discussions which took place last year.

DEATH AND INJURY IN FIRES.

The loss from fire is very generally regarded by the public as being solely an economic one, and, since it is assumed that the great bulk of the property loss is covered by insurance, the fire wastage is regarded by most people with a certain degree of equanimity. The fact that fires are responsible for loss of life and personal injuries in many cases is not generally recognized. The departmental records show that during the year under review fourteen persons were actually burned to death, five succumbed to burns received at fires, and one was killed by a fall while cutting off the power from a burning building. In addition to these twenty fatal accidents, nearly two hundred persons received more or less serious injuries either from burns or from falls, &c., occurring during fires. The following details of the fatal accidents will serve to illustrate the tragic possibilities of fire.

In May, 1931, four men were burned to death in the fire at the Union Hotel at Greymouth, and two men received burns from which they subsequently died in the fire at the Panama Hotel, Wellington. In June, 1931, an old man was burned to death in a house at North Beach, New Brighton. In July, 1931, a father and five children were burned to death in a fire at Putaruru. Only one member of the family—a child of six years—escaped from the burning building. In September, 1931, a relief worker living in an outbuilding attached to the Regent Hotel at Taumarunui was burned to death. In November, 1931, an infant was severely burned in a fire which broke out in a farmhouse at Tangowahine during the temporary absence of the mother, and subsequently died from the injuries received. In the same month a man was burned to death in a fire which destroyed the Church Hall at Gate Pa, Tauranga. In February, 1932, a fire at Russell resulted in a woman being burned to death. In March, 1932, a man was fatally burned by the explosion of an oil-furnace at Newton, Auckland, and during the same month a girl who was working in a manufacturing workshop at Mount Eden was enveloped in blazing wax and subsequently died from burns received.