## ORDER OF REFERENCE (5)

The adequacy and administration of all existing relevant statutes and regulations and all existing relevant by-laws in force in the City of Christ-church in regard to (a) fire protection and fire-prevention in such buildings, and (b) the construction and design of such buildings in relation to the safety of the public.

111. The Factories Act and its regulations seem inadequate since the Act and the regulations under it set a standard of protection against fire very far below that set in standards approved by expert opinion and adopted in other countries.

First, they sanction the use of external fire-escapes, as distinct from protected

external stairways.

Second, they do not require internal protected stairways and lift-wells of the enclosed type.

No provision is made for fire-doors.

Modern informed opinion does not favour, or consider it safe to rely on, vertical external ladders as a mode of egress from factories.

The regulations make no provision for the number of occupants that might be forced to use the fire-escapes required by the Act. Under the present statute and regulations a fire-escape giving access to each floor complies with the provisions of the Act. Obviously a regulation that covers the modern view that the number of fire-escapes should be related to the number of occupants who might have to use them is more effective.

The same considerations apply to the position of fire-escapes, which again should relate to the position of the employees who may be called upon to use them. Unless the adequacy of fire-escapes is related to the number and position of employees by regulations, the test of adequacy without a guide is apt to be uncertain, and the appearance of safety illusory. No provision is made for necessary alternative means of escape nor for hazardous occupancy, and no consideration is given to the installation of protective devices.

112. The same criticisms apply to the existing Fire Board by-law dealing with escape. It, too, regards external fire-escapes as adequate and, so far as existing buildings are concerned, the by-law is practically inoperative, inasmuch as it provides that, in the case of existing buildings, nothing need be done unless the Superintendent of the Brigade, after inspection, serves a notice on the owner setting out what he is required to do. The number of existing buildings that has been inspected under this by-law has been so small that the problem of ensuring the minimum of fire risk and risk to life in existing buildings in Christchurch has, for some years, been hardly touched. The number of notices sent out as recorded was not more than 36 in the period May, 1945, to December 1947.

113. Since the introduction of the 1938 Amendment of the Municipal Corporations Act the Christchurch City Council has been in a position to replace the Fire Board's by-law. Despite that they must have been aware of the unsatisfactory position relating to many existing buildings in Christchurch and the danger that lurks in those buildings in the event of fire, they have taken no steps to combat the danger. Their inactivity and failure to take some effective action seems inexplicable, since the machinery to do so existed and the Standards Institute Egress by-law has been available since 1944.

114. In our opinion, the Christchurch by-laws are inadequate, the administration of the by-laws and regulations has been irregular and ill administered. Some excuse for apparent weaknesses in administration has been the ambiguity of the language used in framing certain by-laws, and the difficulty of interpreting them. In our opinion, it should have been compulsory that applications for permits be signed by the owner as well as by the builder. Granting a permit to Ballantynes to line their building with soft wood fibre board and over-riding their own by-law is an example of administrative laxity that cannot be excused.