

loss amounting to £241,870; all, or nearly all, due in the first instance to carelessness in some form or degree and as such could have been very largely preventable. Very clearly instancing undoubted carelessness and its consequences is the fact that during the last four years 127 fires, involving a loss of £64,679, has been reported as due to the current being left switched on electric flat-irons, radiators, and cookers.

The fire loss throughout New Zealand for the year ended 31st December, 1929, is estimated at £1,230,255—a conservative estimate—and it is a safe assumption that the actual loss was in excess of that amount. This, with an estimated population in the Dominion of 1,485,594, gives an average loss of 16s. 7d. *per capita*. The loss in the fifty fire districts for the corresponding twelve months' period amounted to £461,966; that, with a population of 637,590 residing within the districts, gives a *per capita* loss of 14s. 6d.; whilst the loss for the 848,004 persons resident in other than the fire districts amounted to £768,289, working out at an average of 18s. 1d. per head. As compared with 1928 the returns show a reduction of £405,863 in the fire loss for 1929, and of that amount, with the same number of outbreaks of fire that occurred in 1928 and including only 43 per cent. of the total population resident therein, £221,116, or 53 per cent., of the reduction occurred in the fire districts.

My inspections and observations throughout the Dominion during the past two years warrant the statement that the majority of our fire brigades are attaining a high standard of fire-fighting efficiency. This assertion is supported, to some extent at any rate, by the fact that the 3,685 fires that occurred throughout the fire districts during the three years 31st March, 1927, to 31st March, 1929, averaged a loss of £468 per fire whilst the 1,351 fires for the year ending 31st March, 1930, averaged a loss of £304, or a reduction of £164 in the average loss per fire. It is well that it is so, in view of the excessive number of outbreaks of fire that annually occur in this country, as also that fire-risk conditions in New Zealand demand an even higher standard of fire-fighting efficiency than in most other civilized countries due to the greater inflammability of our buildings, the very large majority of which are wholly constructed of a more or less light description of timber. In other countries where any extensive wood or "frame" construction obtains the timber used is usually of a heavier description, and, generally, the buildings having an internal lining of lath and plaster or other fire-resisting or slow-burning material, therefore are not liable to outbreaks of fire from the most minor causes as in the case of our buildings, particularly dwellinghouses, with their half-inch match-board lining, in many of earlier construction not even tongue and grooved, the wood lining covered with hessian cloth (scrim) and the whole then disguised by further coverings of pasted-on wall-paper which, once dry, is nothing more or less than a quick-fire train throughout the whole of the building, with the too-frequent result of a "total loss."

The decrease in the fire waste of £405,863 as compared with that of the previous year is some satisfaction. The loss, however, of well over one and a quarter million sterling for 1929 is far too heavy. It is a serious drain upon the resources of a country with a population of under one and a half million, and, seeing that to a very large extent the loss is easily preventable, conditions certainly call for some organized effort to reduce this annually recurring huge waste of property.

As previously stated, the estimated loss for 1929 amounting to £1,230,255 is a conservative estimate founded on reliable basis, and only relates to loss of property directly destroyed by fire, and does not take into account the many indirect phases of losses involved such as dislocation of business, unemployment, increased cost of fire-brigade equipment and maintenance, loss of irreplaceable public and personal property, &c., and I consider it to be well within the mark, therefore, to set down the fire waste during 1929 at considerably over one and a half millions of money.

As some indication of the abnormality of the waste by fire prevailing in New Zealand—at the same time making allowance for the more inflammable character of our buildings—comparison with that in Great Britain is of interest. The fire loss in Great Britain and Ireland during 1929 amounted to £15,617,471 (an increase of five millions over the loss in 1928) that with a population of 48,603,553 gives a loss of 6s. 5d. *per capita*, or only 39 per cent. of the loss per head in this Dominion. The large increase in the loss over that of the previous year has roused public interest. "This enormous wastage is a matter of grave concern to public economists," and quite a campaign in reduction of the loss is now in progress, towards which object a National Safety Week, under the auspices of the Safety First National Association of Great Britain, was held in May last, and in which nine hundred fire brigades took part. Measures advocated include installation of automatic sprinklers and alarms, holding of fire inquests, amendment of building by-laws, provision of private fire-extinguishing appliances, compulsory teaching of fire-prevention in schools—"and in what better way can you do that than by teaching children in school." All of which measures have been advocated in New Zealand for years past, and in view of the world-wide evidence to the reliability of automatic sprinklers and fire-alarm systems as a proved means of most effectively reducing the loss by fire, particularly by an almost total elimination of the disastrous "late call"; seeing also that any of the proved systems—due to the large rebate in insurance premiums on properties so protected—can be installed at little in some cases at no ultimate cost to owners of large insured properties, it is disappointing that there has not been in New Zealand any increase in the total number of automatic installations during the year under review.

It would be a step in the right direction if the system of co-ordination between the responsible officers of local governing bodies, on the lines of the public utilities committees now operating in some of the Australian cities and in Auckland and Christchurch, was adopted in all the large towns in New Zealand. Members of the committees set up include the City or Town Engineer, Building Inspector, Managers of the Electric Lighting, Power, and Tramway Services, Superintendent of the Fire Brigade, and so on. These committees hold periodical meetings and discuss suggested alterations