3 H.--12.

The association has recently formed the New Zealand Officers' and Firemen's Institute, membership of which will in future be by examination only. This institute is likely to become an important factor in maintaining the efficiency of the volunteer firemen, as it not only ensures that the members have some knowledge of the theoretical principles involved in fire brigade work, but also tends to make particularly the younger firemen take a greater interest in the service. Although, as indicated above, the equipment of many of the municipal brigades is of a lower standard than that of the Fire Board brigades, the keenness of the personnel and their efficiency within the limits of the equipment provided is very creditable.

## DOMINION FIRE WASTE.

The national loss by fire during the year 1932 was £867,714, as compared with £1,292,094 for the previous year, and an average of £1,332,032 for the previous five-year period. As is usual in these reports, the estimates are conservative, being obtained by taking the actual payments made by the insurance companies, and adding a percentage for uninsured loss ( $12\frac{1}{2}$  per cent.), which is based on the experience in Fire Board districts over a period of years. The fire waste for the year is the lowest since 1922 and represents a loss per head of population of 11s. 5d., as compared with an average of 18s. 1d. for the previous five-year period.

It is also very pleasing to note that the New Zealand fire waste has for the first time in a number of years fallen well below the figures for other high fire-loss countries such as the United States and Canada, the figures for which for the year 1932 are 13s. 5d. and 16s. 8d. respectively. The fire losses in Fire Board districts (see Table I attached), while not strictly comparable, as they are compiled for the financial year ending 31st March, 1933, instead of the annual year 1932, show an even greater proportionate reduction, the fire loss for the year being only £201,736 (5s. 11d. per head of population) as compared with £508,407 (14s. 11d. per head of population) for the preceding five-year period.

A consideration of the probable causes of this reduction in fire loss will be of interest. In

A consideration of the probable causes of this reduction in fire loss will be of interest. In the first place, it must be remembered that owing to the drop in property values due to the present world-wide depression, the insurance companies' payments in respect of fire loss would in any case be considerably lower, since these payments are made on the basis of the value at the time of loss, and not on the value at the time of insurance.

In commenting on the American losses for the year the authorities in both the United States and Canada have drawn attention to this factor, and have indicated that the losses in these countries, which represent a drop of about 11 per cent. on the previous year's figures, were due in the main to reduction in values rather than a diminution in the actual fire waste. The New Zealand figures, which show a reduction of one-third on the previous year, indicate a definite reduction in fire waste, since it is most unlikely that the reduction due to lower property values would exceed 20 per cent. This is confirmed by the fact that, despite the inclusion of several additional areas, the number of fires in Fire Board districts, in which more than half the total insurable property is located, has fallen from 1,345 (average for three years ending 1931) to 737 for the year under review, or a reduction of 45 per cent.

The fire-prevention campaign inaugurated by the Government at the end of 1931 was undoubtedly one of the most important factors in effecting the reduction shown. The campaign was undertaken in the early stages of the depression, and special efforts were made both through the press, in lectures, and broadcast talks, and by the distribution of publicity matter to stress the economic factor, and to show that fires did not "pay." Particular attention was devoted to correcting the mistaken view generally held by the public with regard to the effect of fire insurance, and to show that even under normal conditions the amount recovered under insurance policies did not cover the loss sustained from fire, and further, that the depression had emphasized this position by reducing the owner's equity in property. The action taken by most of the insurance companies in closer inspection of property insured and in insisting on a general reduction in insurance "cover" also helped greatly in giving the public an appreciation of the position.

It would appear likely that the most important influence affecting the fire-loss position is the more general understanding by the public of the facts regarding fire. A fair proportion of the owners of property have realized that on present-day values their equity in the property has been greatly reduced or even extinguished. It is hoped that with the return of more prosperous times this position will correct itself, and so long as an owner can maintain the necessary minimum payments he is able at least to obtain a living out of his business, or to keep his home intact, but in most cases a forced realization would result in ruin or very severe loss. A serious fire would force this realization, and the necessity for extreme care with regard to fire is apparent.

## Causes of Fire.

From an examination of the figures relating to the causes of fire it is very clear that the ordinary heating or cooking fireplace is the principal fire risk existing under New Zealand conditions, and no permanent reduction in the Dominion fire loss will be achieved until this fact is fully realized. The hazard is a hydra-headed one, and amongst its many manifestations are the ignition of clothes being aired in front of a fire, fires caused through sparks thrown out, defective chimneys and hearths, fuel projecting from or placed near the firebox, hot ashes placed in wooden containers, fat or the like boiling over, defective boilers or hot-water systems, lighting fires with kerosene, &c. A consideration of the reports from the police, Fire Superintendents, and Fire Adjusters leads to the conclusion that the majority of fires which are returned as "cause unknown," and which constitute over one-third of the total fire loss recorded, are due to some variant of the fireplace hazard. The cause is returned as "Unknown" because the fire has destroyed the definite evidence, but the circumstances are such as to exclude most other possible causes.