general carelessness, whilst the framing of more stringent building by-laws, stricter regulations governing installations of electricity in its various uses, holding inquests in certain cases of outbreaks of fire, will all have some salutary result, in my opinion, and as adopted in other countries, where the fire losses are high but from 23 to 29 per cent. lower per head of population than that prevailing in New Zealand, the most effective remedy is the teaching of fire-prevention in our schools; and I would again recommend that lessons in fire-prevention be made a compulsory subject in the curriculum of the schools in this Dominion.

Referring to the serious losses occasioned by forgetfulness to switch the current off electric smoothing-irons: there has been recently placed upon the market an iron which has a permanent thermostat fixed inside the box that before the heat reaches the danger-point automatically cuts off the current. As a practical experiment the iron was stood upon a piece of common cotton shirting; after the switch had been on thirteen and a half minutes the thermostat operated, cutting off the current in the iron, and the shirting had then scorched to a medium dark-brown colour, which would probably be some 50° to 70° F. above the actual charring or ignition point. Use of irons of this description would certainly greatly minimize the danger of fire due to the cause in question.

A factor in the rapid spread of fire, and consequently in the heavier comparative fire loss, is the lining of so many buildings with scrim and paper—this more particularly applying to dwellings. In a short time the scrim and paper become dry as tinder; and it is really amazing the manner in which the fire in a building so lined spreads throughout all or most of the rooms in the structure without showing any bulk of fire or intensive destruction in any one room. In this age, when there are so many patented materials on the market at reasonable cost, some of them fire-resisting in a good degree, substitution thereof in place of scrim and paper would prove a sound economic proposition, as well as an improvement from an hygienic point of view.

In the larger towns a number of miniature factories, principally of the tailoring or dressmaking description, employing mostly girls, are now established on upper floors of some fairly tall buildings, and, as far as my knowledge goes most of them at any rate provide alternative means of escape in case of fire, but it is quite a question as to how many of the employees have any practical knowledge of, or are even aware of, the position of the means of escape other than the regular exits from the building; and this is a matter that should be attended to by the officers of the local fire brigade.

Appended are brief reports dealing with each fire district, also the following tables:-

- (1) Summary of calls attended by each brigade.
- (2) Fire loss in each district.
- (3) Annual cost of each brigade.
- (4) Summary of the causes of fires in each district.
- (5) Personnel and equipment of each brigade.

I have, &c.
Thos. T. Hugo,
Inspector of Fire Brigades.

The Hon. the Minister of Internal Affairs.

## DISTRICT REPORTS.

## AUCKLAND.

The several stations visited, together with their equipment, were found in proper order, and the turnout in each case was smartly carried out. A practical test of the turbine pump and first-aid pumping outfit on the recently acquired motor combination unit was carried on the wharf on the 18th instant with quite satisfactory results. The extensive additions to the Remuera district station are approaching completion. A suitable site for erection of a station for protection of the Avondale district has been purchased, and the Board is now negotiating for purchase of a suitable site in the recently incorporated Tamaki district. A letter has been forwarded to the Board in regard to indicating the position of street fire-hydrants by means of splashes of whitewash.

## BALCLUTHA.

Inspection, 18th January, 1928. Two officers and seven firemen in attendance at the inspection muster. The inspection drills were not carried out in a satisfactory manner: this not due to any fault on the part of the men, but to certain circumstances as set out in my report to the Board, and calling for action on their part. The attendance at fire calls averaged 60.5 per cent. of the total strength—the same percentage as last year. This average is considerably below that of other brigades generally, and rather points to the fact that the main fire-alarm bell is not sufficiently effective for the purpose. An electric sirem directly connected with the Telephone Exchange should be installed.