I understand the work of fitting a magneto on the motor hose-tender is now in hand, and also that it is your Board's intention to install three more call-boxes on the street fire-alarm circuits.

I have to recommend that a swivel searchlight be fitted on the motor hose-tender, and also that the fire-station should be connected up with the public telephone service.

Whilst the station gauge showed an improvement in the water-pressure since my last reading—66 lb. as against 48 lb.—unless a substantial improvement in the pressure can be expected in the immediate future, in view of the increasing number of buildings in Petone, particularly in the way of large manufacturing plants, I would suggest to your Board the advisability of providing the brigade with a second motor machine fitted with pumping-apparatus.

I have, &c.,

THOS. T. HUGO,

The Secretary, Fire Board, Petone. Inspector of Fire Brigades.

During the year six fires occurred in the district, the same number as during the previous year. The fire loss for 1918–19 amounted to £352, as compared with £290 for 1917–18, a decrease of £62.

PORT CHALMERS.

My first inspection of Port Chalmers, its fire brigade and fire-prevention equipment, was made on the 10th March, 1919. The following report covers the inspection :—

SIR,— 19th March, 1919.

Having made an inspection of Port Chalmers on the 10th instant, and an inspection of the fire brigade and its equipment on the evening of the 11th instant, I herewith submit the following report for the consideration of your Board :—

The town is approximately two miles in length, running north and south, and varying in width—about half a mile across at its broadest part. The levels are very irregular, with a maximum height of 200 ft. ; the only level ground is a strip immediately along the waterfront ; the streets are irregular in gradient, some of them very steep. The business portion is practically confined to a limited area in the neighbourhood of the harbour-front, with buildings, one and two stories in height, of stone and brick construction, interspersed with a number of old wooden buildings. The buildings throughout the remainder of the borough are residential and of wooden construction.

Water-supply : The town is supplied by water from a reservoir with a storage capacity of 5,500,000 gallons, situated at Sawyer's Bay, about two miles distant, and has a static head of 277 ft. = 121 lb. The carrying-main to the borough boundary is of two diameters, 9 in. and 7 in. ; but as to the respective length of each section no information was available at the time. The principal distributing-main, of 5 in. diameter only, about 45 chains in length, runs along George Street and Wickliff Terrace. The remainder of the reticulation consists of 4 in. and 3 in. piping.

Fire brigade : A volunteer brigade with an authorized strength of twenty all told—viz., Superintendent, Deputy, and eighteen firemen.

Fire-stations : There is a main fire-station situated on the level ground in Beach Street and facing the wharves ; there is also a hose-reel station on the higher levels (180 ft.) in Laing Street.

Fire-alarms : There are two firebells, one (24 in.) in Beach Street, in the vicinity of the main station, and the other (18 in.) in Grey Street, on a higher level.

Principal equipment : At the main station there is a one-horse two-wheeled hose-cart, two hand-drawn hose-reels, 1,350 ft. of 2½ in. unlined canvas hose, three standpipes, seven branches, two L.F.B. hand pumps in pails, one 25 ft. and two shorter ladders. At the outer station there is an old hand-drawn hose-reel with 200 ft. of 1 in. rubber hose, one standpipe, and one branch with ¼ in. nozzle.

Comments and Principal Recommendations.

Water-supply : The static head may be considered reasonably adequate, except for the comparatively small area of the borough lying above the 150 ft. level; but the available flow or volume is far below any point of efficiency, and this is due to the generally restricted capacity of the pipes throughout the system. In the absence of any definite information of the respective lengths of the 9 in. and 7 in. piping forming the carrying-main, I estimate the output at the boundary as approximately 900 gallons per minute. The chief fault, however, lies in the short length (some 45 chains only) and small diameter (5 in.) of the distributing-main, together with the inadequate sizes of the pipes forming the general reticulation ; added to which, judging from the tests made in Beach Street and at the 185 ft. level on the crown of the Harrington Street hill, it would appear that the mains are more or less corroded—in fact, the betterment of the whole of the water-supply system demands consideration.

Brigade personnel : The members of the brigade are apparently an active, willing body of men, of good physique, but during the course of the inspection drills it was evident that they are in need of more instruction. The membership of the brigade should not be allowed to fall below the authorized strength of twenty, which should be the fixed minimum ; and, in addition, local conditions call for, and the size of the town warrants, the appointment of a permanent man.

Main fire-station : The position of the station and the station itself are most unsuitable in all respects. A more central site should be acquired at or in the immediate vicinity of the intersection of Grey, Scotia, and Currie Streets ; a new central station to be erected, or some present building in that neighbourhood adapted to the purpose, which should include a set of married quarters and sleeping-accommodation for three or four men.