

"During the first progress of a fire, or for the first quarter of an hour at least, extra care and sound judgment must be exercised by the officers of the brigade if satisfactory results are to be obtained from the low pressure available—say, an average of 60 lb. over that time.

"Experiments were also carried out with various deliveries and lengths of hose, some of which pointed to the supposition that there must be considerable corrosion or other obstacle to the free flow of water in the Union Street main.

"Some of the nozzles used were of a defective design, the solid jet breaking at a comparatively short distance from the branch: this is a serious defect, particularly in your case, in view of the low water-pressure.

"The station and appliances are maintained in good order and condition, and the members of the brigade worked with a will and smartly in the carrying-out of the above experiments.

"I have, &c.,

THOS. T. HUGO,

"Inspector of Fire Brigades."

The supply of water available for fire-extinction purposes has been gradually decreasing both in volume and pressure for some time past, and at that the maximum pressure supposedly available has become intermittent, as according to the report of the Superintendent of the brigade the highest pressure he was able to obtain during the course of the fire that occurred on the 28th April last was not more than 60 lb. The Borough Council, however, are now taking steps to improve the supply, and following is a report in that connection, dated 12th June, and forwarded to the Town Clerk:—

"SIR,—

"Office of Inspector of Fire Brigades, Wellington, 12th June, 1912.

"In reply to your wire dated the 4th instant, and to your letter dated the 7th instant, I beg to inform you that I have considered the report dealing with the improvement of the water-supply in your Borough for fire-protection purposes, and consider the water-tower scheme, as laid out and recommended in that report, is entirely inadequate as to storage, volume, and pressure. I have had two consultations with Mr. Cameron, your Borough Engineer, and am of opinion that the scheme as finally proposed by him should meet the requirements of your borough for the time and under present conditions. At the same time I must state it is not a permanent solution of the question, as according to my deductions, drawn from such information as I have been able to obtain, it will be found necessary in the not-distant future to duplicate the supply main running from the head reservoir to the town. The principal points of the scheme as finally proposed by Mr. Cameron are shortly as follows: A storage-reservoir tower to be erected in the neighbourhood of the fire-station, having a storage capacity of 120,000 gallons, having a head of 140 ft. above the High Street level, or a guaranteed pressure of not less than 60 lb. A 10 in. main, for fire purposes only, to be laid from the tower along High Street as far as Victoria Street, and there connected with the town reticulation. An electric-driven direct-coupled pump of the Rees-Returbo type, having a capacity of 450 gallons per minute against a head of not less than 140 ft., housed at the foot of the tower, and having direct-suction connections to both the head reservoir 10 in. supply main and to the baths (bath having a holding-capacity of 1,000,000 gallons), to pump directly into the 10 in. fire main connected with the town reticulation, or into the tower reservoir, as may be required. A reflux or stop valve to be fitted on the 10 in. supply main leading from the head reservoir placed at a suitable point in Glover Road.

"I have, &c.,

THOS. T. HUGO,

"Inspector of Fire Brigades."

During the past year four fires have occurred in the district, or two less than during the previous year.

The fire loss amounted to £14,790, as compared with £3,945, an increase of £10,845.

The estimated cost of the brigade for the year 1912-13 is £509 15s. 9d., as against £496 for 1911-12, an increase of £13 15s. 9d.

#### HOKITIKA.

Two inspections of the Hokitika Fire Brigade, its stations and equipment, have been held—viz., 16th November, 1911, and 20th March, 1912.

At the first inspection muster there were in attendance the Superintendent, Deputy, and thirteen firemen: that, with four on leave, accounted for nineteen members. At the second inspection there were present the Superintendent, Deputy, and fifteen firemen: that, with one on duty and four on leave, accounted for twenty-two out of a total strength of twenty-eight. The attendance of members of the brigade shows an improvement, and compares favourably with the attendance during the previous year.

Various test drills, both wet and dry, were performed, and carried out smartly and in an efficient manner. The stations and equipment are maintained in good order and condition.

New nozzles of  $\frac{7}{8}$  in. and 1 in. diameter are required, and some of the branches are badly dented and require straightening.

During the course of the past year five fires have occurred in the district, or one less than during the previous year.

The fire loss amounted to £76, as compared with £62 for the previous year, an increase of £14.

The estimated cost of the brigade for 1912-13 is £433 6s. 8d., as against £500 for 1911-12, a decrease of £11 13s. 4d.