

1911.

NEW ZEALAND.

FIRE BRIGADES OF THE DOMINION

(REPORT ON THE), BY THE INSPECTOR OF FIRE BRIGADES, FOR THE YEAR ENDED
30th JUNE, 1911.

Presented to both Houses of the General Assembly by Command of His Excellency.

The INSPECTOR OF FIRE BRIGADES to the Hon. the MINISTER OF INTERNAL AFFAIRS.

SIR.— Office of the Inspector of Fire Brigades, Wellington, 1st July, 1911.

Herewith I have the honour to lay before you my third annual report, for the year ended 30th June, 1911, relative to the working of the Fire Brigades Act, and including matters in connection therewith.

The number of proclaimed fire districts remains the same as for the previous year—viz., Auckland, Christchurch, Dannevirke, Dunedin, Feilding, Gisborne, Greymouth, Hastings, Hawera, Hokitika, Lawrence, Maori Hill, Masterton, Milton, New Plymouth, Oamaru, Palmerston North, Petone, and Whangarei—nineteen in all.

As in previous years, efforts have been made in several boroughs to have them proclaimed fire districts, but have had to be abandoned owing to conditions imposed by the Act, amongst others being the clause requiring not less than one-third of the ratepayers to exercise their vote, and this was considered to be impracticable.

During the past year I have officially inspected the brigades, with their stations and equipments, working under the control of Fire Boards, as follows:—

Auckland : December 5, 1910, and May 5, 1911.
Christchurch : July 26 and November 21, 1910, and April 5, 1911.
Dannevirke : October 11, 1910, and March 27, 1911.
Dunedin : September 29, 1910, and February 13, 1911.
Feilding : September 12, 1910, and January 12, 1911.
Gisborne : October 20, 1910, and March 23, 1911.
Greymouth : November 17, 1910, and March 2, 1911.
Hastings : October 10, 1910, and March 20, 1911.
Hawera : September 6, 1910, and January 11, 1911.
Hokitika : November 18, 1910, and March 3 to 9, 1911.
Lawrence : September 27, 1910, and February 10, 1911.
Maori Hill : September 28, 1910, and February 14, 1911.
Masterton : November 3 and January 30, 1910, and April 11, 1911.
Milton : September 26, 1910, and February 9, 1911.
New Plymouth : September 7, 1910, and January 10, 1911.
Oamaru : September 23, 1910, and February 27, 1911.
Palmerston North : August 31, 1910, and February 23, 1911.
Petone : November 8, 1910, and April 25, 1911.
Whangarei : December 7, 1910, and May 10, 1911.

At the conclusion of each inspection any faults committed in carrying out the various drills, or any defects in the appliances used, were pointed out, and a short address on fire-protection subjects was given.

At the request of the Wairoa Borough Council, and with the sanction of the Minister of Internal Affairs, a visit was paid to that borough in January last for the purpose of advising the Council on the subject of fire protection: also, in the case of a number of the smaller boroughs who have made application, advice has been given on fire-brigade matters in general.

At the invitation of the executive of the United Fire Brigades Association I attended their annual conference and biennial demonstration, held in Hokitika on the 3rd March and following days, delivering an address, relating to methods of fire protection and fire-brigade work in general, before the delegates, who represented 111 New Zealand brigades. As at the conference held in Hastings the previous year, strong testimony in favour of the Fire Brigades Act was given by delegates representing brigades working under the control of Fire Boards. During the progress of the conference a report was brought down by a committee proposing a number of amendments to the Fire Brigades Act, with the object, amongst others, of enabling a greater number of brigades to take advantage of its provisions, and the report was unanimously adopted by the conference.

Whilst quite recognizing and giving every credit to the United Fire Brigades Association for the good work it has done in the past, and is doing at present, towards increasing the efficiency of the fire service of the Dominion, there is a direction where, in my opinion, considerable improvement could be effected, and that is in the method adopted in certain of the competitions held at the biennial demonstrations. A number of these competitions are carried out in a special manner and with special appliances, and not, as they should be, with both work and gear approaching as nearly as it is possible actual service conditions. These demonstrations, which are most enthusiastically looked forward to by the members of the various brigades, who go through a long course of hard training and practice, attaining a high degree of efficiency, include some competitions wherein the method adopted is quite at variance with the work as carried out in their brigades in actual practice at fires. There can be no doubt the more practical the conditions are made the more they will meet with the approval of the officers of the fire service, and of those competitors who realize that these competitions are one of the means to the end of turning out efficient firemen; and I would respectfully submit that the executive of the association would do well to give this matter their serious consideration.

The following comparisons, taken from results of the two last demonstrations, go towards proving that in smart competition-work those teams drawn from brigades working under the control of Fire Boards more than hold their own :—

Auckland Demonstration, March, 1909 : 87 brigade teams entered for the competitions, and out of that number 20 were those under Fire Board control. Out of 36 prizes, 18 were won by these latter teams.

Hokitika Demonstration : 63 brigades entered, only 11 of which were Fire Board brigades, but out of 42 prizes they secured 16.

About the usual number of accidents, mostly of a slight nature and none fatal, have been sustained by firemen in the execution of their duty.

The following casualties to civilians have been reported by Superintendents of Brigades as having occurred in their respective districts :—

Auckland.—February 16, 1911.—Ponsonby Road.—Fire in fish-shop with dwelling attached : Two children, aged seven and five and a half years respectively, burnt to death ; and four adults, including parents of above, were severely burnt. They were removed to the Hospital, and have since recovered.

February 18, 1911.—Hobson Street.—Fire in a boardinghouse : An elderly man was suffocated by smoke.

Christchurch.—December 6, 1910.—Matheson's Road, Linwood.—Dwellinghouse : Married woman burnt to death.

February 5, 1911.—Hereford Street.—Office buildings : Two men, one severely and the other slightly burnt ; both have since recovered.

Dunedin.—January 1, 1911.—Upper Dowling Street.—Cottage dwelling : Aged married woman burnt to death ; husband slightly burnt, and has since recovered.

During the course of my inspections it was apparent that a steady improvement is taking place in the discipline, drill, and method of work in the large majority of the brigades, and more attention is being paid to that part of ambulance-work essential to fire-brigade requirements.

The principal improvements that have been effected in equipment are as follows : New central fire-stations have been built and occupied in the following fire districts : Palmerston North, August 31, 1910 ; Feilding, September 12, 1910 ; and Masterton, November 3, 1910. The new central station in Dunedin is approaching completion, and should be ready for occupation shortly. In addition to the foregoing, plans have been completed for new central stations in the Dannevirke, Greymouth, and Hastings Fire Districts. A motor hose-and-ladder car of 110-horse power, and carrying a turbine pump with a capacity of 800 gallons per minute, has been purchased for Auckland ; also another hose, ladder, and chemical motor-car of 30-horse power for Christchurch. A street fire-alarm system, with circuits having twelve call-points in all, has been installed in Masterton. Detailed information on the subject of equipment will be found in an attached summary.

Considerable difficulty has been experienced by a number of the Fire Boards in obtaining money by way of a loan, due to the opinion obtaining amongst prospective lenders that the Fire Brigades Act in its present form does not provide for adequate security, and as a consequence there has been and is considerable delay in obtaining very necessary equipment and in the building of much-needed fire-brigade stations.

As taken from the returns, there are installed throughout the fire districts a total number of thirty-six thermostat automatic fire-alarms connected up to the fire-stations ; of these, twenty-two are in Dunedin. There are several patterns of these automatic systems that have reached a high state of efficiency, and have been the means of saving an enormous amount of valuable property as the result of giving brigades timely warning of an outbreak of fire, and it is to be regretted that more of these safeguards are not installed in the large warehouses, department stores, &c.

The total number of calls in the combined fire districts—viz., 741—shows an increase of 74 over those of the previous year; but this is entirely due to the large number of false alarms received by the Auckland and Christchurch brigades, and out of the 217 false alarms received by these two brigades no less than 92 were maliciously given. There is a decrease in the number of actual fires that occurred during the year—viz., 366 as against 378 for the year ending 30th June, 1910.

A large reduction has taken place in the number of fires returned as due to incendiarism, unknown causes, and in unoccupied houses, as follows:—

	Incen- diarism.	Unknown Causes.	In Unoccupied Houses.
1909-10	30	189	19
1910-11	12	94	15
Decrease	18	95	4

These large decreases are probably in a great measure due to more searching inquiry than has been customary in the past being made by the Superintendents of the various brigades as to the origin of the fires.

Although the actual fires number only twelve less than during the previous twelve months, there has been a very substantial reduction in the amount of the loss sustained of property covered by insurance, with a small increase in the case of uninsured property:—

	Insured. £	Uninsured. £	Total. £
1909-10	101,574	26,881	128,455
1910-11	75,708	27,989	103,697
Decrease	£25,866	Increase .. £1,108	Decrease .. £24,758

The fire districts that have incurred the heaviest losses are Dunedin, £30,987, and Maori Hill, £18,747.

The insurance loss throughout the Dominion for the year ending 31st December, 1910, was £392,670, and compares as follows:—

Insurance Losses.

Year ending 31/12/09, £468,530.	Average loss, six years ending 31/12/09, £425,988
„ 31/12/10, £392,670.	„ for year ending 31/12/10, £392,670
Decrease .. £75,860.	Decrease .. £33,318

Adding 33½ per cent. to the insurance loss for the purpose of arriving at the approximate fire waste for the year, makes comparison as follows:—

Fire Waste.

Year ending 31/12/09, £624,707.	Average fire waste, six years ending 31/12/09, £567,984
„ 31/12/10, £523,560.	„ for year ending 31/12/10 .. £523,560
Decrease .. £101,147.	Decrease .. £44,424

The total fire loss for the last seven years amounts to the large sum of £3,931,464.

The United States of America has been looked upon for very many years past as having the heaviest fire loss of any country in the world. According to the New York *Evening Post*, 4th February, 1911, the record fire loss in Europe is held by Russia, with an average of \$1.16, say 4s. 8d., *per capita*; the average throughout Europe as a whole is 48 cents, say 2s., per head of population. The insurance loss in the United States for the year ending 31st December, 1910, is returned as amounting to \$146,326,406 at an exchange rate of \$4.90, this is equivalent to £29,862,532. Arriving at the fire waste by the same process I have adopted for New Zealand—i.e., the addition of 33½ per cent.—gives the sum of £39,816,709, with a population approximating eighty millions: this is something under 10s. *per capita*. With the fire waste of the Dominion for the same year amounting to £523,560, and the population approximating one million, gives an average of over 10s. *per capita*; so that on the foregoing line of deduction the very unenviable record of having the largest fire loss in the world is held by New Zealand, and this notwithstanding the very substantial decrease of £101,147 in the fire waste when compared with that of the year ending 31st December, 1909. Although the question of this excessive loss has been prominently before the public several times during the last two or three years, very little of any importance has been done towards remedying the evil. Some few boroughs have amended their by-laws in the direction of extending the brick-areas in the town-centres, and in some measure improving their building regulations from a fire-protection point of view, but none have gone far enough, and there has been no general movement in this respect. One of the resolutions passed at the United Fire Brigades Conference was that the Government should be asked to frame a set of model building regulations, and provide for their compulsory adoption by local governing bodies.

An inference to be drawn from an analysis of the fire reports sent in from the various districts is that over or excessive insurance is still much in evidence, and the portion of an advertisement following, taken from a local paper recently, appears to be on the face of it a case in point: “Boardinghouse (the furniture is insured for £500): Price for the lease and the whole of the furniture and effects, including upright grand piano, £220.”

For years past I have pointed out the danger of fire caused by the wax match commonly in use. The striking immunity from fires for a long series of years in South Australia some time ago was attributed principally to the almost exclusive use in the State, during that time, of the safety-match; and Dr. von Schwartz, in his "Fire and Explosion Risks," states, "Statistical reports show that, in certain years, 80 per cent. of the total outbreaks of fire were caused by matches, either dropped or trodden on, thrown down whilst still glowing, or used as playthings by children." The following, bearing on this subject, is taken from the *Australian Fireman* :—

"Out of nearly six thousand fires in Chicago, more than one-sixth were due to the careless use of the 'criminal match.' The campaign against the latter, which is now assuming considerable force and proportions (will be pushed vigorously until none but safety-matches can be obtained in the United States. Even then, burning matches carelessly thrown away after use will be responsible for many fires. State Marshal Sullivan, of New Orleans, has issued an edict against the 'criminal match'—that is, the ordinary friction-match which can be ignited on any surface. He has announced that it must go and be replaced wholly by the safety-match. In Harrisburg, Pa., a short time ago a friction-match, dropped on the floor of a cellar, was stepped upon and resulted in a property-loss of 300,000 dollars. Had this been a safety-match no fire would have occurred. In many up-to-date European countries the 'criminal match' which ignites on anything is outlawed, and safety-matches are required to be used exclusively."

In continuation of previous reports on the subject, the following, bearing on the efficacy of holding inquiries into the origin of all fires, is interesting :—

Dr. F. J. Waldo, City Coroner, reporting on his work during 1910, under the City of London Fire Inquests Act, states that although in only two cases was a public inquest considered necessary, he personally, with the assistance of the police and the Coroner's officers, inquired into the causes and circumstances of 152 fires. "This system of personal investigation at the site of fires," he adds, "has been the means of preventing the oversight of any case of fire which should be publicly inquired into, whilst at the same time the cause of many fires has thereby been ascertained, and the expense of unnecessary inquests prevented. In 125 of the 152 fires the causes were determined, leaving only 27 fires the causes of which could not be ascertained." The past year was especially remarkable for the small number of serious fires occurring within the boundaries of the city, a favourable result, which Dr. Waldo thinks may be in part, at any rate, attributed to the working of the City Fire Inquests Act. It is to be noted that in only two cases was it necessary to hold public inquests; the remaining 150 fires were inquired into personally, and "the expense of unnecessary inquests prevented." The Act referred to is a special Act operating over the city-area only, and not throughout the County of London.

Appended are 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; also detailed reports dealing with each fire district.

I have, &c.,

THOS. T. HUGO,

Inspector of Fire Brigades.

The Hon. the Minister of Internal Affairs, Wellington.

1. SUMMARY OF FIRE CALLS.

District.	Fires.	Chimney Fires.	Bush, Grass, and Rubbish Fires.	False Alarms.	Out of District.	Total.
Auckland	78	8	16	57	8	167
Christchurch	69	4	6	162	12	253
Dannevirke	7	2	..	..	..	9
Dunedin	75	13	17	20	3	128
Feilding	7	1	1	1	..	10
Gisborne	20	1	..	..	3	24
Greymouth	4	..	2	..	..	6
Hastings	8	..	..	..	..	8
Hawera	6	..	..	..	..	6
Hokitika	6	..	2	..	..	8
Lawrence	3	..	..	..	..	3
Maori Hill	2	1	2	3	..	8
Masterton	12	2	2	3	1	20
Milton	3	..	..	..	..	3
New Plymouth	10	2	..	..	..	12
Oamaru	9	..	..	..	..	9
Palmerston North	33	6	3	4	2	48
Petone	12	2	..	1	..	15
Whangarei	52	1	1	..	..	4
Totals	366	43	52	251	29	741

2. SUMMARY OF FIRE LOSSES.

District.	Insured.	Uninsured.	Totals.
	£	£	£
Auckland	6,670	312	6,982
Christchurch	11,201	1,517	12,728
Dannevirke	5828	127	955
Dunedin	24,283	6,704	30,987
Feilding	694	542	1,236
Gisborne	4,301	3,091	7,392
Greymouth	1,356	7	1,363
Hastings	530	..	530
Hawera	3,326	619	3,945
Hokitika .. .. .	..	62	62
Lawrence	100	90	190
Maori Hill	7,996	10,751	18,747
Masterton	1,810	672	2,482
Milton	250	225	475
New Plymouth	403	312	715
Oamaru	7499	300	799
Palmerston North	8,227	1,538	9,765
Petone	3,124	595	3,719
Whangarei	110	525	635
Totals	75,708	27,989	103,697

3. COST OF FIRE BRIGADES (CAPITAL EXPENDITURE INCLUDED).

As taken from the Estimates for the Respective Years.

District.	Year ending 30th June, 1910.			Year ending 30th June, 1911.			Year ending 30th June, 1912.		
	£	s.	d.	£	s.	d.	£	s.	d.
Auckland	7,276	0	0	7,454	0	0	8,174	0	0
Christchurch	7,547	0	0	6,849	0	0	6,645	0	0
Dannevirke	590	5	3	595	11	6	592	9	4
Dunedin	6,000	0	0	6,000	0	0	6,500	0	0
Feilding	460	0	0	542	0	0	590	0	0
Gisborne	524	8	5	541	8	2	1,159	4	6
Greymouth	685	10	0	806	4	0	850	6	0
Hastings	708	10	0	756	8	6	1,096	0	0
Hawera	450	0	0	443	0	0	496	0	0
Hokitika	645	0	0	475	0	0	500	0	0
Lawrence	100	0	0	100	0	0	75	2	6
Maori Hill	381	0	0	255	0	0	242	0	0
Masterton	1,334	14	0	926	11	0	1,023	19	0
Milton	300	0	0	280	0	0	140	0	0
New Plymouth	472	0	0	457	5	2	559	2	0
Oamaru	538	8	0	500	0	0	500	0	0
Palmerston North	1,436	13	0	1,504	0	0	1,699	14	0
Petone	915	4	11	657	7	5	762	6	7
Whangarei	366	0	0	250	0	0	300	0	0
Totals	30,730	13	7	29,392	15	9	31,905	3	11

4. SUMMARY OF CAUSES.

	Auckland.	Christchurch.	Dannevirke.	Dunedin.	Fellding.	Gisborne.	Greymouth.	Hastings.	Hawera.	Hokitika.	Lawrence.	Maori Hill.	Masterton.	Milton.	New Plymouth.	Oamaru.	Palmerston North.	Petone.	Whangarei.	Totals.
Ashes, live	4	3	..	4	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	13
Benzene in proximity to lights, lighted lamps, &c. .. .. .	..	..	..	1	..	3	..	..	..	..	..	..	2	..	..	..	..	..	..	6
„ vapour in proximity to lights, lighted lamps, &c. .. .. .	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Birds' nests under roof .. .. .	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Boiling-over of fat .. .. .	..	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
„ tar .. .. .	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	3
„ varnish .. .. .	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	2
Candles, drapery, &c., in contact with lighted	5	2	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	10
„ knocked over .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
„ left burning .. .. .	..	1	..	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	1	6
Clothes, airing before fire .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
Defective chimneys and hearths	1	4	1	6	..	..	1	2	..	..	..	..	..	..	..	1	2	..	..	18
„ kitchen-ranges .. .. .	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Electric light, fusing of wires	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Fireworks, letting off	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	2
Gas, defective fittings, escape of	2	..	..	1	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	5
„ drapery, &c., in contact with lighted	1	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	4
„ explosion of	2	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
„ in act of lighting .. .. .	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	2
„ rings and stoves .. .. .	..	1	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	3
Incendiarism	1	6	..	..	..	..	..	..	..	..	..	..	1	1	..	..	3	..	..	12
Kerosene-lamp explosion .. .. .	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	2
Kerosene-lamps falling .. .. .	..	3	..	..	..	..	..	1	..	..	..	..	2	..	..	..	..	..	..	6
Kerosene-stove .. .. .	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Kerosene, upsetting	2	..	..	2	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	6
Lime, slaking by rain .. .. .	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Lights, naked .. .. .	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Matches, children playing with .. .. .	..	3	..	1	..	..	..	1	..	..	1	..	..	..	..	..	..	1	..	7
„ lighted, igniting tow .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
„ rats gnawing .. .. .	..	2	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	3
„ thrown down alight	1	..	..	7	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	11
Men intoxicated .. .. .	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Overheating beeswax polish	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	2
„ timber, &c., proximity to furnaces, boilers	3	1	..	3	..	..	..	..	2	..	..	..	1	..	..	..	..	1	..	11
Painters burning off paint	1	1	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	4
Phosphorus on fire .. .. .	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Retort, bursting of	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Rubbish igniting .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1
Smoking .. .. .	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	3	..	..	4
„ in bed	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
„ cigarettes thrown down .. .. .	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Sparks from copper fire .. .. .	..	2	..	4	..	..	..	..	..	..	..	..	1	..	..	..	2	1	..	10
„ from fireplaces	3	1	..	3	..	..	1	1	..	..	..	..	..	..	..	4	1	..	..	14
„ from furnaces .. .. .	..	..	2	3	..	..	..	..	..	..	..	..	2	..	..	..	..	1	..	8
Spontaneous combustion .. .. .	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	5
Sulphur, fumigating with .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..	..	3
Unknown	44	24	4	25	7	14	2	3	1	1	2	2	4	3	3	7	5	5	1	94
Totals	78	69	7	75	7	20	4	8	6	6	3	2	12	3	10	9	33	12	2	366

5. SUMMARY, PERSONNEL, PLANT, AND APPLIANCES.

	Auckland.	Christchurch.	Dannevirke.	Dunedin.	Feilding.	Gisborne.	Grey-mouth.	Hastings.	Haвера.	Hokitika.	Lawrence.	Maori Hill.	Maerterton.	Milton.	New Plymouth.	Oamaru.	Palmerston North.	Petone.	Wanganui.	Totals.
Brigades, total strength of	55	43	22	50	22	26	21	28	21	30	12	20	23	15	28	16	27	18	20	497
Fire-stations, residential..	3	4	1	1	1	..	..	1	1	..	..	..	2	1	2	1	2	..	1	21
" non-residential	..	..	1	2	..	4	4	1	1	5	1	2	1	..	4	..	1	1	2	30
Street fire-alarms, circuits (C), boxes (B)	10 C, 82 B.	12 C, 63 B, 9 open C.B.	..	2 C, 20 B.	..	..	..	..	..	..	..	1 C, 5 B.	5 C, 12 B.	..	..	..	..	1 C, 6 B.	..	31 C, 197 B.
Private fire-alarms	7	10	..	22	..	1 on hire	1	2 on hire	..	1 on hire	..	..	..	1	..	1	1	2	..	43
Horses	2	5	..	5	1	..	..	..	..	..	..	..	..	..	..	1	2	1 on hire	..	24
Hose and - ladder motor-cars (horse-power)	2 (60, 38)	1 (12)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
Chemical hose-and-ladder motor-cars (horse-power)	..	3 (30, 30, 14)	..	1 (55)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
Turbine pump, hose-and-ladder motor-cars (horse-power)	1 (800 gal. (110))	1 (450 gal. (70))	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Steam fire-engines (capacity)	1 (450)	3 (450, 350, 260)	..	..	..	1 (500) stationary	1 (600)	1 (600)	..	1 (380)	..	..	1 (350)	..	..	..	..	..	..	9
Manual fire-engines (capacity)	..	..	1 (60)	1 (150)	..	1 (150)	1 (60)	1 (80)	1	2 (80 ea.)	..	..	1	2 (25 ea.)	..	..	..	1 (200)	..	11
Chemical fire-engines, horse-drawn (capacity)	..	3 (140, 140, 70)	..	..	..	..	..	..	..	..	..	..	..	1 (60)	..	..	..	..	..	3
Chemical fire-engines, hand-drawn (capacity)	..	..	..	..	..	..	1 (40)	1 (40)	..	..	..	..	..	..	..	..	..	..	..	2
Hose carts or reels, horse-drawn	2	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	2	1	..	8
Hose carts or reels, hand-drawn	1	7	2	4	2	2	4	2	3	5	1	2	4	..	7	2	4	2	4	58
Escape - ladders, horse-drawn (height)	1 (60')	1 (64')	..	1 (90')	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
Escape - ladders, hand-drawn (height)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Nil
Ladders, coupling (height)	4 (26', 2' (36'))	7 (96')	..	12 (156')	3 (15')	3 (30')	(35')	4 (54')	3 (30')	2 (34')	..	4 (50')	..	2 (36')	4	(20')	8 (72')	8 (76')	..	68
Ladders, single lengths (total height)	6 (118')	..	5 (105')	2 (55')	4 (75')	5 (100')	4 (82')	3 (80')	4 (72')	3 (63')	2 (44')	1 (25')	6 (129')	1 (25')	2 (40')	2 (44')	..	2 (40')	2 (30')	54
J u m p i n g - sheets (feet square)	3 (10')	3 (8')	..	1 (10')	..	..	1 (8')	2 (14' x 12', 12' x 10')	..	..	..	..	..	..	1 (12')	..	1 (10')	..	..	12
Smoke-jackets (J.) or helmets (H.)	2 J.	1 J.	..	2 J.	..	1 H.	..	..	..	..	..	..	..	..	..	..	..	..	..	6
Hand-pumps	4	5	2	2	1	..	1	2	2	2	1	2	2	..	2	1	2	2	2	33
Hand chemical extinguishers	2	4	..	3	..	..	..	..	..	..	..	..	1	2	..	1	1	..	..	16
Stand-pipes, ratchet-valves	8	..	..	7	..	..	..	..	..	..	1	..	2	..	1	1	..	..	..	20
Stand-pipes, double-headers	..	21	8	6	6	6	9	1	5	3	1	4	2	..	9	4	5	1	5	98
Stand-pipes, single heads	2	..	..	..	..	..	1	1	..	2	..	..	4	..	2	2	4	6	..	24
Hose, rubber-lined (feet)	3,000	2,800	..	2,000 (leather)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5,800
Hose, unlined (feet)	3,700	8,800	3,100	8,000	2,100	2,000	5,000	2,500	1,700	2,500	1,000	1,900	3,500	800	4,850	3,000	5,500	2,564	1,000	2,000
Water-supply (gravitation = G)	..	..	G.	G.	G.	G.	G.	Sewers and wells	G.	G.	G.	G.	G.	Wells and tanks	G.	G.	G.	G.	G.	63,514
Average pressure, noon and midnight, varying	10-130	100-105	85-85	150-190	100-100	90-90	100-115	..	60-80	105-105	70-90	120-130	50-55	..	120-128	90-100	75-100	66-80	125-130	..

AUCKLAND.

Two inspections of the Auckland Fire Brigade, its stations and equipment, have been held—viz., 5th and 6th December, 1910, and 5th May, 1911.

In addition to the ordinary inspections, a test trial of the Dennis-Gwynne motor turbine, then lately acquired by the Fire Board, was held on the Queen's Wharf at 5 a.m. on the 5th December. The pump has a nominal capacity of 800 gallons per minute, but during the course of the trial there was an actual discharge through one 2 in. nozzle of 884 gallons per minute, and through two 1½ in. nozzles of 842 gallons per minute, a very satisfactory result. The pump is driven by a six-cylinder engine of 110-horse power.

The several "turnouts" of the brigade and its appliances at the different stations were accomplished in very quick time, and in an efficient manner. The plant and appliances are maintained in good order and condition, but the living-accommodation at the Central and Ponsonby Stations is very deficient, and these two stations are, in my opinion, particularly when the conditions governing the daily life of a permanent fireman are taken into consideration, overcrowded to an unhealthy degree, in addition to affecting the efficiency of the brigade as a whole. In this connection the following letter has been forwarded to the secretary of the Fire Board:—

"SIR,—

"Office of the Inspector of Fire Brigades, Wellington, 18th May, 1911.

"In connection with my recent visit of inspection to your city, I beg to inform you that, following upon the delivery in the near future of the combined electric hose-and-ladder car, it may be considered that, in the matter of the larger fire appliances, the Auckland Fire Brigade in its present area of action is well equipped for some time to come, but the matter of accommodation for the *personnel* has reached a very acute stage, so much so that it is materially affecting the efficiency of the brigade in general—as, for instance, it is a considerable factor in the present state of unrest. The very fact that firemen are of necessity so closely confined to the stations is a strong reason why they should be provided with comfortable quarters as one inducement to remain after undergoing a training and gaining practical experience that increases their value proportionately with a corresponding efficiency of the whole. The conditions now existing at the Central Station must be well known to your Board, and to increase the accommodation I would strongly recommend that your Board should at once acquire all the triangular piece of ground lying to the south of the station, and build thereon three sets of married quarters—viz., the first floor as quarters for the Superintendent, and the ground floor divided into two other sets. The quarters at present occupied by the Superintendent could then be utilized for single men: this would then relieve the existing congestion.

"At Ponsonby the section on the east side of the station should be acquired, and accommodation provided for six permanent, eight auxiliary firemen, and one set of married quarters for the officer in charge.

"The foregoing recommendations contain what I consider is the minimum that should be provided, and is only what is absolutely required in the present, and having in view the rapidly increasing value of land and property in Auckland (this in addition to brigade-efficiency) the sections mentioned should be acquired immediately. If advantage was taken of the amendment to the Fire Brigades Act empowering Fire Boards to borrow money up to the amount of £10,000, the cost of carrying out these proposals need not unduly increase the estimates for any one year.

"I have, &c.,

"THOS. T. HUGO,

"Inspector of Fire Brigades."

The Board has ordered from England an electric combined hose and turntable-ladder car. The ladder will have an elevation of 80 ft. Its delivery is expected shortly, and it should prove a most valuable addition to the equipment of the brigade.

During the year ending 30th June, 1911, 78 fires have occurred in the Auckland Fire District, as against 75 for the previous year, an increase of 3.

The fire loss for the year amounted to £6,982, compared with £36,586, a decrease of £29,604.

The estimated cost of the brigade for the year 1911-12 is £8,174, as against £7,454 for the year 1910-11, an increase of £720.

CHRISTCHURCH.

Three inspections of the Christchurch Fire Brigade, its stations and equipment, have been held—viz., 26th July, 1910, 21st November, 1910, and 5th April, 1911.

During my first visit a very successful exhibition was given of the capabilities of the then recently acquired Dennis-Gwynne motor turbine pump. The suction was placed in the river just below the Chester Street Fire-station, and in 28 seconds after starting the engine a powerful stream of water through a 1½ in. nozzle at 100 lb. pressure was being discharged. The revolutions were then increased, and throughout the trial an average pressure of 135 lb. was maintained. The pump is described as capable of discharging 450 gallons of water per minute, but during portion of the time it was calculated there was a discharge of well over 500 gallons per minute. The pump is worked by an engine with six cylinders developing 70-horse power. Upon the occasion of my second visit, 21st November, 1910, a surprise false alarm was given at 10.39 p.m. from the street fire-alarm box at the corner of Hereford and Manchester Streets, distant about one-third of a mile from the Central Fire-station. The first motor with the Superintendent and four men arrived at 10.41.2 p.m. The motor turbine with the foreman and seven men arrived immediately after. Two jets of water were shown at 10.42.23 p.m., or 3 minutes

23 seconds after the alarm was given. The Chester Street two-horsed chemical wagon with the Deputy Superintendent and seven men arrived at 10.44.5 p.m., the horsed fire-escape with two men arrived at 10.44.25 p.m. These results were very satisfactory, and the practical work was carried out in an efficient manner, with the exception of the motor-ladder drill. This ladder attached to the motor turbine car was a recent acquisition, and there had not then been sufficient time to become proficient in its working.

The following interim report covers the third inspection :—

“ SIR,— “ Office of Inspector of Fire Brigades, Wellington, 19th April, 1911.
“ Following upon my inspection of the Christchurch Fire Brigade on Wednesday, the 5th instant, I beg to lay before your Board the following matters in connection therewith :—

“ In response to my instructions to get to work at an imaginary fire on the premises of the Co-operative Farmers' Company in Bedford Place, there attended from the Central Station the Superintendent and eight men on the Dennis-Gwynne motor, the Deputy Superintendent and five men on the horsed fire-escape, also from the Chester Street Station the foreman and seven men, or twenty-three all told. The Superintendent informed me that there were five more firemen present than would be immediately available under ordinary circumstances. This means that for an ordinary call the Superintendent, Deputy, and sixteen men would attend, an increase of five when compared with the number available upon the occasion of my previous inspection in March, 1910 (see my annual report for 1910). Later in the night a false alarm was given from the Choral Hall box, but the instrument did not register, and a subsequent examination showed the transmitter had not run down, the push-pins being out of alignment. The alarm was then given from the box at the corner of Hereford and Manchester Streets, and was promptly responded to by the brigade, the first motor arriving in 2 minutes 34 seconds from time of call.

“ During the course of the inspection it was apparent that the men were in need of more fire-escape drill; also, the physical drills were carried out in a very perfunctory manner. Nozzles of a larger diameter should be used on the first delivery. No improvement has yet been made in the hydrant-indicators, but I understand the City Council are now taking the matter in hand. The hydrants are spaced very widely apart, and arrangements should be made for the erection intermediately, in the more congested parts of the city, of pillar hydrants having, in addition to the ordinary screwed outlets, one of sufficient size by direct coupling to supply the motor-pump. Failing these, more of the ordinary hydrants should be laid down. The question of living-accommodation at the several stations, as mentioned in my previous report, should receive your Board's earliest possible attention. A very objectionable feature in this connection is the watch-room at the Central Station being used as a bedroom for several men. The congregating of persons, firemen or strangers, in the watch-room does not tend, in many ways, to the prompt and efficient carrying-out of the brigade-work.

“ I have, &c.,

“ THOS. T. HUGO,

“ Inspector of Fire Brigades.”

The several “turnouts” of the brigade and its appliances at the different stations were accomplished in quick time and efficiently.

The Board has purchased a site for the proposed new Central Fire-station.

A special feature of the calls to fires received by the Christchurch Fire Brigade is the exceedingly large number of malicious false alarms. Of the total number of false alarms received—162—no less than 121 are returned as having been given maliciously, leaving only 41 as from justifiable causes. However, I understand that since gongs have been placed on the posts above each alarm-box of the new system recently installed the number of malicious false alarms received has been very considerably reduced.

During the course of the year 69 fires have occurred in the Christchurch Fire District, as against 86 for the previous year, a decrease of 17.

The fire loss for the year amounted to £12,728, compared with £23,486, a decrease of £10,758.

The cost of the brigade for the year 1911–12 is estimated at £6,645, as against £6,849 for the year 1910–11, a decrease of £204.

DANNEVIRKE.

Two inspections of the Dannevirke Fire Brigade and its equipment have been held—11th October, 1910, and 27th March, 1911.

At the first inspection there were present the Superintendent, Deputy Superintendent, 15 firemen, and 1 messenger, or 18 out of a then total strength of 21. This was a satisfactory attendance.

The various drills were carried out efficiently, with the exception that there was a tendency to rush about, no doubt caused by overanxiety to perform the required work smartly.

The second inspection is covered by the interim report following :—

“ SIR,— “ Office of Inspector of Fire Brigades, Wellington, 1st April, 1911.

“ Following upon my visit of inspection to Dannevirke on the 27th ultimo, I beg to inform you that the attendance of members of the brigade at the muster—viz., 18 out of a total strength of 22, 4 being on leave—was satisfactory, but more attention, as pointed out after the inspection, should be paid to the drills and matters in connection therewith. With the exception of one of the hand-pumps, the plant and appliances are maintained in good order and condition. Provision should be made for conveying to fires the ladders, hand-pumps, and ambulance-box.

"I would again direct the attention of your Board to the necessity for the erection of a new fire-station. The rough plans shown to me, if altered as I suggested, would be very suitable, containing quarters for a married couple and accommodation for not less than four single men. The present station and firebell, in addition to being inadequate, are not in a good position in regard to the risks and trend of the town.

"I have, &c.,

THOS. T. HUGO,

"Inspector of Fire Brigades."

Since the date of the foregoing report plans have been drawn for a new Central Station, and the sketched design has been submitted to the Minister of Internal Affairs, and approved of by him. The present strength of the brigade is 22 all told.

During the past year 7 fires have occurred in the Dannevirke Fire District, 1 less than in the previous year.

The fire loss amounted to £955 as against £1,184, a decrease of £229.

The estimated cost of the brigade for the year 1911-12 is £592 9s. 4d., compared with £595 11s. 6d. for 1910-11, a decrease of £3 2s. 2d.

DUNEDIN.

Two inspections of the Dunedin Fire Brigade and its equipment have been held—viz., 29th September, 1910, and 13th February, 1911.

At the inspection held on the 29th September there were present the Superintendent, Deputy Superintendent, and 22 officers and firemen. These, with 3 who were on duty, account for the full strength of the brigade—viz., 27 all told. During the course of the second inspection certain experiments were carried out in Crawford Street for the purpose of testing the water-pressure.

The various "turnouts" were accomplished smartly, and the required drills carried out efficiently.

The plant and appliances are maintained in good order and condition.

As recommended in my report dated 31st March, 1910, arrangements have been made whereby a certain number of the South Dunedin section of the brigade are now available when called upon to assist at fires in the city proper, but during the course of my inspection in February last I was informed by the Superintendent that at the time he had only eleven men available to man the appliances in answer to a first call in the city. This number of men is not sufficient, and as the new Central Station will be ready for occupation shortly, better arrangements should be made immediately it is possible to have a larger proportion of the total strength of the brigade available for the "turnout," particularly to calls in the more congested parts of the city.

The following interim report was forwarded to the secretary of the Fire Board :—

"SIR,—

"Office of the Inspector of Fire Brigades, Wellington, 22nd February, 1911.

"With reference to matters discussed at the informal meeting with the members of your Board on the 14th instant, herewith I beg to confirm my recommendations, in respect to that part dealing with future policy, to be carried out as opportunity will allow in the following order :—

"(1.) Provision of a second motor of a similar horse-power, but lighter in equipment than the present one.

"(2.) Provision of more street fire-alarm call-points.

"(3.) Provision and equipment of sub-stations.

"(4.) Provision of a 70-75 ft. ladder electrically propelled and manipulated.

"As my reasons for the foregoing recommendations, with methods of carrying them out, &c., together with other matters in connection with the more efficient working of your brigade, were fully discussed at the meeting, there is no necessity to write at length here.

"No main has yet been laid down in the southern portion of Cumberland Street. In view of the large risks there, this is an important matter, and the City Council should be urged to place this work in hand at once.

"Although outside the jurisdiction of the Fire Board, seeing how materially a disastrous fire on the Harbour Board's property will affect the city, I would respectfully suggest to your Board that some mutual arrangement should be made with the Harbour Board for the better protection of their property in case of fire.

"I have, &c.,

THOS. T. HUGO,

"Inspector of Fire Brigades."

There has been a heavy fire loss in the Dunedin Fire District during the past year, this mainly due to the fire that took place in the Otago Agricultural and Pastoral Society's buildings in Crawford Street on the night of the 22nd December, 1910, and which was responsible for a loss approximating £20,000. A Coroner's inquest was held into the circumstances, and during the course of the inquiry it was elicited that owing to some stupid actions there was a delay in sending the alarm to the brigade, and also for some little time after their arrival the pressure of water was very unsatisfactory. In connection with this last matter a reliable pressure-gauge should be fixed in the watch-room at the Central Fire-station, and the fireman on duty for the time being should enter in the occurrence-book at stated periods the pressure then showing on the gauge, and also the pressure showing immediately after the brigade have left the station in response to an alarm of fire. Any unusual fluctuation in the pressure should be at once reported by the fireman on duty to the officer in charge of the station, so that steps may be taken immediately to ascertain the cause and make preparations to meet the emergency if required.

Seventy-five fires have occurred in the Dunedin Fire District during the past year, as against 63 for the previous year, an increase of 12.

The fire loss amounted to £30,987, compared with £15,344, an increase of £15,643.

The estimated cost of the brigade for the year 1911-12 is £6,500, as against £6,000 for 1910-11, an increase of £500.

FEILDING.

Two visits have been made to the Feilding Fire District—12th September, 1910, and 12th January, 1911, respectively. The new Central Fire-station was officially opened on the 12th September, 1910, by the Hon. Minister of Internal Affairs. The building is a two-storied brick structure containing commodious engine-house, two loose-boxes, all necessary offices, store-rooms, &c., and accommodation for five single men.

At the inspection drill held on the 12th January, 1911, there were present the Deputy Superintendent, 13 firemen, and 2 messengers, with 2 on leave, or 18 accounted for out of a then strength of 24 on the roll. Owing to some misunderstanding, proper notice of the inspection had not been given to the members of the brigade, therefore this attendance must be considered satisfactory under the circumstances. The various drills were carried out in a smart and fairly efficient manner, but a more methodical system of drill should be adopted.

The plant and appliances are maintained in good order and condition.

The following letter was forwarded to the secretary of the Board :—

“ SIR.— “ Office of the Inspector of Fire Brigades, Wellington, 3rd April, 1911.
 “ In reply to your letter dated the 24th ultimo, I beg to inform you that in my opinion the time has not yet arrived that calls for the provision of a motor fire-car in Feilding.

“ Your borough, though covering a fairly large area—some 2,300 acres—is flat, and has a population of only about 4,000 people, and, with the exception of a small area immediately in the neighbourhood of the newly built fire-station, consists principally of one-story more or less widely detached dwelling-houses. A one-horse hose-and-ladder cart fitted with quick-hitching harness arrangements is maintained at the station, and with the caretaker by day and firemen sleeping on the premises should be sufficient for present requirements in that direction. What should now receive the consideration of your Board is the installation of a fire-alarm system as recommended in my annual report for 1910.

“ I have, &c.,

“ THOS. T. HUGO,

“ Inspector of Fire Brigades.”

During the year 7 fires have occurred in the Feilding Fire District, the same number as in the previous year. The fire loss for the year amounted to £1,236, as against £8,125, a decrease of £6,889.

The estimated cost of the brigade for the year 1911-12 is £590, compared with £542 for 1910-11, an increase of £48.

GISBORNE.

Two inspections of the Gisborne Fire Brigade and its equipment have been held—viz., 10th October, 1910, and 23rd March, 1911.

At the first inspection there were present the Superintendent, Deputy Superintendent, 22 firemen, and 3 messengers, with 1 on leave: this accounts for the full strength. On the 23rd March there were present the Superintendent, Deputy Superintendent, 12 firemen, and 2 messengers, with 5 on leave, 2 sick, and 3 absent. The attendance at this second inspection was not a satisfactory one.

The various drills required were performed smartly and efficiently, with the exception that certain alterations in the method of practice, recommended during previous inspections, had not been attended to.

The plant and appliances are maintained in good order and condition.

The following two interim reports have been sent to the secretary of the Board :—

“ SIR.— “ Office of Inspector of Fire Brigades, Wellington, 31st October, 1910.
 “ Following upon my inspection of the Gisborne Fire Brigade, its plant and appliances, &c., I have the honour to submit a report in connection with some of the subjects discussed between your Board and myself at the meeting held on the evening of the 21st instant.

“ The firebell in Gladstone Road is badly hung, and the ringing arrangements are defective. This matter is, I understand, to be immediately remedied. Persons residing in the immediate neighbourhood of the Whataupoko and Kaiti hose-boxes should receive some instruction in the use of the appliances for the purpose of rendering first aid.

“ I would again impress upon your Board the necessity of erecting, with as little delay as possible, a new fire-station that will, amongst other things, provide suitable accommodation for a caretaker and a certain number of firemen. The present station is very old, and quite inadequate for requirements, and it would be an economical mistake to spend any money at all upon it.

“ From a fire-prevention point of view only I would strongly deprecate the building—as is at the present time being done—close to the centre of the town, of houses constructed of wood on sections

with only about 25 ft. of frontage. One instance of this in particular occurs in a narrow street, and illustrates very clearly that if persisted in it will be the cause of creating very dangerous fire-areas in your borough.

" I have, &c.,

" THOS. T. HUGO,

" Inspector of Fire Brigades."

" SIR,—

" Office of Inspector of Fire Brigades, Wellington, 31st March, 1911.

" Following upon my visit of inspection to Gisborne, and my interview with the members of your Board on the 25th instant, I would herewith emphasize the necessity to at once provide your brigade with coupling-ladders, hand-pumps, and ambulance-box, also to make reliable arrangements for the conveyance, in addition to the hose-reel, of those indispensable appliances. I would point out that the absence of ladders immediately upon arrival at a fire might be the cause of fatal consequences.

" In regard to the station-site, erection of station, fire-alarm installation, question of motor, &c., as it appeared during the course of the above-mentioned interview that your Board realizes the necessity and has decided to take into serious consideration the placing of the brigade upon an efficient footing to deal with fires in your rapidly growing town, beyond again emphasizing the absolute necessity, in the interest of both life and property, of these improvements, I will postpone any further remarks dealing with those subjects until after my next visit of inspection. In reference to the branches and nozzles, I called upon the firm who supplied them, and find that the word 'special' refers to the length—viz., 24 in. As the prices previously quoted to me cover only branches of ordinary length, the prices charged must stand; at the same time I informed them of my recommendation that your Board should return the couplings supplied.

" I have, &c.,

" THOS. T. HUGO,

" Inspector of Fire Brigades."

Up to the present very little has been done by the Gisborne Fire Board in the way of improving the equipment of their brigade, which is very much behind in that respect, and this in view of the fact that the average fire loss is considerably in excess of almost any other town, compared on a population basis: but at the interview with the members of the Board at the time of my last visit I was given to understand that they fully intend to remedy the existing state of things during the coming year.

During the past year 20 fires have occurred in the Gisborne Fire District, as against 32 for the previous year, a decrease of 12 in number.

The fire loss amounted to £7,392, compared with £8,488, a decrease of £1,096.

The estimated cost of the brigade for the year 1911–12 is £1,159 4s. 6d., as against £541 8s. 2d. for 1910–11, an increase of £617 16s. 4d.

GREYMOUTH.

Two inspection visits have been paid to the Greymouth Fire District during the year.

At the first visit, Thursday, 17th November, 1910, a surprise false alarm of fire was given at 8.40 p.m. by means of ringing the firebell at the Central Station. By 8.44–15 p.m. two deliveries had been got to work in Hospital Street, and there were present the Superintendent and 5 firemen, with other members of the brigade in attendance at the hose-reel station in Tainui Street. These results are better than appear at first sight, and may be considered satisfactory. The bell at the Central Station is a comparatively small one, and the ringing arrangements very bad; and, wishing to observe the outcome of ringing this particular bell only, I did not cause the larger bell in Tainui Street to be rung, which is the course adopted by the brigade in response to an ordinary alarm of fire.

During my second visit, 2nd March, 1911, an inspection was made of the stations and equipment only.

The plant and appliances are maintained in good order and condition.

The lower part of the new bell-tower erected on the corner of Buccleuch and High Streets has been boarded in as suggested, and will serve for the present as a hose-reel station for the district. A new hose-reel has been purchased.

The manila cords at present being used for ringing the firebell at the Boundary Street Station should be replaced by flexible steel-wire rope of small diameter. Whilst in Greymouth a sketch-plan for a new Central Fire-station was submitted for my opinion, but I consider the internal design or arrangements unsuitable, and partly in this connection the following letter was sent to the secretary of the Board:—

" SIR,—

" Office of Inspector of Fire Brigades, Wellington, 28th November, 1910.

" In reference to the proposed new station, I would strongly recommend to your Board that, in addition to sleeping-accommodation for single men, a set of quarters should be provided for a married man to act as station-keeper. There are a number of reasons for this: First, it is to be presumed that in the near future a system of street fire-alarms will be installed in Greymouth, and there should always be some person, male or female, on the premises to ring the big bell when the street alarm is operated, otherwise, unless the alarm system is directly connected up for twelve to fourteen hours out of the twenty-four, the alarm system is useless; second, the moral supervision required where a number of young single men are quartered: third, the watch maintained, by the very fact of a family residing on the premises, over appliances and instruments that are becoming more valuable as time goes on.

" As it is unsafe to take the fire-engine over the bridge into Blaketown, and there does not appear to be any prospect of the water-system being extended there in the near future, I have to recommend, so as to afford some measure of protection, that a chemical engine be purchased and placed in that district, and a section of the brigade established there.

" I have, &c.,

" THOS. T. HUGO,

" Inspector of Fire Brigades."

During the past year 4 fires have occurred in the Greymouth Fire District, as against 8 during the previous year, a decrease of 4.

The fire loss amounted to £1,363, compared with £2,326, a decrease of £963.

The estimated cost of the brigade for the year 1911-12 is £850 6s., as against £806 4s. for the year 1910-11, an increase of £44 2s.

HASTINGS.

Two inspections of the Hastings Fire Brigade and Fire Police Corps and their equipments have been held—10th October, 1910, and 20th March, 1911.

Following are two interim reports forwarded to the secretary of the Hastings Fire Board, covering both inspections :—

“ SIR,—

“ Office of Inspector of Fire Brigades, Wellington, 31st October, 1910.

“ I have the honour to submit for the consideration of your Board the following report in connection with my inspection, on the 10th instant, of the Hastings Fire Brigade and Fire Police, with their plant, appliances, &c.

“ The attendance at the muster of the members of the brigade—viz., 24 and 1 on leave out of the total strength of 25—was very satisfactory.

“ The attendance of members of the Fire Police—11 out of a total strength of 21—was very unsatisfactory. By reference to my two previous reports it will be seen that there has been no satisfactory attendance of the Fire Police at any of my inspections.

“ It was stated at the roll-call that the officers of both brigade and police only received notice of my intended inspection at 10 a.m. on the morning in question, but as the letter informing you of my proposed visit was posted in Wellington on the 6th instant these officers should have received earlier notice.

“ An ordinary wet steamer drill was carried out in a satisfactory manner.

“ The plant and appliances of both brigade and police is maintained in good order and condition.

“ I would recommend that the Fire Police should turn out for practice, carrying out their own drill, at the same time and in conjunction with the brigade.

“ During the course of my inspection, upon asking to see the ambulance-box, which, I understand, in accordance with my recommendation, your Board had purchased some time previously, the captain of the Fire Police informed me that they had not yet been supplied with one.

“ I would direct the attention of your Board to the following recommendation contained in my report dated 12th October, 1909: ‘ If there is no prospect of installing the gravitation high-pressure system in the immediate future, concrete tanks should at once be put down at various suitable points in the town, so that water to supply the fire-engine will be immediately available in case of necessity.’

“ I have, &c.,

“ THOS. T. HUGO,

“ Inspector of Fire Brigades.”

“ SIR,—

“ Office of Inspector of Fire Brigades, Wellington, 31st March, 1911.

“ At 8 p.m., Monday, the 20th instant, I held an inspection of the Hastings Fire Brigade and Fire Police Corps.

“ Of the brigade there were present—Superintendent, Deputy Superintendent, 22 firemen, and 3 messengers, or 27 out of a total strength of 30 on the roll; of the 3 absent, 1 was on sick-leave, 1 on leave, and 1 out of the district.

“ Of the Fire Police Corps there were present—Captain, Lieutenant, and 18 constables, or 20 out of a total strength of 21; the 1 absent was on sick-leave.

“ The attendance of both brigade and Fire Police was very satisfactory.

“ At 8.12 p.m. I instructed the Superintendent to get the fire-engine to work from the sump at the intersection of Heretaunga Street and Karamu Road. The pressure-gauge on the engine indicated 100 lb. of steam at 8.22 p.m., but it was not until 8.30-50 p.m., or 19 minutes from the time of call, that sufficient water had backed up to enable the engine to get to work. I then directed the Superintendent to move the engine to the sump at the intersection of Heretaunga and Warren Streets: The trap-door was lowered, and the engine ready for work at 8.41 p.m., but it was 9.3-40 p.m., an interval of nearly 23 minutes, before one delivery could be got to work, and even then sufficient water had not gathered to cover the suction strainer, and as a consequence the resulting jet was a mixture of air and water. Presumably it would have required some minutes longer to obtain an efficient stream, but, not wishing to play any more of this water on the street than was absolutely necessary, I did not carry the experiment any further.

“ Seeing that once a fire gets beyond the limited capacity of the chemical engine these sumps have got to be relied upon to supply the necessary water, it must be apparent to your Board that the above statement reveals a most serious state of affairs. I understand it is possible to always keep a certain amount of water in the sewers, and I would suggest that arrangement should be made to have this matter attended to at once, coupled with a reliable supervision. In connection with this subject, I would direct your attention to my report, dated 12th October, 1909—that portion headed ‘ Means for extinguishing fires.’

“ It is necessary that your Board should make by-laws dealing with the status of the Fire Police, &c., but this and other matters were the subject of conversation between your Chairman and myself during my visit to Hastings, and doubtless he has already laid them before you.

“Such work as the brigade personally was called upon to perform was carried out in a satisfactory manner. This remark also applies to the Fire Police, with the addition that a considerable improvement is manifest in their attendance and work when compared with previous inspections.

“I have, &c.,

THOS. T. HUGO,

“Inspector of Fire Brigades.”

As pointed out during the course of my inspection, the jumping-sheets require strengthening, and more grummet-holds working in.

The plant and appliances are maintained in good order and condition.

The chemical engine has proved a valuable addition to the equipment of the brigade, and owing to the scarcity of water most satisfactory results have attended its use, otherwise the fire loss during the past twelve months would have undoubtedly been very much greater in Hastings.

A site was purchased some little time ago, the plans for a new Central Fire-station prepared and approved, but considerable difficulty has been experienced by the Board in obtaining the necessary money on loan for the purpose of building the proposed new station. However, this difficulty has now been overcome, and the work is to be proceeded with at once.

During the year 8 fires have occurred in the Hastings Fire District, as against 11 for the previous year, a decrease of 3.

The loss by fire amounted to £530, as against £2,831, a decrease of £2,301.

The estimated cost of the brigade for the year 1911-12 is £1,096, as against £756 8s. 6d. for the year 1910-11, an increase of £339 11s. 6d. This comparatively large increase is due to providing for the quarterly repayment of the loan-money borrowed to build the new station, and to providing new equipment for the brigade in anticipation of the completion of the high-pressure water-supply system.

HAWERA.

Two inspections of the Hawera Fire Brigade and the Fire Police Corps with their equipment have been held—viz., 6th September, 1910, and 11th January, 1911. At the request of the Fire Board a special visit was made to Hawera on the 28th June for the purpose of consulting with and advising them in connection with brigade matters.

At the first inspection there were present Fire Brigade: Superintendent, Deputy Superintendent, 17 officers and firemen, and 2 messengers, with 2 on leave: this accounts for the full strength of 23 all told. Fire Police Corps: Captain, Lieutenant, and 4 constables, with 2 on leave, or 12 accounted for out of a total strength of 18: this attendance was very unsatisfactory.

The following interim report sent to the secretary of the Board covers the second inspection:—

“SIR,— Office of Inspector of Fire Brigades, Wellington, 11th January, 1911.

“An inspection of the Hawera Fire Brigade and Fire Police was held on 11th January, 1911.

“At the muster at 8.10 p.m. there were present—Superintendent, Deputy Superintendent, 10 firemen, and 2 messengers, with 2 on duty at the Theatre, 5 on leave: authorized strength, 25 all told. Fire Police present—Captain, Lieutenant, 8 constables, and 1 messenger, with 2 on leave: authorized strength, 13.

“The Fire Brigade is at present 3 short of the authorized strength: this, with 5 on leave, out of the district, brings the available strength of the brigade down to 17 all told, and is not sufficient. An effort should be made to have not less than 20 all told at call. The attendance of the Fire Police was good.

“During the course of the subsequent drill I found that only two standpipes were available: one had been placed in the new out-station, and another was at the Theatre. Two new standpipes should be obtained immediately, also two branches, and a two-into-one breeching-piece.

“In a letter addressed to you, dated 10th February, 1910, I reported that the new set of coupling-ladders were defective in their construction, and recommended that the defects should be made good at the maker's expense. The steel bands have not been replaced by stronger ones, as pointed out to the Superintendent at the time of my visit should be done. As they are at present they will never be satisfactory.

“The relay shutter for working the electric-trembler bell has not yet been installed. A small box containing a few bandages, lint, carron-oil, friar's balsam, &c., should be supplied to the brigade for emergency cases.

“The new firebell is not giving satisfactory results. This is due to the ringing arrangement that, in my opinion, is entirely wrong in design. The hammer striking the bell externally and resting as it does must stop the vibrations; and the stroke, about 1 in., is quite too short. A comparison may be made by ringing the bell by means of its own tongue, taking care that the external hammer is not resting on the bell at the time, and comparing the sound produced by the different methods of ringing. Again, the bell is not rung very frequently, and it is more than likely that the lengthy sprocket-chain, some 100 ft. or more, will become rusted up. I consider the rocker system will be found much more effective.

“More reliable arrangements should be made so that the increased water-pressure may be available immediately an alarm of fire is given. I understand that at the late fire in Princes Street it was nearly half an hour before the greater pressure was obtained, and even then the pressure was so poor that at no time could more than three ineffective streams of water be employed.

“I have, &c.,

THOS. T. HUGO,

“Inspector of Fire Brigades.”

The various drills required, with some minor exceptions pointed out after the drill, were carried out smartly and efficiently.

The plant and appliances are maintained in good order and condition.

The Hawera Fire Board has decided to disband the Fire Police as a separate body, but intends incorporating a certain number of the members with the Fire Brigade, so strengthening the latter body to allow of any special salvage-work, previously performed by the Fire Police, being undertaken.

During the past year 6 fires have taken place in the Hawera Fire District; no fire occurred in the district during the previous year.

The fire loss amounted to £3,945.

The estimated cost of the brigade for the year 1911-12 is £496, as against £443 for 1910-11, an increase of £53.

HOKITIKA.

An inspection of the Hokitika Fire Brigade and its equipment was held on 18th November, 1910, when there were present the Superintendent, Deputy Superintendent, 18 officers and firemen, with 2 on leave, 1 sick, and 4 on duty at the military camp, or 27 accounted for out of a strength of 29 then on the roll. This was a satisfactory attendance.

A second visit was paid to the Hokitika Fire District during the time the United Fire Brigades Conference and demonstration was in progress, from the 2nd to the 9th March last, and great credit is due for the complete arrangements made to carry out such a large undertaking by a small community like that of Hokitika. The various drills carried out during the inspection were performed smartly and in an efficient manner.

The plant and appliances are maintained in good order and condition.

I have again to recommend that sleeping-accommodation for, say, three firemen should be provided at the Central Station. The brigade should be provided with a small ambulance-box.

A new hose-reel station has been erected in Sale Street and equipped with a new hose-reel, hose stand-pipes, &c.

The gravitation water-supply and its reticulation is now giving satisfaction, and an average pressure of 105 lb. is available.

Six fires have occurred in the Hokitika Fire District during the past year, as against 3 for the previous year, an increase of 3.

The fire loss amounted to £62, compared with £760, a decrease of £698.

The estimated cost of the brigade for the year 1911-12 is £500, as against £475 for the year 1910-11, an increase of £25.

LAWRENCE.

Two inspections of the Lawrence Fire Brigade and its equipment have been made—27th September, 1910, and 10th February, 1911, respectively.

At the first inspection there were present the Superintendent, Deputy Superintendent, and 8 firemen; these, with 1 on leave and 1 sick, accounted for the full strength of the brigade. At the second inspection all were present with the exception of 1 fireman on leave. These attendances were very satisfactory.

The various drills were carried out smartly and efficiently, but the locality of the practices should be constantly changed, and the drills varied in character and not confined to a certain routine.

The plant and appliances are maintained in good order and condition.

The bell-ringing arrangements are defective; good results are not obtained, and this should be rectified. A small ambulance-box should be provided.

Three fires have occurred in the Lawrence Fire District during the past year, 2 less than during the previous year.

The loss by fire amounted to £190, as against £407, a decrease of £217.

The estimated cost of the brigade for the year 1911-12 is £75 2s. 6d., compared with £100 for 1910-11 a decrease of £24 17s. 6d.

MAORI HILL.

Two inspections of the Maori Hill Fire Brigade and its equipment have been held—viz., 28th September, 1910, and 14th February, 1911.

At the first inspection there were present the Superintendent, Deputy Superintendent, and 16 firemen, with 1 on duty at Woodhaugh. Second inspection—present, Superintendent, Deputy Superintendent, and 13 firemen, with 4 on duty. On both occasions 19 were accounted for out of a strength of 20 all told. These attendances were very satisfactory.

The various drills required were carried out smartly and in an efficient manner.

The plant and appliances are maintained in good order and condition.

As previously recommended, the supply of hose has been increased, and there is now 1,900 ft. available. The brigade has not yet been provided with hand-pumps.

Since my last report alterations have been made to the receiving and indicating instrument of the street fire-alarms, and this should improve the efficiency of the system.

A destructive fire took place on the 12th April last, destroying the New Zealand Paper-mills, situated in the Woodhaugh Ward of the Maori Hill Fire District. The buildings covered a considerable area, and containing, as they did, very inflammable material, the fire spread rapidly, and was quickly beyond the power of the limited (both in numbers and plant) strength of the brigade to cope with, although assisted by a contingent from each of the Dunedin and Roslyn Fire Brigades. As it is intended to rebuild the mills it is to be hoped that, in addition to other precautions, the various sections or buildings will be divided by substantial brick-wall fire-breaks that will enable the brigade to confine a fire to any particular section in which it may break out.

During the past year 2 fires have occurred in the Maori Hill Fire District, as against 4 during the previous year, a decrease of 2.

The fire loss amounted to £18,747 compared with £526, an increase of £18,221.

The estimated cost of the brigade for the year 1911-12 is £242, as against £255 for the year 1910-11, a decrease of £13.

MASTERTON.

Two inspections of the Masterton Fire Brigade and the Fire Police Corps with their equipments have been held—viz., 3rd November, 1910, and 30th January, 1911. A third visit was made in April last for the purpose of testing the newly installed street fire-alarm system.

The new Central Fire-station was officially opened on 3rd November, 1910. The building is constructed of brick, two stories in height, contains commodious engine-house, loose-boxes for two horses, watch-room, and all necessary offices, and one set of married quarters, all on the ground floor. On the first floor there is a large recreation-room, a meeting-room for the Fire Police, and accommodation for seven single firemen.

At the inspection on 30th January last there were present—Fire Brigade: Superintendent, Deputy Superintendent, and 18 officers and men; these, with 2 on leave, account for the full strength—viz., 22 all told. Fire Police Corps: Captain, Lieutenant, and 12 constables, with 2 on leave; total strength (16) accounted for. The attendance of both brigade and police was very satisfactory.

The various drills required were carried out smartly and efficiently by both bodies.

The plant and appliances are maintained in good order and condition.

Some delay was experienced when getting the steam fire-engine to work, due to the cover of the well from which the water was taken being entirely covered over with metal. A new cover should be fitted, and raised to a level with the ground.

The main firebell at the Central Station does not ring in a satisfactory manner, and this important matter should be attended to immediately.

Some new ropes, lighter than those at present in use, are required by the Fire Police.

A street fire-alarm system consisting of five circuits, and having a total number of twelve boxes or call-points, has recently been installed, and up to the present time has given every satisfaction. In this connection the following letter was sent to the secretary:—

“SIR,—

“Office of Inspector of Fire Brigades, Wellington, 19th April.

“Following upon my visit to Masterton on the 11th instant for the purpose of inspecting the newly installed street fire-alarm system, I beg to submit the following remarks for the consideration of your Board:—

“The aerial circuits should have been, as recommended in the first instance, insulated instead of bare wire, for the principal reason that, running on the same poles and closely parallel to the telephone-lines, the alarm circuits are subject at any time to serious interference due to broken telephone-wires, &c.

“The actual inspection and testing of the system was satisfactory with the exception of the three following items; and when they have been attended to the installation should be in thorough good order and give very satisfactory results, outside the possible interference on the aerial lines as mentioned above:—

“(1.) The transmitting-instruments require to be securely fixed to their basis so that they are immovable when winding up the instrument, thus obviating any possibility of the push-pins being thrown out of alignment.

“(2.) The ringing keys or buttons on circuits D and E require adjustment.

“(3.) The indicator relay fixed on the face of the instrument-board is at present too much exposed to the action of dust or dirt, therefore it should be covered in.

“Of the auxiliary portable telephone attachments, only two of the circuits, C and E, were completed; the tests were satisfactory, with the exception of a very minor adjustment required on the E circuit.

“As a matter affecting the efficient working of the installation, I would suggest that your Board should frame very stringent rules dealing with any member of the brigade, other than those specially authorized so to do, who touches or interferes with any of the instruments or parts of the installation in the watch-room. Strangers should not be allowed to frequent the watch-room.

“I have, &c.,

“THOS. T. HUGO,

“Inspector of Fire Brigades.”

During the past year 12 fires have taken place in the Masterton Fire District, as against 10 during the previous year, an increase of 2.

The fire loss amounted to £2,482, compared with £1,166, an increase of £1,316.

The estimated cost of the brigade for the year 1911-12 is £1,023 19s., as against £926 11s. for 1910-11, an increase of £97 8s.

MILTON.

Two inspections of the Milton Fire Brigade and its equipment have been held—viz., 26th September, 1910, and 9th February, 1911.

At the first inspection there were present the Superintendent, Deputy Superintendent, and 8 firemen; these, with 1 on leave, accounted for the then full strength—viz., 11 all told. At the second inspection there were present the Superintendent, Deputy Superintendent, 8 firemen, and 1 messenger, with 4 on leave; total strength (15) accounted for. These attendances were satisfactory, and the various drills were carried out smartly and efficiently.

The plant and appliances are maintained in good order and condition, with the exception that there appears to be a considerable slip in one of the manual pumps, and this should be remedied.

The only supply of water available for the manual pumps in the business part of the town is restricted to what can be obtained from three or four private wells, and in that connection the following letter was forwarded to the secretary of the Board:—

“SIR,—

“Office of Inspector of Fire Brigades, Wellington, 22nd February, 1911.

“Seeing that the question of a public water-supply for Milton is no nearer a settlement, and the danger of a disastrous fire taking place at any moment due to the very limited supply of water available for fire-extinction purposes, I would strongly recommend the advisability of sinking wells in the vicinity of some of the larger risks of your town. As it is at present the brigade have very little chance of stopping the spread of a fire should they receive a late call to certain of the block risks.

“I have, &c.,

“THOS. T. HUGO,

“Inspector of Fire Brigades.”

During the past year 3 fires have occurred in the Milton Fire District, as against 2 for the previous year, an increase of 1.

The fire loss amounted to £475, compared with £352, an increase of £23.

The estimated cost of the brigade for the year 1911-12 is £140, as against £280 for 1910-11, a decrease of £140.

NEW PLYMOUTH.

Two inspections of the New Plymouth Fire Brigade have been held—7th September, 1910, and 10th January, 1911.

At the first inspection drill, held 7th September, 1910, there were present the Superintendent, Deputy Superintendent, and 11 firemen, with 1 on duty, 2 sick, and 4 on leave; or 20 accounted for out of a total strength of 28. This was a far from satisfactory attendance.

At the second inspection, on the 10th January, there was a very satisfactory muster—viz., Superintendent, Deputy Superintendent, and 23 firemen, with 3 on leave—total strength accounted for. The various drills performed on the last occasion were carried out in a smart and efficient manner.

The plant and appliances are maintained in good order and condition.

As pointed out to members of the Board at the time of my visit to New Plymouth, more accommodation will be required at the Central Station in the near future, and land for this purpose should be purchased whilst it can be acquired at a reasonable price.

A small ambulance-box should be provided. I would again draw the attention of the Board to recommendations contained in my previous reports as to the necessity for more hydrants being laid down in the more congested parts of the town, and to the advisability of installing a street fire-alarm system.

During the past year 10 fires have occurred in the New Plymouth Fire District, compared with 8 the previous year, an increase of 2.

The loss by fire amounted to £175, as against £2,350, a decrease of £1,635.

The estimated cost of the brigade for the year 1911-12 is £559 2s., compared with £457 5s. 2d. for 1910-11, an increase of £101 16s. 10d.

OAMARU.

Two inspections of the Oamaru Fire Brigade and its equipment have been held—viz., 23rd September, 1910, and 7th February, 1911.

At the first inspection there were present the Superintendent, Deputy Superintendent, and 12 men, with 2 on leave, or 16 accounted for out of a then strength of 17 all told. Second inspection: Present, Superintendent, Deputy Superintendent, and 9 men, with 1 sick and 2 on leave, or 14 accounted for out of 15 then on the roll. These attendances were satisfactory.

The various drills required were carried out smartly and efficiently, with the exception of some minor faults pointed out at the time, but in comparison with the previous year a decided improvement is manifest.

The plant and appliances are maintained in good order and condition.

At the time of my visit there was considerable danger of the horse, through excitement, slipping on the concrete floor when starting out of the station, but since then large coir mats have been obtained and laid on the floor of the engine-house, and this now gives a secure foothold.

In connection with my last visit the following letter was sent to the secretary of the Board :—

“ SIR,— “ Office of Inspector of Fire Brigades, Wellington, 22nd February, 1911.
 “ With reference to my visit of inspection to Oamaru on the 7th and 8th instant, I have again to recommend (see report dated 3rd March, 1909, also Annual Report, 1910) the placing of a small reel-shed and bell towards the north end of Thames Street, shed to be equipped with hand-reel, hose, stand-pipe, and ladders; also, I have to call your attention to the fact that several of the hydrant-caps are still bolted down in a manner that would cause serious delay to the brigade in getting to work should a fire take place in the immediate vicinity of such hydrants. I would also recommend that your Board should urge upon the Borough Council the necessity of laying down water-mains and hydrants in Usk and Exe Streets with as little delay as possible. Both these streets are well built on, and it is a long stretch between Thames and Humber Streets with no plugs intervening. In reference to the proposed fire-alarm installation, I would suggest that this matter should be held over for a short time pending further information.

“ I have, &c.,

“ THOS. T. HUGO,

“ Inspector of Fire Brigades.”

A feature of the fires that have taken place in the Oamaru Fire District during the past year is that out of a total of 9 no less than 4 fires have occurred in unoccupied houses within the last six months; 9 fires have taken place as against 5 during the previous year, an increase of 4.

The fire loss amounted to £799, compared with £523, an increase of £276.

The estimated cost of the brigade for the year 1911–12 is £500, the same amount as for the year 1910–11.

PALMERSTON NORTH.

Two inspections of the Palmerston North Fire Brigade and its equipment have been made—viz., 31st August, 1910, and 23rd February, 1911, respectively.

At the request of the Fire Board a special visit to Palmerston North was made on the 26th May, 1911, in connection with Board matters. The new Central Fire-station, situated in Cuba Street, was officially opened by the Hon. Minister of Internal Affairs on Wednesday, 31st August, 1910. The building is a brick structure of two stories, containing a commodious engine-house, two loose-boxes, all necessary offices, workshops, store-room, &c., and provides accommodation for five single men in addition to two sets of married quarters.

At the inspection drill on the 23rd February, 1911, there were present the Superintendent, Deputy Superintendent, and 18 firemen; these with 4 on duty accounted for 24 out of a then total strength of 26. This attendance was satisfactory. The various drills were carried out smartly and in a very efficient manner.

The present strength of the brigade is, Superintendent, Deputy Superintendent, and 25 firemen, or 27 all told. This number includes 2 permanent officers and 1 permanent fireman.

The plant and appliances are maintained in good order and condition.

The following interim report was forwarded to the secretary of the Board :—

SIR,— “ Office of Inspector of Fire Brigades, Wellington, 16th March, 1911.
 “ In my first report to your Board, dated 20th August, 1908, I made the recommendation that the horse hose-reel cart should be replaced by a hose-and-ladder motor-car. I understood some eighteen months ago that it was the intention, very shortly from that time, to increase the gravitation pressure to something like 130 lb. This has not been done, and, whatever the reason, the present available pressure, an average of 70 lb., is not sufficient for fire-extinction purposes, and I have now to repeat the recommendation stated above, with the addition that the car should be fitted with a fire-pump so that with fires of any magnitude the brigade may be expected to deal with them with some measure of success.

“ I have, &c.,

“ THOS. T. HUGO,

“ Inspector of Fire Brigades.”

In addition to the foregoing recommendation I have to call the attention of the Board to the necessity of installing a street fire-alarm system throughout the town.

During the year ending 30th June, 1911, 33 fires have occurred in the Palmerston North Fire District, as against 36 for the previous year, a decrease of 3.

The loss by fire amounted to £9,765, compared with £21,535, a decrease of £11,770.

The estimated cost of the brigade for the year 1911–12 is £1,699 14s., as against £1,504 for the year 1910–11, an increase of £195 14s., of which increase £90 is on account of overdraft from previous year.

PETONE.

Two official inspections of the Petone Fire Brigade and its equipment have been held—viz., 18th November, 1910, and 25th April, 1911.

At the first inspection, 18th November, 1910, there were present the Superintendent, Deputy Superintendent, 14 firemen, and 2 messengers, with 1 on leave, or 19 accounted for out of a then strength of 21 all told. This attendance was fairly satisfactory.

The various drills required were performed smartly, but certain suggestions made during previous inspections with the object of making the practice drill more efficient had not been carried out.

The following interim report was forwarded to the secretary of the Board, and covers the second inspection :—

“ SIR,— “ Office of Inspector of Fire Brigades, Wellington, 27th April, 1911.
“ I held an inspection of the Petone Fire Brigade on Tuesday evening, the 25th instant, and in connection therewith beg to submit the following for the consideration of your Board :—

“ Of the total strength of the brigade—viz., 19—there were present the Superintendent, Deputy Superintendent, 12 firemen, and 2 messengers, or 16 in all ; of the remaining 3, 1 was sick, 1 on leave, and 1 absent. The attendance was satisfactory, and the various drills were carried out smartly and efficiently.

“ To test the fire-alarm installation a false alarm was sent in from the Queen Street box. The system up to the ringing of the main firebell was in good order, but at that point the chain working the motor-valve slipped off the wheel when the valve was only partly opened. It was tried a second time with the same result. To obviate this fault it will be necessary to replace the wheel by one with a deeper and wider groove.

“ A couple of collapsible buckets should be provided for each reel. A new nozzle is required for one of the hand-pumps. The present one is of too large a diameter, with the result that the pump will not throw a stream of water more than 7 or 8 ft.

“ The maximum pressure of water registered on the gauge at the fire-station and direct from the reservoir from 7.15 p.m. until 8.45 p.m. did not show more than 80 lb., and I understand it very rarely now rises above 85 lb. This is an average drop of 10 lb. to the square inch from what obtained, say, two years ago. This matter, that appears to be a gradual fall, should be inquired into with the view of improving the pressure, which is now falling below what is adequate.

“ I have again to call the attention of your Board to the necessity of erecting a new fire-station to contain a set of married quarters and sleeping-accommodation for a number of single firemen.

“ I have, &c.,

“ THOS. T. HUGO,

“ Inspector of Fire Brigades.”

With reference to the last paragraph of the above report, the present time is a favourable opportunity to secure a suitable site for the proposed new Central Fire-station, and the land necessary for that purpose should be purchased whilst it can be obtained at a reasonable price.

The plant and appliances are maintained in good order and condition.

Twelve fires have occurred in the Petone Fire District during the past year, as against 13 for the previous year, a decrease of 1.

The fire loss amounted to £3,719, compared with £2,266, an increase of £1,453.

The estimated cost of the brigade for the year 1911–12 is £762 6s. 7d., as against £657 7s. 5d. for the year 1910–11, an increase of £104 19s. 2d.

WHANGAREI.

Two inspections of the Whangarei Fire Brigade and its equipment have been held—7th December, 1910, and 10th May, 1911, respectively.

At the first inspection there were present the Superintendent, Deputy Superintendent, and 17 firemen, with 1 on leave, all accounted for. Second inspection : Present, Superintendent, Deputy Superintendent, and 15 firemen, with 1 sick, 1 on leave, and 1 short on roll—total strength accounted for. These attendances were very satisfactory.

The present strength of the brigade is 20 all told. Plant and appliances are maintained in good order and condition.

Considerable improvement in the drill was manifest upon the occasion of my last visit ; the required work was carried out with more method and in a steadier manner than on previous occasions.

A couple of branches and some 1 in. nozzles are required.

The attention of the Superintendent was directed to certain minor matters that required attending to. I have again to direct the attention of the Board to my report, dated 28th June, 1909, dealing with the method of conveying the appliances to a fire, and the installation of a street fire-alarm system.

During the year only 2 fires have occurred in the Whangarei Fire District, the same number as during the previous year.

The loss by fire amounted to £635, as against £200, an increase of £435.

The estimated cost of the brigade for the year 1911–12 is £300, compared with £250 for the year 1910–11, an increase of £50.

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