# 1910. NEW ZEALAND.

# FIRE BRIGADES OF THE DOMINION

REPORT ON THE), BY THE INSPECTOR OF FIRE BRIGADES, FOR THE YEAR ENDED 30TH JUNE, 1910.

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 Minister of Internal Affairs, Wellington, 1st July, 1910.

Herewith I have the honour to lay before you my second report, for the year ended 30th June, 1910, relative to the working of the Fire Brigades Act, and including various 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, or nineteen in all.

Efforts have been and are being made in certain other boroughs to have them proclaimed "fire districts," but there appear to be strong objections on the part of the local Councillors concerned to allow the matter to be submitted for the decision of the ratepayers by means of a poll, as required

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 13 and 14, 1909; May 16 and 17, 1910.

Christchurch: March 2, 1910, and other visits. Dannevirke: August 19, 1909; April 12, 1910.

Dunedin: September 27, 1909; March 16, 1910. South Dunedin, March 17, 1910.

Caversham, March 19, 1910. Feilding: August 30, 1909; January 24, 1910. Gisborne: August 16, 1909; April 7, 1910.

Greymouth: November 4, 1909; April 1, 1910.
Greymouth: November 4, 1909; April 28, 1910.
Hastings: August 12, 1909; April 11, 1910.
Hawera: September 2, 1909; February 3, 1910.
Hokitika: November 5, 1909; April 27, 1910.
Lawrence: September 24, 1909; March, 15, 1910.
March: Hill September 28, 1909; March, 18, 1910.

Lawrence: September 24, 1905; March, 15, 1910.

Maori Hill, September 28, 1909; March 18, 1910.

Masterton: October 25, 1909; February 11, 1910.

Milton: September 23, 1909; March 14, 1910.

New Plymouth: September 1, 1909; February 4, 1910.

Oamaru: September 29, 1909; March 11, 1910.

Palmerston North: August 27, 1909; January 27, 1910.

Petone: February 10, 1910, and other visits.

Whangarei: December 15, 1909; May 18, 1910.

In the case of the majority of the brigades, after the inspection drill was finished any shortcomings or mistakes there may have been were pointed out, and an address of instruction was given.

In addition to the statutory work required by the Act, during the course of the year the Minister of Internal Affairs (the Hon. Mr. Buddo) received applications from a number of local authorities-viz., Rangataua, Taihape, Taumarunui, Huntly, and Woodville-asking permission for the Inspector of Fire Brigades to visit their respective towns for the purpose of giving advice in the matter of protection from fire. As in each case the population of the district was below the H.—6A.

number necessary to take advantage of the operation of the Fire Brigades Act, the Minister granted the desired permission, and the visits were carried out accordingly. Advice, &c., has been given in the case of other of the smaller districts, on such matters as the purchasing of new plant, inspecting and reporting upon new appliances, &c., and an address on "Modern Methods of Fire Protection" was delivered before the delegates to the Annual Conference of the United Fire Brigades Association of New Zealand, held at Hastings in February last. During the Conference, representing 108 brigades, very strong evidence in favour of Fire Board control, including the benefit derived from the periodical visits of an inspecting officer, was given by a number of officers and men then working under the provisions of the Fire Brigades Act, and the following resolution was moved and carried unanimously: "That it be an instruction to the Executive to take steps whereby a knowledge of the working of the Fire Brigades Act may become better diffused, with a view to getting districts to see the advantage to be gained in working under a Fire Board."

In the course of my last inspections it was evident that in general a decided improvement has

In the course of my last inspections it was evident that in general a decided improvement has taken place in the discipline, drill, and methods as a whole, with the exception (although in some cases attention has been given to the matter) that more instruction and drill in rescue and ambulance work is required. In using the words "ambulance work" they should be understood as applying to that part of it that teaches the resuscitation of persons overcome by smoke, gas, heat, &c., the treating of burns, scalds, and those accidents common to fire-brigade work in general. In many cases a new spirit of emulation has arisen that is in part due to the members of the Fire Boards, in addition to providing better equipment, taking an active interest in the well-being of

the personnel of the brigades.

Though much remains yet to be done, very considerable improvements have been and are being made by the majority of the Fire Boards in the equipment of their brigades and generally in the matter of fire protection in their respective districts. This has called for a proportionally large expenditure in comparison with that previously obtaining; but in the provision of stations, plant, appliances, &c., nothing is being expended except upon what is absolutely necessary to attain any degree of efficiency, which is a proof that until the coming into force of the Fire Brigades Act the requirements of the brigades had been very much neglected by at least some of the local governing bodies.

New central stations have been or are being built in the following fire districts — Oamaru, Milton, Dunedin, Palmerston North, Masterton, Feilding; with others at present under consideration. Motors of the latest designs for fire-brigade work have been purchased for Auckland, Christchurch, and Dunedin. Particular mention should be made of the most recent importation by the Christchurch Fire Board, of a 70-horse-power motor fitted with a turbine pump of 450 gallons capacity, the first of its class in Australasia. The results obtained from this machine after exhaustive trials exceeded all expectations. An engine of the same class, but with a pump of much larger capacity, is on order for Auckland. The foregoing are some of the principal improvements made; more information on this subject will be found in the attached reports.

About the usual average number of accidents to firemen, more or less severe, have occurred throughout the year, but I regret having to report that Fireman Williamson, of the Feilding Brigade, was accidentally killed in the execution of his duty during the progress of a fire in that

town on the 5th October, 1909.

The insurance loss throughout the Dominion for the year ending 31st December, 1909, amounted to £468,530, or £51,050 in excess of the average loss for the previous five years. Adding 33½ per cent. to the insurance loss, for the purpose of arriving at the approximate fire waste for the year, brings the amount to £624,707, or £68,067 in excess of the average for the period previously mentioned. Taking the population of New Zealand proper as numbering one million, the average loss per head for 1909 was 12s. 6d., an increase of nearly 9½d. per capita. It is to be noted that the losses have been more generally distributed throughout the Dominion than in previous years—that is, no particular fire took place that involved a loss of any great magnitude, such, for instance, as that in Christchurch in 1908 approaching £300,000, which very greatly increased the average for the five years ending 31st December, 1908, the average fire waste for that period being £556,640, as against £624,707 for 1909.

The total number of fires throughout all the fire districts for the year ending 30th June last

was 378, as compared with 330 for the previous year, an increase of 48.

The fire loss for the corresponding periods was £128,455, as against £77,750, an increase of £50,705.

A matter calling for comment is the number of fires that have been returned as due to incendiarism and unknown causes. A comparison with the latest available returns from a number of other places will show that they are above normal proportions.

				Fires.	Incendiarism.	Unknown.
Brisbane	 			36		13
South Australia	 			124		63
West Australia	 			138		63
Edinburgh	 			345	1	15
Melbourne	 		<b>-</b>	597	• • • • •	304
Sydney	 • • •	• •		633	$^{\circ}$	40
London	 			3.238	2	291
New Zealand fire dis				378	30	189

And of the "unknown" 189 fires, 19 occurred in unoccupied premises. Some part of the more excessive disparities in the "unknown" causes may be due to the investigation into the causes being carried out in a more thorough or systematic manner in some places than is the practice in the Dominion.

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As bearing directly on this question of incendiarism and suspicious fires, and consequently as one efficient method towards reducing the excessive fire waste, the following extract taken from an

English journal (The Fireman) is of interest:

A paper published by the National Fire Protection Association gives the following interesting details of the working of the "Fire Marshal" system in the United States of America: "It transpires that in the States having a Fire Marshal's office and its detectives the conviction of firebugs is a comparatively easy task. In Ohio there have been more convictions for incendiarism during the two and one-half years of the existence of the Fire Marshal's Department than in the hundred years preceding its creation. This would seem to indicate the necessity of such a department if the fire-bug is to be properly looked after. The activity of county officers is so divided that they cannot give the attention necessary to tracing and convicting such criminals. Fire Marshal laws usually provide that the cause, origin, and circumstances of every fire in the State which damages property shall be investigated and reported to the Fire Marshal. The most important duty of the latter is the securing of evidence for the conviction of the incendiaries, and placing it in the hands of the Prosecuting Attorney of the county in which the crime is committed, officers of the Department who may have gathered the facts being present at the trial as witnesses. Perhaps the most important result of successful convictions by the Department is their deterrent effect, the knowledge that incendiaries are quickly pursued and usually punished operating to diminish the number of such crimes. Nine of the States now have Fire Marshal Departments, and in five the Commissioner of Insurance has the power of a Fire Marshal. As a manifestation of the quickening interest in this matter throughout the country, however, it is noted that Bills for the creation of such a Department are under consideration by the Legislatures now in session in eighteen of the States."

Appended are tables showing the annual cost of maintenance and the number of calls attended

by each brigade, also the fire loss in each district.

I have, &c.,

Thos. T. Hugo,

Inspector of Fire Brigades.

The Hon. the Minister of Internal Affairs, Wellington.

SUMMARY OF FIRE CALLS.

SUMMARY OF FIRE CALLS.								
Distric	t.		Fires.	Chimney Fires.	Rubbish Fires, &c.	False Alarms.	Out of District.	Total.
Auckland			75	13	7	29	8	132
Christchurch			86	. 5	5	97	11	204
Dannevirke			8			3	1	12
Dunedin			63	11	22	25	6	127
Feilding			7	3		. 1	1	12
Gisborne			32			1	1	34
Greymouth			8					8
TT	• •		11		1	1		18 13
~~	• •	••		1				Nil.
ww. 1 1.11	• •	• •	3	1 ::				3
	• •	• •	5			i		6
Lawrence	• •	• •	$\frac{3}{4}$					4
Maori Hill	• •	• •	10	8		4	1	23
Masterton	• •	• •	$\frac{10}{2}$	_	• •	_		$\frac{1}{2}$
Milton	• •		8		i	••	1	10
New Plymouth	• •	• •	5		1	1	1	8
Oamaru .	• •	• •			2	5	1	46
Palmerston North	• •	• •	36	2	_ Z	8	1	21
${\rm Petone} \qquad \dots$		• •	13	•••		8		21
Whangarei	• •	• •	2	••	••	••	••	2
Totals	• •		378	42	39	176	32	667

SUMMARY OF FIRE LOSS.

Di	strict.			Insured.	Uninsured.	Totals.
				£	£	£
Auckland	• •			31,648	4,938	$36,\!$
Christchurch				20,255	3,231	23,486
Dannevirke				987	197	1,184
Dunedin		• •		14,256	1,088	15,344
Feilding				$6,\!165$	1,960	8,125
Gisborne				3,653	4,835	8,488
Greymouth				2,081	245	2,326
Hastings				2,206	625	2,831
Hawera	••					Nil.
Hokitika				<b>56</b> 0	200	760
Lawrence	• •			310	97	407
Maori Hill				526		526
Masterton				774	392	1,166
Milton				25	327	352
New Plymouth				2,150	200	2,350
Oamaru				428	95	523
Palmerston North				14,330	7,205	21,535
Petone	• •			1,120	1,146	$2,\!266$
Whangarei	• •	• •	• •	100	100	200
Total				101,574	26,881	128,455

Cost of Fire Brigades.

As taken from the Estimates for the Respective Years.

÷ .				Year ending 30t	th J	une, 1910.	Year ending 30th June, 191
	-			£	s.	d.	£ s. d.
Auckland			•. •	7,276	0	0	7,454 0 0
Christchurch				7,547	0	0	6,849 0 0
Dannevirke				590	5	3	595 11 6
$\operatorname{Dunedin}$				6,000	0	.0	6,000 0 0
Feilding				460	0	0	$542 \ 0 \ 0$
Gisborne				524	8	5	541 8 2
Greymouth				685	10	0	806 4 0
Hastings				708	10	0	756 8 6
Hawera		• •		450	0	0	443 0 0
Hokitika				645	0	0	$475 \ 0 \ 0$
Lawrence				100	0	0	100 0 0
Maori Hill				381	0	0	<b>255</b> 0 0
Masterton		• •		1,334	14	0	926 11 0
Milton				300	0	0	280 0 0
New Plymouth		• •		472	0	0	$457 \ 5 \ 2$
Oamaru				538	8	0	500 0 0
Palmerston No.	$\operatorname{rth}$			1,436	13	0	1,504 0 0
Petone				915	4	11	657 7 5
Whangarei		• •		366	0	0	250 0 0
Т	otals			30,730	 13	7	29,392 15 9

#### AUCKLAND.

An official inspection of the Auckland Fire Brigade was held at the Central Fire Station on the 13th December, 1909, and again on the 16th May, 1910. Subsequent inspections were made of the substations and equipment.

The several "turn-outs" of the appliances were carried out smartly and in quick time, and the various drills—steamer, ladder, hose, rescue, &c.—were performed in an efficient manner, and the members of the brigade appear to be well disciplined, and conversant with their various

The stations and appliances are maintained in good order and condition, but the need for more accommodation at the several stations is very apparent.

During the year the City Council have made considerable improvements to and extension in the reticulation on the higher levels of the city, and a much better supply of water is now

A 100-horse-power Dennis-Gwynne petrol motor, with pump capable of throwing 800 gallons of water per minute, has been ordered by the Auckland Fire Board, and it will be placed in the Beach Road Station—that is, in the vicinity of the greater risks of the city, and with special design to the protection of the Harbour Board's property.

The two following interim reports have been forwarded to the Secretary of the Auckland Fire

Board:-

SIR,-Office of the Inspector of Fire Brigades, Wellington, 29th January, 1910.

In connection with my inspection of your brigade and its appliances, &c., held on the 13th ultimo, I have to recommend for the consideration of your Board the advisability of obtaining another combined fire-escape and ladder. The large-block risks in Auckland, to which in a number of cases, should a fire of any magnitude occur, access is only possible from the frontages and from very narrow streets, render the provision of a second ladder of a more modern type than that at present in use necessary; and I would suggest the purchase of one similar in design, but of smaller dimensions, to those lately supplied to the Liverpool, Sydney, and other These machines are both driven and operated by electricity, and have many points in their favour as a fire-brigade appliance, such as being capable of conveying a number of men, carrying hose and other gear, simplicity of manipulation, &c.

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

Str.-Office of the Inspector of Fire Brigades, Wellington, 27th May, 1910. Following upon my recent visit of inspection to your city, and having in view the rapid increase in number of buildings of large cubical capacity that are adding greatly to the block risks, I beg to submit the following recommendation for the consideration of your Board: The numerical strength of your brigade is insufficient to cope with a block-fire of any magnitude, and, as it would mean a very considerable increase in the cost of maintenance to attach permanently to the brigade such a number of men as might be considered adequate to cope with any emergency, I have to suggest that arrangements should be made, either by the payment of a reasonable subsidy or some such other consideration that may be mutually agreed upon, with the volunteer brigades at present established and operating in the suburban boroughs immediately adjoining the city, whereby a certain number of firemen from each brigade would be available for work at a fire in the city in the event of your Superintendent deeming it necessary at any time to call for such aid.

Thos. T. Hugo,

Inspector of Fire Brigades.

During the year ending 30th June, 1910, 75 fires have occurred in the Auckland Fire District, as against 68 for the previous year.

The loss by fire amounted to £36,586, as compared with £12,679, an increase of £23,907.

Out of the total loss for the year, £36,586, the sum of £32,000 was due to the fire at the

Strand Arcade on the 16th August.

The estimated cost of the brigade for the year 1910-11 is £7,454, as against £7,276 for 1909-10, an increase of £178.

#### CHRISTCHURCH.

Considerable changes in the personnel and alterations in the organization of the Christchurch Fire Brigade have taken place since the date of my last report. The strength is now 42 of all ranks—viz., Superintendent, Deputy Superintendent, 20 permanent and 20 auxiliary firemen—but, in addition, the services of the Railway Brigade are available in cases of emergency.

During my inspection on the 22nd March last it was evident that the members of the brigade attached to the Headquarters Station (I understand that they included a number who had only recently been appointed) were in need of more instruction and drill.

The drills performed by the Chester Street Section were carried out smartly and in an efficient manner.

I understand that from 7.30 a.m. until 7.30 p.m. only eleven men are available for a turnout to a first call in the city. Much depends upon the first few minutes after an outbreak of fire,

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and that is not a sufficient number to attend in response to an alarm from the neighbourhood of the larger buildings of block risks, and arrangements should be made to have more men available for answer to those particular calls.

The stations and equipment are maintained in good order and condition.

I have again to call attention to the need of more accommodation at all stations, and to the expediency of married men being placed in charge of substations.

A chemical and hose motor-car from the Central Station has been placed at the St. Albans

substation.

A 16-horse-power second-hand chassis was purchased, the body built locally to suit requirements, and the machine placed at the Sydenham Substation; but it has not given altogether satis-

factory results.

The 70-horse-power Dennis-Gwynne petrol fire motor, fitted with pump capable of throwing 450 gallons of water per minute, ordered by the Fire Board some time ago, was delivered in Christchurch in June. It has been put through a series of severe trials, and has given entire satisfaction, the turbine pump in particular giving most satisfactory results. A tender for the installation of a more modern system of street fire-alarms than those at present in use has been accepted, and the alarms are now in course of erection; also a better method of marking the position of the fire hydrants is being introduced.

During the year ending 30th June, 1910, 86 fires have occurred in the Christchurch Fire District, as compared with 76 for the previous year, an increase of 10.

The loss by fire amounted to £23,486, as against £12,902, an increase of £10,584.

The estimated cost of the brigade for the year 1910-11 is £6,849, as against £7,547 for 1909–10, a decrease of £698.

#### DANNEVIRKE.

An inspection of the Dannevirke Fire Brigade and its equipment was held on the 19th August, 1909; present—Superintendent, Deputy Superintendent, and 15 firemen, or 17 out of a then strength of 21.

A second inspection was held at 7.30 p.m. on the 12th April, 1910, when there were present-Superintendent, Deputy Superintendent, 16 firemen, and 2 messengers; with 2 on leave; or 22 accounted for out of a total of 24 then on the roll.

The attendance at the musters was fairly satisfactory.

The work performed at the first inspection was carried out energetically, but the members of the brigade require steadying down, and more exercise in the various drills.

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

The building of the proposed new station on the site in Allardyce Street, acquired in 1908, has not yet been put in hand, nor has the bell yet been removed to a more suitable site. sion should be made for carrying ladders to a fire.

A number of hydrants have been placed on the footpath in the main street, each with a 3 in. set-off pipe from the 8 in. main on the roadway. If it is considered expedient by the borough authorities to place the hydrants in that position, the set-off pipes should not be less than 4 in. in diameter. There are various reasons for this, and it is particularly necessary in Dannevirke, owing to the considerable corrosion that takes place in the water-pipes there.

During the year ending 30th June, 1910, 8 fires have occurred in the Dannevirke Fire District, as against 5 for the previous year, an increase of 3. The loss by fire amounted to £1,184, as compared with £875, an increase of £309.

The estimated cost of the brigade for the year 1910-11 is £595 11s .6d., as against £590 5s. 3d. for 1909-10, an increase of £5 6s. 3d.

#### DUNEDIN.

Inspections of the Dunedin Fire Brigade were held on the 27th September, 1909, and the 16th March, 1910. The respective "turn-outs" were accomplished smartly and in quick time. The various drills were carried out in a satisfactory manner, and good discipline is apparent.

The following interim report was forwarded to the Secretary of the Dunedin Fire Board :-SIR,-

Office of the Minister of Fire Brigades, Wellington, 31st March, 1910. Following upon my inspection of the Dunedin City Fire Brigade on the 16th instant I beg to make the following recommendations for the consideration of your Board:-

The Brigade is numerically weak, consisting as it does at present of 24 members all told. I understand your Board has authorized the addition of 2 permanent and 4 auxiliary firemen: this will give a total strength of 30, but included in that number are 3 drivers and 1 waterman, who presumably are not available for actual fire-work. Then, between the hours of 7.30 p.m. and 11.30 p.m. the number is still further reduced by the absence of 2 firemen on theatre duty. Again, there is always at least 1 on leave: this, then, leaves, for some hours out of the twenty-four (and including the Superintendent and officers), only 23 available for actual work at a fire. This number is not nearly sufficient to handle a fire of the least magnitude, and means in such a case that the brigade have to rely greatly upon the general public for assistance; and I would suggest, pending the erection of the new Central Station and reorganization of the suburban brigades, that immediate arrangements should be made whereby members of both or at least one of the suburban brigades, should be available for a city call in case of emergency.

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I have further to recommend to your Board the advisableness of purchasing a "combined electric turn-table fire-escape and hose tender," the ladder to pitch to a height of 70 ft. or 75 ft. There are many points in favour of these machines as a fire-brigade appliance. into this matter whilst in Dunedin with the Chairman of your Board and the Superintendent of your Brigade. They are built to carry from ten to twelve men, up to 2,000 ft. of hose, stand-pipes, &c., and I would suggest that the Superintendent he instructed to draw out a general specification of his requirements—i.e., height of ladder, number of men and appliances to be carried, speed, number of miles capacity per charge, grade to be guaranteed—and that a price be obtained accordingly.

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The quantity of hose at the Caversham Station—530 ft.—is not sufficient—another 300 ft. should be supplied; also they should be provided with a hand-pump and buckets. Some of the hydrant indicators in the Caversham district are missing, and this matter requires attention.

I have, &c.,
Thos. T. Hugo,

Inspector of Fire Brigades.

Through inability to obtain the amount of money required, the erection of the proposed new Central Fire Station in Cumberland Street has been delayed. However, this difficulty has been overcome, and the building is to be proceeded with. A suitable site for a new substation has been secured in Cargill Road, and it is intended, as opportunity offers, to build a station thereon that will serve for the protection of both the South Dunedin and Caversham districts.

The South Dunedin branch of the brigade was inspected on the 17th March, 1910. There is on the roll of this section captain, lieutenant, and 12 firemen, or 14 all told, and there was a full attendance at the muster at 8 p.m. The drill was performed with a marked efficiency, and excellent discipline is manifest. The station and appliances are maintained in good order and

condition.

The Caversham branch was inspected on the 19th March, 1910. There are on the roll captain, lieutenant, and 14 firemen, or 16 all told. There were present at the muster at 8 p.m. captain, lieutenant, and 11 firemen. This was a very satisfactory attendance under the circumstances. The drill was carried out in an efficient manner. The station is old and very dilapidated, and, partly as a consequence, the equipment was not in the best of order and condition.

During the year ending 30th June, 1910, 63 fires have occurred in the Dunedin Fire District,

as compared with 54 for the previous year, an increase of 9.

The loss by fire amounted to £15,344, as against £6,504, an increase of £8,840.

The estimated cost of the brigade for the year 1910–11 is £6,000, the same amount as for 1909-10.

#### FEILDING.

An inspection of the Feilding Fire Brigade was held at 8 p.m. on the 30th August, 1909, when there were present—Superintendent, Deputy Superintendent, 18 firemen, and 2 messengers; 1 on leave: or 23 accounted for out of a total of 24 then on the roll. This was a very good attendance.

leave: or 23 accounted for out of a total of 24 then on the roll. This was a very good attendance. For the second inspection at 8.25 p.m. on 24th January, 1910, a false alarm of fire was given by means of ringing the firebell, and at 8.27 6 p.m. the horse hose-reel, with five men in attendance, had been smartly turned out. The roll was called at 8.35 p.m., ten minutes after the first toll of the bell, when the Superintendent, Deputy, 10 firemen, and 2 messengers were found present, or 14 out of a total of 20 then on the roll. This must be considered a fairly satisfactory muster, and altogether since my first visit of inspection there is a manifest improvement in the personnel and the work, as carried out at drills, in this brigade. The plant and appliances are maintained in good order and condition. A commodious two-story Central Station is in course of erection. in good order and condition. A commodious two-story Central Station is in course of erection, and should be ready for occupation in the course of a few weeks. Additions to the minor plant have been made during the course of the year, but the Board should now take into consideration the installation of a system of street fire-alarms.

During the year ending 30th June, 1910, 7 fires occurred in the Feilding Fire District, the

same number as during the previous year

The total loss by fire amounted to £8,125, as against £1,818 last year, an increase of £6,307. Of the total loss incurred, £5,880 was due to the fire that partially destroyed the Feilding Hotel, 5th October, 1909.

The estimated cost of the brigade for the year 1910-11 is £542, as against £460 for 1909-10,

an increase of £82.

# GISBORNE.

An inspection of the Gisborne Fire Brigade was held on the 16th August, 1909, when there were present—Superintendent, Deputy, and 21 firemen; with 2 on leave: all accounted for.

A second inspection was held at 7.30 p.m. on the 7th April, 1910; present, Superintendent,

Deputy, and 20 firemen, with 2 on duty and 1 on sick-leave: all accounted for.

The present strength of the brigade is 25 all told—viz., Superintendent, Deputy, and 23 fire-

The attendance at both musters was very satisfactory, and good discipline is apparent. The drills were carried out in a smart and workmanlike manner, but more instruction, as pointed out at the time, is necessary.

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

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The Fire Board have made a number of improvements in the brigade equipment, the principal being as follows: A horse is now available for taking the plant to a fire. Hose-boxes equipped with 200 ft. of hose, branch, and standpipe have been placed, one in Gladstone Road and another in Whataupoko district. The cracked bell in the tower in Gladstone Road has been replaced by a new one, but no move has yet been made in the more important matter of erecting a new fire station.

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

Office of the Inspector of Fire Brigades, Wellington, 21st April, 1910. SIR,-In connection with my recent visit of inspection to your town I have again to bring under the notice of your Board the necessity for the erection of a new Central Fire Station that will provide accommodation for a resident caretaker and sleeping accommodation for firemen.

The brigade has not yet been provided with coupling-ladders suitable for carrying to a fire, and no provision for fire protection has yet been made in the Kaiti district, nor is there any

improvement in marking the position of the fire hydrants.

Seeing that the foregoing are matters that very materially affect the efficient working of the brigade, I would respectfully suggest that they should receive the active consideration of your Board at its earliest convenience.

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

During the year ending 30th June, 1910, 32 fires have occurred in the Gisborne Fire District,

as against 13 for last year, an increase of 19.

The loss by fire was £8,488, as compared with £5,887 for the previous year, an increase of

£2,601.

There has been a very high percentage of fires, in proportion to population, in the Gisborne Fire District during the past year—viz., 4 566 per thousand. Another feature calling for remark is the large proportionate number of fires returned as due to incendiarism or unknown causes: out of a total of 32 fires in the district, 5 have been returned as caused by incendiaries, and 24 as due to unknown causes.

The estimated cost of the brigade for the year 1910-11 is £541 8s. 2d. as compared with £524 8s. 5d. for 1909-10, an increase of £16 19s. 9d.

## GREYMOUTH.

An inspection of the Greymouth Fire Brigade was held on the 4th November, 1909. At the

roll-call at 9.40 p.m. there was a full attendance—viz., Superintendent, Deputy, and 18 firemen.

At the second inspection, on the 28th April, 1910, there were present—Superintendent, Deputy, and 12 firemen, or 14 accounted for out of a total strength of 20 then on the roll.

The attendance at the first inspection was very satisfactory, but that at the second was not so. The fire-engine during the first inspection was handled in a very capable manner, and the various drills were carried out smartly and efficiently.

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

A new bell-tower, roughly constructed of wood, has been erected at the corner of Buccleuch and High Streets. The lower part of the tower should be boarded in, and a light hose-reel, equipped with a hose, branch, and standpipe, at present in the neighbouring box, placed there; ladders also are required there. Other minor additions to the equipment have been made during the year, but in the matter of providing better station accommodation nothing of any moment has been done. It is simply a waste of money to do any patching to the old and dilapidated building that is at present doing duty as a Central Fire Station; also, the Blaketown district is without any adequate protection from fire.

During the year ending 30th June, 1910, 8 fires occurred in the Greymouth Fire District, as

compared with 2 for the previous year, an increase of 6.

The loss by fire amounted to £2,326, as against £280, an increase of £2,046.

The estimated cost of the brigade for the year 1910-11 is £806 4s., as against £685 10s. for 1909-10, an increase of £120 14s.

#### HASTINGS.

The 30th June, 1910, completes the first official year that the Hastings Fire Brigade has been working under the control of the Fire Board, and the following two reports cover my inspections of that brigade and its equipment:

SIR, Office of Inspector of Fire Brigades, Wellington, 12th October, 1909.

In reply to your letter dated the 20th ultimo addressed to the Minister of Internal Affairs, and asking for a copy of Inspector Hugo's report on the Hastings Fire Brigade, I have the honour to forward you the following report:

I gave a call at the fire station at 8.8 p.m. on Thursday, the 12th August, for a supposed fire on a vacant section at the corner of Warren and Queen Streets, some 325 yards distant from the station, directing that two deliveries should be got to work from the steamer. The engine, reel, and Fire Police salvage-van were turned out smartly. The engine was placed alongside the sewer-

9 H.--6A.

trap at the intersection of the Heretaunga and Warren Streets. Steam was raised to 60 lb. pressure and the engine started to work at 8.17.15 p.m., but no water was obtainable, and it was 8.29.10 p.m. before sufficient water had backed up in the sewer to allow the water to be shown from the first delivery. The second water was shown 1 minute 5 seconds later.

Personnel of the Brigade.—There was a full muster of the brigade, consisting of the Superintendent, Deputy Superintendent, 2 engineers, 24 firemen, and 3 messengers. They are a smart, capable body of men, of good physique, and appear to take an interest in their work, but require

more instruction, particularly in the life-saving part of fire-brigade work.

Of the Fire Police there were present—captain, 3 lieutenants, and 7 constables, or 11 out of a total strength of 15 on the roll. They appear to be a capable body of men, and efficient in the duties they are called upon to perform, but they also should receive instruction in such first aid

as applies to fire-brigade work.

Station and Equipment.—The present station is inadequate for its purpose; the accommodation for both men and appliances is altogether too limited, and it is impossible to make efficient arrangements for horsing the fire-engine, but some more satisfactory method than that at present existing should be adopted. It is absolutely necessary that a site should be acquired and a suitable station erected thereon. In selecting the site and designing the building future expansion and developments should be carefully taken into consideration. A set of coupling-ladders are

required.

Means for extinguishing Fires.—The chemical engine lately acquired by your Board will be found, in conjunction with hand-pumps, a most valuable appliance for dealing with incipient fires, or fires in the earlier stages; but, beyond that stage, matters assume a serious aspect. By reference to figures given above it will be seen that the call was given at 8.8 p.m., and, although the engine was ready to work some ten minutes later, it was 8.29 10 p.m., or 21 minutes 10 seconds from the time the call was given, before the first water was available—this right in the heart of the town, and under, as far as regards the call, what must be considered favourable circumstances; and I consider it my duty to strongly emphasize the danger, as in the event of a late call, for instance, of a disastrous conflagation due to prevailing conditions taking place at any moment. And this risk is always becoming greater owing to the increase of the number of buildings of larger cubical capacity than those formerly built. The more prosperous your town becomes, the more this danger will increase unless adequate means of fire protection are provided. 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. It must be understood that this method would be only a partial remedy, and is not suggested as an alternative to a gravitation or other reticulative supply.

A matter to which I would draw your attention is, at a fire of any magnitude firemen as a rule cannot help their clothing getting wet through, perhaps remaining in that state for hours; consequently there is considerable danger to their health when the water used is drawn from the

sewers, as in Hastings.

I have, &c., Thos. T. Hugo,

Inspector of Fire Brigades.

A. Collinge, Esq., Secretary, Hastings Fire Board, Hastings.

Office of Inspector of Fire Brigades, Wellington, 30th May, 1910. SIR.

In reply to your letter dated the 25th instant, addressed to the Minister of Internal Affairs, and asking "for a copy of Inspector Hugo's last report on the Hastings Fire Brigade," I beg to forward you a report in that connection as follows:

At the inspection muster held at 7.30 p.m. on the 11th April last there were present the Superintendent, Deputy Superintendent, 18 firemen, and 3 messengers, or 23 out of a total of 25.

was satisfactory.

At the Fire Police muster there were present—captain, lieutenant, and 9 constables, or 11 out of 19 on the roll; 3 constables reported later. This was not very satisfactory. The drill was carried out in a satisfactory manner; all plant and appliances clean and in good order. I have to again (see previous report to your Board, dated 12th October, 1909) recommend the urgency of acquiring a site, and the erection of a new fire station to take the place of the present inadequate More attention should be given to ambulance instruction in relation to accidents at fires, particularly by the Fire Police, and they should be supplied with a small first-aid ambulance-

Greater care should be taken of the hose. The damage to the length of new hose was caused by its being very badly chafed, presumably when hung up to dry.

I have, &c.,

THOS. T. HUGO,

Inspector of Fire Brigades.

A. Collinge, Esq., Secretary, Hastings Fire Board, Hastings.

The ratepayers of Hastings have recently sanctioned the raising of a loan for the purpose, amongst others, of providing a gravitation system of water-supply; and in view of the present inadequate protection from fire, and the consequent danger of serious loss, it is to be hoped that the work of reticulation will be put in hand with the least possible delay.

During the year ending 30th June, 1910, 11 fires have occurred in the Hastings Fire District.

The loss by fire amounted to £2,831.

The estimated cost of the brigade for the year 1910-11 is £756, as against £708 for the year 1909-10, an increase of £48.

#### HAWERA.

An inspection of the Hawera Fire Brigade and of the Fire Police Corps was held on the 2nd September, 1909, when there were present: Brigade—Superintendent, Deputy, and 9 firemen; 3 were on leave and 1 sick; or, 15 accounted for out of 17 then on the roll. Fire Police—Captain, lieutenant, and 6 constables; 3 were on leave and 1 sick; or, 12 accounted for out of 15 on the roll. The second inspection was held on the 3rd February, 1910. Brigade: Present—Superintendent, Deputy, 15 firemen, and 1 messenger; 1 was on leave and 1 sick; or, 20 accounted for out of 21 on the roll. Fire Police: Present—Captain, lieutenant, and 5 constables, or 7 out of a total strength of 14.

The attendance of members of the brigade was good, but that of the Fire Police Corps was very unsatisfactory. Most of the drills were carried out in a smart and efficient manner, and a good discipline is manifest in the brigade. The Central Station and brigade appliances are maintained in good order, and the Fire Police plant is in much better condition than at the time of my previous visit. New hose and coupling-ladders have been provided. No improvement in the

hanging of the fire-bell has yet been made.

In an interim report dated the 10th February, 1910, addressed to the Secretary of the Board, I have suggested the neighbourhood of the junction of High and Disraeli Streets as a very suitable site for the new hose-reel shed and bell proposed to be erected at the west end of the town; also that a large-sized trembler bell should be placed in the engine-house at the Central Station.

The Hawera Fire Board should take into consideration the provision of a street fire-alarm

During the year ending 30th June, 1909, no fires have occurred in the Hawera Fire District; during the previous year three fires took place, with a loss of £233.

The estimated cost of the brigade for the year 1910-11 is £443, as against £450 for 1909-10,

a decrease of £7.

#### HOKITIKA.

An inspection of the Hokitika Fire Brigade was held on the 5th November, 1909. Present-Superintendent, Deputy, and 16 firemen; 2 were on leave and 2 sick: leaving 8 unaccounted-for.

A second inspection was held on the 27th April, 1910. Present—Superintendent, Deputy, and 8 firemen; 3 were on duty and 1 sick: or, 14 accounted for out of a total strength of 30 on

the roll.

The attendance of members of the brigade at the inspection and subsequent drills compares very unfavourably with those of others under the control of Fire Boards, and points to an absence of discipline in that respect or to a want of interest generally in the matter of becoming efficient. Those members who were in attendance carried out the required drills in a smart and competent The stations and plant are maintained in good order and condition.

The high-pressure water system has been installed throughout the town, and a good working-

pressure, averaging 105 lb., is available
Since its inception the Hokitika Fire Board has made considerable additions to the equipment of the brigade. A substantial iron-framed bell and watch tower has been erected, also two new hose-reel sheds, one at the east end of Gibson's Quay, and the other in the north-eastern part of the town. Two new hose-reels, new hose, standpipes, and minor requisites have been purchased, and in the matter of stations, plant, and appliances sufficient provision has been made for the present; but it would add very considerably to the efficient working of the brigade if, as recommended in my report dated the 17th May, 1909, sleeping accommodation for, say, three firemen was provided at the Central Station.

During the year ending 30th June, 1910, 3 fires have occurred in the Hokitika Fire District,

as against 5 for the previous year, a decrease of 2.

The loss by fire amounted to £760, as against £1,270, a decrease of £510.

The estimated cost of the brigade for the year 1910-11 is £475, as compared with £645 for the year 1909-10, a decrease of £170.

#### LAWRENCE.

At 7.35 p.m. on the 24th September, 1909, a surprise alarm of fire was given in Lawrence by means of ringing the fire-bell. The first jet of water was shown at a point some little distance from the station at 7.38 25 p.m., and the second at 7.38 53 p.m., or 3 minutes 25 seconds and 53 seconds respectively from the time of first ringing the bell. This was a very good performance.

At the muster there were present—Superintendent, Deputy, and 9 firemen, or 11 out of a total of 12 on the roll. At the second inspection, held at 7.46 p.m. on the 15th March, 1910, there were present—Superintendent, Deputy, and 8 firemen; with 2 on leave: full strength accounted The attendance at both musters was very good.

The various drills were performed in a creditable manner, but attention should be paid to rescue and ambulance work.

A new iron-framed bell-tower has been erected in a more suitable position than that occupied by the old tower.

Five hundred feet of new hose has been purchased, but another hand-pump is required.

During the year ending 30th June, 1910, 5 fires have occurred in the Lawrence Fire District, as against 3 for the previous year, an increase of 2.

The loss by fire amounted to £407, as compared with £550, a decrease of £143.

The estimated cost of the brigade for the year 1910-11 is £100, the same amount as for 1909-10.

#### MAORI HILL.

Two inspections of Maori Hill Fire Brigade have been held, 28th September, 1909, and 18th March, 1910.

There was a good attendance of members of the brigade at both musters.

During my last inspection a very decided improvement in carrying out the various drills was evident.

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

A street fire-alarm system has been installed, but was not yet in working-order at the time

Following are two interim reports forwarded to the Secretary of the Maori Hill Fire

Board :-

Office of the Inspector of Fire Brigades, Wellington, 29th October, 1909. Sir,-

In reply to your letter dated the 19th instant, asking if I have any advice to give in reference to the efficiency of your brigade's equipment, I beg to make the following suggestions:— First, the quantity of hose, 1,750 ft., divided between the two stations is not sufficient; there

should not be less than 2,000 ft. of hose always available.

Second, a pair of 10 ft. 6 in. coupling-ladders are required for each station.

Third, hand-pumps should be supplied, one to each station.

Fourth, to obtain as good results as possible from the fire-alarm system you are installing, it should be connected up directly with the big bell by means of a water-wheel or other mechanical means, so that in case of a fire during the day, or at other times when there is no one at the station, the bell will be automatically rung by the person operating the fire-alarm box. this is done it will be found that, on an average, for fourteen hours out of the twenty-four the installation will be of no service, for the simple reason that there will be nobody at the station to attend to the alarm.

Fifth, direct communication should be established between the two stations.

Sixth, special arrangements for giving the alarm should be made with the management of the paper-mills, in case of a fire breaking out on their premises. At the inspection drill held on the 28th September last it was apparent that the brigade required more drill, mainly for the purpose of steadying them down at their work, as most of the faults or errors were due to overeagerness rather than to the want of knowledge of what was actually required.

I have, &c., Thos. T. Hugo,

Inspector of Fire Brigades.

Office of Inspector of Fire Brigades, Wellington, 2nd April, 1910. SIR.-Following upon my inspection of your brigade, I beg to inform you that the stock of All the hose is carried on the reels—viz., 650 ft. At least another 500 ft. should be procured and hose in the district, 1,100 ft., is not sufficient. in the South Ward and 450 ft. at Woodhaugh. kept in reserve—say, 300 ft. at the South Ward Station, and the remaining 200 ft. at the Wood-I have, &c., Thos. T. Hugo, haugh Station.

Inspector of Fire Brigades.

During the year ending 30th June, 1910, 4 fires have occurred in the Maori Hill Fire District, as against 1 for the previous year, an increase of 3. The loss by fire amounted to £526, as against £550, a decrease of £24. The estimated cost of the brigade for the year 1910-11 is £255, as compared with £381 for 1909–10, a decrease of £126.

# MASTERTON.

An inspection of the Masterton Fire Brigade and Fire Police Corps was held at 8 p.m. on the 25th October, 1909. Brigade: Present—Superintendent, Deputy, and 19 firemen; and 1 on leave: all accounted for. Fire Police: Present—Captain, 2 lieutenants, and 10 constables; 3 on leave and 1 sick: leaving 2 unaccounted-for.

The second inspection was held at 8 p.m. on the 11th February, 1910. Brigade: Present-Superintendent, Deputy, and 12 firemen; 3 on leave, and 1 sick: or, 18 accounted for out of a total of 20 then on the roll. Fire Police: Present—Captain, 1 lieutenant, and 7 constables; 2 on leave: or, 11 accounted for out of a then strength of 15 all told.

The attendance of members of the brigade at the inspection musters and drills was very good, but the attendance of Fire Police, particularly at the last inspection, was not very satis-

The various drills were carried out in a smart and efficient manner.

Good discipline appears to be maintained.

The plant and appliances of both brigade and Fire Police is in good order and condition. The Fire Board having purchased a site with a frontage to Queen Street, competitive plans for a new Central Station were called for. One of the designs sent in was, after some minor modification, accepted, and the work put in hand.

The fire-engine has been fitted with a new firebox, and is now in good working-order.

No tender has yet been accepted for the proposed street fire-alarm installation. The brigade has not yet been provided with hand-pumps, and the Fire Police require more suitable ropes for their street-work.

During the year ending 30th June, 1910, 10 fires have occurred in the Masterton Fire District, as against 17 for the previous year, a decrease of 7.

The loss by fire amounted to £1,166, as against £5,244, a decrease of £4,078.

The estimated cost of the brigade for the year 1910-11 is £926 11s., as compared with £1,334 14s. for 1909-10, a decrease of £408 3s.

#### MILTON.

Two inspections of the Milton Fire Brigade have been held, 23rd September, 1909, and 14th March, 1910, respectively.

At the first inspection there were present—Superintendent, Deputy, and 9 firemen; with 2 on leave: or, 13 accounted for out of 14 then on the roll.

At a second inspection there were present only the Superintendent, Deputy, and 3 firemen. This poor attendance was due to the Secretary of the Fire Board, after being notified, not informing the Superintendent in proper time of my proposed visit.

The present authorized strength of the brigade is-Superintendent, Deputy, 10 firemen, and

3 auxiliary firemen.

The station and appliances are in good order and condition. Considerable improvements

have been made in fire-protection matters in Milton
The new station was taken over in November last. It is a wooden structure of one story, well designed for its purpose, and containing commodious engine-house, watch, meeting, store, and bath rooms, also sleeping-accommodation for three firemen.

A double-cylinder (of 25 gallons capacity each) chemical engine, manufactured in Christ-church, has been purchased. Two 3-gallon hand-chemicals have also been purchased. One of the hand-brake pumps has been mounted on a suitable carriage.

This brigade is in a much better position to cope with outbreaks of fire than it was formerly,

but the want of a proper water-supply may at any time result in a serious loss.

During the year ending 30th June, 1910, 2 fires have occurred in the Milton Fire District, as against 1 for the previous year, an increase of 1.

The loss by fire amounted to £352, as against £320, an increase of £32.

The estimated cost of the brigade for the year 1910-11 is £280, as compared with £300 for 1909-10, a decrease of £20.

## NEW PLYMOUTH.

An inspection of the New Plymouth Fire Brigade was held on the 1st September, 1909. Present—Superintendent, Deputy Superintendent, 22 firemen, and 5 auxiliary firemen; with 1 on sick leave: total strength accounted for. At the second inspection, at 8 p.m. on the 4th February, 1910, there were present—Superintendent, Deputy Superintendent, 17 firemen, and 5 auxiliary firemen; 2 were on duty, 1 on sick leave, and 3 on leave: all accounted for. There was a very satisfactory attendance at both musters, and good discipline is apparent. The present strength of the brigade totals 30 of all ranks. The various drills were carried out in a smart and efficient manner; any omissions were mostly due to the positions of the hydrants not being marked or clearly marked, and the following letter in connection has been forwarded to the Secretary of the Fre Board:

Office of Inspector of Fire Brigades, Wellington, 10th February, 1910.

I have the honour to inform you that during the drill of your brigade held for inspection purposes it was discovered that the positions of certain of the fire hydrants were very indistinctly marked; in some instances there were no indicators at all. It must be obvious that unless the hydrants are very clearly and distinctly marked, it becomes very difficult to pick them up promptly, particularly on dark or wet nights, resulting in very serious delay in the brigade getting to work. Therefore I would suggest that your Board should endeavour to have this defect remedied with as little loss of time as possible.

I have, &c.,

THOS. T. HUGO,

Inspector of Fire Brigades.

Stations and appliances are maintained in good order and condition. Alterations have been made at the Central Station, and sleeping-accommodation for seven firemen is now available.

Minor additions have been made to the equipment during the year.

I have to recommend that the Fire Board should take into consideration the advisability of installing a street fire-alarm system. There are some fairly large risks in New Plymouth, and the loss of some minutes for want of proper facilities to give a prompt alarm may have disastrous consequences. I would draw the attention of the Board to a recommendation contained in my report dated the 20th August, 1908, "The hydrants are spaced quite far enough apart, and some more of them should certainly be laid down in the more congested parts of the town, particularly in the neighbourhood of the larger fire risks."

During the year ending 30th June, 1910, 8 fires have occurred in the New Plymouth Fire

District, the same number as in the previous year. The loss by fire amounted to £2,350, as against £4,950, a decrease of £2,600.

The estimated cost of the brigade for the year 1910-11 is £457 5s. 2d., as against £472 for 1909-10, a decrease of £14 14s. 10d.

#### OAMARU.

An inspection of the Oamaru Fire Brigade was held on the 29th September, 1909, when there were present-Deputy Superintendent and II firemen; with the Superintendent on leave.

A second inspection was held at 8 p.m. on the 11th March, 1910. Present—Superintendent, Deputy, and 12 firemen; with 1 on leave: all accounted for. The attendance at the musters was very good. The strength of the brigade is 15 all told.

Drills were performed in an efficient manner, with every appearance of good discipline.

The station and equipment are maintained in good order and condition.

Possession was taken of the new station in August last. It is a well designed and fitted-up stone structure of one story, contains ample accommodation, and should meet the requirements of Oamaru for many years to come. Firemen now sleep on the premises, and a horse is stabled there, and this should result in a smart turn-out in response to an alarm of fire. I noticed that a number of the fire hydrants were completely covered over with road-metal, and during the course of a drill the waterway of one hydrant was found to be covered over with a metal plate secured by a bolt and nut. I understand there are others in the same condition. These faults should be rectified at once.

I have to again recommend (see report dated 3rd March, 1909) the placing of a small reelshed and bell somewhere towards the north end of Thames Street, the shed to be equipped with reel, hose, hydrant, and ladders.

During the year ending 30th June, 1910, 5 fires have occurred in the Oamaru Fire District, as against 25 for the previous year, a decrease of 20.

The loss by fire amounted to £523, as against £4,180, a decrease of £3,657.

The estimated cost of the brigade for the year 1910-11 is £500, as against £538 for 1909-10, a decrease of £38.

#### PALMERSTON NORTH.

Two inspections of the Palmerston North Fire Brigade have been held—viz., on 27th August, and 27th January, 1910, respectively. The attendance of members of the brigade at both 1909, and 27th January, 1910, respectively. musters was very satisfactory. Of the Fire Police Corps there were only the captain and four constables present at the first inspection, but since then it has been considered expedient to disband that corps and increase the strength of the brigade, which now numbers 28 all told—viz., Superintendent, Deputy Superintendent, and 26 firemen.

The various drills were carried out efficiently, and apparently good discipline is maintained.

The plant and appliances are in good order and condition.

The Fire Board has made considerable improvement in fire-brigade matters in Palmerston, the principal item being the erection, on a suitable site in Cuba Street, of a two-story Central Station, that is now nearly ready for occupation. Other minor additions and alterations have been made to the equipment of the brigade, and the question of further improvement is under consideration.

During the year ending 30th June, 1910, 36 fires have occurred in the Palmerston Fire District, as against 32 for the previous year, an increase of 4.

The loss by fire amounted to £21,535, as against £17,306, an increase of £4,229.

There was a run of serious fires in the early part of April, a number being attributed to incendiarism. Of the total number of fires for the year (36), the Superintendent has returned the origin of no less than 9 as being due to that cause.

The estimated cost of the brigade for the year 1910-11 is £1,504, as against £1,436 for

1909-10, an increase of £68.

#### PETONE.

In addition to other visits in connection with brigade matters, an inspection of the Petone Fire Brigade was held on the 10th February, 1910, when there were present — Superintendent, Deputy Superintendent, 16 firemen, and 2 messengers; with 1 on sick-leave: all accounted for. The total strength of the brigade is Superintendent, Deputy, 17 firemen, and 2 messengers.

The attendance at the muster was very good, and the various drills performed were carried

out efficiently. Station and appliances are maintained in good order and condition.

The new street fire-alarm installation has given satisfaction.

A number of improvements in the matter of fire protection have been made in the Petone Fire District, including the purchase of a horse and four-wheeled hose-and-ladder cart. Constructive alterations have been made at the station, whilst other minor matters have been attended to; but I have again to call attention to the necessity for the erection of a new station that will provide sleeping-accommodation for a certain number of firemen.

During the course of the year ending 30th June, 1910, 13 fires have occurred, as compared

with 6 for the previous year, an increase of 7.

The loss by fire amounted to £2,266, as against £1,529, an increase of £737.

The estimated cost of the brigade for the year 1910-11 is £657 7s. 5d., as against £915 4s. 11d. for 1909-10, a decrease of £259 17s. 6d.

#### WHANGAREI.

Two inspections of the Whangarei Fire Brigade and its equipment have been held-viz., on 15th December, 1909, and 18th May, 1910, respectively. The two following interim reports cover the inspections.

Office of Iuspector of Fire Brigades, Wellington, 23rd December, 1909. SIR,-I beg to inform you that an inspection and drill of your brigade was held on Monday, the 15th instant, at 8 p.m. Of the full strength of the brigade-viz., 20 all told-there was present the Superintendent, Deputy Superintendent, and 14 firemen; 2 were on sick-leave; leaving 2 unaccounted-for. I note that since my last visit the strength of the brigade has been increased by the addition of four auxiliaries. The work that the brigade was called upon to perform was carried out in an energetic and willing manner, but more exercise in the various drills is required, and the work should be performed in a more deliberate manner. At the termination of the drill an address of instruction was given, and matters to which attention should be paid were pointed out. In view of the manner in which empty cases, straw, rubbish, &c., are stored on some of the premises in your town, it is necessary, so that ordinary precautions in this matter may be taken, that your Board should make a by-law regulating the storage of such materials. (Power for this specific purpose is given by the Fire Brigades Act, 1908, section 43, subsection (d).) This will enable your Superintendent to order immediate removal in cases where such storage has become, in his opinion, dangerous. In the question of the inspection of buildings, as this inspection concerns only the provision of means of escape in cases of fire in buildings used for residential purposes, the matter might be mutually arranged between the Borough Council and your Board on the lines as discussed between us on the 14th instant.

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

James Harrison, Esq., Chairman, Whangarei Fire Board.

Office of the Minister of Internal Affairs, Wellington, 23rd June, 1910. SIR,-I beg to acknowledge receipt of your telegram, dated the 21st instant, asking for a report

in connection with my last visit of inspection to your town.

In reply thereto I beg to refer you to recommendations in the matter of better means of conveying the appliances to a fire, and the installation of a fire-alarm system, contained in my report dated 8th June, 1909. Further, I have to again recommend (see report dated 23rd December, 1909) that the members of the brigade should be given more exercise in the various drills, including ambulance and rescue work. The drills should be carried out regularly, and with as near an approach to actual fire-conditions as possible.

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

C. J. Eccles, Esq., Secretary, Whangarei Fire Board.

The station and appliances are maintained in good order and condition. During the year ending 30th June, 1910, only 2 fires have occurred in the Whangarei Fire District, as against 4 for the previous year, a decrease of 2.

The loss by fire amounted to £200, as against £673, a decrease of £473. The estimated cost of the brigade for the year 1910–11 is £250, as against £366 for 1909–10, a decrease of £116.

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