

1917.

NEW ZEALAND.

FIRE BRIGADES OF THE DOMINION.

APPENDIX TO THE REPORT BY THE INSPECTOR OF FIRE BRIGADES FOR THE
YEAR ENDED 30TH JUNE, 1917.

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.

Office of Inspector of Fire Brigades,
Wellington, 20th August, 1917.

SIR,—

Herewith I have the honour to submit an analysis relative to the fires reported as having occurred throughout the fire districts for the year ended 30th June, 1917, together with 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.

Nine new circuits with eighty-two new call-boxes have been added to the street fire-alarm installations. Only two new auto-detector fire-alarm installations have been put in during the twelve months.

The total number of calls received by the brigades throughout the fire districts was 775, as against 749 for the previous year, an increase of 26. There has been a decrease in the number of actual fires, 421 (457), decrease 36, as also in "out of district" fires, 28 (26), decrease 2; but an increase under other headings—viz., chimney fires, 62 (57), increase 5; bush and rubbish fires, 82 (54), increase 28; false alarms, 184 (153), increase 31. Of the 421 fires 9 are reported as due to incendiarism, 6 as very suspicious, 10 occurred in unoccupied premises, and 156 as of unknown origin.

Losses throughout the fire districts: The heaviest district losses occurred in Auckland (£33,445), Hamilton (£26,967), and Hastings (£24,315); the total loss for the twelve months ended 30th June amounting to £142,176, as against £99,271 for the previous twelve months, an increase of £42,905.

Losses throughout the Dominion: The insured loss throughout the Dominion for the year ended 31st December, 1916, was £402,373.

Following the same line of deduction as adopted in previous years, and adding 33½ per cent. to the ascertained insurance loss so as to arrive at the approximate fire waste, the total loss for the year ended 31st December, 1916, is thus shown to amount to £536,497, a decrease for the year of £86,060 as compared with the average waste per year for the previous eight years—that is, since 31st December, 1907.

The losses throughout the fire districts and the losses throughout the Dominion quoted above are each for a term of twelve months, but ending at different periods of the year; and the insured loss for the simultaneous twelve months ended 31st December, 1916, is for the Dominion £402,373, and for the fire districts £92,055, or 22·88 per cent. of the total loss.

I have, &c.,

THOS. T. HUGO,

Inspector of Fire Brigades.

The Hon. the Minister of Internal Affairs.

1. SUMMARY OF FIRE CALLS.

District.	Fires.	Chimney Fires.	Bush, Grass, and Rubbish Fires.	False Alarms.	Out of District.	Totals.
Auckland	95	14	13	59	4	185
Christchurch	76	9	17	67	7	176
Dannevirke	1	1	..	..	1	3
Dunedin	106	33	29	36	..	204
Fielding	4	..	1	..	2	7
Gisborne	14	..	..	4	..	18
Greymouth	8	1	..	..	..	9
Hamilton	10	..	1	..	..	11
Hastings	11	..	..	..	1	12
Hawera	7	1	1	3	3	15
Hokitika	2	..	..	..	..	2
Lawrence .. .. .	..	..	..	..	..	..
Masterton	10	..	8	..	..	18
Milton .. .. .	..	..	..	..	..	..
New Plymouth	16	..	3	..	..	19
Oamaru	3	1	..	..	..	4
Palmerston North	21	2	5	1	1	30
Petone	8	..	1	1	1	11
Rotorua	2	..	..	..	2	4
Tauranga	5	..	1	..	..	6
Timaru	8	..	2	10	3	23
Whangarei	5	..	..	3	1	9
Woolston	9	..	..	..	..	9
Totals	421	62	82	184	26	775

2. SUMMARY OF FIRE LOSSES.

District.	Insured.	Uninsured.	Totals.
Auckland	£ 33,109	£ 336	£ 33,445
Christchurch	8,007	1,161	9,168
Dannevirke .. .. .	..	..	..
Dunedin	13,002	2,983	15,985
Fielding	165	5	170
Gisborne	2,238	590	2,828
Greymouth	1,377	411	1,788
Hamilton	11,033	15,934	26,967
Hastings	17,280	7,035	24,315
Hawera	347	27	374
Hokitika	417	50	467
Lawrence .. .. .	..	..	..
Masterton	109	376	485
Milton .. .. .	..	..	..
New Plymouth	5,010	2,105	7,115
Oamaru	190	..	190
Palmerston North	6,074	465	6,539
Petone	170	222	392
Rotorua	11	..	11
Tauranga	7,335	3,040	10,375
Timaru	293	88	381
Whangarei	300	2	302
Woolston	470	409	879
Totals	106,937	35,239	142,176

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

As taken from the Estimates for the respective Years.

District.	Year ending 30th June, 1914.			Year ending 30th June, 1915.			Year ending 30th June, 1916.			Year ending 30th June, 1917.			Year ending 30th June, 1918.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Auckland ...	10,110	0	0	10,256	0	0	10,811	0	0	10,585	0	0	11,700	0	0
Christchurch ...	9,000	0	0	8,000	0	0	7,210	0	0	6,900	0	0	7,000	0	0
Dannevirke ...	881	3	5	612	6	9	639	16	1	819	9	4	251	9	9
Dunedin ...	7,000	0	0	7,000	0	0	7,000	0	0	8,000	0	0	8,500	0	0
Feilding ...	612	10	0	683	11	0	544	11	2	573	11	9	354	0	0
Gisborne ...	789	10	3	763	0	0	1,125	0	0	1,620	13	0	958	5	10
Greymouth ...	964	0	0	864	0	0	844	0	0	878	0	0	888	0	0
Hamilton ...	300	0	0	850	0	0	600	0	0	350	0	0	1,450	0	0
Hastings ...	1,146	0	0	1,105	0	0	1,287	0	0	1,125	0	0	1,300	0	0
Hawera ...	617	16	0	767	0	0	647	5	10	744	0	0	374	0	0
Hokitika ...	433	6	8	433	6	8	460	0	0	366	13	4	346	13	4
Lawrence ...	75	0	0	60	0	0	80	0	0	60	0	0	60	0	0
Masterton ...	1,150	0	0	1,151	1	4	1,246	18	0	1,026	7	2	931	13	0
Milton ...	120	0	0	100	0	0	110	0	0	100	0	0	90	0	0
New Plymouth ...	1,098	1	3	1,098	1	3	1,200	0	0	1,500	0	0	1,380	0	0
Oamaru ...	340	0	0	370	0	0	477	0	0	770	0	0	550	0	0
Palmerston North ...	1,842	9	1	1,939	3	4	1,685	19	0	1,364	12	5	1,400	7	4
Petone ...	847	16	10	1,076	11	9	880	13	7	870	0	0	Not available.		
Rotorua ...	419	10	0	614	0	0	752	7	0	794	0	0	807	0	0
Tauranga ...	...			...			655	6	8	444	12	11	315	11	6
Timaru ...	1,500	0	0	2,825	0	0	1,450	0	0	1,810	0	0	1,350	0	0
Whangarei ...	480	0	0	600	0	0	500	0	0	550	0	0	550	0	0
Woolston ...	...			...			...			914	4	0	776	2	2
Totals ...	39,927	3	6	41,368	2	1	40,336	17	4	42,166	3	11	41,333	2	11

4. SUMMARY OF CAUSES.

Cause.	Auckland.	Christchurch.	Dannevirke.	Dunedin.	Felling.	Gisborne.	Greymouth.	Hamilton.	Hastings.	Hawera.	Hokitika.	Masterton.	New Plymouth.	Oamaru.	Palmerston North.	Petone.	Rotorua.	Tauranga.	Timaru.	Whangarei.	Woolston.	Totals.
Ashes, live .. .. .	..	1	..	5	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	1	9
Birds' nests under eaves .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
Benzine, proximity to lights	2	..	..	3	..	..	..	..	..	1	..	1	1	..	..	..	..	..	2	..	..	12
" vapour, proximity to lights	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
" explosions, &c. .. .. .	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	2
Candles, drapery, &c., in contact	10	5	1	6	..	..	..	1	..	1	..	..	..	..	1	..	..	..	..	1	..	26
Clothes airing before fire	2	..	..	..	..	..	2	..	1	..	..	2	..	..	..	..	..	..	..	..	..	7
Defective building .. .. .	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
" chimneys, hearths	1	5	..	8	..	..	..	..	..	..	..	1	2	..	..	1	..	..	..	2	..	20
" hot-water services .. .. .	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	2
Electricity, fusing of wires	7	1	..	2	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	11
" overheating clothes-iron .. .. .	..	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
" spark from switch .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1
Gas, defective fittings	1	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	3
" explosion	2	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
" rings, stoves .. .. .	..	1	..	3	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7
Ignition, kapoc .. .. .	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
" picture-films .. .. .	..	..	..	1	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	1	..	4
" sulphur	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Incendiarism, or suspected .. .. .	..	2	..	6	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	9
Kerosene-lamp explosions .. .. .	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	2
" lamps knocked over .. .. .	..	2	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
" heaters overheated .. .. .	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	2
Lime, slaking	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Matches, children with	1	3	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	7
" rats .. .. .	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
" thrown down alight	1	10	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	..	..	14
Methylated spirits, explosion	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Naked lights .. .. .	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Overheating beeswax, fat, &c.	2	1	..	3	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7
" bearings .. .. .	..	..	..	3	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	4
" tar	3	1	..	..	..	1	..	..	2	..	..	..	..	1	1	..	..	..	..	..	..	9
" wood, proximity furnaces	2	1	..	5	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	9
" vulcanizing-ovens .. .. .	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	2
Painters burning off paint .. .. .	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	3
Refraction, sun's rays .. .. .	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
Smoking .. .. .	..	6	..	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9
" cigarette, butts .. .. .	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Soldering-iron	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Sparks from chimneys .. .. .	..	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
" copper-fires	1	4	..	4	..	..	1	..	..	3	..	2	..	1	2	1	..	..	..	..	..	19
" fireplaces	1	1	..	2	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	5
" furnaces	1	1	..	1	..	1	..	..	..	1	..	..	..	..	4	1	..	..	..	..	1	11
" stoves and ranges .. .. .	..	2	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	4
" other fires .. .. .	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Spontaneous combustion	4	3	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
Testing automatic alarms .. .. .	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Vagrants .. .. .	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Unknown	49	10	..	35	2	5	3	7	7	1	..	2	9	1	9	3	..	4	2	1	6	156
Totals	95	76	1	106	4	14	8	10	11	7	2	10	16	3	21	8	2	5	8	5	9	421

5. SUMMARY.—PERSONNEL, PLANT, AND APPLIANCES.

	Auckland.	Christchurch.	Dannevirke.	Dunedin.	Feilding.	Gisborne.	Greymouth.	Hamilton.	Hastings.	Hawera.	Hokitika.	Lawrence.
Brigades, total strength of ..	73	33	18	93	24	16	20	32	23	21	30	10
Fire-stations, residential ..	5	3	1	2	1	1	1	1	1	1	..	..
" non-residential ..	2	..	1	5	1	5	5	1	..	1	..	..
Fire-alarms—(C.) circuits, (B.) boxes ..	35 C., 239 B.	16 C., 104 B.	..	8 C., 80 B.	..	..	..	..	..	3 C., 14 B.	..	..
" Automatic, private ..	14	25	..	28	..	..	..	..	..	..	..	..
Telephones, points ..	Tel.	Tel.	Tel.	Tel.	5	100	4	10	3	Tel.	8	..
Horses ..	..	..	..	..	..	..	1 (on hire)	..	..	1 (35)	1 (on hire)	..
Motors, hose-and-ladder (h.p.) ..	8 (2-45, 4-40, 1-38, 1-20)	1 (12)	..	1 (15)	1 (20)	..	..	..	..	..	..	..
" chemical, hose-and-ladder (h.p.) ..	..	3 (40, 40, 14)	..	3 (75, 60, 28)	..	1 (50)	..	1 (60)	1 (30)	..	..	..
" pump, hose-and-ladder (h.p.) ..	1 (110) 800 gal.	2 (70) 500 gal., (55) 400 gal.	..	..	..	..	..	1 (60) 400 gal.	..	..	..	..
" first-aid pump, hose-and-ladder (h.p.) ..	..	..	..	3 (60, 60, 60)	..	..	..	..	..	..	..	..
" electric, ladder (height) ..	1 (87')	..	..	1 (84')	..	..	..	..	..	..	..	..
" Fire-engines, steam (gallons) ..	1 (450)	2 (260, 450)	..	..	..	1 (600)	1 (600)	..	1 (600)	..	1 (380)	..
" manual (gallons) ..	..	..	..	..	..	1 (100)	1 (60)	..	1 (80)	..	2 (80, 80)	..
Chemical engines, hand-drawn (gallons) ..	..	..	..	..	..	..	..	..	..	..	..	..
Hose carts, reels, horse-drawn ..	..	..	..	..	..	..	..	..	..	..	..	..
" hand-drawn ..	3	2	2	5	2	2	6	3	2	3	5	2
Ladders, horse-drawn (height) ..	..	..	..	1 (80')	..	..	..	..	..	..	..	..
" motor-traction (height) ..	1 (60')	1 (65')	..	..	..	..	..	..	..	..	..	..
" extension (height) ..	2 (44')	2 (45', 42')	..	..	..	1 (40')	1 (30')	on motor	1 (40')	1 (30')	..	..
" single and coupling (total length) ..	8 (216')	26	5 (105')	4 (72')	8 (105')	7 (155')	4 (81')	7 (140')	7 (168')	6 (111')	5 (99')	2 (54')
Jumping-sheets (square feet) ..	5 (10' x 10')	4 (9' x 9')	..	1 (12' x 12')	..	..	1 (10' x 10')	..	2 (12' x 14')	..	..	..
Smoke-jackets (J.), helmets (H.) ..	2 H.	1 J., 1 H.	..	1 J., 1 H.	..	1 H.	..	..	..	..	..	..
Hand-pumps ..	5	5	2	3	1	1	1	..	..	..	..	..
Hand chemical extinguishers ..	4	6	1	10	2	..	..	1	..	2	..	..
Stand-pipes, ratchet valves ..	15	1	..	13	..	..	..	1	..	1	..	..
" double heads ..	..	19	6	8	6	8	9	1	6	5	5	1
" single heads ..	9	..	..	1	..	2	1	6	1	2	2	..
Hose, rubber-lined (diameter) ..	..	2,200' (2½")	..	..	..	..	..	..	..	..	..	..
" unlined (diameter) ..	12,400' (2½")	9,000' (2½")	2,200' (2½")	12,600' (2½")	3,100' (2½")	3,000' (2½")	5,000' (2½")	4,500' (2½")	3,000' (2½")	3,000' (2½")	3,000' (2½")	1,200' (2½")
Water-supply (G. = gravitation) ..	G.	G.	G.	G.	G.	G.	G.	G.	G.	G.	G.	G.
Pressure, average, noon-midnight ..	5-120	95-105	80-88	115-130	85-100	90	85-100	35-42	120-130	55-80	100-105	70-80

5. SUMMARY.—PERSONNEL, PLANT, AND APPLIANCES—continued.

	Masterton.	Milton.	New Plymouth.	Oamaru.	Palmerston North.	Petone.	Rotorua.	Tauranga.	Timaru.	Whangarei.	Woolston.	Totals.
Brigades, total strength of	26	14	30	23	22	24	19	18	23	19	6	617
Fire-stations, residential	1	1	2	1	2	1	1	1	1	1	1	30
" non-residential	1	..	2	..	1	..	2	1	..	2	..	37
Fire-alarms—(C.) circuits, (B.) boxes	5 C., 12 B.	..	..	..	..	2 C., 10 B.	..	..	6 C., 22 B.	1 B.	..	75 C., 482 B.
" Automatic, private	Tel.	..	Tel.	..	Tel.	3	..	..	1	..	..	71
Telephones, points	2	..	..	10	..	Tel.	8	..	Tel.	6	Tel.	165
Horses	..	..	..	1	1	..	..	..	..	..	..	6
Motors, hose-and-ladder (h.p.)	..	..	1 (20')	..	..	1 (30')	1 (45')	..	..	1 (15')	..	16
" chemical, hose-and-ladder (h.p.)	..	..	..	..	..	..	..	..	..	..	..	9
" pump, hose-and-ladder (h.p.)	..	..	..	..	..	..	..	..	..	..	..	7
" first-aid pump, hose-and-ladder (h.p.)	..	..	1 (60) 400 gal.	..	1 (55) 350 gal.	..	..	..	1 (60) 400 gal.	..	..	3
" electric, ladder (height)	..	..	..	..	..	..	..	..	..	..	..	2
Fire-engines, steam (gallons)	1 (350)	..	..	..	..	..	..	..	..	..	..	7
" manual (gallons)	..	1 (50)	..	..	..	..	..	..	..	..	..	7
Chemical engines, hand-drawn (gallons)	..	1 (50)	..	..	..	..	..	..	..	..	..	6
Hose carts, reels, horse-drawn	..	..	..	1	2	1	..	..	1	..	..	1
" hand-drawn	4	..	4	2	3	2	2	3	1	3	..	5
Ladders, horse-drawn (height)	..	..	..	..	..	..	..	..	..	..	..	61
" motor-traction (height)	..	..	..	..	..	..	..	..	..	..	..	1
" extension (height)	..	..	..	..	..	..	..	..	..	..	..	2
" single and coupling (total length)	7 (105')	3 (56')	on motor 5 (108')	1 (20') 2 (40')	on motor 6 (97')	on motor 7 (62')	6 (85')	1 (36') 2 (49')	on motor 8 (170')	1 (50') 1 (30')	on motor	20
Jumping-sheets (square feet)	..	..	1 (12' x 12')	..	1 (12' x 12')	1 (8' x 8')	1 (11' x 11')	..	1 (12' x 12')	..	..	136
Smoke-jackets (J.), helmets (H.)	..	..	..	1 H.	..	1 H.	..	..	1 H.	..	..	18
Hand-pumps	2	1	3	1	2	2	1	2	1	2	2	45
Hand chemical extinguishers	1	2	4	1	2	2	3	..	3	..	..	46
Stand-pipes, ratchet valves	2	..	1	1	..	..	..	..	1	2	..	39
" double heads	4	..	8	3	5	1	..	4	3	..	..	103
" single heads	5	..	4	2	4	6	5	1	2	3	..	56
Hose, rubber-lined (diameter)	..	..	4,000' (2½") G.	2,800' (2½") G.	5,600' (2½") G.	4,380' (2½") G.	1,500' (2½") G.	2,000' (2½") G.	3,000' (2½") G.	1,600' (2½") G.	..	2,200
" unlined (diameter)	3,000' (2½") G.	300' (2") Wells and tanks	..	..	..	..	..	..	..	..	..	90,180
Water-supply (G. = gravitation)	100-125	100-140	60-100	60-70	48-51	70-110	70-75	160-168	No water-supply	..
Pressure, average, noon-midnight	85-92

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