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## ELECTRIC LIGHTING AND POWER.

The rapid increase in the use of electricity for lighting and power has thrown a considerable amount of work on the Department, which, acting for the Electric Telegraph Commissioner as the Board of Control, has dealt with regulations in connection with the construction of tramways in the City of Christchurch. A number of applications for licenses under "The Electric Lines Act, 1884," has been received from boroughs and dealt with.

# TELEGRAPH AND TELEPHONE CONSTRUCTION AND MAINTENANCE.

### AUCKLAND DISTRICT.

#### Construction.

The following new lines have been erected during the year :-

		Mile	s of Poles.	Miles of Wire.
Mapuna (lead off Dargaville-Tangiteroria lin	ıe)		$1\frac{3}{4}$	$1\frac{3}{4}$
Hobsonville (lead off Auckland-Swanson lin			3	8
Koutu (lead off Rawene-Hokianga Heads lir			$0\frac{1}{2}$	$0\frac{1}{2}$
Te Kopuru to Dargaville telephone-line	·			6~
Kawakawa to Hukerenui deviation			17	$56\frac{1}{2}$
East Tamaki (lead off Auckland-Papatoetoe	wire)		13	$1\frac{1}{2}$
Mangonui to Doubtless Bay (extension of No				
The Spa (lead off Taupo-Atiamuri wire)			2	3 2 6 <del>1</del> 0 <del>1</del> 0 <del>1</del> 3
Thames to Kauaeranga			$0\frac{1}{4}$	$6\frac{1}{4}$
Paengaroa (lead off Te Puke-Maketu wire)		•••	$0\frac{1}{4}$	$0\frac{1}{4}$
Fencourt line extended to new office			$0\frac{1}{2}$	$0\frac{1}{3}$
Waimangu (lead off Rotorua-Waiotapu line)			3 ້	3 *
Warkworth to Whangarei (No. 4 extended)				$7\overline{7}$
Albany (lead off Auckland-Takapuna wire)			$2\frac{1}{2}$	9
Waiotemarama (lead off Rawene-Hokianga	Heads line)		$\frac{-2}{4\frac{1}{3}}$	
Whitford (lead off Auckland-Cowes line)	•••	• • •	5	$rac{4rac{1}{2}}{5}$
Kawakawa to Waipapa deviation			18	77
Waiotapu Prison, Loop into				0 <u>3</u>
11 talotta 2 110011, 2200p 11100	Poles.		•••	4
For Railway Department—	Miles.			
Auckland to Newmarket (tablet wire)		$1\frac{3}{4}$		
Ellerslie to Penrose		1		
Otahuhu to Papakura telephone-wire	10 <del>3</del>	$10\frac{3}{4}$		
Tuakau to Whangarata telephone-wire	,,,	$2\frac{1}{8}$		
Tuakau signal-repeaters		$0\frac{3}{2}$		
Huntly to Ohinewai telephone-wire	$5\frac{1}{8}$	$5\frac{7}{8}$		
Ruakura Junction to Eureka telephone-wire		5ຶ		
Mercer to Pokeno telephone-wire		31/2		
			$15\frac{7}{8}$	$29\frac{3}{4}$
Totals		•••	$75rac{5}{8}$	2921
	•••			—— <u>—</u>
Lines dismantled—				
Kawakawa to Hukerenui			14	60
Kawakawa to Waipapa			17	59
	•••	•••		
Totals			31	119
1000000		• • • •	J-	

# The net increase is $44\frac{5}{8}$ miles of poles and $173\frac{1}{4}$ miles of wire.

# Maintenance.

The reconstruction of the Auckland-Doubtless Bay section is almost completed, only a short section of 4 miles, between Warkworth and Waiwera, now requiring attention. The line between Kawakawa and Hukerenui, which used to run across very rough and inaccessible country, has been diverted to the main road, and Towai connected with Hukerenui.

The old line between Kawakawa and two miles south of Waipapa was quite rotten, the spans being very long and unfit to carry copper wires. The country traversed was very rough, besides being covered with gorse and far off the roadway. Fires caused much damage here at times; therefore the line has been dismantled and wires deviated through Ohaeawai, the gaps between Kawakawa and Pakaraka, and Waimate North and two miles south of Waipapa, being poled. By this route the line is kept to the road all the way, and faults can thus be more quickly removed.

The above two works entailed the dismantling of 31 miles of poles and 119 miles of wire, and

The above two works entailed the dismantling of 31 miles of poles and 119 miles of wire, and the re-erection of 35 miles of poles and 133½ miles of wire.

The reconstruction of the section Otahuhu to Hamilton is nearing completion, and should be finished some time in June. The work is heavy, there being 30 poles erected to each mile. The line, which originally ran over many private properties, has been brought on to the roadway, thereby rendering it easier of inspection and maintenance. This section has been notorious for faults, but now seldom gives trouble.

It will be necessary to entirely rebuild the Auckland-Otahuhu section shortly.