F.—1.

The New Plymouth to Mahoenui extension comprises one copper wire to Waitara, 13 miles; two from Waitara to Awakino, 50 miles; and one for a further distance of 22 miles to Mahoenui. One wire, Waitara to Awakino, provides telephonic communication to several settlements along this route, and the other gives direct communication between New Plymouth district and Auckland, and is available as an alternative circuit between Wellington and Auckland in the event of the East Coast wires being crippled. No 11½ copper wire has been used throughout.

#### Maintenance.

The following sections have been	overh <mark>au</mark>	led and st	rengther	ned :			
Waipukurau to Pakipaki		•••		•••		27 1	miles.
Wairoa to Moeangiangi		•••				38	"
Gisborne to Port Awanui					• • • •	97	"
Total	1					162 1	milee

The Lower Hutt to Upper Hutt Section—a distance of twelve miles—was overhauled and

strengthened, 155 25 ft. poles being put in, and the wires given increased spread.

During the running of the extra copper wire—New Plymouth to Wanganui—erected to replace a wire sold to the Railway Department, the whole of the line, 104 miles, was overhauled and strengthened generally.

The Featherston to Kaitoke Section has had special work done upon it by the lineman, to lessen the liability to faults on the Rimutaka Range, which is high and exposed to the wind.

The railway-line from Upper Hutt to Cross Creek was put in good repair during the running of the railway-wire, and new cable leads were put in at Upper Hutt and Kaitoke. From Cross Creek to Featherston the railway telegraph-line—the poles of which were much weakened by decay—was removed to the lee side of the railway-track. A good substantial line now exists on this section.

Two miles of wire between Marton and Marton Railway-station were dismantled.

A new aerial cable was put across the river at Waipawa.

A section of No. 8 iron wire, from Kaikora North to Woodville-60 miles-was sold to the Railway Department. In lieu of this, 21 miles of wire, from Dannevirke to Takapau, were run.

The work referred to in last report-erecting three new wires, from Masterton to Woodville,

to take the place of those on the old line vià Tenui—is now in progress.

Instruments in the Masterton and Featherston offices have been rearranged and refitted. completion of the Masterton-to-Wellington wire, to be used by the Railway Department instead of a combined wire, will give increased accommodation between Wellington and the Wairarapa district, by leaving the wire formerly used for combined railway and public purposes wholly available for public business.

The quadruplex system has been in operation between Wellington and Auckland for some months, and, although the circuit is about 500 miles, has given every satisfaction. It is intended to introduce this system on some of the principal circuits where required during this year.

Bridging bell telephones have been substituted for seven-series instruments on the Gisborne-

Port Awanui line; this has enabled transmitting to be avoided.

The No. 1 Oterangi Bay cable became interrupted on the 9th May, 1898. The cable-steamer "Tutanekai" left with a repairing staff on the 16th June, and repairs were completed on the 27th June. The break was about  $2\frac{1}{2}$  knots from Oterangi Bay. The cable has worked well since the repair, and the other two cables from this terminus have worked satisfactorily during the year. They all test well. The No. 4 Lyall Bay cable likewise has been working satisfactorily.

Telephone Exchanges.

The branching multiple switchboard at Wellington continues to give satisfaction. number of subscribers is now 1,279.

The total number of exchanges in the district is eight, and at all these the number of subscribers is on the increase.

Two new exchanges, one at Feilding and one at Hawera, will be opened shortly.

The total number of subscribers at all exchanges in the district is 2,277.

### NELSON.

# Construction.

The following new lines have been erected:-

						Poles.	Wire.
		***	4.4.4			$2\frac{3}{4}$	$2\frac{3}{4}$ $8\frac{1}{2}$
Collingwood to Bainham		***	• • •	***		$8\frac{1}{2}$	8 <del>1</del>
Renwicktown to Kaituna	•••	•••	•••	•••	•••	3	3
Belgrove to Tophouse	• • •	*,* *	4,4.4	•••	• • •	• • • •	27
Total				•••		14 <del>1</del>	411

## Maintenance.

The section Westport to Inangahua Junction has been thoroughly overhauled, and poles brought down from high points to the road to facilitate repairs. All poles between Nelson and Inangahua Junction, and Nelson and Blenheim, have been examined, and renewed where necessary. Three No. 8 copper wires have been substituted for iron wires between Blenheim and White's Bay the cable terminus. The total length renewed is 42 miles.