

on the East Coast, through country where there is no road, and it is so old that it will require reconstructing. Instead of renewing and strengthening the line it will be better and cheaper to erect three new wires on existing poles between Masterton and Waipukurau *via* Woodville, dismantling a similar number on the line between Waipukurau and Masterton *via* Porangahau, Herbertville, and Tenui. When this work is completed all the northern circuits as far as Napier will be greatly improved. The old lines will be maintained to carry one wire to serve the intermediate stations on the East Coast.

It is proposed to use on the section between Masterton and Waipukurau *via* Woodville three copper wires, each of 200 lb. to the mile, and of a resistance of 4.5 ohms per mile.

On railway circuits, as well as some of the department's, where a number of stations is on the same wire, there has been a great improvement effected by the introduction of continuous-current working and the lowering of the resistance of the relays. There has also been a great saving in cost of maintenance of batteries, which are now placed at but few stations, and in some offices only fifty cells are used where there were formerly five hundred. Amongst the circuits so dealt with are: Railway and public wires—Palmerston North to Wanganui, Wanganui to New Plymouth; railway wires—Wellington to Woodville; and public wire—Wellington to Masterton; public and railway wires—Auckland to Drury and Frankton Junction, Christchurch to Timaru, Dunedin to Oamaru and Dunedin to Invercargill.

#### TELEPHONE EXCHANGES.

A new multiple switchboard, with provision for 1,500 subscribers, and an ultimate capacity for 4,800, has been fitted up in the Wellington Exchange.

A like equipment for Auckland is now in the colony, and will be fitted up during the year.

Similar switchboards are to be provided for Dunedin and Christchurch at an early date.

Notwithstanding that the use of a telephone-exchange connection is restricted to the business of a subscriber or that of his family, employes, or guests, it is found that the use of instruments, particularly on long suburban lines, by persons not coming under one or other of these definitions is on the increase. As this affects the revenue derived from bureaux the department will probably have to interfere, as in the case of some of the other colonies—especially Victoria—where it has been found necessary to frame strict regulations to meet similar abuses.

There were, on the 31st March last, 18 central exchanges and 11 sub-exchanges, a total of 29.

The following is a comparative return of the telephone-exchange connections for the years 1896-97 and 1897-98:—

Exchange.	No. of Subscribers or Connections:	
	Mar. 31, 1897.	Mar. 31, 1898.
Ashburton ... ..	96	96
Auckland ... ..	1,065	1,039
Blenheim ... ..	64	65
Christchurch ... ..	916	848
Dunedin ... ..	928	907
Balclutha ... ..	18	13
Kaitangata ... ..	...	6
Milton ... ..	17	19
Port Chalmers ... ..	17	17
Gisborne ... ..	60	97
Greymouth ... ..	72	81
Invercargill ... ..	227	211
Bluff ... ..	22	23
Gore ... ..	49	48
Mataura ... ..	10	10
Riversdale ... ..	15	11
Winton ... ..	9	9
Woodlands ... ..	8	7
Masterton ... ..	53	69
Napier ... ..	289	291
Hastings ... ..	22	27
Nelson ... ..	60	57
New Plymouth ... ..	123	150
Oamaru ... ..	96	103
Palmerston North ... ..	86	91
Thames ... ..	85	83
Timaru ... ..	74	73
Wanganui ... ..	138	173
Wellington ... ..	1,127	1,163
Hutt ... ..	1	...
Totals ... ..	5,747	5,787

The connections may be classified as follows: Paying, 5,478; free, 113; bureaux, 196: total, 5,787.

The raising of the rates to business subscribers in the six principal exchanges from £5 to £7 resulted in a number of subscribers retiring. The net increase of subscribers for the year, however, was forty.

The telephone-exchange receipts amounted to £36,422 6s. 8d., an increase of £7,173 7s. 3d. as compared with the subscriptions received the previous year.