TOLL SERVICE: IMPROVED METHODS OF OPERATION.

The system of direct dialling between exchanges, to which reference was made in last year's report, was extended during the year throughout the Wellington Engineering District. Equipment for the extension of this system to the other engineering districts is under order, and its installation will be proceeded with when the material is to hand. The ultimate aim of the Department is to enable the toll operators at all exchanges which can communicate direct with automatic exchanges to dial the subscribers at such exchanges direct.

Where there is a number of circuits connecting two exchanges, an improved method, known as "multiple dialling," has been developed. With the ordinary method of direct dialling, the controlling circuit is associated with the talking circuit from the time the call is dialled until the time the call is completed. By means of multiple dialling, it is possible to release the controlling circuit from association with the talking circuit immediately a connection between the subscribers is established. This enables the controlling circuit to be used for setting up successive calls on other talking circuits to the distant exchange, thus increasing the efficiency. Multiple dialling has been introduced between Palmerston North and Wellington, and between Eastbourne and Wellington; and, where the conditions are suitable, will be utilized in other cases involved in the general programme of direct-dialling extension.

A further innovation in direct dialling was the installation in the Wanganui Automatic Exchange of apparatus by means of which exchanges adjacent to Wanganui were enabled, without assistance from the Wanganui toll-operating staff, to pass calls to toll stations normally switched by Wanganui as intermediate station. In other words, provision has been made whereby certain exchanges may automatically, by the operation of a dial, gain connection to other toll lines terminating at Wanganui. They may then proceed to call the distant exchange or dial direct to a distant subscriber without any assistance from a Wanganui toll operator.

The combined line and recording method of operating (commonly known as the "C.L.R." method), the introduction of which was referred to in last year's report, is giving entire satisfaction on the lines in which it is in use. As opportunity offers, the use of this system will be extended throughout the Dominion.

RETURN OF TOLL-CALL DELAYS AND CANCELLATIONS.

In pursuance of the policy of affording telephone-users the most prompt and efficient service possible, special efforts are directed towards keeping at an absolute minimum the time elapsing between the application for a toll-call and the actual placing of the subscribers in communication. The following return of toll-calls throughout the Dominion held over a short period indicates the percentage of calls satisfied within stipulated delays after the application. It will be seen that the majority of calls are afforded within five minutes of application. Particulars of cancellations and the reasons are also given.

	Full	Rate.	Half Rate.	
	Number.	Percentage.	Number.	Percentage
Calls connected with less than 5 minutes' delay	68,210	79.699	9,781	55.558
$,, ,, 10, ,, \dots$	10,042	11.733	2,695	15.308
Calls connected with more than 15 minutes' delay	$3,564 \\ 3,769$	$4.165 \\ 4.403$	$\substack{1,434\\3,695}$	8·145 20·989
Totals	85,585	100.00	17,605	100.00

			Can	cellations	•			
							Number.	Percentage.
Line out of ord	er						229	0.22
Unable to wait							385	0.37
Crossed call							192	0.18
Miscellaneous							254	0.24
		Totals	• •	• •	• •	• •	1,060	1.01

Total number of calls during period, 103,190.

EXTENSION OF TOLL AND TELEGRAPH FACILITIES.

The steady demand for telephone facilities called for the prosecution of a vigorous programme in the extension of toll and telegraph networks throughout the Dominion during the year. A considerable number of lines was erected which either gave service to localities which had previously not enjoyed the convenience of the telephone, or provided relief where congestion was acute. Where existing facilities could not be augmented other than by the erection of additional circuits, rearrangements, replacements, and substitutions effected coincident with the erection of new circuits almost invariably resulted in the traffic-carrying capacity of the original speech-channels being increased and the speech efficiency considerably improved. The progress made during the year in extending the toll-line