

Aboard ship the power is usually much below 8-h., and it is with these smaller powers that comparisons of relative efficiency would prove most useful.

No ships visiting the New Zealand waters, except war-vessels, are equipped with wireless-telegraph apparatus. The foreign-going vessels which trade to these waters are on the return voyages within the reach of wireless shore stations along the coasts of Great Britain, but appear to consider it unnecessary to set up wireless apparatus on the ship to avail themselves of these coastal facilities.

The Dominion has not yet any wireless station to communicate with ships. The Department is keeping itself informed of wireless-telegraph developments, and will be prepared to carry out any work of the kind should it be decided to establish wireless stations. Probably a conference of representatives of naval, military, marine, telegraph, and commercial interests to consider their requirements would be an advisable preliminary step.

TELEGRAPH AND TELEPHONE CONSTRUCTION AND MAINTENANCE.

The new switchboards at New Plymouth, Wanganui, Palmerston North, Napier, Gisborne, and Nelson telephone exchanges have been supplied with the breastplate equipment, which enables each attendant to use her own transmitter. The other larger exchanges are being similarly equipped.

NEW ZEALAND CABLE SERVICES.

On the 31st May, 1907, No. 4 Lyell Bay cable developed a fault about 11½ knots from the Lyell Bay side. Repairs were completed on the 23rd June.

A new cable of 42½ knots was laid across Cook Strait from Lyell Bay to White's Bay on the 5th December, 1907, to provide additional communication between the two islands.

On the 7th December, 1907, No. 3 cable became faulty about five knots from the Oterangi Bay end. The cable was repaired on the 21st December.

No. 2 Oterangi Bay cable broke on the 6th January, 1908, about nine miles from Oterangi Bay and its repair was completed on the 19th January.

No. 4 Lyell Bay, which had a fault in it that did not entirely interrupt the working of the cable, was cut into and repairs effected on the 20th January, 1908.

On the 16th March, 1908, a cable of about 5½ knots in length was laid between Colac Bay and Centre Island to establish telephonic communication between the lighthouse on Centre Island and Riverton on the mainland.

On the 31st March, 1908, 4½ knots of cable were laid between Stephen's Island and Pawakaiwawa Bay on D'Urville Island, and 1½ knots between Terurutu Bay on D'Urville Island and Elmslie's Bay on the mainland of the South Island. Telephonic communication already extends as far as Elmslie's Bay, and when the land line on D'Urville Island, which is being erected, is completed Stephen's Island lighthouse will be connected by telephone with Nelson.

The whole of the Cook Strait cables and the cable from Wanganui to Wakapuaka are in good order. The cables in other parts of the Dominion are also in good working-order.

TELEPHONE TRUNK WIRES.

The demand for telephone trunk wires to connect outlying places with exchanges and the exchange in one locality with that in another does not diminish. In most cases telegraphic communication exists between the towns, but this does not always satisfy the public. A perusal of the record of works carried out in the different Inspectors' districts will show that much has been done during the year to meet these requirements, and the general extension of the telephone system has been on a scale in excess of the extension in previous years.

As stated in former reports, the carrying-capacity of a telephone circuit is limited to about fifty spoken communications a day, so that the growing requirements of the public for telephonic facilities between centres of population can only be met by a large capital outlay. Telegraph revenue shows a tendency to shrink where telegraph and telephone communication exist side by side.

The superimposed circuits introduced from time to time work satisfactorily, and wherever facilities exist in connection with new wires telegraph circuits are, when considered advisable, superimposed upon the new wires.

The following is a comparative statement showing length of new lines and wires, mostly telephone, erected in Inspector's districts during the last five years:—

	1903.				1904.				1905.				1906.				1907.			
	Poles.		Wire.		Poles.		Wire.		Poles.		Wire.		Poles.		Wire.		Poles.		Wire.	
Auckland	M.	ch.	M.	ch.	M.	ch.	M.	ch.	M.	ch.	M.	ch.	M.	ch.	M.	ch.	M.	ch.	M.	ch.
Christchurch	44	50	173	20	62	70	371	10	63	30	101	50	135	60	494	40	139	60	350	60
Dunedin	4	40	111	0	16	60	64	60	57	20	165	40	111	30	170	8	121	0	518	20
Nelson	30	0	76	20	81	60	166	0	136	50	400	20	48	40	392	20	90	47	262	20
Wellington	47	23	51	30	3	20	3	40	25	15	152	1	146	67	217	49	245	16	484	77
Totals	15	60	158	30	33	0	116	40	128	71	592	78	156	35	641	40	104	43	696	74
	142	13	570	20	197	50	721	70	411	26	1,412	29	598	72	1,915	77	701	6	2,307	11