F.—1.

The lengths of pole-line and wire in use for telegraph and telephone toll purposes on the 31st March, 1925 and 1926, respectively, were as follow:—

27

Pole-line and Wire.						Year ended 31st March, 1925.	Year ended 31st March, 1926.	Increase.
Miles of pole-line Miles of wire .			•••	• • • • • • • • • • • • • • • • • • • •		12,935* 56,592*	13,052 59,791	117 3,199

\* Revised figures.

The telegraph and telephone wire in use on the 31st March, 1926—viz., 59,791 miles—is classified as under:—

Miles.

The total length of wire that may be used for telephone toll traffic is therefore 48,889 miles; the total length that may be used for the transmission of telegrams, 55,639 miles; and the length of telephone toll-lines over which telegrams may be transmitted by telephone, 23,060 miles. The total length of Morse circuit derived from the superimposing of telephone circuits is 12,114 miles, and the total length of additional telephone toll circuit improvised from the existing wire circuits by the use of subsidiary apparatus associated therewith (so-called phantom working) is 4,333 miles.

## NEW ZEALAND SUBMARINE CABLES.

The Wanganui-Wakapuaka (Nelson) cable and the No. 3 Cook Strait cable are still out of commission. Repairs to these cables are being deferred until there is sufficient cable-work available to warrant the chartering of a cable-repairing steamer.

Cables which developed faults and which were repaired were the Mititai-Te Kopuru, the Tokatoka-Tatarariki, and the Tiritiri and Great Barrier (Auckland) cables.

On account of their being of no further use, two small sections of cable at Dog Island and Centre Island (Foveaux Strait) have been abandoned.

## INTER-ISLAND SUBMARINE TELEPHONE CABLE.

The 26th March, 1926, marked the completion of the laying of the Cook Strait telephone cable, which is destined to become an important factor in fostering the development of long-distance telephony in New Zealand and in promoting a closer relationship, both commercially and socially, between the North and South Islands.

The cable, which is a four-core continuously loaded type, was manufactured by Messrs. Siemens Bros. and Co. (Limited), of Woolwich, England. The total length of cable purchased was  $41\frac{1}{4}$  nautical miles, made up of  $6\frac{1}{4}$  miles of shore-end cable and 35 miles of intermediate cable. The shore-end cable weighs approximately 11 tons per nautical mile, and the intermediate cable  $7\frac{3}{4}$  tons per nautical mile.

As the Pacific Cable Board's cable-steamer "Iris," which usually undertakes the repair of the Department's cables, could not be made available for this special work, arrangements were made with the Marine Department for the Government steamer "Tutanekai" to be recommissioned for the occasion.

The cable was shipped from London by the s.s. "Tongariro" on the 16th January, 1926, and reached Wellington on the 7th March. Discharging operations commenced on the 9th March, and within three days the whole of the cable had been transhipped direct from the tank in the "Tongariro" into the holds of the "Tutanekai."

On the 22nd March the "Tutanekai" proceeded to the mouth of the Blind River (approximately 5 miles south-east of Seddon, in the Awatere County) for the purpose of laying the South Island shore end, measuring  $1\frac{1}{4}$  nautical miles. On the following morning the Seddon shore-end cable was landed and anchored, the  $1\frac{1}{4}$  nautical miles paid out, and the end buoyed. The "Tutanekai" then returned to Lyall Bay in the hope of laying the main portion of the cable on the following day. During the night, however, a strong southerly wind sprang up and prevented the ship from working on the 24th. On the 25th March, the weather being favourable, the ship dropped anchor at Lyall Bay at 6 a.m. The Lyall Bay end of the cable was secured on shore at 7.20 a.m., and the ship commenced paying out at 8.30 a.m. The paying-out of cable continued until 4 p.m., when the "Tutanekai" reached the buoy at the extremity of the Seddon shore end. Testing and jointing operations proceeded throughout the night, and the section containing the splice between the main cable and the Seddon shore end was dropped from the ship at 9 a.m. on the 26th March.

The laying of the cable was carried out without mishap of any kind; and much credit is due to the officers of the Marine Department who were in command of the "Tutanekai" during the cablelaying operations.