13 F.—1.

In consequence of the carrying-capacity of the telegraph-lines having been substantially increased by the adoption of the machine-printing system, a number of lines previously required for telegraph traffic have been released and are now being utilized for long-distance telephone (toll) services. phone services obtained in this manner are as follow: Continuous telephone service between Auckland and Wellington Provinces, and between Taranaki and Auckland; telephone service between Napier, Taupo, and Rotorua. Arrangements are also being made to provide a metallic circuit between Christchurch, Marlborough, and Nelson, by making use of a Morse wire which has been released through the introduction of machine-printing telegraph apparatus.

At one time during the year no less than four of the seven submarine cables across Cook Strait were out of action simultaneously, but with the use of the multiplex circuit between Wellington and

Christchurch the telegraphic traffic was disposed of without suffering serious delay.

The traffic handled on the two multiplex machine-printing circuits (Wellington-Christchurch and Wellington-Auckland) on Saturday, 23rd December (Christmas Eve), was as follows: Forwarded messages, 10,027; received messages, 9,566: total, 19,593. This is considered very satisfactory in view of the comparatively short time that the system has been in use in New Zealand.

The machine-printing system will shortly be extended from Christchurch to Dunedin. is also under order for linking up Napier with Auckland and Wellington respectively. sions, when completed, will release lines for telephone purposes between Wellington and Napier, Napier and Auckland, and Christchurch and the southern towns. Investigations are also being made regarding machine-printing telegraph systems intended for use on the less important circuits, with a view to forming a network that will provide more efficient methods of handling Press traffic than is possible with the Morse system.

## NEW ZEALAND SUBMARINE-CABLE SERVICE.

A new submarine telephone-cable has been laid between Auckland and Devonport, thus reducing the trunk line distance from eleven to three and a half miles, and considerably improving speech.

During the year five of the Cook Strait cables were interrupted, four being out of action simul-The repairs to these cables involved the recovery of fifteen miles and the relaying of approximately twenty miles of cable.

## OCEAN CABLE SERVICES.

The number of cable messages, excluding Press, sent from New Zealand to international offices during the year shows an increase of 17.81 per cent. on the number sent during 1921-22, and the number sent to Australian offices shows a decrease of 1.05 per cent. Messages received from international offices increased by 12·14 per cent., and messages from Australia decreased by 0·98 per cent. The proportion of cable messages sent "via Pacific" was less than that sent by the same route

the previous year, the percentages being 67.4 and 68 respectively.

The following table shows the total number of cable messages forwarded by each route during each of the past five years, and also the percentage of such traffic falling to each.

Pacific.			Eastern.		
Year.	Messages.	Percentage of Total.	Year.	Messages.	Percentage of Total.
1918-19 1919-20 1920-21 1921-22 1922-23	103,347 139,772 159,896 147,781 157,895	59 67 70 68 67·4	1918-19 1919-20 1920-21 1921-22 1922-23	70,591 68,832 68,406 69,515 76,455	33 30 32 32·6

Press messages numbering 2,051 were sent via Pacific and 2,835 via Eastern, compared with 1,407 and 1,854 respectively during 1921-22. The number received via Pacific was 7,081 and via Eastern 2,922, compared with 9,553 and 2,432 respectively.

The number of cable messages forwarded at the deferred rate was 17,868, compared with 15,712, an increase of 2,156, or 13.72 per cent.

The number of week-end messages despatched was 22,434, and the number received 13,369.

## New Route for Cable Messages to or from the United Kingdom.

A new route, "via Cairo Wireless and Eastern," was opened for cable messages from the United Kingdom in May, 1922. The route was opened for traffic from New Zealand three months later. The route is open for full-rate and deferred messages, and the rates are the same as those charged for messages that make all their journey by cable.