

be undertaken immediately. Accordingly, arrangements were made to charter the cable steamer "Recorder." The vessel arrived in Wellington from Auckland on the 17th December, and, after taking in twenty-four miles of repair cable from the shore tanks, she left port on the 19th December to commence work on the Titahi Bay - Picton cable. Repairs to this cable were completed on the 20th December, after 10.22 nautical miles of new cable had been laid in. Some delay ensued in effecting repairs to the other cables owing to unfavourable weather conditions, and on several occasions during the progress of the work the cable-ship was forced to return to port for shelter. Communication was finally re-established over No. 3 cable on the 9th January, and repairs to No. 1 cable were completed the following day. Restoration of these two channels necessitated the laying-in of fifteen nautical miles of new cable inclusive of two new shore ends at Oteranga Bay.

On the eve of completion of the above-mentioned repairs it was reported that an earth fault had disclosed itself in No. 4 Lyall Bay - White's Bay cable. Tests showed that the fault had developed in a nine-mile section which had been laid over twenty years ago and which was known to be weak in insulating properties. Owing to extensive corrosion of the armouring in this section, it was found necessary to lay in 10.34 nautical miles of new cable. Repairs to the fourth cable were completed on the 16th January after further delays resulting from unfavourable weather conditions.

The "Recorder" returned to her base at Auckland on the 20th January, the charter having extended over a period of thirty-eight days.

## RADIO TELEGRAPH AND TELEPHONE SERVICES.

### OVERSEAS RADIO-TELEPHONE SERVICE.

With the gradual return of economic prosperity greater use has been made of the overseas telephone service, and it is pleasing to note that the irregular and more experimental use of the service is now giving place to the adoption of this method of overseas contact as a regular practice in the case of many users.

The total number of commercial messages handled during the twelve months was as follows:—

Between New Zealand and Australia .. .. .	266
Between New Zealand and Great Britain .. .. .	46

The corresponding figures for the previous year were 170 and 38 respectively.

While the cable service continues to afford the main channel of communication between New Zealand and the outside world, such a service can never provide the direct and personal contact afforded by a telephone conversation from office to office or home to home. A reduction in the charges would no doubt result in an increase of business, but, in this connection, certain definite difficulties exist owing to the fact that the fee has to be sufficient to cover reasonable charges on the trunk circuits involved, and the land-line system in the overseas country to which connection is sought. Thus, in the case of Australia, on the present flat-rate basis the charge must be sufficient to cover a call from Adelaide to Invercargill as well as from Sydney to Wellington. The question of charges is, however, under discussion between the various Administrations concerned, and, as far as the Department is concerned, every endeavour will be made to reduce rates.

In the case of the telephone service between New Zealand and the United Kingdom, the outgoing signals from New Zealand are at present switched through Sydney. While this practice meets immediate requirements, there is no doubt that any great increase in the demand for the English service will necessitate serious consideration being given to the erection of a powerful telephone station in the Dominion capable of providing a transmitting channel direct to the United Kingdom.

At the present state of the science of radio telephony it has to be admitted that a service between the United Kingdom and New Zealand can only be conducted at pre-arranged times, the circuit being available to the public only during definite periods of the day. It thus becomes obvious that if New Zealand is to have the best possible service, the existing method of sharing circuit time with Australia will have to be discontinued in favour of the installation of a direct service. The position is being closely watched, and, as soon as the erection of the necessary station of adequate power for direct connection becomes warranted commercially, its installation will receive detailed consideration.

From the 15th February the charges for radio-telephone calls from New Zealand to Finland were reduced from £8 8s. to £7 19s. for a conversation of three minutes' duration. At the same time the charges for calls to Roumania were reduced from £8 11s. to £7 19s. for a three minutes' conversation.

In a speech made at Lincoln, England, on the 23rd February, 1934, the British Postmaster-General, Sir Kingsley Wood, stated that, of 34,000,000 telephones in use throughout the world, 32,000,000 could be connected with telephone-users in Great Britain. This is an indication of the rapid strides made in the technique of radio-telephony.

### DEPARTMENTAL RADIO STATIONS: OPERATION.

#### AUCKLAND-RADIO.

The erection of the radio receiving-station at Brown's Bay, to which reference was made in last year's report, has been completed, and the radio receiving-apparatus has been installed therein. The temporary station previously in use was situated near Takapuna, a distance of about two miles from the present site. The new location is a very favourable one for reception from ships at sea, and enables signals to be received from vessels at much greater distances than is possible in the city. The station is normally unattended, the apparatus being operated by remote control from the main radio station in the City of Auckland.