

All lines up to Waipukurau—within thirty-three miles of Hastings—were restored at 4 p.m., and by 7.30 p.m. clear, though weak, speech was obtained by telephone between Waipukurau and Hastings, Morse operation being impracticable owing to line conditions. At 9.55 a.m. on the following day Morse communication over a shaky circuit was restored between Waipukurau and Hastings. At 11.35 a.m. direct Morse communication between Wellington and Hastings was established, and at short intervals thereafter further outlets were obtained as circuits were cleared and Morse sets wired. Telegraph communication was re-established between Napier and Hastings at about 9 a.m. on the 4th February. During the morning several outlets between Napier and Hastings were cleared, but, owing to the numerous tremors, they were subject to continual interruption. An improved simplex Morse circuit from Wellington to Hastings and Napier was obtained by 1 p.m., while the recovery of further circuits enabled duplex working to be accomplished by 4 p.m. The development of telegraph communications continued as rapidly as possible. By 10 a.m. on the 5th February a quadruplex set had been brought into service at Hastings, and by 5 p.m. on the same day two quadruplex sets had been installed at Napier. Four arms of the multiplex machine-printing telegraph system were then installed at Napier, and two were brought into operation at 6.20 p.m. on Sunday, the 8th February, when the Borough Council's emergency power-station commenced supplying electricity. At 2.45 p.m. the following day a full multiplex was working.

By 11.30 a.m. on the 5th February, the telegraph-line between Napier and Taupo was restored by a self-contained mobile party from the Auckland District, thus providing a Morse outlet from Napier to Auckland via Rotorua. At 5 p.m. the circuit was being worked duplex.

Between Napier and Wairoa the damage to roads and departmental telegraph and telephone lines was very severe, and telegraph communication between those points was not restored for several days. This was not, however, a serious state of affairs, as communication between Wairoa and Gisborne was re-established by 4.30 p.m. on the 3rd February. On the Napier-Wairoa section considerable damage was done to the pole-line, necessitating its diversion at several points. At Turiroa, a section of the main road had dropped 20 ft., and had moved 30 ft. out of line. At Matahura Gorge the road was covered by landslides to a height of 30 ft. to 40 ft., and access to a section of line could only be obtained by linemen descending 250 ft. of almost sheer cliff. The lines were joined through temporarily by dropping braided bronze wire from the railway viaduct to the pole-line 280 ft. below. A shaky Morse connection between Napier and Wairoa was eventually obtained on the 9th February, and on the 11th one clear metallic circuit between those points was available. All the Napier-Wairoa circuits were restored by the evening of the 12th. A severe earthquake at 1.30 p.m. on the 13th caused further interruption, but a Morse wire was recovered at noon the following day and one metallic circuit by 5 p.m. All the lines between Napier and Wairoa were again cleared by the 17th February.

One Morse circuit between Wairoa and Gisborne was restored at 4.30 p.m. on the 3rd February. During the same evening the remaining Wairoa-Gisborne circuits were recovered. These circuits again suffered complete interruption by the earthquake on the 13th, but full recovery was effected within forty minutes.

Carrier-current Systems.—Owing to the interruptions of the lines and later the total destruction by fire of the equipment itself, the carrier-current systems operating from Napier were completely disrupted. Apparatus collected from various points was installed at the temporary telegraph office at Napier on the 11th February and provided separate outlets from Napier to Wellington, Auckland, Palmerston North, and Gisborne. Communication on the Napier-Wellington system was established at 7 p.m. on the 11th, but owing to faulty lines the Auckland, Palmerston North, and Gisborne circuits were not suitable for toll purposes until the 12th, 16th, and 25th February respectively. Although the earthquake on the 13th interrupted all physical lines, the carrier channel between Napier and Wellington continued in operation.

DISPOSAL OF TELEGRAPH TRAFFIC.

Owing to the disconnection of telegraph circuits, special measures were necessary to dispose of telegraph traffic to and from the affected area. The number of messages lodged for transmission for some days after the earthquake was enormous, and even had the circuits remained intact over the whole period it would not have been possible by means of telegraphic transmission to dispose of all the messages presented.

In addition to the use of radio channels as already mentioned, telegraph traffic from Napier and Hastings was, on the 3rd and 4th February, forwarded by road to Waipukurau and Dannevirke for transmission, Napier telegraphists being despatched to those stations to assist in the disposal of the traffic.

Arrangements were made on the afternoon of the 3rd for a telegram mail to be conveyed from Wellington to Hastings by aeroplane leaving Wellington early on the morning of the 4th. Messages for the district were copied and forwarded by aeroplane which left Wellington on the 4th at 6 a.m. and arrived at Hastings at 10 a.m. A regular service by aeroplane for the carriage of telegrams and important mail-matter was then established between Auckland, Gisborne, and Hastings, and between Wellington and Hastings; and this service continued until 9th February. During that period twenty-four aeroplane flights were made between Hastings and Wellington, and eight between Auckland and Hastings, calling at Gisborne *en route*, and, in addition, several flights were made between Gisborne, Wairoa, and Hastings.

It is regretfully added that a flight from Gisborne to Hastings on the 8th fatally terminated at Wairoa when an aeroplane piloted by Captain Kight crashed after dropping a mail, the pilot and the two passengers being killed.