

Officers of the Post and Telegraph and Marine Departments, and private observers, have given valuable assistance in the reporting of earthquakes felt by them in New Zealand. Eighty-five reports were received from officers of the Post and Telegraph Department, 122 from other observers, and 202 from the newspapers.

The total number of earthquake shocks felt in New Zealand for the year 1926 was 175; 131 of these were felt in the North Island and 52 in the South Island. In eight cases the same shock was felt in both Islands. The maximum intensity of the shocks felt in 1926 was 8 on the Rossi-Forel scale. The maximum intensity of shocks felt in 1921 and 1922 was 8, in 1923 was 6, in 1924 was 7, in 1925 and 1926 was 8 on the same scale.

An article on "Earthquakes in New Zealand" was prepared for and published in the New Zealand Year-book. Maps have been prepared showing in considerable detail the distribution and intensity of the earthquake shocks felt in New Zealand; these are now being made ready for publication.

The work in seismology has increased very considerably since the new Milne-Shaw seismograph has been running, and a further addition to the work has been caused by the installation of the second Milne-Shaw seismograph. In addition to the technical reports on the earthquakes, contact prints are made of all important records, and are sent to other observatories. The old Milne machine has proved its usefulness in a number of cases where the local shocks have been strong enough to throw the Milne-Shaw machines out of action.

During the calendar year 1926 earthquake reports have been received from thirty-one observatories.

Steps are now being taken with a view to obtaining seismographs suitable for recording local earthquakes. By means of these seismographs it is hoped that some precise knowledge of the origins of New Zealand earthquakes may be obtained.

GENERAL.

Observatory Committee.

In January, 1927, the Research Council appointed an Observatory Committee for the purpose of reporting to the Council on the programme of work to be submitted by the Director of the Observatory. The members of the Committee are—The Naval Adviser; the Surveyor-General; the Engineer-in-Chief, Public Works Department; and four representatives of the New Zealand Institute. The four members of the New Zealand Institute are Professor C. Coleridge Farr, Christchurch; Professor D. M. Y. Sommerville, Wellington; Mr. A. C. Gifford, Wellington; and Professor P. Burbidge, Auckland. This committee continues the work of the Government Observatory Advisory Board.

The first meeting of the committee was held on the 29th March, 1927, when Professor C. Coleridge Farr was elected Chairman. The committee dealt with the statement by the Government Astronomer on the proposed programme of work for the coming financial year. A number of the matters dealt with by the committee are included in the report.

Publications.

The following Observatory publications have been issued during the year:—

Bulletin No. 60.—Report of Dominion Observatory, 1925–26.

Bulletin No. 61.—New Zealand Observations during the Lunar Eclipse, 1921, April 21. Stars occulted during Lunar Eclipse in 1921. By L. J. Comrie. (Reprint from Monthly Notices, R.A.S., March, 1922.)

Bulletin No. 62.—Site Testing at Nelson. By F. Gibbs and E. L. Morley.

Bulletin No. 63.—New Zealand Mean Time. (Extract, Transactions of N.Z. Institute, 1902.)

Earthquake Reports for 1924, April, to 1927, January.

As in past years, the Observatory is again indebted to individuals and to institutions for valuable gifts of publications. Some of these are presented in exchange for the bulletins. In particular, reference should be made to the valuable gifts of cases of books forwarded to this Observatory by Dr. L. J. Comrie; these include publications from the Nautical Almanac Office, London; the Royal Astronomical Society, London, and the British Astronomical Association, London, and the Royal Observatory, Greenwich.

During the year forty-six volumes of astronomical and seismological publications were bound.

Meteorological Records, 1926.

The following are the meteorological records for 1926:—

Barometer (height above sea-level 415 ft.)—

Maximum reading, 30.20—1926, June, 23.

Minimum reading, 28.85—1926, June 13.

Temperature (in transit-room)—

Maximum, 71.0° F., recorded 1927, February 12.

Minimum, 47.1° F., recorded 1926, August 11.

Temperature (in cloak-room)—

Maximum, 70.2° F., recorded 1927, February 1.

Minimum, 47.5° F., recorded 1926, July 4.

Humidity in new cellar—

Maximum reading, 100 per cent.

Minimum reading, 77 per cent.