

"Wireless weather forecasts which were discontinued at the commencement of the war have been resumed during the year, and are sent out through the radio stations at Avaniui, Wellington, and Awarua on the usual reporting nights, and at other times when deemed necessary. A daily wireless weather report was authorized from the Chatham Islands, and commenced on the 8th April, 1915; it has been maintained without a single break. Part of this message is also transmitted by cable to the Commonwealth Weather Bureau for research purposes. Forecasts are also occasionally transmitted to the Chatham Islands, for which a small charge is made by the Post Office, but usually the Wellington forecast suffices. Macquarie Island radio station was closed on the 14th October, 1915. Since it was opened by Sir Douglas Mawson it has done very good work indeed, and is one of the most notable researches in meteorology of the day. Since Sir Douglas Mawson sold the establishment to the Australian Government the New Zealand Government has contributed £500 per annum towards its upkeep, mainly for research into antarctic conditions, and to link up with the Imperial Antarctic Expedition still in the south. It has also proved a valuable aid to forecasting in dealing with westerly storm areas.

"Some valuable records from the island were lost in the s.s. 'Endeavour,' but there is much scope for research work upon the records which remain. The records were not entirely lost, for they had been partly transmitted by wireless before the originals were removed.

"With regard to rainfall stations, there has been a considerable extension during the past year, but, on the other hand, some decline both in the quality and quantity of the records in a certain number of stations. In some cases observers have joined the colours; others, through extra work, have found themselves unable to fulfil the duties; and there has been a general restlessness throughout the country which has militated against the regularity and precision requisite for observing rainfall, temperature, &c. The curtailment of reports in the *Government Gazette* has also been unfortunate, and under the present circumstances little encouragement can be given to observers for carrying on day after day and year after year such disinterested and patriotic labours.

"We hope during the coming year to have an addition to the staff to enable us to enter into closer correspondence, and also bring out more results from our labours in the way of publication.

"Inspection has, I regret to say, been much curtailed during the past year, but is urgently necessary for standardization, correction of errors, and meeting of local needs, besides imparting personal instruction and interest to the observers.

"The price of instruments has risen greatly, but our purchases have been kept down to the minimum. Reprints from the *Government Gazette* containing rainfall reports, &c., are to be furnished to observers at 2s. per annum, and authority has been given to charge for special reports when required by the public."

#### *Government Steamers.*

The "Hinemoa" has been employed on her usual work of conveying material, stores, coal, provisions, and oil to the lighthouses, and in cleaning and painting coast and harbour buoys and beacons. This work has been very satisfactorily carried out. Some engine-room and deck repairs have been executed.

The plans for a new steamer to replace the "Hinemoa," which are being prepared by a naval architect in Great Britain, have not yet come to hand.

The training-ship "Amokura" spent last winter in Wellington Harbour, and during that time the boys attended technical-school classes at the ship's schoolroom on Thorndon Esplanade. The instruction was given by a teacher employed by the Wellington Technical School, this Department paying his salary. The examination which was held at the end of the term gave very satisfactory results.

The vessel has during the year made two trips to the Southern Islands and one trip to the Kermadec Islands to search for castaways, and to inspect the provision depots which are maintained by the Department on those islands. No castaways were found, and the depots had not been interfered with. Besides these trips the vessel has also made coastal trips for the training of the boys. There has been no difficulty in keeping up her complement of sixty boys—in fact, the difficulty is to take all boys who apply for admission. When the boys have completed their training, places are easily found for them on other ships.

The general behaviour of the boys has been good, and there has been an absence of any serious breach of discipline.

Three boys have been placed on board the s.s. "Aparima" to be trained as officers. 101 old boys who received training on the "Amokura" have gone on active service at the front. Of these five have been killed and several wounded. Seaman F. Kivell, who was so favourably reported on by the captain of H.M.S. "Philomel," on service in the Persian Gulf, is an old "Amokura" boy.

#### *Lighthouses.*

The automatic lighthouse on Karori Rock, in Cook Strait, was completed, and the light was first exhibited on the 20th October, 1915. An automatic light has been procured for Okuri Point, near the French Pass, and its erection will be commenced during this month. A similar light has also been procured for Flat Rock, in the Hauraki Gulf, but owing to the need for economy on account of the war, the erection of the necessary tower, which will cost about £650, has not been commenced. Automatic lights have been installed in Nelson and Ponui Passage lighthouses, which has enabled a considerable saving to be made, as no keepers are now required. An automatic acetone-acetylene light has been ordered for Jackson's Head to replace the Pintsch-gas light now there.