

A new observatory is being erected on the Thorndon Esplanade, Wellington, on a site leased from the City Council at a nominal rental, and the thanks of the Department are due to the Council for allowing the occupation of this site, which is a very good one, for the purpose.

Appended is a report by the Rev. Mr. Bates, Director of the Meteorological and Weather Office, giving full information concerning the work of the office.

*Government Steamers.*—The “Hinemoa” has carried out the work of attending to the lighthouses and buoys and beacons under the control of this Department, and has performed the work in a very satisfactory manner. She made a special trip to the Chatham Islands with passengers and cargo, owing to the ordinary steamer service being interrupted for a time. She also made a trip with His Excellency the Governor from Auckland to Whangarei, the Bay of Islands, and back to Auckland, and conveyed His Excellency's household from Wellington to Lyttelton and back. The “Tutanekai” has carried out repair-work to the Cook Strait cables. During most of the year she has been laid up in Wellington Harbour. During the time she is laid up only the nucleus of a crew is kept on board. The Post and Telegraph Department pays to this Department the sum of £2,000 a year in consideration of her being available for cable-work when required, this Department providing the remainder of the cost of her maintenance. During the year she has had a new funnel put in her and new bridge deck laid down, towards the cost of which the Post and Telegraph Department contributed. A house for a wireless-telegraph room has also been built on her bridge deck. Arrangements are being made to install the wireless on both steamers.

During last winter the training-ship “Amokura” was moored in Wellington Harbour, and the boys underwent the usual courses of training on board, and also attended classes at the Technical School. At the conclusion of the classes they passed very creditable examinations. The Department has purchased the building on the Thorndon Esplanade which was formerly the Thorndon Yacht Club's shed. The ground floor will be used for a storeroom, and the upper floor for a schoolroom for the boys, in which they will be taught during the winter months by teachers from the Technical School in subjects which are specially selected as being of value to them in after-life at sea. The vessel made her first cruise after last winter in Cook Strait, and she then proceeded to the Southern Islands to search for castaways and examine the depots for castaways. On her return she proceeded north, and went from Auckland to the Kermadec Islands to search for castaways and to examine the depots. She then made a trip to the Chatham Islands to render assistance, if required, to the stranded steamer “Himitangi,” and from there she went to Akaroa and on to the Southern Islands. A new boat-deck and better means of storing fresh water on board are required, and it is proposed to provide these while the vessel is in port during the winter. With very few exceptions, the boys have conducted themselves well, and the value of their training is evidenced by the demand there is for their services on other ships when they have completed their training on the “Amokura.” Attached is a return showing the boys who have passed through the ship, and those still on board.

*Lighthouses.*—A contract has been let for an iron tower for the lighthouse which is being erected at Castle Point, the site for which is being got ready. A road to it has been formed, the erection of the keepers' dwellings and the necessary outbuildings and stores are being proceeded with, and the lantern and apparatus have been received from England. It is anticipated that the works will be completed and that the light will be exhibited early in November next. The light will be a second-order incandescent group-flashing white light, flashing at intervals of forty-five seconds, with intervals of eight seconds between each group-flash.

The work of forming the necessary track from the landing-place to the site of the lighthouse which is being erected on Chicken Island, and the erection of the tower, is now in hand, and the apparatus has been procured, and will be sent to the island as soon as the tower is ready for it. The light will be an automatic acetone-acetylene light, so that no keepers will be required. The acetone-acetylene gas is manufactured in Napier, and will be sent to the lighthouse by the “Hinemoa” in specially made cylinders about every three months, when the vessel makes her periodical visits to the northern lighthouses. The light will be a flashing light, a quarter of a second flash and three and one-twelfth seconds dark, giving eighteen flashes a minute.

A vote of £1,500 was taken last year for a lighthouse at the North Cape, and the lantern and apparatus have been ordered from England. A further vote will be asked for next session of Parliament, in order that the erection of the tower, dwellings, and other necessary buildings may be proceeded with. The light will be a second-order incandescent group-flashing white light, giving three flashes in quick succession every half-minute.

When the lighthouses on Chicken Island and the North Cape are completed the coast from Cape Maria van Diemen to Auckland will be very well lighted indeed.

The new tower at Tuahine Point, near Gisborne, has been completed by the Department, and an acetone-acetylene light, provided by the Gisborne Harbour Board, installed in it. This light, which was exhibited on the 16th October last, is being maintained by the Board.

During the year incandescent lights have been installed at Cape Palliser, Cape Egmont, Cape Saunders, Waipapapa Point, and Farewell Spit. In addition to these places, similar lights are in use at Cape Maria van Diemen, Cape Brett, Cuvier Island, Pencarrow Head, Brothers, Stephens Island, Centre Island, and Puysegur Point; and the apparatus for installations at Portland Island and Kahurangi Point have been obtained, and will be fitted up in the lighthouses as soon as the expert, who is at present engaged on the lighthouse-works at Castle Point, is available to do the work.

These installations give a much better light than is given by the use of the Doty paraffin-burners formerly in use, and their maintenance is much less expensive, as they burn less oil, and kerosene, which is a cheaper oil than paraffin, is used. I recommend that provision for installations for some of the other lighthouses be made in the estimates for the current year.