

spherical cage, and, although very useful, was not large enough to be easily seen at night. The new beacon, shortly after it was erected, was run into by a steamer, and considerably damaged; but it has since been satisfactorily repaired at a cost of £43 19s. 2d. Although this substantial structure is a great improvement on the old iron-rod beacon, it cannot be regarded as a reliable guide for vessels entering the Pass at night; it is therefore proposed to erect a light on the mainland side of the Pass, so arranged as to produce an apparent light on the beacon opposite, by means of a reflector placed on it. The effect of this will be to show a light on each side of the channel, and thus enable mariners to approach it with confidence on the darkest night. At present, about ten steamers, some of large tonnage and frequently crowded with passengers, go to and return from Nelson by way of the French Pass every month, frequently reaching the Pass during the night; a light is therefore urgently needed at this point, and I strongly recommend that authority be given for its erection to be proceeded with as soon as possible.

*Harbours.*—The various harbour establishments under the control of this department have been maintained in good order, and such local beacons and buoys as were absolutely necessary have been placed in position. Amongst these I may mention new iron buoys at Tauranga and Nelson. Orders have also been given to have the channel to Waiuku (Manukau Harbour) buoyed off. Advantage has been taken of the “Stella’s” visits to the various ports to clean and overhaul the buoys.

*Port Chalmers Graving Dock.*—The machinery, boilers, &c., have had a thorough overhaul during the past year, and are now in good order. The boilers have been fitted with Galloway tubes and feed-water heaters, which have had the effect of considerably reducing the quantity of coal consumed. The receipts for docking vessels during the year amounted to £1,947 11s. 6d., and the expenditure for the same period was £1,613 12s. 2d. This is exclusive of the interest payable on loans raised for construction of the dock.

*Light Dues.*—The amount collected for light dues during the past year amounted to £7,542 7s. 8d., being £808 7s. 1d. in excess of the amount collected during the previous year. In addition to this sum actually paid by the owners and agents of vessels, a further sum of £1,788 was paid to the credit of the Light Dues Account by the General Post Office, being arrears of light dues on the San Francisco mail steamers, which vessels, in accordance with the terms of their contract, do not pay light dues. I may be permitted here to remark that it is gratifying to find that the propriety of the course I have steadily advocated ever since the first San Francisco mail contract was entered into, in respect of the light dues chargeable to mail steamers, has at length been recognized. There can be no doubt, I think, that it is not only correct in principle, but in every way desirable, that the entire cost of all services by or for any department of the public service should appear in the accounts of that department for the information of the public.

*Government Steamers.*—The “Hinemoa” has been laid up for the greater portion of the year, and when she was employed it has always been on special service. The “Stella” has been continuously employed in attending to the lighthouses, &c., and, besides this, has done a considerable amount of work for other departments; she has had her machinery overhauled, the high-pressure slide valve having been faced, a new high-pressure piston made, the rods turned up, &c. This is the first regular overhaul her machinery has had during more than five and a half years’ constant running; a very small sum had been previously spent in repairs to the engine and boiler, which shows that they must have been well designed and faithfully constructed by the builders, Messrs. Scott and Co., of Greenock. Her masts also, which were unnecessarily reduced on her passage out from Home, have been lengthened, gaffs fitted, and a new suit of sails made. The alterations to the masts have greatly improved her appearance and rendered her steadier at sea in rough weather.

*Examinations of Masters, Mates, and Engineers.*—A despatch has been recently received from the Colonial Office, covering a communication from the Board of Trade announcing that the Board had decided that it was no longer necessary to insist upon the provisions of the domiciliary clause in the Queen’s Order in Council of the 12th February, 1876, authorizing the issue in New Zealand of certificates of competency of equal value with those granted by the Board of Trade. This further modification of the clause referred to practically allows certificates to be now granted in New Zealand on precisely similar conditions to those which are in force in the United Kingdom, and thus enables any person to be examined here for a certificate who can produce a properly-verified statement of services. Certificates of competency have been issued during the past year to 123 candidates, 72 being for masters, mates, and engineers of sea-going vessels, and 51 for masters and engineers of river steamers.

*Surveys.*—It having been reported that considerable changes had taken place at the entrance to Nelson Harbour, a survey of that place was made by Captain Johnson, of this department, assisted by Mr. O’Connor, of the Public Works Department. The result of this survey showed that on the old course over the bar the water had shoaled considerably, there being, however, a channel nearer to the Boulder Bank with 7 feet at low water, the same depth as the channel off the Arrow Rock. Vessels of the usual draught can, therefore, by using this channel, enter Nelson as before. A corrected chart has been published, and copies have been sent to the Hydrographer to the Admiralty in order that the Admiralty charts may be corrected. Soundings in the vicinity of various reported dangers have also been taken by the captains of the Government steamers. A survey of Opunake Bay has also been begun under the superintendence of the Public Works staff; but, owing to bad weather, it has not yet been completed.

*Steam Navigation.*—Passenger-certificates have been issued to 146 steamers of 14,650 aggregate tonnage and 6,009 horse-power, being 8 steamers more than were surveyed last year.

*Wrecks and Casualties.*—The casualties reported during last year amounted to 66; of these, 59 were on or near, and 7 beyond, the coasts of the colony. Of those on or near our coasts, 19 vessels of 3,755 tons register were total losses, 40 of 8,128 tons were partial losses, and 5 were cases of loss of life from being washed or knocked overboard at sea. The total number of lives lost in these casualties was 160, including 130 lost in the “Tararua,” and 7 in the “Pakeha,” 5 each in the “Dido,” “Rona,” and “Owake,” 3 in the “Bee” (these 5 vessels being lost with all hands); and 1 each from the “Clara,” “Venus,” “Fanny Thornton,” “Torea,” and “Orpheus.” Of the casualties reported as having occurred beyond