

## EXAMINATION OF LIGHTKEEPERS IN SIGNALLING.

Lightkeepers have been examined in the signalling part of their duties as occasion required. Six such examinations were conducted, in each case the candidate being successful. Since its introduction in 1922 thirty-nine lightkeepers have passed this examination.

## NAUTICAL ALMANAC AND TIDE-TABLES.

The 26th edition of the "New Zealand Nautical Almanac and Tide-tables" was issued during the first week in November, 1927, so as to enable its contents to be earlier available to ships proceeding overseas. This publication contains the latest authentic navigational information relative to the most used ports within the Dominion, and to any changes in navigational "aids" which may have taken place since its last publication. Also, it contains tide and tidal-stream tables, sunrise and sunset tables and astronomical ephemeris used in navigation. The tide-tables were extended so as to provide daily tidal predictions for the fast-growing port of New Plymouth, and these predictions, in addition to those for Auckland, Bluff, Dunedin, Lyttelton, Wellington, and Westport, will be continued annually. This publication has, as is usual, been well received, and has had a ready sale.

## WIRELESS TELEGRAPHY ON SHIPS.

During the year seventy deck officers passed the Wireless Signaller Examination, making a total of 251 deck officers who have become so qualified since the 1st January, 1926, the date on which the regulations as to ships being provided with wireless-telegraph installations came into force.

## SURVEY OF SHIPS.

Certificates of survey issued to ships during the year were as follows: To seagoing steamships and auxiliary-powered vessels, 203; steamships and auxiliary-powered vessels plying within restricted limits, 537; sailing-vessels, 17. The total number of certificates issued is 757, as compared with 816 for the previous year. Included in this total are nine sea-going vessels and thirty restricted-limit vessels surveyed for the first time. The new seagoing vessels comprise one cargo-steamer of 1,600 tons register, one steam-tug, one motor-tug, one oil-tanker, one wooden motor-vessel built at Auckland, and four smaller craft. The new restricted-limits vessels are mostly launches. A small steam-tug of steel is at present being constructed at Auckland. The type of propelling-engine most favoured for launches is the petrol-engine, but as the so-called semi-Diesel engine is now obtainable in the smaller sizes, this type of engine, on account of its low running-costs and lesser fire hazard, will no doubt be more extensively adopted in the future. Under section 226 of the Shipping and Seamen Act 307 vessels were surveyed for seaworthiness and efficiency. Extensive repairs to the hull of the "Northumberland" estimated to have cost over £8,000 were carried out at Auckland.

The Board of Trade have called attention to the proper loading of coal-carrying vessels and the necessity of such vessels having prescribed proportions of breadth and draught to ensure stability. Their instructions are based on the recommendations of an informal committee on coal-carrying vessels. Recently a collier of 143 tons register was lost when on a voyage from Blyth to Dundalk. It is interesting to note that the Court of Inquiry found that, having regard to the type, design, and proportions, and to the loading of the vessel for the intended voyage, the estimated metacentric height of 9.6 in. was insufficient. Since the 1st January last it has been compulsory for all new types of seagoing vessels to be inclined, and shipowners have been requested by the Board of Trade to furnish their masters with information regarding stability to guide them in the loading of their ships. It has been the practice in England for many years to incline the larger passenger-vessels. It is hoped that the extension of the practice to all types of vessels will encourage further study of stability with a view to the presenting of the information in a form conveniently applicable to the practical problems arising in the loading of ships.

Motor-vessels and oil-burning steamships are increasing in numbers each year, and it is necessary that these vessels should carry proper fire-extinguishing appliances. It does not appear to be generally known that no one type of extinguisher is effective for all classes of fire. There are three types of extinguishers in common use—the tetrachloride extinguisher, the froth or foam extinguisher, and the ordinary CO<sub>2</sub> extinguisher discharging water. The tetrachloride type is the most effective for oil fires in closed compartments, as the gas can penetrate to places inaccessible to froth. The froth or foam type is most effective in open spaces, as tetrachloride gas may be dispersed by draughts. In closed passenger-spaces where fire of woodwork may occur the ordinary CO<sub>2</sub> extinguisher discharging water will be most effective.

*Survey of Launches.*—The Department's requirements in regard to the survey of launches have in the past year given rise to what may appear to be a great deal of objection. In actual fact the statement of requirements was issued in 1915 in accordance with advice received from the Imperial Board of Trade, but, owing to war conditions then existing, it was found impossible to enforce the requirements, and the matter was left more or less in abeyance. The Imperial Board of Trade is regarded in New Zealand and elsewhere in the Empire as the parent authority, and the Marine Department endeavours as far as possible to follow the practice in Great Britain.

It is to be understood in the first place that private launches do not come under the Department's survey, and that therefore the Department's requirements extend only to launches plying for hire, either with passengers or cargo. Furthermore, by the Shipping and Seamen Amendment Act of 1925 it was provided that if a ship did not exceed 6 tons register and was owned by a person engaged in some agricultural or pastoral pursuit and employed in carrying the produce or other goods of the owner, she should not be subject to the provisions of the Shipping and Seamen Act relating to survey