

Fires in cargoes other than coal cargoes have occurred, and the causes of such have been difficult to trace. After much investigation they generally are attributed to spontaneous combustion. Nevertheless, it cannot be denied that some of the outbreaks may have resulted from the liberty enjoyed by the general public to walk and to smoke in the vicinity of vessels and cargoes whilst loading or discharging operations are being performed. Such liberty does not exist in the older countries.

Collisions affecting seagoing vessels have been infrequent, and their infrequency shows, generally speaking, that the Collision Regulations are being well interpreted by those who necessarily have to observe them.

Minor collisions between vessels of the launch class continue to occur, and the time has arrived when an elementary knowledge of the Collision Regulations should be demanded of all persons who have charge of such launches.

At present, launches which are licensed to carry passengers and cargo may be in charge of persons whose only qualification is an ability to drive the engine of such vessels. In the interests of safety to life and property it would appear necessary that such persons should be qualified so as to enable them to take proper action to avoid collision. The same would apply to pleasure-yachts, of which there are a large number, and the persons in charge of which are not at present required to possess any knowledge of the Collision Regulations, or even to show a slight ability to avoid collision if such became imminent.

In some cases where it has been considered necessary further action has been taken by the Department, and in few cases it has been found that casualties have been caused by wrongful act or negligence and might have been avoided by care or prudence.

*Notices to Mariners.*—Information of importance to vessels affecting the coasts of the Dominion and localities visited by vessels of the Dominion, also information of value to overseas vessels mainly relating to changes in "aids" or obstructions to navigation, has been published.

The various changes which occur in our harbours and the alterations in coastal "aids" to navigation have been promulgated among shipping as has been found necessary.

*Radio Direction-finding for Navigational Purposes.*—The development of radio direction-finding for the use of vessels has proceeded to great length in Europe and America. At present the development of this important side of radio telegraphy has slackened somewhat owing to divergence of views as to the best manner of its application and use, some favouring the method of position-lines being supplied to vessels on demand; others favouring the method by which a vessel becomes quite independent and may observe its own position-lines.

*Examination in Form and Colour Vision.*—This examination, which is open to all persons who desire to follow employment at sea, has been performed for seventy-four candidates during the year. Of this number, one candidate failed to pass the form vision part of the test, and two candidates failed in colour vision; one of the latter being quite unable to distinguish the difference between green and red. This examination is carried out by the Department's officers at Auckland, Wellington, and Lyttelton in a manner similar to and with the same instruments as used by the Board of Trade in the United Kingdom.

*Examination of Masters and Mates.*—At Wellington the examination of masters and mates has been performed by the Principal Examiner monthly, during the first two weeks; at Auckland, by the Examiner at that place when necessary, and at Lyttelton by the Superintendent of Mercantile Marine, who acts as Examiner at that port, monthly during the third and fourth weeks.

Some examinations for restricted limits certificates have been carried out at Napier by the Harbourmaster, and at Dunedin by the Superintendent of Mercantile Marine. This branch of the Department is now in process of reorganization, in the interests of economy and efficiency.

This year has witnessed a slight decrease in the total number of candidates for certificates for seagoing vessels, the total number of candidates being 91; whilst last year the total number was 104; the total number of failures being 52, and of successes 39.

Past records show the percentage of failures to be normal.

Of the total number 55 were candidates for foreign-going certificates, and 14 were candidates for home-trade vessels, and of these 30 passed, whilst 22 were desirous of obtaining certificates for vessels which trade in restricted limits, and 9 passed. The percentage of passes for all grades was 43.

Of the foreign-going total, four examinations were held for the higher certificate of extra master. Two candidates, Captain W. W. Stuart and Mr. W. J. Keane, were successful in passing this examination, the first-named being one of the Department's officers stationed at Auckland. It was pleasing to find that both candidates possessed a good knowledge of the subjects in which they were examined.

The subjects of this examination comprise, in addition to the syllabus for ordinary certificates, advanced questions in stability, naval architecture, magnetism, elementary science, and scientific meteorology. It also embraces an examination in signalling at fair rates of speed. This examination lasts for a whole week, and it is not surprising that few candidates compete for this qualification.

All the examinations have been carried out in conformity with the requirements of the Imperial Board of Trade, and the signalling portion is conducted with automatic signalling instruments similar to those used by that body in the United Kingdom.

Recently the Imperial Board of Trade revised the Regulations governing the Examination of Masters and Mates.

As foreign-going certificates issued in New Zealand are valid throughout the British Empire, it is necessary that the existing regulations in this Dominion should be identical with those issued by the Board of Trade. The Regulations are now under revision.

*Examination of Marine Engineers.*—During the year 291 candidates passed their examinations and 66 failed. Of those who passed, 130 were engineers of seagoing ships; 12 were engineers of steamers plying within restricted limits; 50 were engineers of seagoing motor-propeller ships; and 99 were engineers of such boats plying within restricted limits.