

The new Board of Trade rules make it compulsory in the case of new ships—*i.e.*, those the keels of which were laid after the 30th June, 1932, for the freeboard to be computed in accordance with the new rules. In the case of existing ships—*i.e.*, those the keels of which were laid before the 1st July, 1932, the owners have the option of a freeboard computed under the new rules or that found by the previous rules, but in any event, existing ships will be required to comply with the conditions of assignment in principle and detail so far as is practicable and reasonable, having regard to the efficiency of the protection of openings, the guard rails, the freeing ports, and the means of access to the crew's quarters provided by the arrangements, fittings, and appliances existing on the ship at the time when she is first surveyed under the new rules.

It has been reported that the general effect of the new rules is that the new freeboards will agree approximately with those computed by the previous rules, except in the case of "tankers" and ships carrying deck loads of timber. These classes of ships will benefit by deeper loading under the new rules, but they will be required to comply with special conditions to ensure their safety with reduced freeboards. It has been estimated that the reduction of freeboard of tankers will be about 15 per cent. In the case of timber-carrying vessels, it is impossible to say what will be the general increase in the draft now permissible.

Whilst the general effect of the new rules on ordinary types of cargo-vessels is small, there will be individual ships which will gain or lose a few inches in freeboard. The exact difference in freeboard of a particular ship can be determined only from a close investigation of the design, construction, dimensions, and condition of the vessel.

It would appear that the effect of the new rules on the flush-deck type of ship will be to increase freeboards slightly, whilst ships with long erections such as the poop, bridge, and forecastle type or long bridge and forecastle type, or shelter-deck type, will obtain a few inches deeper loading.

The freeboard of a ship is the distance between the deck-line and the load-line. On existing ships the deck-line, known as the "statutory deck-line" is a point squared out from the inner edge of a waterway of assumed width. In future, on all ships, both existing and new, the deck-line will be marked at the point of intersection of the upper surface of the freeboard deck with the outer surface of the hull-shell plating.

The new Load-line Rules differ from the previous rules in one other important respect, and that is they define particularly the localities or zones and the season for which each load-line is appropriate. Previously the Winter North Atlantic and the Indian Summer load-lines marked the loading for these localities within specified months of the year, but no such particular definition was given regarding the winter and summer seasons in other localities.

In the new rules a schedule of zones and seasonal areas and also a chart are given showing precisely the permanent tropical and summer localities, and the summer and winter periods in other localities. In respect to New Zealand, the northern boundary of the seasonal winter zone meets the west coast at approximately the centre of the South Island. On the East coast this boundary-line leaves the coast at Cape Saunders and continues off and approximately parallel to the coast to a point north-east of Auckland. Vessels, therefore, proceeding south from Dunedin will be limited to the winter load-line during the period from 16th April to 15th October inclusive.

On certain occasions a vessel leaving Wellington, which is in the permanent summer zone, and bound for Panama will, on the Great-circle Track between these two ports, pass into the seasonal winter zone approximately 200 miles from Wellington, and continue in that zone for well over 2,000 miles on her journey. Such a vessel must be loaded not wholly with regard to the load-line for the zone in which the voyage is commenced, but also with regard to the consumption of fuel, stores, &c., and her draught when she will enter the winter zone.

The Board of Trade rules apply not only to ships to which the International Load-line Convention applies, but also to other load-line ships, which will be known as "local load-line ships"

#### *Safety of Life at Sea Convention.*

The International Convention for the Safety of Life at Sea was signed at London on the 31st May, 1929, and a Bill was passed by the British Parliament on the 17th March, 1932, providing for the survey of ships by the Imperial Board of Trade in accordance with the provisions of the convention relating to the construction of passenger-ships, life-saving appliances for passenger ships, and wireless telegraphy installations on passenger and cargo ships. Provision is made for the issue of a safety certificate, after inspection and survey, to every passenger-ship which complies in an efficient manner with the requirements relating to construction, life-saving appliances, and wireless telegraphy, and for the issue of a safety radio-telegraphy certificate to ships other than passenger-ships. The convention rules do not vary much in principle from the rules hitherto recognized as contributing to the safety of life at sea, but they will tend to promote uniformity in interpretation and to reconcile more thoroughly the opposing and sometimes vexatious factors of safety and economy in design, construction, and operation. The convention was unanimously agreed to and signed by eighteen maritime countries, and it is expected that it will be brought into operation on the 1st January next. The necessary steps are being taken to effect accession to it on behalf of New Zealand.

In order to give full effect to the provisions of this and the Load-line Convention certain legislation is necessary and the preparation of this is in hand.

#### SAFETY CARGO-WORKING HOOK.

The advisory committee appointed to consider the large number of specimen cargo-working hooks submitted in connection with this competition, for which prize-money amounting to £100 was provided by Government, completed its work in December last.