

## DECKED LIFEBOATS.

Under the statutory rule for life-saving appliances of the 14th June last, which came into force on the 1st August, provision is made for the classification of decked boats as lifeboats of section (A), (B), or (C).

There is nothing in the rules of the 10th February, 1902, which would prohibit the construction of a section (D) or (E) boat with a deck, and under those rules a section (E) boat may be collapsible. It is intended that all section (D) boats should have fixed bulwarks, and the new rule, therefore, makes no change as regards these two classes of boats.

It will be seen that the new rule applies to all ships which are required to carry two or more boats of section (A), or section (B), or section (C), and permits not more than half the number of such boats to be decked lifeboats.

Under the provisions of the rule, all decked boats must be constructed in a manner approved by the Board of Trade. Enclosed air-cases must be fitted in all metal lifeboats of section (A) or (B), but may be dispensed with in wooden decked boats, subject to such conditions as may be approved by the Board of Trade.

The following methods of construction have been approved, viz. :—

(1.) *Construction of Decked Section (A) or (B) Boats without Air-cases or Buoyant Material.*

The dimensions given are for boats over 27 ft. but not exceeding 30 ft. in length.

*Keel, Stem, Sternpost, Deadwoods, Aprons, and Hogpiece.*—To be of oak or elm, with rabbets and housings for the planking. The keel is to be 3 in. moulded by 2 in. sided.

*Planking.*—To be of oak, teak, mahogany, or wych elm, in two thicknesses, each  $\frac{3}{8}$  in. breaking joint, with a ply of calico laid in varnish or paint between. The edges of the planks are to be fastened with wrought-copper nails clenched on rooves and spaced not more than 3 in. apart in the edges of the outer thickness; and the inner thickness is to be fastened to the outer between the timbers where necessary. The planking is to be fastened to the timbers by wrought-copper nails, properly turned over or clenched on the timbers. The butts of each thickness are to be well shifted, and fastened with wrought-copper nails clenched on rooves. The hood ends of planks are to be secured by brass screws to the stem or sternpost, and the edges must be well secured to the hogpiece and shelf.

*Timbers.*—To be of elm,  $1\frac{1}{2}$  in. by  $\frac{7}{8}$  in., spaced 9 in. apart from centre to centre, bent in one piece from shelf to shelf. At the ends they may be in two pieces, provided their heels are well secured to the deadwood.

*Deck.*—The deck must be of two thicknesses of mahogany or teak, each  $\frac{3}{8}$  in. thick, with a ply of calico laid in varnish or paint between, and all the seams of the upper thickness must be covered with foothold battens, well fayed to the deck, bedded in red lead, with a hemp stopwater on each edge. The two thicknesses of the deck and the foothold battens are to be fastened to the beams by galvanized-iron screws and nails alternately.

Four properly framed hatchways, the total area of which is to be at least 25 per cent. of the deck area, are to be fitted and so placed as to give access to the different parts of the boat. Efficient bearing surface and fastenings are to be provided for the edges and butts of the deck-planking around the hatchways. The hatch-covers are to be in two thicknesses, formed with a double rabbet, bedded on calico and varnish, and fastened by brass screws to the beams and carlings, and made watertight. It is recommended that an opening be made in the deck, closed by a suitable screwed metal cover, in order to ventilate the boat when the hatches are on.

*Deck Shelf at Lower Gunwale.*—To be of oak or elm,  $2\frac{1}{2}$  in. deep by  $2\frac{3}{4}$  in. wide; scored to provide at least  $1\frac{1}{2}$  in. housing for the beam ends. It must be well fayed and secured to the deck and side planking, and the fastenings must be placed clear of the beam ends.

*Beams.*—To be of oak,  $1\frac{1}{2}$  in. by  $1\frac{1}{2}$  in., spaced 9 in. apart from centre to centre, and well supported by the middle line bulkhead, and by oak quarter stanchions, suitably placed, with their ends well secured to the timbers and beams.

The ends of the through beams are to be scored  $1\frac{1}{2}$  in. into the shelf, and the short beam-ends 1 in. into the fore and aft carling in way of the hatchways.

Lodging knees are to be fitted at the ends of alternate beams, and securely fastened to the beams and shelf. If the knees are of iron they should be galvanized.

*Longitudinal Bulkhead.*—A longitudinal bulkhead must be fitted at the middle line, of  $1\frac{1}{4}$  in. pitch-pine or larch, scored over the timbers and beams and efficiently secured to the hogpiece and deck planking. It must extend at least from the forward to the after slings, and must be fitted with drain holes, sufficient in number and size.

The longitudinal bulkhead may be dispensed with provided the boat is efficiently strengthened at the middle line by strong stanchions with diagonal bracing connected to a girder under the beams and to a keelson, or by other suitable means.

*Caulking.*—The seams of the planking at the keel, stem, and sternpost are to be lightly caulked, and filled after painting, with white putty.

*Painting.*—The hull is to have two coats of lead paint inside and three coats outside, after inspection by a surveyor.

*Materials and Workmanship.*—All materials and timber are to be of the best quality, free from defects and objectionable knots, and the workmanship is to be of the best quality.

(2.) *Alternative Method of Construction when the Boat is filled with Cork.*

If the whole interior of the boat below deck is filled with cork cuttings the construction may be modified as follows: The planking may be of a single thickness of oak, teak, mahogany, or wych elm,  $\frac{1}{2}$  in. thick and worked clencher; or two thicknesses of pine may be employed, with a ply of calico laid in varnish or paint between. In any case the spacing of the edge fastenings is not to exceed 3 in.