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SHIPS' LIFEBOATS

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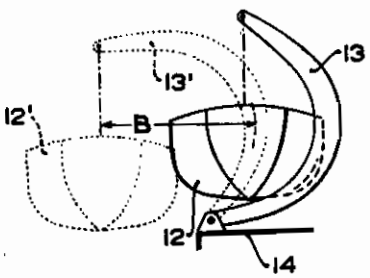

FIG. 1

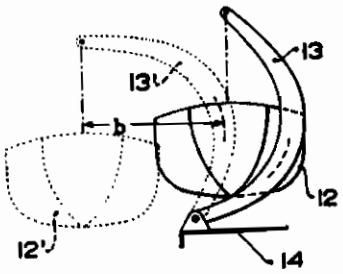

FIG. 3

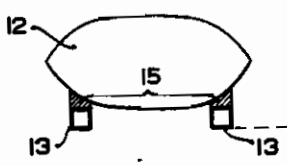

FIG. 2

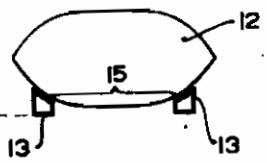

FIG. 4

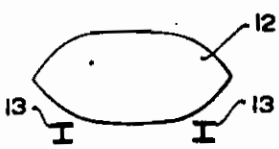

FIG. 5

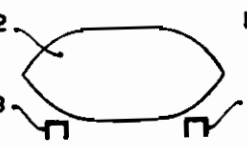

FIG. 6

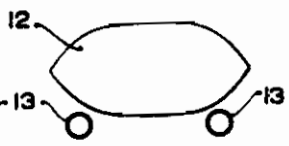

FIG. 7

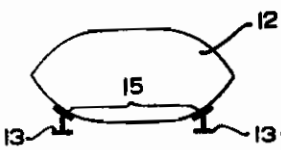

FIG. 8

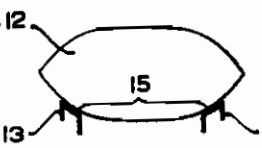

FIG. 9

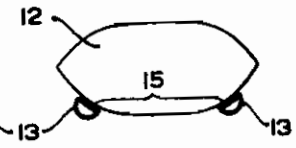

FIG. 10

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SHIPS' LIFEBOATS

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This invention relates to a boat-launching device with luffing davits or the like arranged within the length of the boat, the arms of the davits, in the in-board position of the boat and of the davits, fitting closely to the cross-sectional form of the boat. The sides of these arms facing the boat have hitherto been shaped parallel to the longitudinal axis of the boat.

The invention consists in the feature that the davit arms, at the side facing the boat, fit snugly to the longitudinal outline of the side of the boat.

Further details, and the advantages obtainable with the invention, will be explained with reference to the accompanying somewhat diagrammatic drawings, in which:

Figures 1 and 2 represent in side elevation and in horizontal cross section respectively the arms of two luffing davits of the usual construction, the out-board position being indicated in Figure 1 in dotted lines;

Figures 3 and 4 are corresponding views of luffing davits according to the invention;

Figures 5, 6 and 7 show further known profiles of davit arms; and

Figures 8, 9 and 10 represent corresponding profiles, as modified according to the invention.

In Figures 1 and 2 the davit arms, from which a boat 12 is suspended, are denoted by 13. They are rotatable in a plane transverse to the ship, are secured to the edge of the deck 14, and are of rectangular boxlike profile. They likewise serve, amongst other things, as supports for the boat, and are provided for this purpose with wooden blocks 15 of trapezoidal cross section, which are shaped to fit the outside of the boat facing the davit arms.

Now Figures 3 and 4 show that according to the invention oblique blocks are not used, but the davit arms themselves are so shaped as to fit closely to the wall of the boat, with the interposition of thin, flat plates of wood. From a comparison of Figures 1 and 2 with Figures 3 and 4 the advantages of this design over the usual construction will be immediately obvious.

In the first place there is a saving of deck space, for the free width of the deck is increased on both sides, by adopting this invention, by a distance *a*.

Further, the bending moment in the davit arm arising from the weight of the boat is diminished. Whereas with the usual design the lever arm of the bending moment for the most severely stressed cross section in the out-board position is equal to B, with the structure according to the invention, other conditions being the same, the bending arm is equal to *b*. Usually *b* is less than B by more than 10 per cent. The davit arm may consequently be made correspondingly lighter.

It is also possible by adopting this invention to use simple, flat wood blocks. This yields a saving of material and of labour costs, since trapezoidal blocks are difficult to make, quite apart from the fact that they are liable to split and splinter at the sharp edges.

Finally a davit arm according to the invention has a more pleasing form in side elevation, since its curvature need not be so marked.

Figures 8, 9 and 10 show further davit profiles according to the invention. From a comparison between Figures 5 and 8 it is evident that the invention can also be applied to davit arms of double-T profile. Davit arms of channel-shaped profile, as shown in Figure 6, or of circular cross section, as shown in Figure 7, can also advantageously be adapted to the shape of the wall of the boat, as shown in Figures 9 and 10 respectively. With regard to Figure 9 it is also to be observed that the open side of the channel section may if desired be closed by means of a plate.

The invention is also suitable for davits the arms of which do not serve at the same time as supports for the boat. If the boat then rests, in the in-board position, upon chocks that are independent of the davits, and is therefore not supported by blocks secured to the davit arms, the advantage mentioned with respect to these blocks does not of course arise.

ANE PIETER SCHAT.