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2,016,838

INSTALLATION FOR HANDLING A LIFEBOAT

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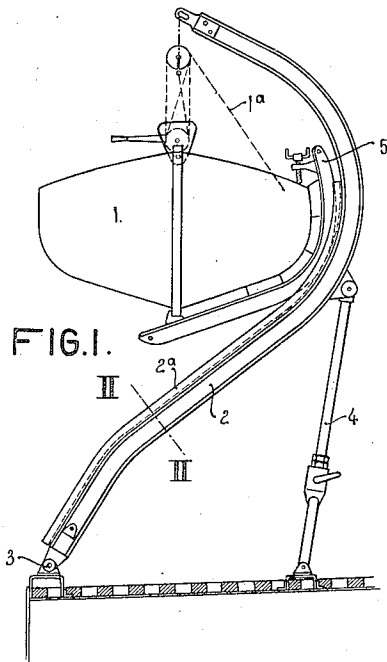


FIG. 1.

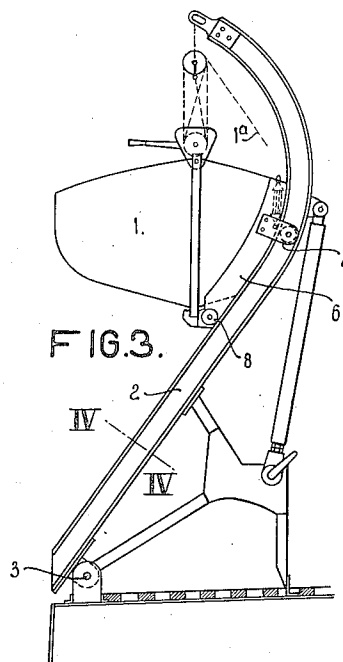


FIG. 3.

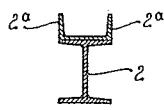


FIG. 2.



FIG. 4.

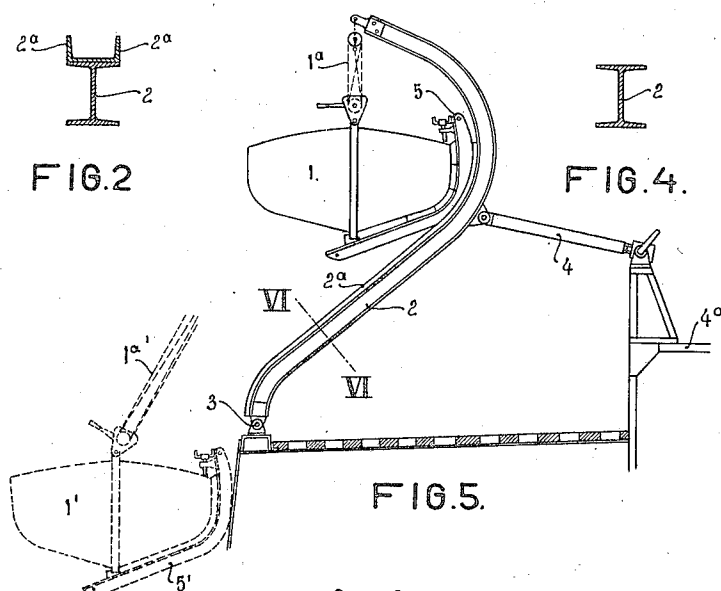


FIG. 5.

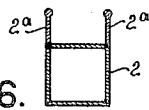


FIG. 6.

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INSTALLATION FOR HANDLING A
LIFEBOAT

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Application January 3, 1933, Serial No. 650,016
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3 Claims. (Cl. 9—22)

This invention relates to installations for handling a life boat on board a ship and its main object is such an installation which will enable the safe launching of the life boat irrespective of the list that the vessel may have.

In order that my said invention may be fully understood by those skilled in the art I shall now proceed to describe the same in further detail with reference to the drawing, in which:

Fig. 1 is an end elevational view of a life boat suspended from a pair of davits, it being understood, that only one davit of the pair is shown,

Fig. 2 is a cross sectional view, on an enlarged scale, along the line II—II in Fig. 1,

Fig. 3 is an end elevational view of a life boat suspended from davits of a somewhat different construction,

Fig. 4 is a cross sectional view, on an enlarged scale, along the line IV—IV in Fig. 3,

Fig. 5 is an end elevational view of a life boat suspended from davits of still another construction, and

Fig. 6 shows on an enlarged scale a cross-sectional view along the line VI—VI in Fig. 5.

In Figs. 1 and 2, the numeral 1 designates the life boat, which is suspended by falls 1a from a pair of luffing davits of which one only, designated by 2, is shown. Said davit is pivotally mounted as at 3 quite near to the ship's side and adapted to be positively swung inboard and outboard by any convenient gear 4, which does not require further description.

The boat 1 is provided on its inboard side with a pair of ordinary, removable Schat-skates, of which one only, indicated by 5, is illustrated, these skates being in engagement with the davit arms when the boat normally is stowed.

The lower portions of the davit arms in their normal positions of rest as shown, form steep, inclined trackways, along which the boat, guided by its skates, is adapted to slide downhill towards the water when the falls are paid out. It will be understood that during this downward sliding movement the boat is prevented from excessive fore and aft movement by the skates 5 being engaged between the flanges 2a of the trackways, see Fig. 2.

In Figs. 3 and 4, the boat 1 is fitted with a pair of wooden chocks 6 detachably secured thereto and each provided with rollers 7, 8 as means for guiding the boat and keeping it in engagement with the davit arms during its downward sliding movement.

Fig. 5 illustrates an arrangement which is substantially similar to that shown in Fig. 3, it being

understood, however, that the gear 4 here is not pivoted directly to deck, as in Fig. 1, but to a superstructure 4a on deck. The davits here have a hollow, square cross section (see Fig. 6) provided with flanges 2a, formed by bulb irons. The bulbs prevent damage to the boat when the latter engages the free edges of said flanges. If desired, these davits can be made from steel strips suitably welded together.

The modus operandi of the illustrated embodiments is as follows.

Under normal conditions, the boat is lowered simply by the paying out of the falls, the davits being kept in their inboard positions. It then slides downhill over the davit arms, the lower portions of which perform the function of inclined chocks along which the boat can slide towards the water by gravity.

Obviously, the center of gravity of the boat, which originally was located in the vertical line passing through the top block of the tackle, gradually moves laterally away from said vertical, since the davit remains stationary. This has the distinct advantage that, when the boat is lowered so far as to be flush with the embarkation deck, as shown in dotted lines in Fig. 5, the location of the center of gravity of the boat tends to press the boat with its skates 5 or the like against the side of the vessel, thus enabling a safe embarkation of passengers and crew without it being necessary to use so-called bowsing pendants, which, when released, often cause a violent swinging motion of the boat.

Should the vessel have a very heavy list, all that is required on the high side is forcing the davits out through an angular distance dependent upon the list of the vessel, before paying out the falls, until the davits again assume a suitable inclination relative to the vertical to guide the boat as described. On the low side, the davits remain inboard, or partly inboard, as may be desired.

It will thus be understood that, when the davits assume the correct positions relative to the vertical, somewhat as shown in the drawing, the davits need not be forced outboard in order to get the boat over the side, but, as distinguished from ordinary practice, are kept stationary so as to also act as inclined chocks. The gear 4 only serves to adjust the davits as required with a view to the list of the vessel, if any, but it may also be used to swing the davits out, if so desired, for instance, when the boat is to be hoisted.

As a matter of course, suitable means may be provided for locking the stowed boat in position, or for other obvious purposes, but it is not deemed

necessary to show or describe the same, as they do not form part of this invention and any one skilled in the art is familiar therewith.

Attention is drawn to the special shape of the 5 davits as shown in Figs. 1 and 5. As illustrated, said davits are straight through a substantial part of their lower portions serving as trackways for the boat. A relatively short distance above the deck, however, said portion is bent inwardly, so 10 as to form an outward curve. In practice it has been found that this form is very suitable for keeping the boat which slides down the davits, in upright position during its transition from the davits on to the ship's side. I therefore consider 15 said outward curve to be a very important feature of my invention.

Figs. 1 and 5 of the drawing show some embodiments, in which the means for guiding the boat on the davit arms are the well-known Schat-skates 20 detachably secured to the boat, whereas Fig. 3 illustrates an installation wherein wooden chocks 6 are provided for the same purpose. It may be well to state that the invention is not limited to these special means and that other means such 25 as fenders or the like may be employed.

What I claim is:—

1. In an installation for handling a life boat on board a ship, a pair of independent luffing dav-

it arms separately hinged near the ship's side, separate driving means connected with each dav- 5 it arm adapted to positively control and swing said arm outwardly from an inboard position, a substantial part of the lower portions of the dav- 10 it arms having a steep slope towards the water when the ship is level and provided with trackways, a pair of falls, a life boat suspended through said falls from the said davit arms and adapted to seat itself on the davit arms when the latter 15 assume an inboard position, and means attached to the boat and adapted when the davit arms assume their inboard position to guide the boat over said trackways of the lower davit arm portions when the falls are paid out.

2. In an installation as claimed in claim 1, means such as flanges provided on the lower por- 20 tions of the davit arms and adapted to coact with the said guiding means so as to prevent excessive fore and aft movement of the boat during its downward sliding movement over said davit arm portions.

3. Installation as claimed in claim 1, wherein the lower portions of the davit arms have an out- 25 ward curve so as to enable the boat to remain in a substantially horizontal position, when sliding from the said portions on to the ship's side.

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