Oct. 2, 1962 T. D. WALL, JR 3,056,466

STAND-OFF FOR BOARDING LADDER

Filed Aug. 7, 1961

Fig. 1

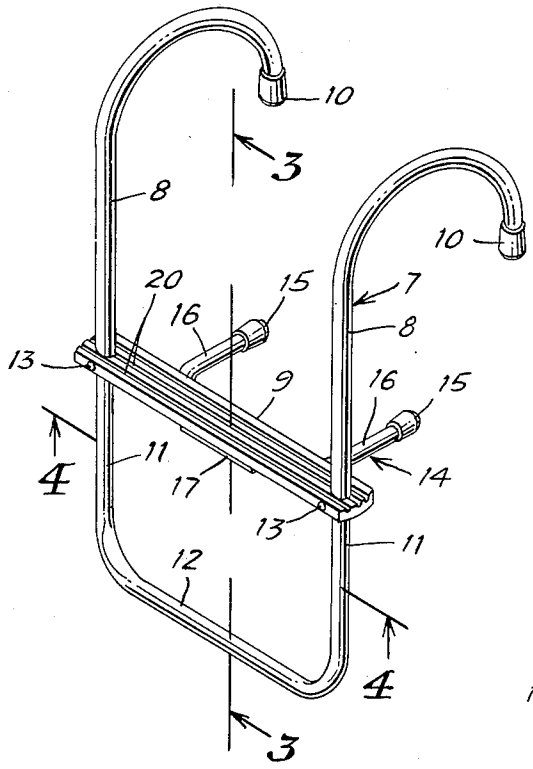
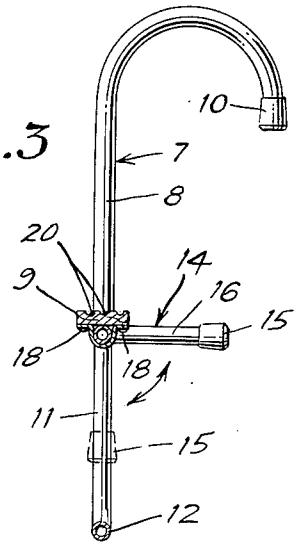


Fig. 3



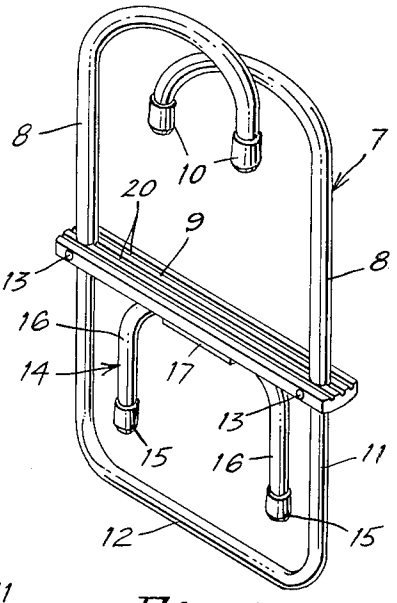


Fig. 2

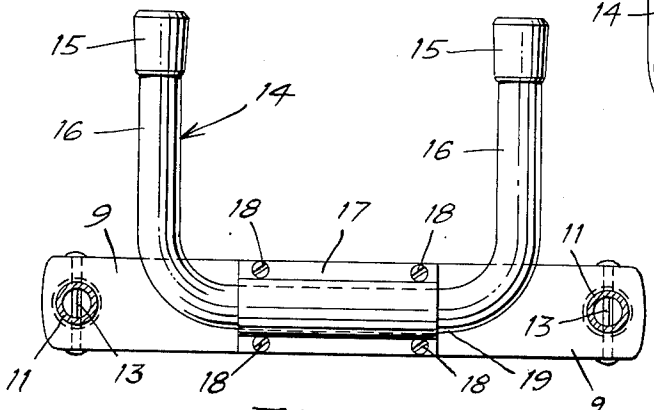


Fig. 4

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STAND-OFF FOR BOARDING LADDER

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This invention relates to boarding ladders and more particularly to that part of this type of ladder that is known as a stand-off.

It is well known to those experienced in the marine arts that when the average boarding ladder is placed over the gunnel of a boat or ship that difficulty will be encountered due to the usual inwardly sloping sides of the craft unless some form of stand-off is provided to hold the ladder in a safe useable position. It is therefore one of the purposes of this invention to provide a stand-off that can readily be adapted to any boarding ladder having rigid steps.

Another object of this invention is to provide a stand-off that is made of light weight material so as not to add materially to the weight of the boarding ladder and thus make it awkward to handle.

Another object of this invention is to provide a stand-off that can readily be adapted to a boarding ladder regardless of which side of the vessel it will be used on.

Another object of this invention is to provide a stand-off that will give added safety to any boarding ladder to which it is secured by reason of the fact that it has not one, but two stand-off struts thus assuring lateral stability of the ladder.

Still another object of this invention is to provide a stand-off that can readily be adapted to any rigid ladder of any material regardless of what use it may be put in so long as it, the ladder hangs by its inverted U-shaped arms or their equivalent.

Other and further objects and advantages of this stand-off for boarding will be hereinafter described, and the novel features thereof in the appended claim.

Referring to the drawing:

FIG. 1 is a pictorial view of a typical boarding ladder used on small boats with this invention in place ready for use.

FIG. 2 is a pictorial view of the boarding ladder with my invention attached, both folded and ready for storage.

FIG. 3 is a sectional view taken substantially along lines 3—3 of FIGURE 1 as viewed in the direction indicated by the arrows.

FIG. 4 is a sectional view taken substantially along lines 4—4 of FIGURE 1 as viewed in the direction indicated by the arrows.

Similar reference characters refer to similar parts throughout the several views of the drawing.

Having reference now to the drawing in detail, and in particular to FIGURES 1 and 4, there is generally indicated by the character 7 a boarding ladder embodying a pair of vertically disposed supporting rails 8 that also acts as a hand rail. The upper end of each of these rails of which there is one on each side of the step 9, curves downwardly in the form of an inverted letter U that terminates in a resilient cap 10. Each one of the foresaid rails is rotatably adapted in a snug fit over a vertical member 11 which I call a leg. Actually there are two of these foresaid vertical members and a horizontal bottom step portion 12 all in one single piece in the form of the U as can clearly be seen on examination of FIGURES 1 and 2 of the appended drawing.

Continued examination of the same foresaid FIGURES 1 and 2 will show that the lower end of each one of the said rails 8 rest on top of the step 9 while each of the vertical members 11 project upward through an opening

in each end of the said step 9 to which it is secured by means of a rivet 13 or its equivalent. The foresaid tubes 8 are of course suitably secured to the vertical members 11 in any desired manner that will not prevent the rotation of the said tubes.

A typical boarding ladder to which my actual invention, the stand-off for a ladder has now been described in detail though it is realized that this foredescribed construction may vary considerably with the size of the ladder and the material from which it is made as it is not absolutely necessary that the rails 8 or vertical members 11 be of metal nor the step 9 of wood.

This invention which, as has previously been stated, is called a stand-off, consists of a U shaped tubular member 14 having resilient caps 15 on the outer end 6 on each one of its legs 16. A U shaped bracket 17 is adapted to rotatably secure the foresaid tubular member 14 to the underside of the step 9 by means of a plurality of screws 18 by fitting over, and partly around the head portion 19 of the said tubular member 14. This construction is best illustrated by FIGURE 14 of the appended drawing.

The construction of both the boarding ladder and the stand-off (invention) to which it is secured has now been described in detail, and its method of use is almost self explanatory when one reads the above description of its construction along with an examination of the appended drawing.

It is certainly clear to those experienced in the art that when one gets ready to board or leave a boat or ship by a ladder of this sort, that it is only necessary to place the said ladder 7 over the side of the craft and hang the same by upper ends of the rails 8 which are curved as previously stated, to hang over the gunnel of a boat or the like, after first of course placing the stand-off which is the U shaped tubular member 14 in a horizontal position with its legs 16 extending from the boarding ladder 7 to the side of the boat or vessel which is not shown in any of the figures on the appended drawing since it is of course not a part of this novel invention. The resilient caps 15 rest against the side of the boat or vessel so as not to damage its painted or otherwise finished surface.

When the boarding ladder 7 is removed from the side of the craft and is not in use, its rails (hand rails) 8 are rotated so that the inverted U shaped upper end is turned inward as clearly shown in FIGURE 2 of the appended drawing, the stand-off, the U shaped tubular member 14 is rotated so that its legs 16 are parallel to and in the space between the two vertical members 11.

It may be added that the foresaid rails 8 which as said before, serve as hand rails, are covered with rubber, plastic or any other desired material that will prevent one's hands from slipping while boarding or leaving a boat or ship on which this ladder is being used. The upper surface of the step 9 is provided with a plurality of grooves 20 to prevent one's feet from slipping when using this boarding ladder.

From the foregoing it will now be seen that there is herein provided an improved stand-off for boarding ladders which accomplishes all of the objects of this invention, and others, including many advantages of great practical utility and commercial importance.

As many embodiments may be made of this inventive concept, and as many modifications may be made in the embodiment hereinbefore shown and described, it will be understood that all matter herein is to be interpreted merely as illustrative, and not in a limiting sense.

What I claim as new and desire to secure by Letters Patent is:

In an invention of the character described, comprising a single piece of round tubing having the configuration of the capital letter U when viewed from the front or back

thereof, the two upper ends of the said tubing being convexed when viewed from either side thereof, and a rectangular step having an opening in each end thereof, the upper surface of the said step having a plurality of longitudinally disposed grooves formed therein, the said step having the said tubing passing through the opening in each end thereby forming a boarding ladder, the said step being secured in place on the said tubing by means of a rivet in each end of the said step, the rivet passing through both the step and the said tubing and a U shaped clamp of a predetermined length screwed onto the underside of the said step, and a U shaped tubular member that is the stand-off member of this said boarding ladder, the said U shaped tubular member being prevented from swinging upward by reason of its pivotally being secured to the underside of the said step by the said U shaped clamp.

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