(No Model.)

J. G. W. HAVENS.

CENTER BOARD FOR VESSELS.

No. 259,308. Patented June 13, 1882.

Fig. 1.

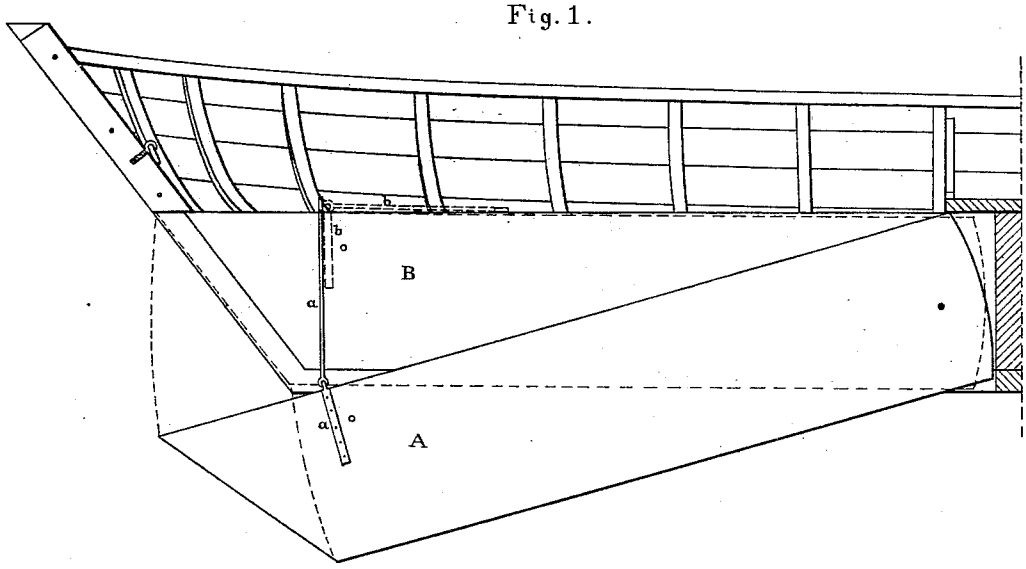


Fig. 2.

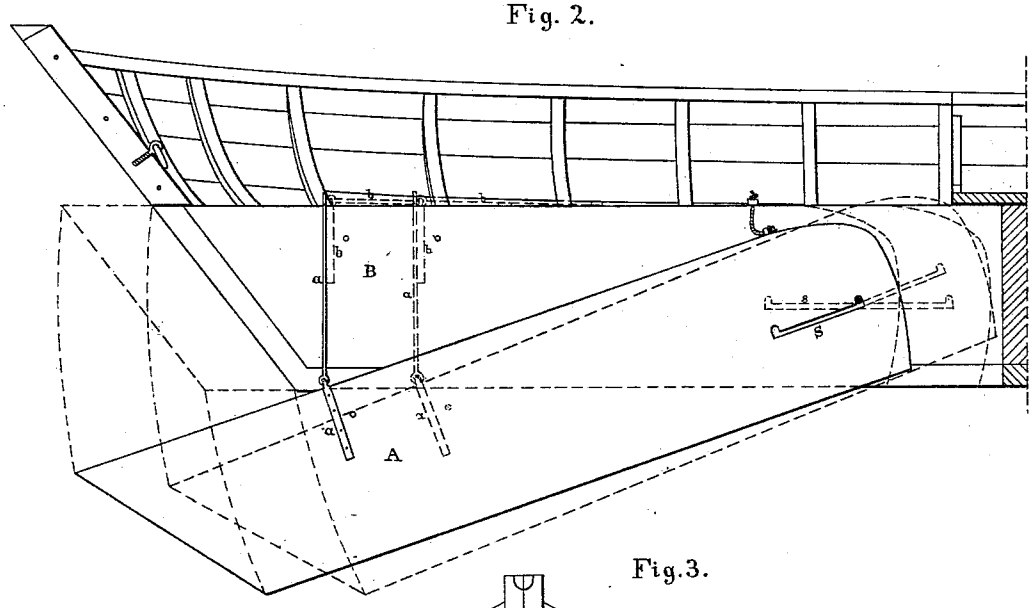
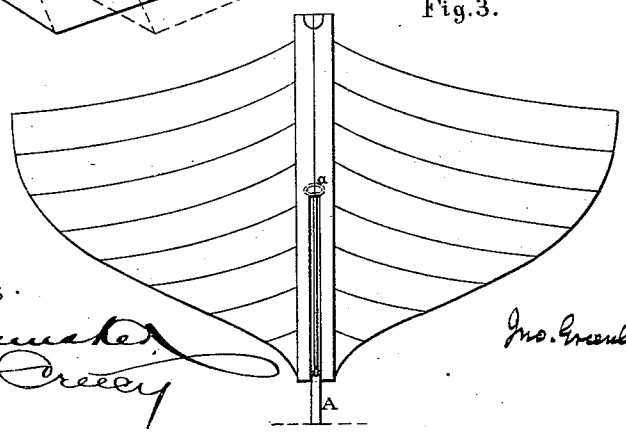


Fig. 3.



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CENTER-BOARD FOR VESSELS.

SPECIFICATION forming part of Letters Patent No. 259,308, dated June 13, 1882.

Application filed February 21, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN GREENLIEF WEBB HAVENS, of the village of Metedeconk, in the county of Ocean and State of New Jersey, a citizen of the United States, have invented a new and useful attachment to be applied to all classes of boats and vessels to prevent them from broaching to; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make use of the same.

Heretofore boats and vessels approaching shore, especially in a heavy sea, have been liable to broach to or incline suddenly to windward, thereby being exposed to imminent danger of oversetting, and involving to the occupants consequent liability to loss of life.

The object of my invention is to obviate the above disastrous results, and to this end it is to be applied to and used in boats or vessels for whatever purpose employed.

Figure 1 is a side view of the interior of the after part of a boat or vessel, with the starboard side of the box or well removed, in which A shows the board or non-broaching-to appliance when lowered or in use, and B the same when raised or not in use. *a a* show the parts or sections of the rod or lever by which the appliance is lowered when in use, and *b b* the same when not in use. S shows the slot by means of which the appliance may be extended farther aft beyond the stern of the boat or vessel.

Fig. 2 represents the said center-board when extended beyond the dead-wood of the boat or vessel by means of said slot.

Fig. 3 is a view of the stern of a boat and of the said board or appliance when extended aft through the double or divided stern-post.

Similar letters in all figures indicate corresponding parts.

This non-broaching-to appliance is a center-board, located as herein described, to be constructed wholly or in part of wood and metal, or of any substitute for wood or metal. In length it may be equal to one-fifth (more or less) of the length of the boat or vessel; in width either less, equal to, or greater than the depth of hold, and of sufficient thickness to secure the necessary strength. It is to be incased in a box or well placed in the extreme after part or stern of the boat or vessel, as shown in the accompanying drawings, and to be operated by a rod or lever jointed at or near the upper edge of the board or appliance in the most convenient manner.

I am aware that a "center-board" inserted in a "trunk," both of which are similar in construction to my above-described appliance, is now in general use in vessels, placed in or near the middle of the vessel, both as to length and width, and also that a double board operating both forward and aft, has been employed; but both of these being designed and used for a different purpose—namely, to cause the vessel to incline to windward or "go about"—one or the other is necessary (in vessels without keels) for that purpose, and neither can be successfully used or employed for the object for which my appliance is designed.

To operate the board as shown in Fig. 1 it is only necessary to raise the rod or lever to a vertical position, when a slight pressure will bring the board into position for use. To operate it as shown in Fig. 2 it will be necessary, in addition to the above, to raise the forward end of the same, by means of a rope, (shown in the drawings,) sufficiently to bring the pin on which the board is hung out of the niche in the after end of the slot, when the board will at once slide obliquely downward and aft. In this case the after part of the top of the well is left open to allow fore-and-aft play of the rod or lever.

The board or appliance, when not in use, may be held in position by a pin either through the board or through an eye or staple in the upper edge of the same.

The advantage of my invention is that the board extends beyond the stern-post of the boat or vessel, and takes into water which would not be reached by a center-board as ordinarily constructed.

Having thus fully described my invention, what I desire to claim, and to secure by Letters Patent, is—

1. The combination, with boats or vessels,

of a center-board so located as to extend aft beyond the dead-wood when said board is down or in use, substantially as described in Fig. 1.

2. The combination, with boats or vessels, of a center-board extending aft beyond the dead-wood, and mounted, as shown in Fig. 2, so as to be extended farther aft than the position shown in Fig. 1 by a sliding motion downward and aft by means of a slot in said board.

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Witnesses:
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