(No Model.)

R. CENTER.

CENTER BOARD FOR VESSELS.

No. 293,226. Patented Feb. 12, 1884.

Fig. 1.

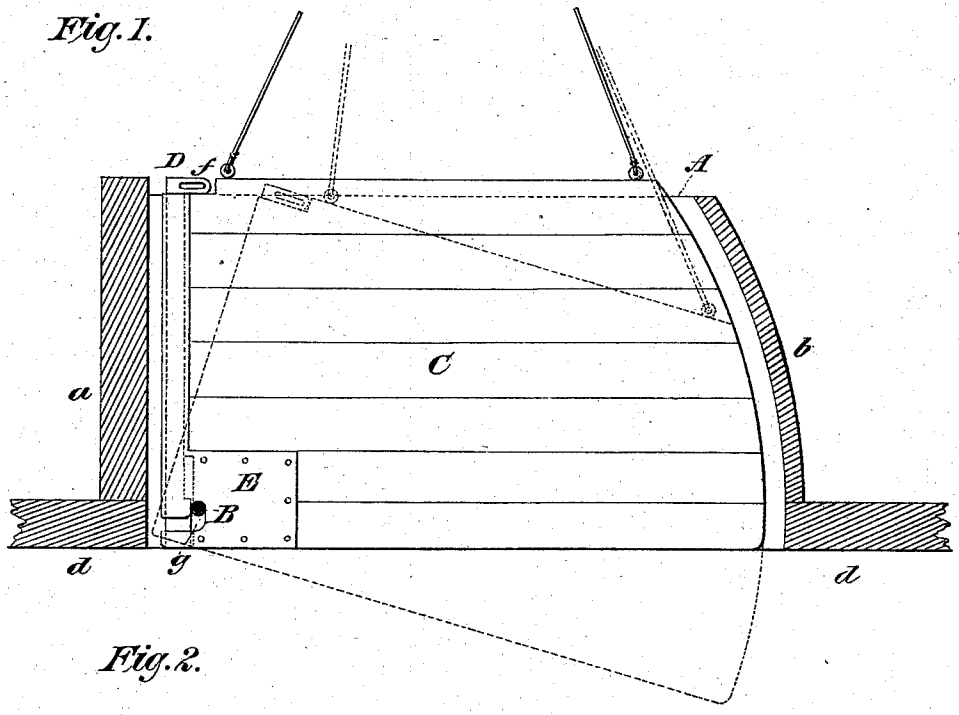


Fig. 2.

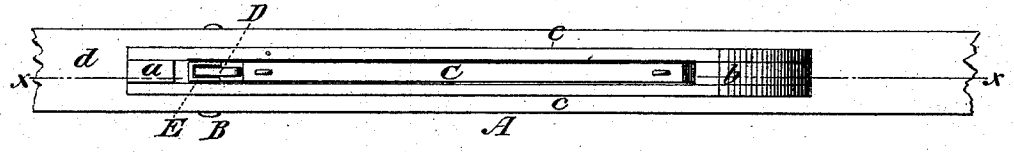
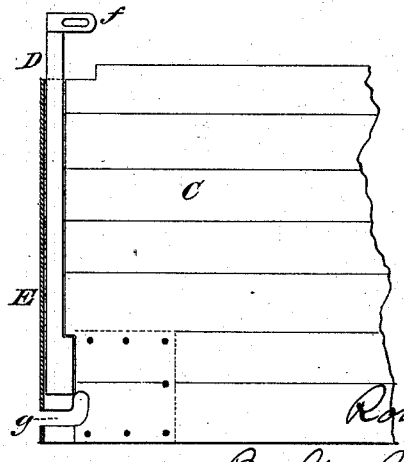


Fig. 3.



WITNESSES:

Gustave Dieterich

H. Hagen.

INVENTOR

Robert Center

By Geo. W. Hopkins

ATTORNEY

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

ROBERT CENTER, OF NEW YORK, N. Y.

CENTER-BOARD FOR VESSELS.

SPECIFICATION forming part of Letters Patent No. 293,226, dated February 12, 1884.

Application filed November 8, 1883. (No model.)

To all whom it may concern:

Be it known that I, ROBERT CENTER, a citizen of the United States, residing in New York city, in the State and county of New York, have invented a new and useful Improvement in Center-Boards for Sailing and other Vessels; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to center-boards used on sailing and other vessels; and it consists in a pivoting device which provides for readily unshipping and replacing the center-board without the necessity of removing the pivotal pin.

It has been customary to pivot the center-board of a vessel on a pin driven through the trunk and passing through a hole in the center-board, and whenever it became necessary to remove the center-board it could be done only by driving out the pin, thereby allowing more or less water to enter the vessel before the holes in the trunk could be stopped. My invention is designed to obviate this difficulty by allowing the pin to remain permanently in the trunk and providing convenient means for placing the center-board on the pin and removing it therefrom.

Figure 1 of the drawings is a sectional side elevation on line *x x*, Fig. 2, of a trunk and center-board embodying my improvement. Fig. 2 is a plan view, and Fig. 3 a side elevation, with the retaining-bolt exposed to view. Like letters indicate the same parts in the different figures of the drawings.

The trunk A is of the usual construction, and is composed of the head ledge, *a*, rear ledge, *b*, and sides *c*, all of which are secured to the keel *d*.

The center-board pin B traverses the center-board well, and is secured permanently in the keel *d*. The body of the center-board C is of the usual form and construction, and its forward end is grooved vertically to receive the bolt D, which is capable of sliding in the groove. The length of the bolt D is about equal to the vertical height of the center-board, and it is re-enforced at its lower end and provided with a handle, *f*, at its upper end.

The forward edge of the center-board, in which is placed the bolt D, is inclosed in a metal sheathing, E, which is widened at its lower end and extends a short distance along the sides of the center-board, as well as across the ends thereof. The narrow and wider parts of the sheathing E may be made of separate pieces, and in the case of large and thick center-boards plates applied directly to the end of the center-board may be used, instead of the narrow part of the sheathing E.

In the wide part of the sheathing E, and in that portion of the center-board inclosed by it, is formed a right-angled slot, *g*, one arm of which is parallel to and near the lower edge of the center-board, the other arm extending upward at the rear of the path of the bolt D. The slot *g* is of sufficient width to readily receive the pin B, upon which the center-board turns.

The center-board and the bolt D being in the position shown in the drawings, to unship it it is only necessary to raise the bolt D so as to open the slot *g*, and then raise the center-board until the horizontal part of the slot is opposite the pin B, and then move the center-board back until it is entirely disengaged from the pin. To replace the center-board, the bolt D being down, the forward end is drawn along over the pin B until it enters the end of the slot *g*, when the bolt D is raised, allowing the center-board to move forward on the pin B, and then downward until the upper end of the slot receives the pin B, when the horizontal part of the slot *g* is closed by pushing down the bolt D.

The center-board is held by means of my improvement so that it cannot accidentally become unshipped; but whenever desirable it may readily be unshipped in the manner described, thereby obviating the necessity of docking the vessel or removing the cargo.

I am aware that center-boards have been constructed so as to be removable from the deck of the vessel by means of a removable bar, to which the center-board is hinged; also, by a hinged hook attached to the center-board; also, by means of a curved slot in the walls of the well and a series of stop-water boards; but my device differs from these in construction and in being simpler and more readily operated.

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

1. The combination, with a center-board having its pivot-corner sheathed and provided with a right-angled slot extending inward and upward for receiving the pivotal pin, of a bolt adapted to slide in the sheathing and close the said right-angled slot, to retain the pivotal pin therein, as herein specified.

2. The center-board C, provided with the sheathing E, having the right-angled slot *g*, the bolt D, adapted to slide in the said sheathing and close the said slot, and the fixed pivotal pin B, in combination, as specified.

ROBERT CENTER.

Witnesses:
CHAS. L. COHN,
GEO. M. HOPKINS.