

(No Model.)

W. CHILDS.
FOLDING CENTER BOARD.

No. 278,776.

Patented June 5, 1883.

Fig. 1.

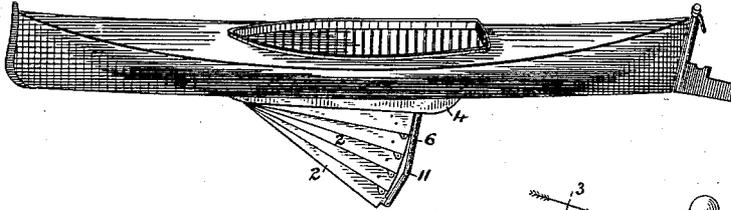


Fig. 2.

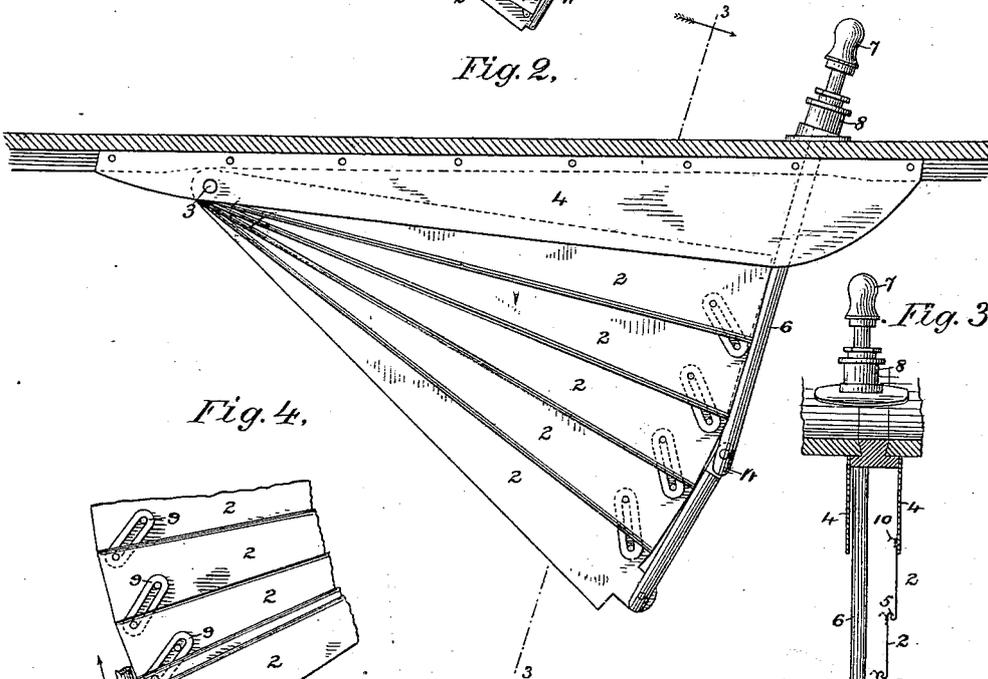


Fig. 4.

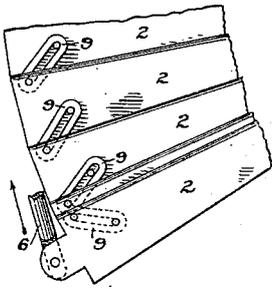


Fig. 5.

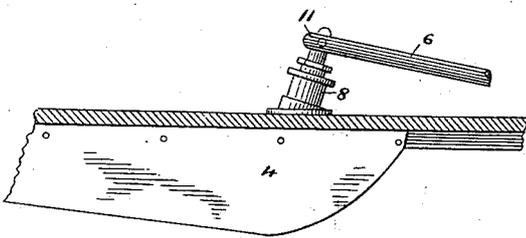
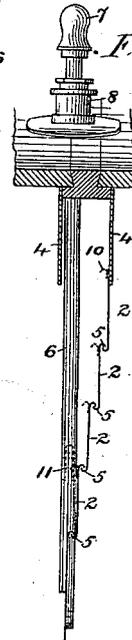


Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM CHILDS, OF BROOKLYN, NEW YORK.

FOLDING CENTER-BOARD.

SPECIFICATION forming part of Letters Patent No. 278,776, dated June 5, 1883.

Application filed February 14, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM CHILDS, a citizen of the United States, residing in the city of Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Folding Center-Boards, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

It is the object of the present invention to produce a center-board for use upon canoes, skiffs, and other small boats or yachts, which can be readily lowered into or raised from the water without interfering with the sailing or management of the boat, which will not require any trunk or housing upon the inside of the boat, and which can be applied without the necessity of cutting the keel or keelson or otherwise weakening or injuring the boat.

To these ends the invention consists in a center-board composed of a number of independent sections located entirely upon the outside of the hull or body of the boat, and provided with means communicating directly through the bottom of the boat without the use of a well or housing, by which the several sections composing the board can be folded into small compass against the bottom of the boat when not in use, or quickly spread so as to present their entire surface to the water when the use of a center-board becomes necessary.

The invention also embraces various details of construction and combinations of parts, all of which will be hereinafter fully explained and particularly pointed out.

In the accompanying drawings, Figure 1 is a perspective view of a canoe provided with a center-board embodying the present invention. Fig. 2 is a side elevation upon an enlarged scale of the board and the apparatus for raising and lowering the same. Fig. 3 is a cross-section taken upon the line 3 3 of Fig. 2. Fig. 4 is a detail to be hereinafter referred to, and Fig. 5 is a side view of the trunk or housing, showing the board folded.

Referring particularly to Fig. 2, it will be seen that the center-board consists of a number of independent sections, 2, pivoted at their forward ends to a rod, 3, supported in a pair

of narrow plates, 4, secured to the bottom of the boat. The sections 2 of the board are mounted side by side upon the rod 3, and are so arranged that they can be spread to the fan-like form shown in Figs. 1 and 2, or folded so as to lie side by side between the trunk-plates 4, as shown in Fig. 5. The edges of the sections 2 will preferably be provided with interlocking flanges 5, (see Fig. 3,) which, when the board is lowered, will serve to hold the sections rigidly together, thereby increasing the strength of the board and its capacity to resist the pressure of the water.

The board is lowered to and raised from operative position by means of a rod, 6, which is pivotally secured to the rear end of the lower section of the board and extends upward, terminating in a suitable handle, 7, in the inside of the boat. Where the rod 6 passes through the bottom of the boat it is surrounded by a suitable stuffing-box, 8, which serves to form a water-tight joint around the rod. The several sections constituting the board may be connected by links 9, sliding on studs, as shown in Figs. 2 and 4, which, as the lower section is raised, will act to draw the other sections upward and to hold them in their proper position between the sides of the trunk.

Instead of the links 9, the upper edges of sections may be provided with hooks or projections 10, as indicated in dotted lines in Fig. 3, which will serve the same purpose.

The rod 6 is provided with a joint, 11, by which, when the board is raised, the rod can be turned down, either to the front or rear, so as to lie entirely out of the way along the bottom of the boat. When the rod is thus turned down the portion just above the joint will lie across the top of the stuffing-box and hold the board in its raised position.

A center-board thus constructed and arranged will be operated as follows: When it is desired to use the board the rod will be turned up from the bottom of the boat and pushed downward through the stuffing-box, thereby spreading the sections to the fan-like form shown in Fig. 2. If any of the sections should stick between the sides of the trunk, or should not turn freely upon their pivot, they will be forced downward by the interlocking flanges

5. When, for any reason, it is desired to raise the board, the rod 6 will be drawn upward through the stuffing-box, thereby raising the lower section, and by the action of the links 9 or projections 10 drawing the several sections upward to a position beside each other between the sides of the trunk, after which the rod may be turned down, to hold the board in its raised position.

10 The sections constituting the board may be made of any of the materials usually employed for such purpose; but galvanized sheet-iron or sheet-brass will usually be found best adapted for the purpose. The number of sections and their width will depend upon the size of the board required and the character of the boat to which it is to be applied. It will usually, of course, be found most desirable to make the sections comparatively narrow, so that the board when raised will extend but a short distance below the bottom of the boat.

By reason of constructing and applying a board in this manner all necessity of weakening the boat by cutting its keel or keelson is avoided and the entire inside of the boat is left free and unobstructed. A board of this construction also possesses the advantage of being capable of ready application to any boat already built without the necessity of cutting its hull or otherwise changing its structure. Another advantage possessed by a board thus constructed and arranged is due to the fact that it is located entirely upon the outside of the boat, which makes it possible to greatly in-

crease the length of the board and proportionately reduce its width, thereby making it possible for the boat to run in a less depth of water.

I am aware that center-boards are old made in sections and provided with devices to raise and lower such sections, and I do not, therefore, broadly claim the same; but

What I claim is—

1. The combination, with a center-board composed of a number of sections, as 2, pivoted at one end beneath the hull or body of the boat, of a rod, as 6, attached to the other end of one of said sections and extending upward through a stuffing-box, as 8, located in the bottom of the boat, substantially as described.

2. The combination, with a center-board composed of a number of sections, as 2, pivoted at one end beneath the hull or body of the boat, of the stuffing-box 8 and the jointed rod 6, attached to the outer end of one of said sections, substantially as described.

3. A center-board composed of a number of pivoted sections, as 2, provided with interlocking flanges, as 5, on their contiguous edges, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

WM. CHILDS.

Witnesses:

JAS. A. HOVEY,
T. H. PALMER.