

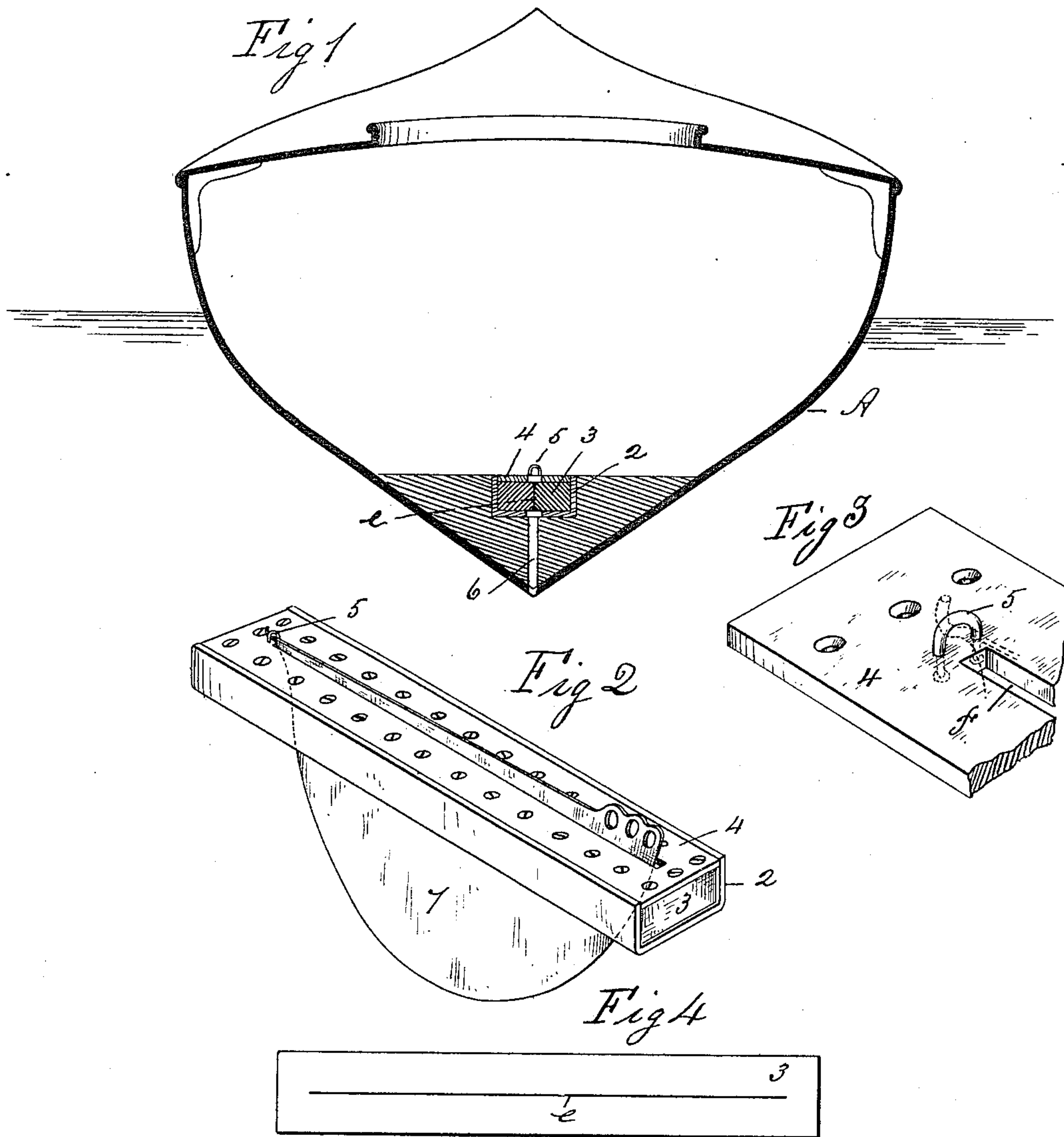
(No Model.)

E. H. BARNEY.

CENTER BOARD FITTING FOR BOATS.

No. 362,702.

Patented May 10, 1887.



Witnesses
 H. Chapin
 G. M. Chamberlain.

Inventor
Everett H Barney
reys
Chapin & Co

By his Attorneys

UNITED STATES PATENT OFFICE.

EVERETT H. BARNEY, OF SPRINGFIELD, MASSACHUSETTS.

CENTER-BOARD FITTING FOR BOATS.

SPECIFICATION forming part of Letters Patent No. 362,702, dated May 10, 1887.

Application filed March 7, 1887. Serial No. 229,939. (No model.)

To all whom it may concern:

Be it known that I, EVERETT H. BARNEY, a citizen of the United States, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Center-Board Fittings for Boats, of which the following is a specification.

This invention relates to center-board fittings for boats, the object being to provide improved inclosing devices for center-boards, whereby the upwardly-projecting "center-board box" usually built in boats is dispensed with and the inside of the boat is entirely cleared of any such obstruction.

In the drawings forming part this specification, Figure 1 is a transverse section of a boat embodying in its construction my improvements. Fig. 2 is a perspective view of my improved center-board fittings and of a center-board therein. Fig. 3 is a perspective view of a detail part, hereinafter fully described. Fig. 4 is a plan view of the center-board packing strip or block.

In the drawings, A represents a transverse section of a boat through that part thereof to which the center-board is attached.

In carrying out my invention I secure in the bottom of the boat, in the position indicated in Fig. 1, a case, 2, preferably of metal, of trough-like form, having a flat bottom, sides standing up at right angles to the latter, and having a narrow slot in the bottom thereof, extending nearly from end to end, of sufficient width to allow the center-board 7 to pass through it. A metal cover, 4, is provided for the case 2, which is fitted between its sides, and through which pass a series of screws or bolts, as shown in Fig. 2, which have an engagement with the bottom of said case, said cover having a longitudinal slot therein corresponding with that above referred to in the bottom of the case, and being adapted, like the slot in the latter, to permit the center-board 7 to swing freely therein. A staple, 5, or other suitable similar device, is attached to the outer side of the cover 4 at one end of the slot therein, as shown in Figs. 2 and 3, said slot in the latter-named figure being designated by *f*, said Fig. 3 illustrating in perspective view one end of said cover 4.

One end of the center-board 7 is provided with a hook, as shown, which engages with said staple 5, the latter and said hook constituting a species of detachable hinge-connection between the center-board and the cover 4, the center-board being provided with several finger-holes near its free end, whereby it is taken hold of to swing it up or down.

The case 2 is located in the bottom of the boat A longitudinally, and with the slot in the bottom of said case directly over the center-board slot 6 through the bottom of the boat.

Within the case 2 I place a block of rubber, 3, having cut therein a longitudinal slot, *e*, (see Fig. 4,) said slot *e* being cut with a sharp instrument and without removing any of the material of which the block is made therefrom, so that after said slot is cut the opposite sides thereof may meet and press against each other, the said slot *e* extending nearly to each end of said block, as shown. Said block of rubber 3 having been prepared as described and placed in the case 2, the cover 4 is placed thereon and the aforesaid screws are inserted through said cover and that part of the rubber block surrounding the slot therein, and are screwed into the bottom of the case, thereby so compressing said block on all sides of said slot therein as to cause the sides of said slot to press so tightly against each other as to prevent water from passing through it.

The center-board 7 is made, preferably, of sheet-metal, in order that it may be made as thin as is consistent with the rigidity which is required of it, and having its hook end engaged with the staple 5, its free end is then forced downward, carrying the center-board through the slotted block 3 to the position shown in Fig. 2, and the pressure of the adjoining sides and of the ends of the slot *e* in the rubber block 3 against the sides of the center-board and against the ends thereof prevents the leakage of any water around the center-board. It will be understood that when the center-board is driven downward, as above set forth, its lower edge projects sufficiently below the keel of the boat to enable the center-board to perform its usual function.

The center-board constructed and having a detachable hinged attachment by one end to the center-board fittings, which are securely

attached to the boat, is easily removed from the fittings when it is drawn upward out of slot *e* in the elastic block 3, and may be laid away in another part of the boat entirely out of the way, and when the center-board is removed from its fittings, as just described, the adjoining sides of said slot *e* spring tightly together, owing to the pressure of the cover 4 thereon, as aforesaid, and thus the entrance of any water through said slot into the boat is prevented.

In small boats, and particularly in those of the canoe class, any fixed projection above the bottom of the boat on the inside thereof is a great inconvenience, for in small boats the space within them is necessarily very limited, and under certain circumstances it is desirable that the bottom of the boat may be perfectly clear and unobstructed, so that persons may lie down and rest therein; but with the usual central longitudinal projection in such boats, which is required for ordinary center-boards, such use cannot, with any convenience, be made of a boat.

In the construction herein shown, however, it is seen, by reference to Fig. 1, that the top of the case containing the said elastic slotted block 3, through which the center-board operates, is in the same plane as the bottom of the boat, or the floor thereof, and hence there is nothing in said construction to occasion the before-mentioned inconveniences; but when the center-board is not hung the floor of the boat presents substantially the same appearance as though it were not furnished with a center-board.

It is obvious that the elastic rubber block 3 may be inserted in a suitable recess in the floor of the boat without the employment of the metal case 2, and be so compressed therein and secured as to fairly serve the purpose herein described in preventing water from entering the boat, whether the center board occupy its said position in said block or not; but a rigid metal case, as described, serves to render the action of the said elastic block more satisfactory. It is obvious, also, that different widths of center-boards may be used in the same fittings; and, furthermore, that two strips of rubber or

similar elastic material, each equal to one-half of the width of said block 3, may be employed instead of a solid block, as described, without departing from the spirit of my invention, which consists, essentially, in providing a surrounding elastic packing for a center-board, substantially as described, and locating said elastic packing within the floor of the boat in such a way that neither it nor its inclosing devices project above the plane or level of said floor.

A further advantage pertaining to the use of the within-described improvements in boats is that when the center-board is in operative position in the boat it constitutes no obstruction to a free movement of persons in the boat, for its upper edge, as shown in Fig. 2, projects little or none above the floor; also, the center-board fittings herein described permit of employing a center-board of such thin metal in a single piece as prevents the center-board from offering any perceptible resistance to the movement of the boat through the water.

What I claim as my invention is—

1. Center-board fittings for boats, consisting of a longitudinally-slotted elastic packing-block, substantially as described, secured to the inner side of the boat substantially in the plane of the floor thereof over its center-board slot, combined with a center-board having one end detachably hinged near the end of the slot in said block and capable of a swinging movement therein, substantially as set forth.

2. Center-board fittings for boats, consisting of a longitudinally-slotted case, as 2, fixed within the floor of the boat, a longitudinally-slotted cover, as 4, for said case, adjustably connected thereto, a longitudinally-slotted elastic packing-block, as 3, capable of compression within said case, combined with a center-board, substantially as described, having a detachable hinged connection with said cover near one end of the slot therein and capable of a swinging movement within the slot in said block, substantially as set forth.

EVERETT H. BARNEY.

Witnesses:

WM. H. CHAPIN,
G. M. CHAMBERLAIN.