Nov. 8, 1932. R. W. POST 1,886,499

FOLDING BOAT

Filed June 3, 1931 3 Sheets-Sheet 1

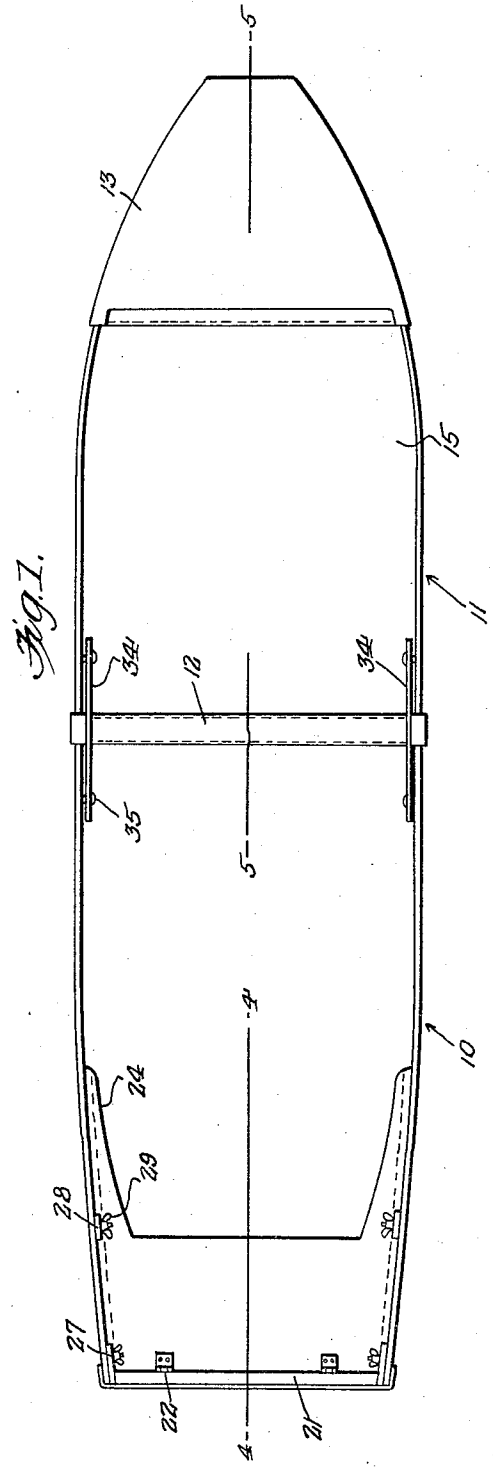


Fig. 1.

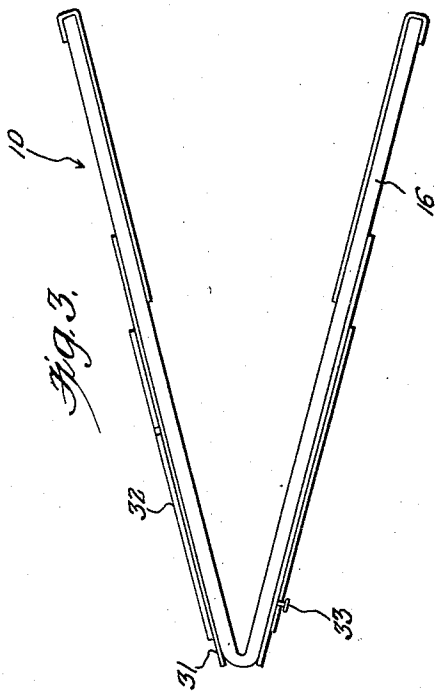


Fig. 3.

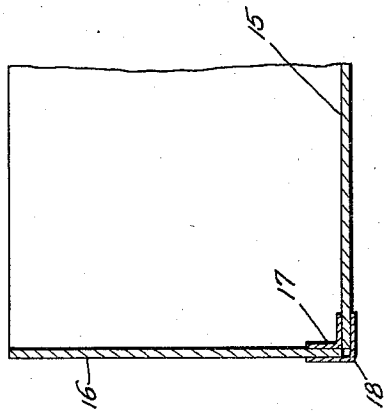


Fig. 7.

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FOLDING BOAT

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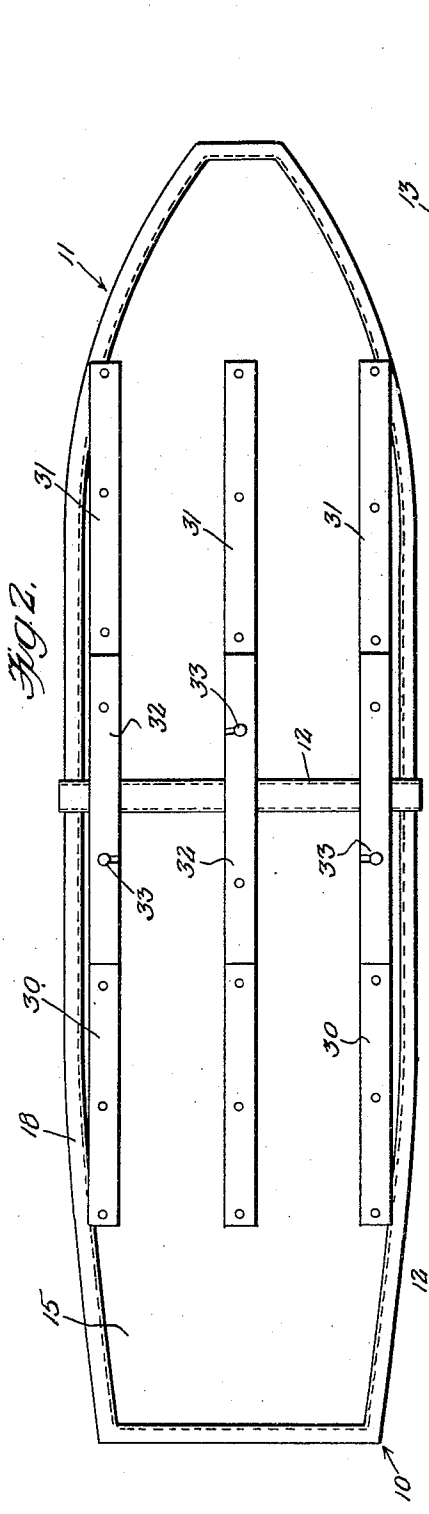


Fig. 2.

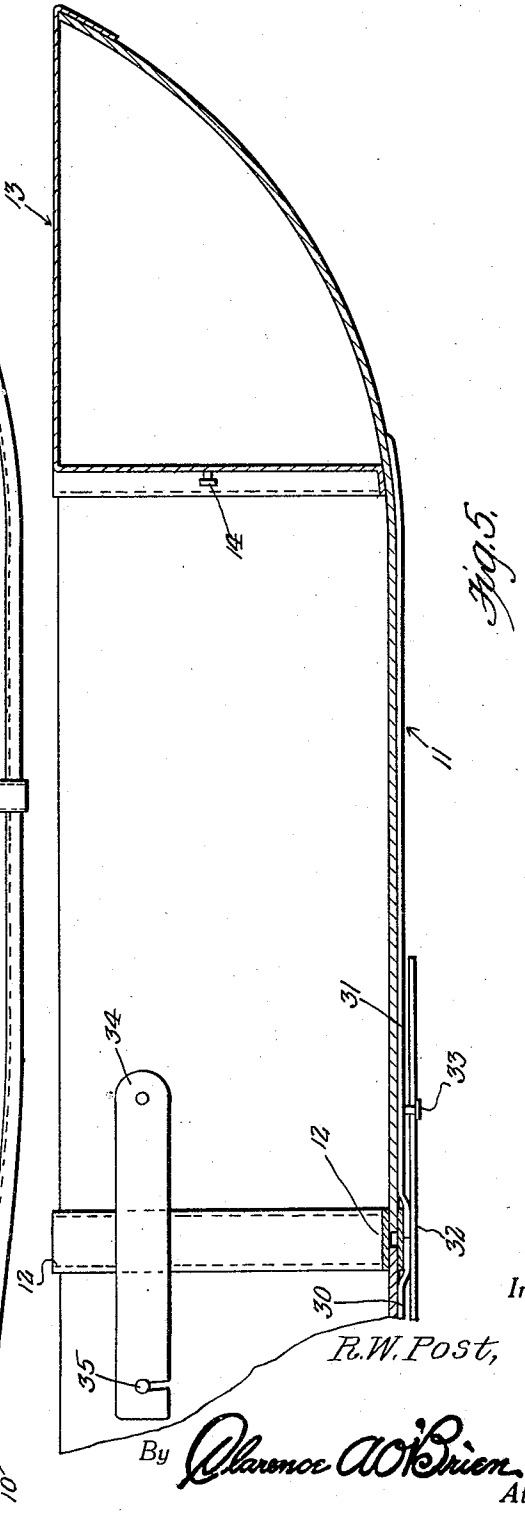


Fig. 5.

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FOLDING BOAT

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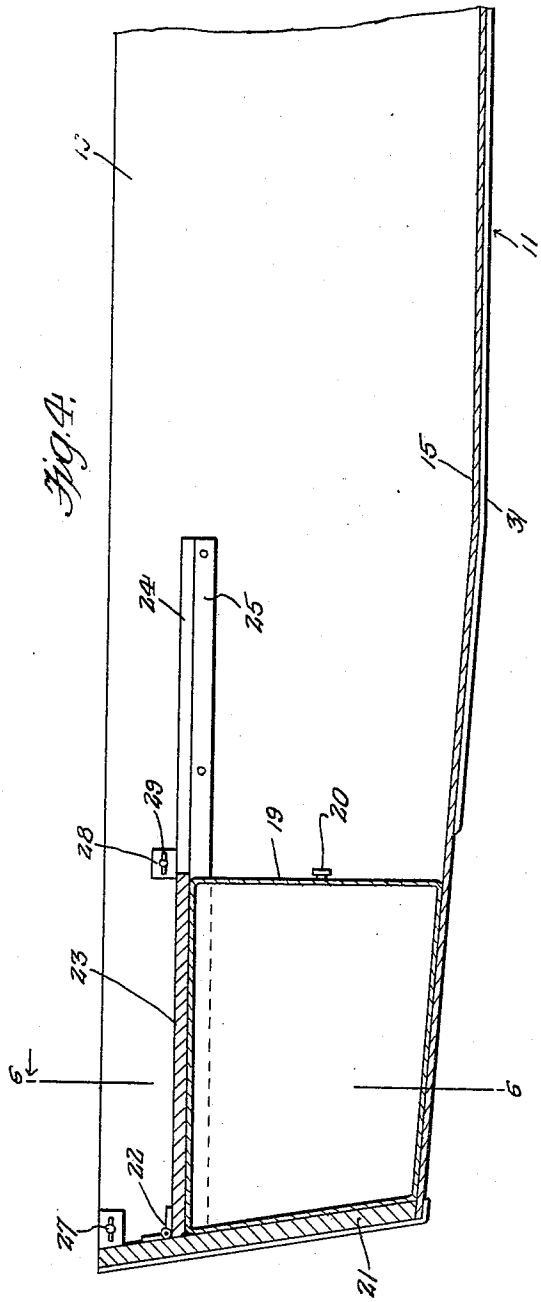


Fig. 4.

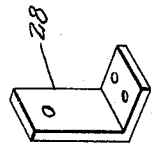


Fig. 9.

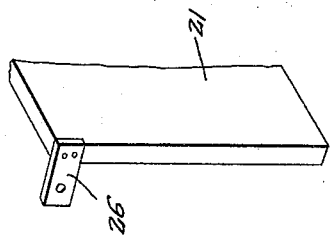


Fig. 8.

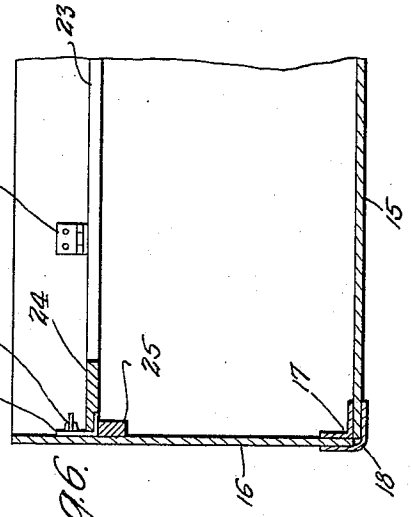


Fig. 6.

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Patented Nov. 8, 1932 1,886,499

UNITED STATES PATENT OFFICE

RAYMOND W. POST, OF VAN NUYS, CALIFORNIA

FOLDING BOAT

Application filed June 3, 1931. Serial No. 541,887.

This invention relates to an improved collapsible or folding boat designed with a view toward providing a simple, economical, compact and convenient structure of this class susceptible of expeditious handling and transportation to and from the water.

More specifically stated, I have evolved and produced a feasible and practical collapsible boat in the nature of a rowboat, canoe and the like, and the same being composed of a pair of companion hingedly connected sections adapted to be swung into overlapping relationship the sections including flat bottom portions and foldable side walls whereby to enable the structure to be expanded into boat form for sailing purposes, or collapsed into a compact package for convenient transportation to and from the waterfront.

The specific details and arrangement of parts will become more readily apparent from the following description and drawings.

Figure 1 is a top plan view of the complete boat ready for sailing.

Figure 2 is a bottom plan view thereof.

Figure 3 is a view showing the sections collapsed and folded.

Figure 4 is a longitudinal sectional view on the line 4—4 of Figure 1.

Figure 5 is a similar view through the opposite end portion of the boat, the section being on the line 5—5 of Figure 1.

Figure 6 is a transverse section on the line 6—6 of Figure 4.

Figure 7 is a detail view.

Figure 8 is a perspective view of a removable reinforcing board.

Figure 9 is a perspective view of an attaching frame.

In the drawings, in Figure 1, it will be observed that the complete boat is composed of a pair of companion sections, the rear section being designated by the numeral 10 and the front section by the numeral 11. These are hingedly connected together by a waterproofed canvas joint generally denoted at 12.

In the stern of the front section is an inflation bag constituting a float 13 having appropriate air valves 14, for expansion and deflation. Both sections of the boat comprise flat bottoms 15 and hinged side and end walls 16 the walls 16 being joined to the bottom through the medium of canvas strips 17 and 18 defining a waterproof folding joint. This allows the walls 16 to be swung down into overlapping relation with the bottoms 15, and then the bottom parts can be folded on the central hinge joint 12 so that the sections 10 and 11 swing into overlapping folded state as shown in Figure 3 for carrying.

At the back portion of the boat, as shown in Figure 4, is a float 19 having a valve 20. At this end, I provide a removable backboard 21 which forms the rear end of the boat as well as the mounting for a propulsion motor, not shown, such as an outboard motor or the like. This part 21 serves for holding the walls in upright expanded spaced parallelism.

Connected by hinges 22 to the upper portion of the board and extending inwardly into the boat is a seat 23 having extensions 24 resting on longitudinal cleats 25 mounted on the walls of the boat. It will be observed that the board 21 carries attaching ears 26 held in place by bolts and nuts 27 as shown in Figure 4. In addition, the seat 23 is provided with brackets 28 held in place by nuts 29 carried by bolts on the side walls of the boat. The unit comprising the back board 21 as well as the seat and the brackets are foldable bodily, so as not to interfere with the folding of the companion sections of the complete boat.

I next call attention to Figure 2, wherein it will be observed that the numerals 30 and 31 designate stays fastened to the bottom side of the boat on opposite sides of the central hinge joint. Associated with these are pivotally mounted latches 32 co-operable with headed retaining studs or keepers 33. As will be seen some of these latches 32 are pivoted to some of the stays and the opposing stays carry the studs 33. These latches may be swung to a position to facilitate folding of the sections of the boat as seen in Figure 3 or they can be disposed to bridge the hinged joint as seen in Figure 2 thereby retaining the boat in operative state.

The numerals 34 designate pivotally mounted hooks having notches engageable with

headed studs 35 to bridge the adjacent ends of the side walls of the respective sections as shown in Figure 5 to facilitate maintenance of the walls in distended state.

The primary factors to be noted are these. First, the complete boat is primarily designed of a pair of companion hingedly mounted sections, the sections being fastened together for overlapping folding relationship. Each section embodies a flat bottom and hingedly mounted side walls. The hinged joints for the side walls, as well as the hinge means between the respective sections may be of waterproofed canvas or equivalent material.

The sections themselves may be of lightweight metal such as aluminum or other equivalent material. The respective stay strips 30 and 31 on the bottom and complemental hooked latches and keepers constitute a novel feature of the invention. The hooks 34 aid in maintaining the walls of the sections in an upright state.

The unit at the back of the boat embodies the rear board and the seat board co-operating with the cleats 35 is important in that it constitutes a spacer and a seat and a means for maintaining a motor on the rear of the boat. Moreover, the floats at the front and rear add to the buoyancy of the complete structure and facilitate motion in the water.

It is thought that persons skilled in the art to which the invention relates will be able to obtain a clear understanding of the invention after considering the description in connection with the drawings. Therefore, a more lengthy description is regarded as unnecessary.

Minor changes in shape, size, and rearrangement of details coming within the field of invention claimed may be resorted to in actual practice if desired.

I claim:

1. In a folding boat of the class described, a pair of companion sections, each section embodying a flat bottom and hingedly mounted side walls adapted to swing into overlapping relation with the bottom when the sections are folded, and collapsible inflation bags at the front and rear of the boat to add to the buoyancy of the complete boat and to aid in maintaining the side walls in upright relationship when the side walls are distended to operative sailing position.

2. In a folding boat of the class described, a body including a bottom, hingedly mounted side walls attached to the marginal edges thereof, a removable backboard disposed between the rear end portions of the side walls, brackets carried by said board, and means for releasably attaching the brackets to said side walls, together with a seat board hingedly attached at its rear end to the upper end portion of said board and said side walls having longitudinal cleats with which the longitudinal edges of said seat board are engageable to aid in maintaining the seat board in operative position, and an inflation valve-equipped bag beneath said seat board and engaging said first-named board.

3. In a folding boat of the class describing front and rear sections, each comprising a bottom part and side parts, flexible members for hingedly connecting the rear end of the front section to the front end of the rear section, said members extending over the bottom and side of the sections, means for hingedly connecting the sides of each section to the bottom thereof, latch means for connecting the side parts of the two sections together, and latch means for connecting the bottom parts of the two sections together to hold the boat in unfolded position, and inflatable members at the front and rear of the boat which when inflated help to hold the side parts in raised position.

In testimony whereof I affix my signature.

RAYMOND W. POST.