Jan. 27, 1931. E. F. HOLLIS 1,790,094

BOAT

Filed June 14, 1929 2 Sheets-Sheet 1

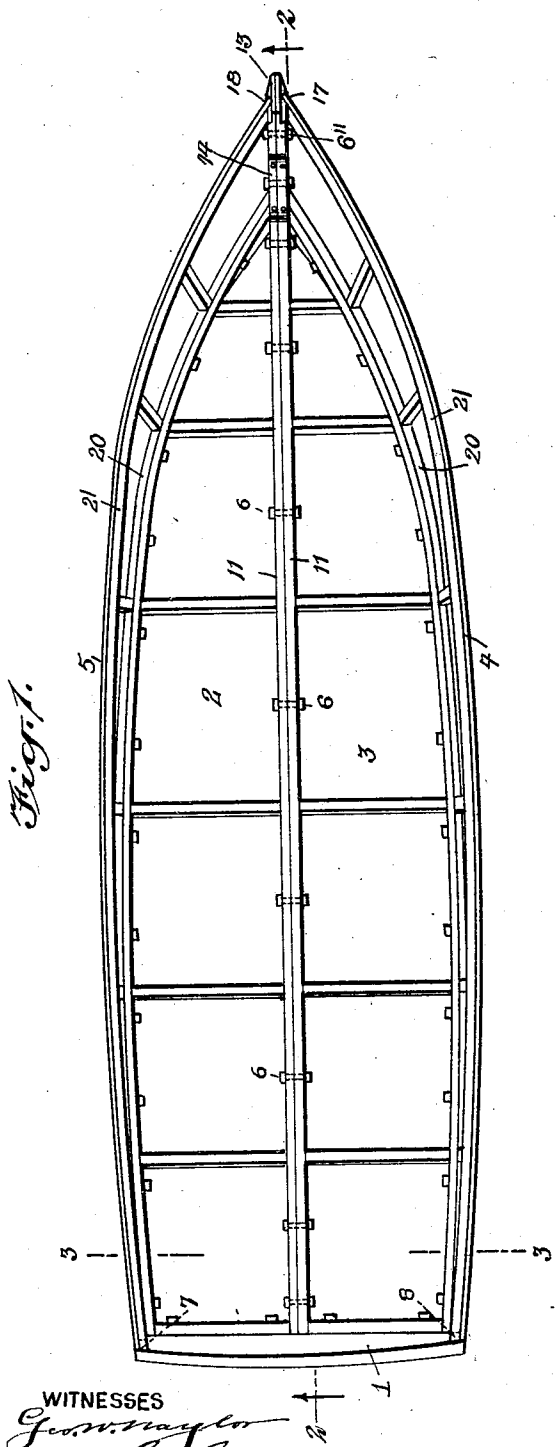


Fig. 1.

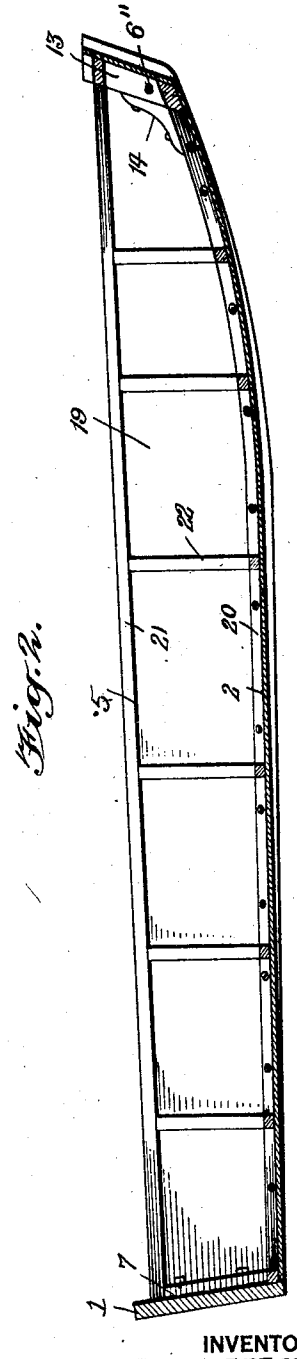


Fig. 2.

WITNESSES

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Fig. 3.

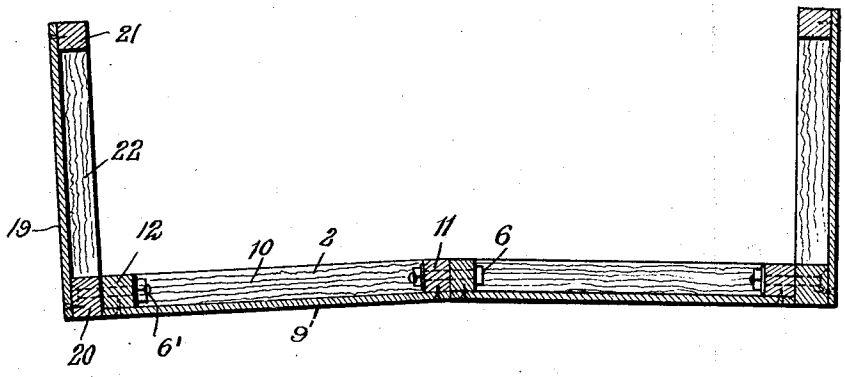
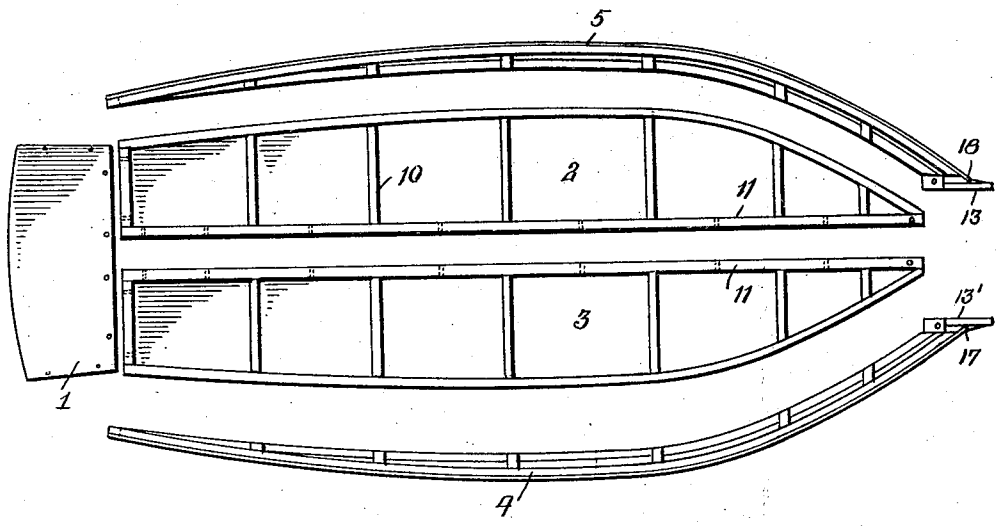


Fig. 4.



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UNITED STATES PATENT OFFICE

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BOAT

Application filed June 14, 1929. Serial No. 370,914.

This invention relates to an improved boat, and has for an object to provide a structure which may be taken to pieces and nested when not in use, the parts being so arranged that when nested a minimum space will be sufficient to permit storage of the complete boat.

Another object of the invention is to provide what may be termed a collapsible boat, the boat being formed in sections and each section being braced to be a strong, independent unit with the parts so formed that they may be bolted or otherwise secured together to form a complete, serviceable boat.

A further object, more specifically, is to provide a boat which may be taken to pieces and set up, the parts or sections being so formed as to present either curved or flat members capable of being readily nested when desired and capable of quick assemblage without reshaping and with a minimum amount of effort.

In the accompanying drawings,—

Figure 1 is a top plan view of a boat disclosing an embodiment of the invention;

Figure 2 is a sectional view through Figure 1 approximately on the line 2—2;

Figure 3 is a sectional view through Figure 1 on the line 3—3, the same being on an enlarged scale;

Figure 4 is a view similar to Figure 1 with the parts disconnected and slightly separated.

Referring to the accompanying drawings by numerals, 1 indicates the rear section or board, while 2 and 3 indicate the two bottom sections of a boat. Associated with the bottom sections and the rear section are side sections 4 and 5. These five sections make up the complete boat when suitable fastening means, as for instance, bolts 6 and 6′ are used for clamping the sections together. Associated with the bolts may be a suitable gasket, as for instance, paint, strips of packing or other caulking material, whereby all joints will be water-tight. The section or board 1 is held in place by suitable bolts extending through board 1 and the bars 7 and 8. Also, bolts are inserted through the bars 10 at the ends of the sections 2 and 3 and through the board 1, so that a proper connection of board 1 is made between sections 2 and 3 and the sides 4 and 5. It will be understood that a suitable gasket, as above-mentioned, is preferably placed between all parts which are bolted or clamped together by the bolts mentioned or by screws or other securing means. Bolts are preferable, as they are easily applied and easily removed without injury to themselves or the parts clamped together.

It is, of course, understood that different designs or shapes may be provided without departing from the spirit of the invention, and also different materials may be used. For the purpose of illustration boards have been shown, though metal sheeting, a composite board, or a plurality of small boards for each of the sections may be used.

As shown particularly in Figs. 3 and 5, the sections 2 and 3 are identical, except that one is right and one is left. Section 2, for instance, is provided with a bottom board or bottom member 9 which may consist of one board, as shown, or a plurality of boards connected to the cross bars 10 by screws or other means. The board 9 is also connnected preferably by screws to the central, longitudinal beam 11 and also to the side beam 12 which is curved, as shown in Fig. 4 so as to give the bottom the desired shape. When it is desired to assemble the bottom the remaining surfaces of the beams 11 and 12 are painted, shellacked or otherwise covered, and if desired, a piece of asbestos or paper is applied thereto, so that when the clamping bolts 6 or 6′ are placed in the various apertures provided, and tightened, the seam or joint between the two sections will be water-tight. If at any time any of the seams should open slightly they may be readily caulked in the usual manner.

In assembling and disassembling the boat it is primarily intended to assemble the same at the beginning of the season and to disassemble the same at the end of the season for storage purposes. In many places the boat owner has no facilities or very poor facilities for storing the boat on or near the shore, and by providing a boat which may be

disassembled and readily nested the boat may be transported to a garage or any storage place and properly protected while occupying a minimum space. Each of the beams 11 is provided with a removable brace 14 coacting with these beams. and with the stem post. The stem post is made in two parts 13 and 13′, so that the extensions 17 and 18, as shown in Fig. 4, may interlock therewith. These posts are preferably of the same width as the beams 11 so that when the parts are assembled they will appear as shown in Fig. 1, and by the use of the braces 14 the post and associated parts are properly braced. Suitable bolts 6″ are used to connect the parts of the posts 13 together, whereby a strong, rigid structure is provided at the front of the boat, but one which may be easily assembled or disassembled. The sides 4 and 5 are identical, except that one is right and the other left, and are each provided with a main board or wall 19 suitably braced by the beams 20 and 21 and by suitable connecting bars 22.

From Fig. 3 it will be seen that the bolts 6′ firmly clamp the beams 12 and 20 together, whereby a watertight joint is produced, and at the same time the sides are properly clamped to the bottom. Screws or other clamping means may be used at the front and the rear, so that the sides will be clamped to the rear section 1 and the front of the sides will be clamped to the posts 13. It will be seen particularly from Figs. 3 and 4 that each section is thoroughly braced, and when the sections are bolted together a very rigid structure is produced which will stand much rough usage, and in fact, will function substantially the same as if built permanently together.

It will also be evident that an outboard motor could be clamped to the section 1 and suitable seats mounted at desired places along the body of the boat. Also, if desired, a suitable mast socket could be connected to the boat so that it could be used as a sail boat under some circumstances. It will thus be seen that the boat may be used as a motor boat, a sail boat, or even as a row boat, if suitable oarlocks are provided. In the different uses the structure remains the same and continually presents a rigidly braced, comparatively light boat. The structure also lends itself to the proposition of making boats of different sizes in a disassembled condition and then assembled in the same manner.

What I claim is:—

1. A collapsible boat, comprising a pair of substantially flat independent bottom members, a pair of curved side members fitting against the outer edge of said bottom members a stern member, and bolts for removably connecting all of said members together to form a complete boat structure.

2. A collapsible boat formed with a pair of side sections, a pair of bottom sections, means for connecting said bottom sections together along a central line, means for connecting said side sections to one side of the respective bottom sections, a stern section, and means for connecting the stern section to both bottom sections and to both side sections.

3. A collapsible boat, comprising a body formed with a plurality of sections, including a pair of flat bottom sections a pair of curved side sections, said bottom sections and side sections having stiffening beams around their perimeters, and a plurality of transverse bracing bars connecting the beams.

4. A collapsible boat, including a plurality of sections capable of being assembled and disassembled, and means for rigidly connecting said sections together when assembled, said sections including a pair of flat bottom members, a pair of flat side members, said bottom members, said side members comprising an outer sheathing, a bracing beam connected with the outer sheathing at its perimeter, said beams being positioned interiorly of the sheathing, and a plurality of bracing bars connecting certain of said beams.

5. A boat, including a plurality of independent sections including a pair of bottom sections and a pair of side sections, bolts for securing said bottom sections together, bolts for securing said side sections to said bottom sections, a stem post secured to the front of each of the bottom sections, a brace on each of the bottom sections for bracing the stem posts, said stem posts being formed with rabbets for receiving part of the side sections, and means for securing said stem posts together.

ELMER F. HOLLIS.