Dec. 11, 1951 F. T. LARSSON ET AL 2,577,970

COLLAPSIBLE BOAT

Filed Sept. 20, 1945 2 SHEETS—SHEET 1

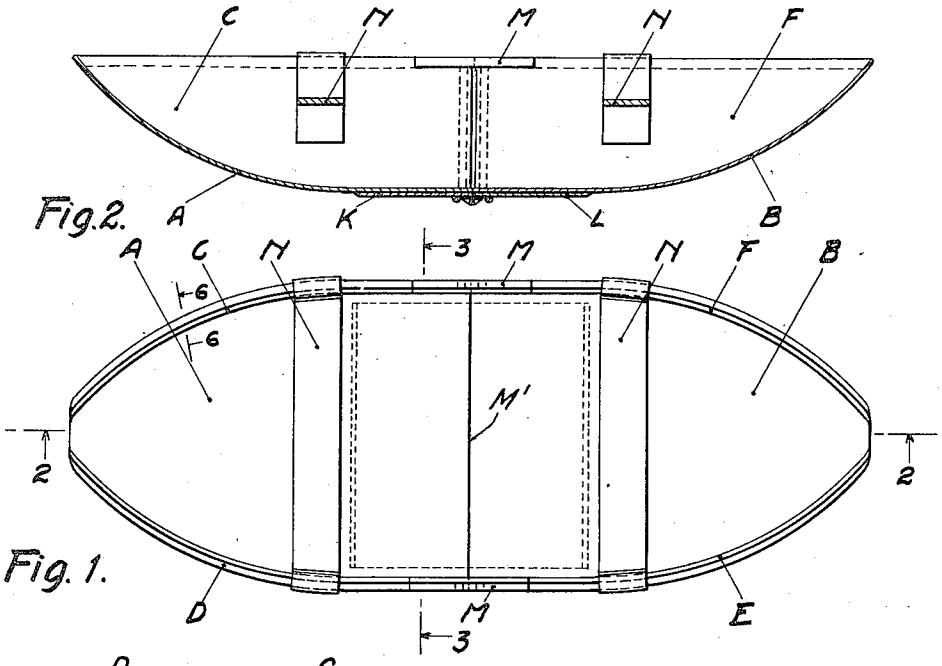


Fig. 2.

Fig. 1.

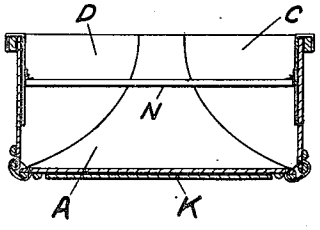


Fig. 3.

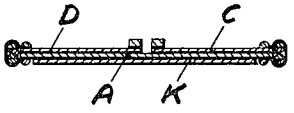


Fig. 4.

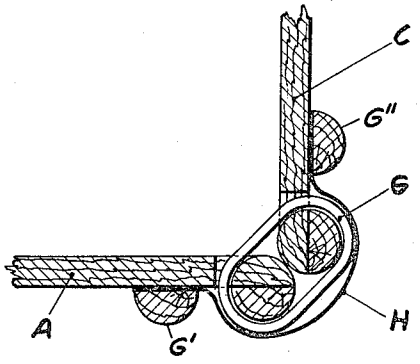


Fig. 6.

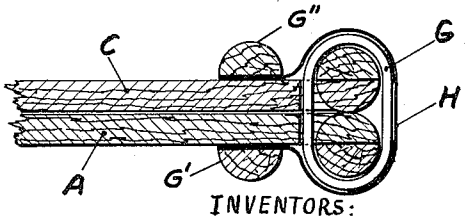


Fig. 5.

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COLLAPSIBLE BOAT

Filed Sept. 20, 1945 2 SHEETS—SHEET 2

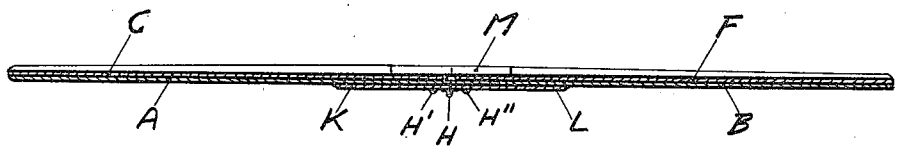


Fig. 7.

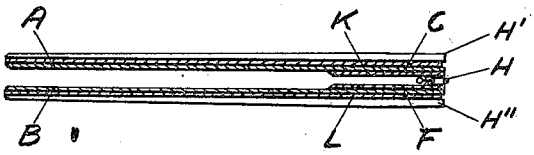


Fig. 8.

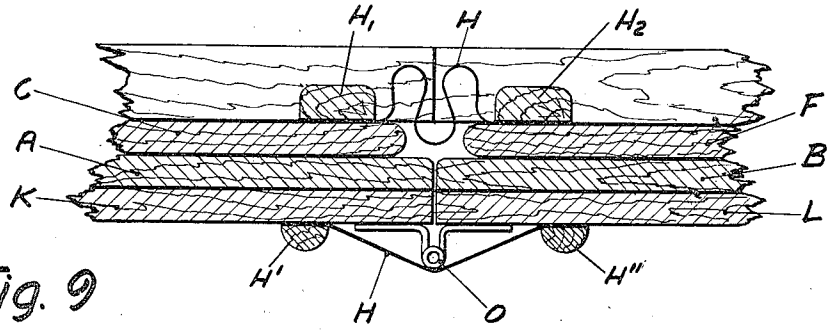


Fig. 9

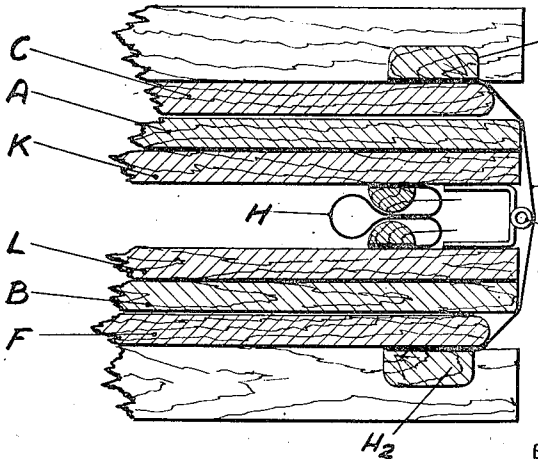


Fig. 10.

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2,577,970

COLLAPSIBLE BOAT

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Application September 20, 1945, Serial No. 617,462
In Sweden January 20, 1944

1 Claim. (Cl. 9—2)

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The present invention relates to such collapsible boats, pontoons or other floating constructions, which include walls of stiff material, which walls throughout their entire length are linked to a bottom of stiff material, and in which constructions the walls are adapted to be folded inwards in relation to the longitudinal centreline of the bottom and placed on the bottom during transport, the walls being adapted to be set up when the boat or the like is to be used, an object of the invention consisting in the provision of a boat which is so constructed, that the bottom and the walls are divided into parts linked to one another, so that the boat or the like, after the sidewalls having been folded down, may be folded again in order to diminish its length.

The links between the sidewalls and the bottom may consist of rings, which may be constituted by the windings of an helically bent or braided metal wire.

The links between the parts of the sidewalls suitably consist of flexible material, such as fabric, while the links between the parts of the bottom consist of hinges or any other link construction.

The invention will appear more clearly from the following detailed description when taken in conjunction with the accompanying drawings showing by way of example a preferred embodiment of the inventive concept.

In the drawings:

Figure 1 is a plan view of the boat as unfolded or uncollapsed and ready for use;

Figure 2 is a sectional view along 2—2 of Figure 1;

Figure 3 is a sectional view along 3—3 of Figure 1;

Figure 4 is a view similar to Figure 3 but with the walls in the folded or collapsed position and the thwart or stay removed;

Figure 5 is a detail of the link between the walls and the bottom member with the wall folded down or collapsed on the top surface of the bottom member and on an enlarged scale;

Figure 6 is a fragmentary sectional view along 6—6 of Figure 1;

Figure 7 is a view similar to Figure 2 but with the wall folded down or collapsed on the bottom member;

Figure 8 is a view similar to Figure 7 but with the collapsed wall and bottom member folded to reduce the length of the boat;

Figure 9 is a detail of the transverse link designed to permit the folding of the bottom member as shown in Figure 8 but prior to being folded and on an enlarged scale; and

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Figure 10 is a view similar to Figure 9 but after the bottom member has been folded by the link shown in Figure 9.

Referring now in greater detail to the drawings where like reference characters indicate like parts, reference characters A and B indicate the two parts or segments of the bottom member formed from fairly stiff material. The segments A and B are hingedly secured along the transverse line M' substantially at the midpoint of the bottom member by the hinge O (Figs. 9 and 10). The parts of segments may be reinforced by means of the plates K and L secured by any suitable means to the segments on opposite sides of the line M' and on the under surfaces of the segments as illustrated. The hinge O connecting the segments is protected against the entrance of water by means of a strip H (Fig. 8) which is made from flexible material such as fabric. The strip H is secured between the bottom parts or segments A and B or, where used, the plates K and L, by the battens H' and H''.

Reference characters C and F on one side of the parts or segments of the bottom member and D and E on the opposite side indicate the walls and are transversely separated adjacent the line M'. The segments of the walls along the lower edges follow the contour of the bottom member throughout their entire length and consist of relatively stiff material such as plywood which, however, has sufficient flexibility to allow the outer ends of the bottom member to bend inwardly for assuming the curvature which is forced upon the parts or segments of the walls when folded up or in the uncollapsed position. Each part or segment of the walls and corresponding parts or segments of the bottom member are linked to one another throughout their entire length by means of rings G (Figs. 5 and 6) or braided wire.

To prevent water from passing through the line of jointure of the segments of the walls and bottom member, strips H (Figs. 5 and 6), similar to the previously mentioned strip sealing the transverse joint between the parts or segments of the bottom member, is fastened over the line of jointure by the battens G' and G'' one of which is attached to the side wall and the other to the bottom member.

The opposed ends of the parts or segments of the walls, adjacent the line M', are likewise made water tight and transversely collapsible

by a similar strip H secured between the opposed ends by the battens H_1 and H_2 (Figs. 9 and 10).

In the uncollapsed position, the upper parts of the segments C and F, and D and E may be connected to each other by means of a lock M placed over the opposed ends of the segments. Also, in the uncollapsed position, the thwart or stays N may be used to keep the walls in the uncollapsed position. Any suitable means may be used for removably securing the stays in position.

It is obvious that the invention may be used in many respects without departing from the spirit upon which it is based.

What is claimed is:

A collapsible boat, pontoon or other floating construction comprising a bottom member and at least two wall members for opposite sides of the bottom member, the members being formed of substantially rigid material with sufficient flexibility to permit being bent and flattened repeatedly, the bottom member and each wall member being divided into at least two transversely severed segments in a plane perpendicular to the longitudinal center line of the bottom member, links for collapsibly securing the transversely severed segments of the bottom member and the wall members and of the wall members and the bottom member along corresponding

edges, the bottom surface of one bottom segment being collapsible over the bottom surface of the other bottom segment when the wall segments are collapsed on the top surfaces of the corresponding bottom segments and means for waterproofing the boat at least along the lines of jointure of the segments when the segments are in the uncollapsed position.

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GEORGES ERIC VON DARDEL.
BO GÖRAN NETTELBLADT.

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