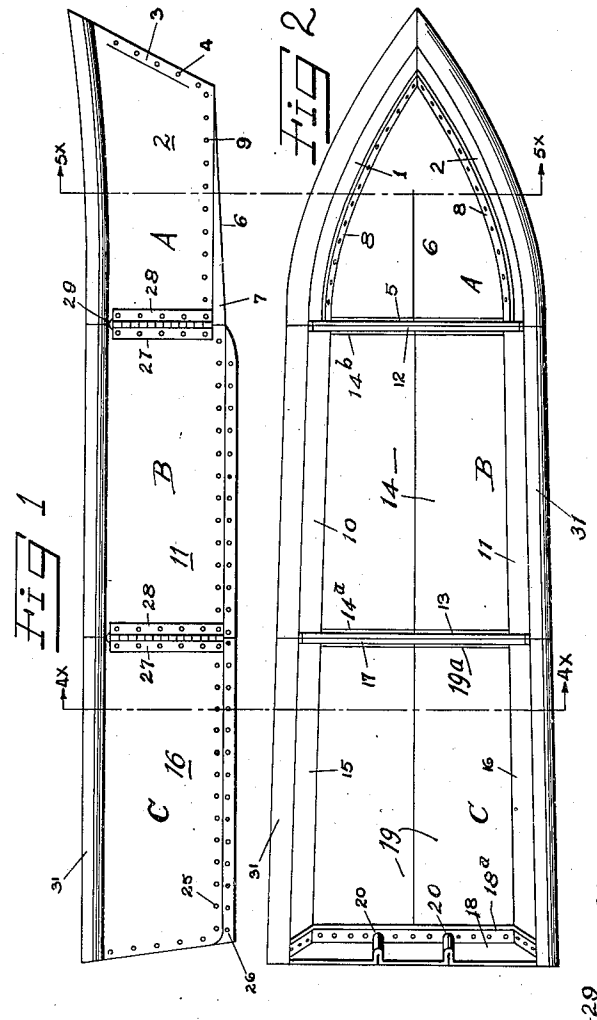
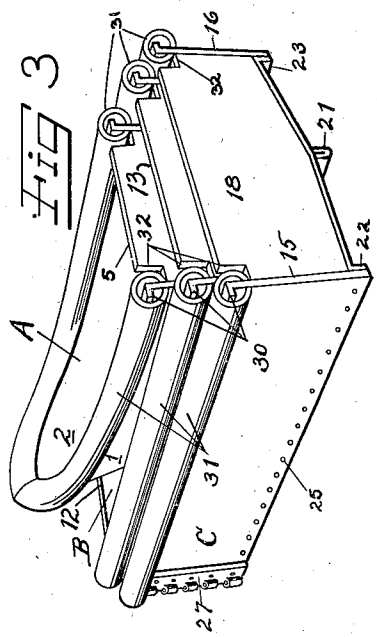
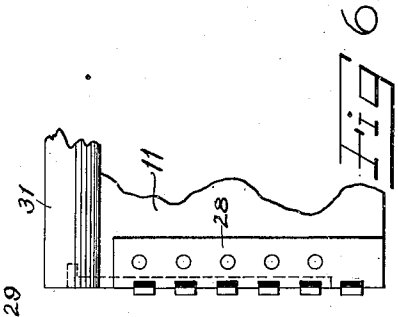
June 22, 1948. S. G. HOUSE 2,443,767

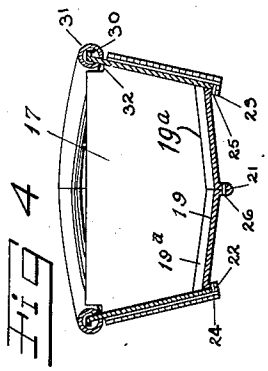
SECTIONAL BOAT

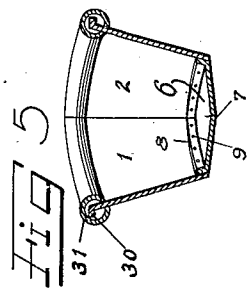
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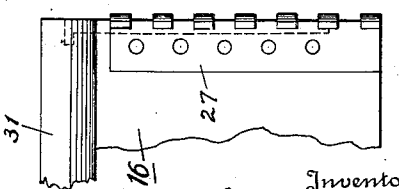









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# UNITED STATES PATENT OFFICE

2,443,767

## SECTIONAL BOAT

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Application April 12, 1946, Serial No. 661,747

2 Claims. (Cl. 9—2)

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My present invention has for its object to provide a boat constructed in sections capable of being nested one within the other for convenience in transportation and storage, and provided with means for readily connecting them, whereby a rigid seaworthy craft may be had.

Another object of my invention is to provide a knockdown sectionalized boat especially designed to facilitate its construction entirely of sheet metal.

A still further object is to provide a row boat constructed of sheet metal having a bottom and sides so constructed as to provide a center keel and flanking side keels cooperating therewith to give increased stability against tipping either from the displacement of loads or water surface conditions.

To these and other ends my invention embodies further improvements all as will be further described in the accompanying specification, the novel features thereof being set forth in the appended claims.

In the drawings:

Figure 1 is a side elevation of a boat embodying my invention.

Figure 2 is a top plan view thereof.

Figure 3 is a view showing the several sections disconnected and nested for shipment.

Figure 4 is a transverse sectional view of the stern section taken on the line $4^x$—$4^x$ of Fig. 1.

Figure 5 is a like sectional view through the bow taken on the line $5^x$—$5^x$ of Fig. 1.

Figure 6 is an enlarged fragmentary view showing the means of connecting the meeting edges of fore and aft sections of the boat.

Similar reference characters in the several figures indicate similar parts.

In carrying out my invention I construct a boat, of the row boat variety, with a bow section A, an intermediate section B and a stern section C. These separate parts decrease in size reversely to the order named so that the intermediate one will fit within the stern section and in turn receive the bow section as shown in Figure 3, thus enabling the craft to be readily transported by motor vehicles, as for instance in the trunk compartment of a passenger automobile.

In the construction of the several parts of the boat I employ sheet metal throughout with special attention to the structural shapes of the different parts. The part A forming the bow has a pointed stem formed by the curved side plates 1 and 2 the meeting edges being slightly flanged at 3 and united by a row of rivets 4. Extending between the rear ends of these plates is

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a bulkhead 5 which is the full depth of said plates. The bottom is formed of a single plate 6 having a pointed outline. It is depressed at its center with increasing depths rearwardly as indicated at 7 and on its three sides it is provided with upwardly extending flanges 8 fitting closely within the bottom edges of the side plates and bulkhead and to which permanent attachment is effected by horizontal rows of rivets 9.

The side walls of the several sections flare outwardly slightly in straight lines from their lower edges and also diverge slightly in a rearward direction. The section B has the side plates 10—11 spaced at their forward ends to form continuations of the plates 1 and 2. Within the two ends of the plates 10—11 are secured the forward and rear bulkheads 12 and 13, which, with the bottom 14, forms, as does the bow section, a separate buoyant compartment.

The stern element is likewise formed of side plates 15—16 carrying at their forward ends the bulkhead 17 and at their rear extremities a stern plate 18, said several walls being closed by the bottom member 19. The stern plate 18 may be stiffened if desired by spaced vertical ribs 20.

In order to add stability to the craft in the water as well as to increase its strength structurally, additional features are incorporated in the construction of the bottoms and side walls of the parts B and C. Their bottoms 14 and 19 are depressed at the center in continuation of the depression 7 at the rear end of the bottom of the bow A from which point they extend rearwardly horizontally. They each have a center keel 21 which is made by bending the metal upon itself, as shown in Fig. 4. At their lateral edges these bottoms have short downwardly extending vertical flanges 22 and 23 fitting within their respective side walls, the latter being extended at their lower edges and flanged slightly to receive them and accommodate the rows of rivets 24—25 by which a permanent attachment is effected. The side walls formed by the fold on the metal to provide the center keel 21 are also secured against spreading by a row of rivets 26.

The bottom 14 of section B is provided at its ends with upturned flanges $14^a$—$14^b$ by which it is attached to the bulkheads 12 and 13. Similarly the bottom 19 of the stern section C has a flange $19^a$ by which it is joined to the bulkhead 17. It is, however, at its rear end, preferably extended beneath the stern plate 18 and secured to an inwardly extending flange $18^a$ thereon.

It will be seen from the construction described that the major portion of the overall length of

the boat is provided with a center keel and two laterally disposed side keels which cooperate at all times in aiding to maintain stability of the craft against rocking by displacement of the load and which will also act to steady it under various conditions of weather and currents that may be encountered. Also I have provided a structure having a bow section formed to give buoyancy and lifting qualities at its forward end as the craft is propelled through the water and to render qualities of maneuverability to the boat. A contributing factor to these attributes comes also from the slight upward lateral flare of the several bottoms **6**, **14** and **19** at each side of the longitudinal center line of the boat which results in placing the two lateral keels in a horizontal plane above the center keel.

The several sections described are provided at their meeting edges with means capable of ready connection and disconnection. To this end I employ plates **27** and **28** which are preferably the full depth of the side plates of the boat and have overlapping eyes through which a long pintle **29** is inserted.

Gunwales are provided by turning the top edges of the side plates outwardly to form narrow flanges **30** and these may be further embellished by applying to said flanges sections of pipe as indicated at **31**, which are slotted on their lower sides to embrace the inner and outer edges of the side walls as shown in Figs. 4 and 5. These may be made to fit frictionally and are secured in place by slipping them lengthwise along the top edges of the side plates. The transversely extending bulkheads may be formed with upper edges slightly below the corresponding edges of the side plates or they may be notched, as indicated at **32**, opposite the flanges **30** to permit the application of the gunwales **31**.

I claim:

1. In a sectional row boat consisting of bow,



intermediate and stern sections, each comprising a buoyant body composed of sidewalls having narrow outwardly extending flanges on their top edges, bottoms fitted within their lower edges and bulkheads extending between their ends having notches opposite said flanges, and gunwales formed of pipe sections split on their lower sides and slipped endwise of said flanges, and means for securing the contiguous ends of the side pieces together.

2. A boat composed of a plurality of longitudinally alined sections, the side walls thereof forming with the bottom a water tight compartment, the ends of the sections forming bulkheads, the bottoms of the two rear sections being formed of metal bent upon itself to form a central keel and the bottom of the forward section being depressed at its center and flaring outwardly and upwardly and flaring upwardly and forwardly, the side walls of all of the sections having outwardly extending narrow flanges, pipe sections split on their lower edges and slipped over said flanges to form rounded gunwales, plates having alined eyes extending from the latter to the lower edges of the side plates and affixed to the abutting edges of said plates and pintles engaging said eyes to lock them together.

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