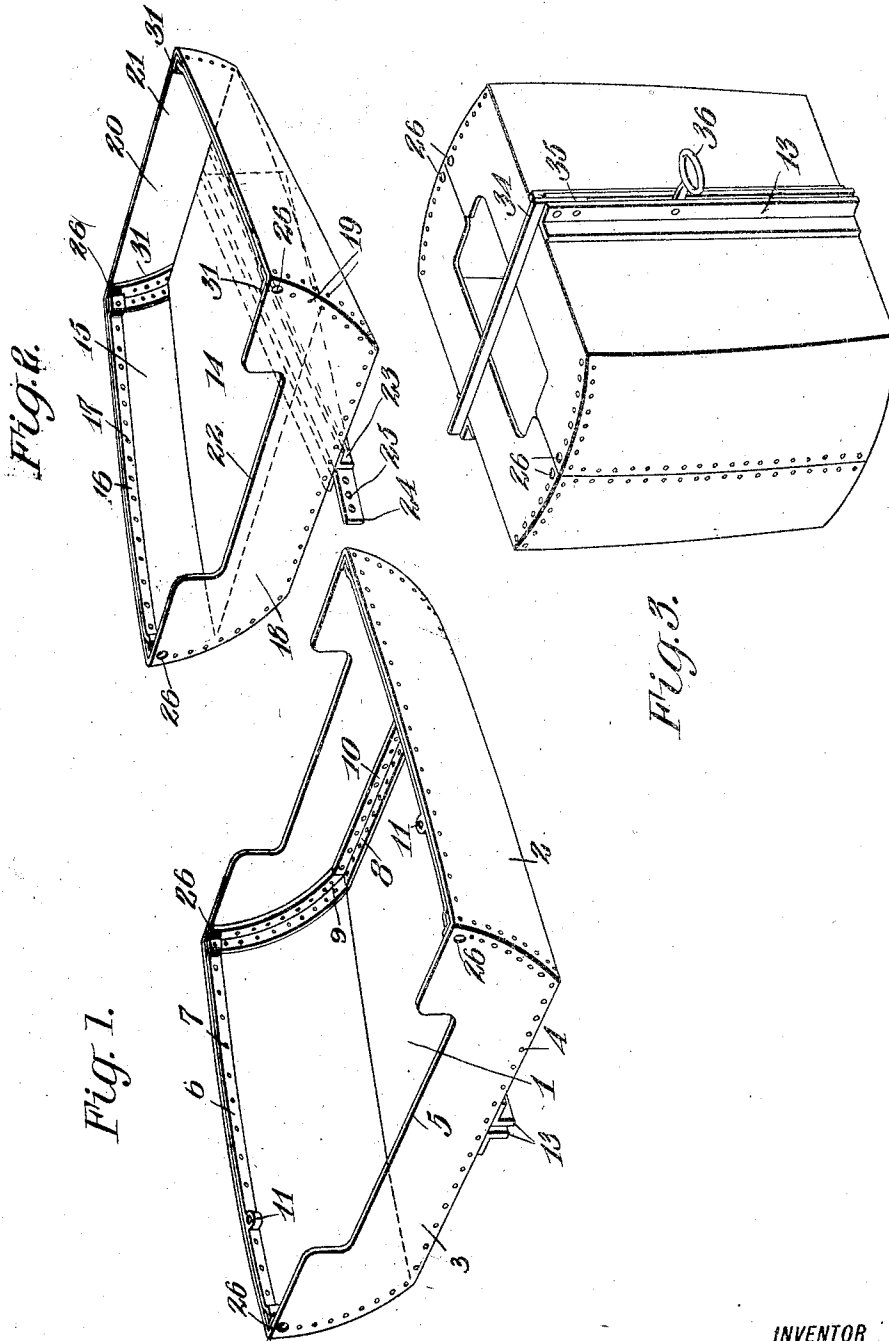


H. W. VANIMAN.
BOAT.
APPLICATION FILED JULY 13, 1909.

957,820

Patented May 10, 1910.
2 SHEETS—SHEET 1.



WITNESSES
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Fig. A.

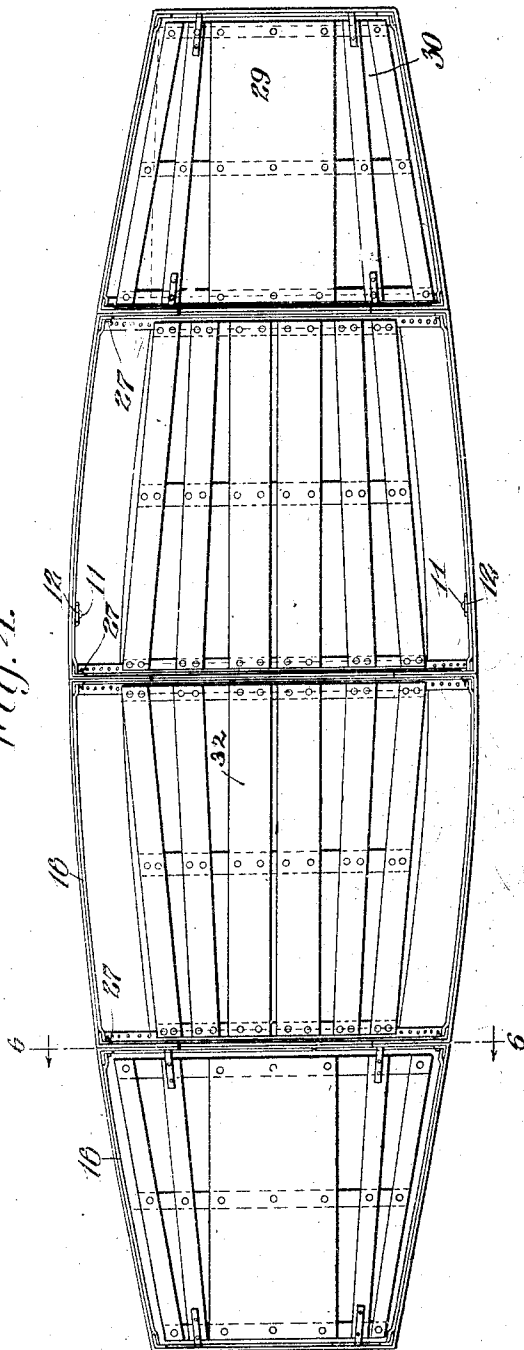


Fig. 5.

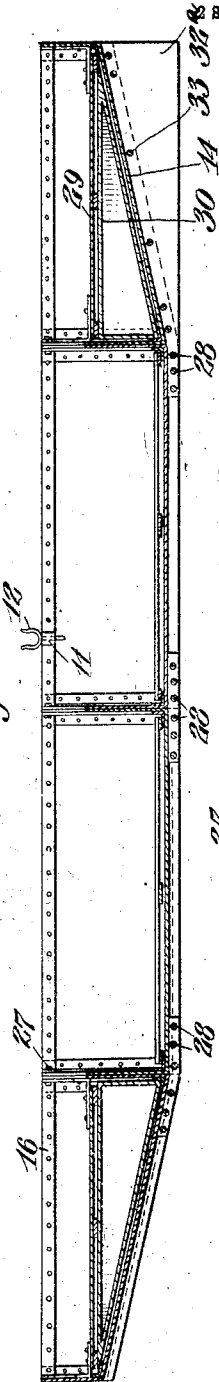
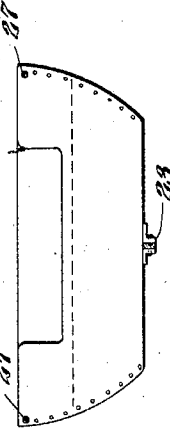


Fig. 6.



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UNITED STATES PATENT OFFICE.

HARVEY WEBSTER VANIMAN, OF CINCINNATI, OHIO.

BOAT.

957,820.

Specification of Letters Patent.

Patented May 10, 1910.

Application filed July 13, 1909. Serial No. 507,292.

To all whom it may concern:

Be it known that I, HARVEY WEBSTER VANIMAN, a citizen of the United States, and a resident of Cincinnati, in the county of Hamilton, State of Ohio, have invented certain new and useful Improvements in Boats, of which the following is a specification.

My invention is an improvement in boats, and consists in certain novel constructions and combinations of parts hereinafter described and claimed.

The object of the invention is to provide a non-sinkable and non-oxidizable boat comprising a plurality of sections, sundry, preferably two, of which are of greater size for the center and capable of receiving the other sections therein in nested relation, the said larger sections being then secured together.

Referring to the drawings forming a part hereof: Figure 1 is a perspective view of one section of the boat. Fig. 2 is a similar view of another section; Fig. 3 is a similar view, showing the sections folded together; Fig. 4 is a plan view of the boat; Fig. 5 is a central longitudinal section; and Fig. 6 is a section on the line 6-6 of Fig. 4.

The embodiment of the invention shown in the drawings is composed of four sections, two of which are of larger size than the others and are arranged at the center of the boat, the end sections being enough smaller than the central sections to fit therein in nested relation. The central sections are similar in construction, as are also the corresponding sections on each side thereof, and only one section of each series will be described, it being premised that the boat consists practically of two parts, each of which is the counterpart of the other.

Each of the sections is composed of sheet material, such as iron or steel, and each central section consists of a plate bent to form a bottom 1 and sides 2, the sides being curved and having their convex faces outward, while the bottom is substantially flat as shown. End plates 3 are secured to each end of the plate by nuts 4, and each of the end plates is recessed in its upper edge, as at 5.

The edges of the sides 2 are reinforced by a strip or bar 6, which is riveted to the edge by rivets 7, and angle plates 8 are riveted to the end edges of the bottom and sides and to the adjacent edge of the end plates, as at 9. Each of the bars 6 is provided near one

end with a perforated lug 11 for receiving a rowlock 12.

A pair of angle plates 13 is secured to the under face of the bottom at approximately the longitudinal center of the boat, and the said plates are arranged with their horizontal portions extending in opposite directions, the angle plates 13 acting as a keel in a manner to be presently described.

Each end section consists of a sheet or plate which is bent to form a bottom 14 and sides 15, the bottom being substantially flat and the sides curved and arranged with their convex sides outwardly and each side edge is provided with a reinforcing strip or bar 16 riveted thereto, as at 17.

The end section is of greater width at the end adjacent to the central section, and tapers gradually toward the outer end, and the larger end is closed by an end plate 18 recessed, as at 22, and riveted to the bottom and sides, as at 19, while the other end is closed by a plate 20 whose upper edge 21 is straight. The end section is also provided with a pair of angle plates 23 similar in construction and arranged in the same manner as the plates 13, and between the ends of the plates adjacent to the larger end a bar 24 provided with a longitudinal series of openings 25 is arranged.

Each section is provided at its corners with openings 26 which register with the corresponding openings of the adjacent section when the sections are placed together, and bolts 27 are passed through the registering openings for securing the sections together. The angle plates 13 and 23 are also provided with transverse openings at their ends, and bolts 28 are passed through the openings, and through the openings of the bars 24, to assist the bolts 27 to secure the sections in close contact.

It will be observed from an inspection of Fig. 5 that the bottoms of the end sections are inclined upwardly toward their outer ends, and that false bottoms 29 which are substantially horizontal are arranged above the said bottoms, and an air chamber 30 is arranged between the true and the false bottoms.

The corners of the end sections are reinforced by angle plates 31, and each section is provided with a slatted removable bottom 32, the bottom 32 resting upon the false bottom in the end sections. The angle plates 23 on the section which forms the rear of the

boat have arranged therebetween a substantially triangular plate 32^a, which is secured in place by rivets or bolts 33, and acts as a rudder to steady the boat. Folding oars are preferably made use of, which may be received inside of the sections when folded.

During transportation the improved boat may be arranged as indicated in Fig. 3, the end sections being nested each in its adjacent center section, and the center sections placed with their edges abutting. A bar or link 34 is arranged transversely at each end of the sections, and is provided at each of its ends with an angular portion 35 which is received between the adjacent angle plates 13 and secured in place by bolts, the link extending across the ends of the sections, as shown in Fig. 3, and handles 36 are pivoted between the angle plates of each outer section at approximately their longitudinal center. The boat so folded may be carried in the hand like a suit case, and when it is desired to use the same the links 34 are released and removed, as is also the handle. The sections are now placed in alinement with the bars 24 in place and the bolts 27 and 28 are inserted and secured in place.

The boat is, as before mentioned, preferably constructed of sheet iron or steel secured together by rivets and then soldered and galvanized after it is secured together, and the bolts are preferably of brass. It will be evident that more sections may be added if desired, and fewer may also be made use of, the number used depending upon what service the boat is intended for.

I claim:

1. A boat comprising a plurality of sections, each section being formed of sheet material bent to form a bottom and sides, and ends secured to the ends of the sides and bottom, angle plates connecting the ends to the sides and bottom, a reinforcing bar on the free edge of each side, a pair of angle

plates on the under face of the bottom of each section and longitudinally of the boat, a bar arranged between the angle plates and connecting the sections, bolts traversing the bar and the angle plates, bolts connecting the ends of the adjacent sections, sundry of said sections having false bottoms, air chambers arranged between the said false bottom and the true bottom, said sections decreasing in size from the central to the end sections whereby to permit them to be arranged in nested relation, means for securing the sections together when so nested, and detachable handles connected with sundry of the sections.

2. In a boat of the class described, a stern section composed of sheet material and having its bottom inclined upwardly toward the stern end thereof, a substantially horizontal false bottom above the true bottom, angle plates secured to the true bottom in spaced and parallel relation, and longitudinally of the boat, and a rudder secured between the angle plates.

3. In a boat of the class described, a plurality of sections composed of sheet material, each having on its bottom angle plates in spaced and parallel relation and longitudinally of the boat, and a stern section composed of sheet material having its bottom inclined upwardly toward the stern end thereof, a substantially horizontal false bottom above the true bottom, angle plates secured to the true bottom in spaced and parallel relation and longitudinally of the boat, a rudder secured between the angle plates, said sections being adapted to be arranged end to end, and plates extending between the angle plates of adjacent sections for securing them together.

HARVEY WEBSTER VANIMAN.

Witnesses:

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