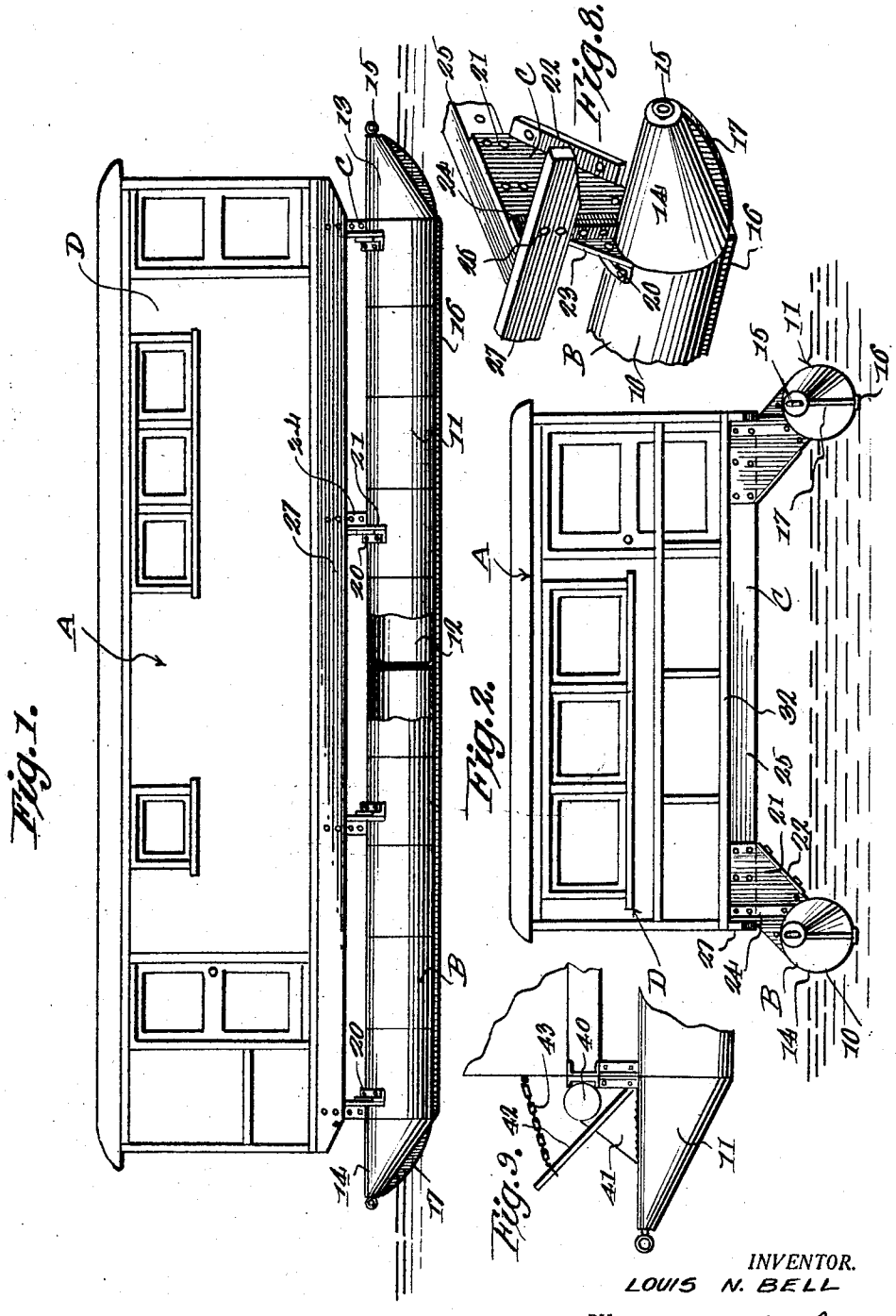
Sept. 29, 1931. L. N. BELL 1,825,613

PONTOON HOUSE BOAT

Filed March 10, 1930 2 Sheets-Sheet 1



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PONTOON HOUSE BOAT

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Fig. 3.

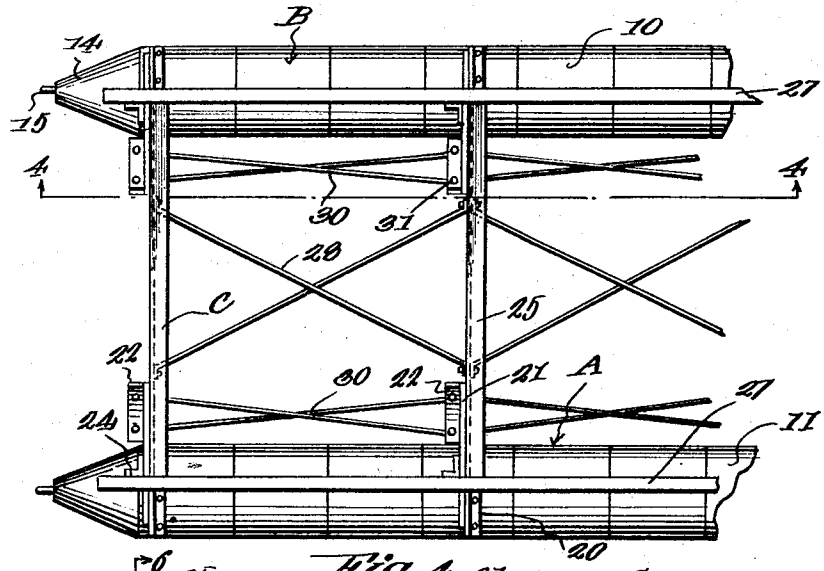


Fig. 4.

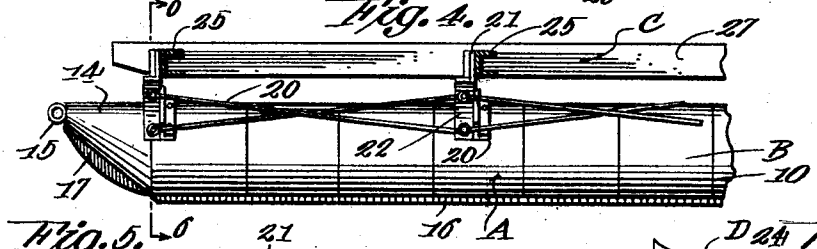


Fig. 5.

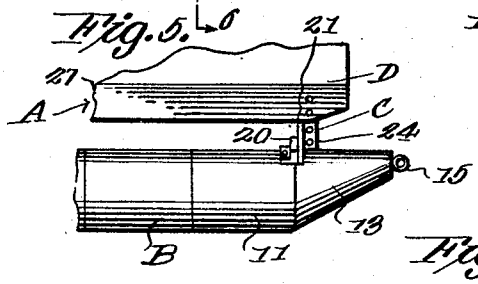


Fig. 6.

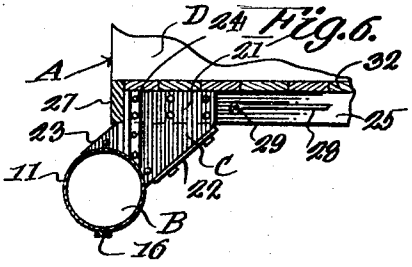
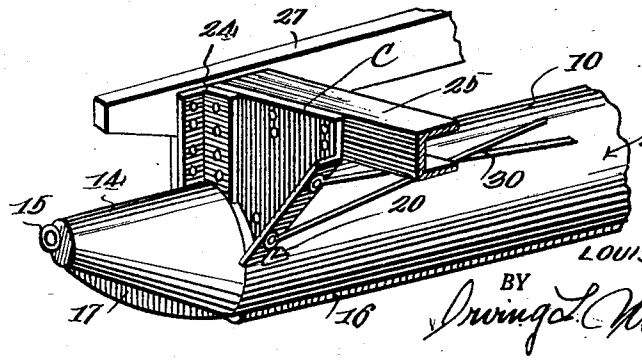


Fig. 7.



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UNITED STATES PATENT OFFICE

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PONTOON HOUSE BOAT

Application filed March 10, 1930. Serial No. 434,736.

This invention appertains to boats and more particularly to a novel pontoon house boat.

One of the primary objects of my invention is the provision of a novel pontoon and frame work structure for supporting the deck of the house boat, the pontoons being so formed as to effectively ride the waves and support the body of the house boat, and including a plurality of water tight compartments whereby the danger of the pontoons submerging incident to leakage will be eliminated.

Another important object of my invention is the provision of means for reinforcing the pontoons by longitudinally extending ribs acting in the nature of keels, the ends of the pontoons being provided with blunt nosed conical shaped terminals for riding the waves.

A further object of my invention is the provision of a novel frame work carried by the pontoons for supporting the body of the house boat, the frame work embodying novel brackets welded to the pontoons and effectively braced for supporting the floor joists which can be formed of structural iron, the ends of the joists carrying the floor stringers to which the floor or deck of the house boat can be nailed.

A still further object of my invention is to provide an improved pontoon house boat of the above character, which will be durable and efficient in use, one that will be simple and easy to manufacture, and one which can be placed upon the market at a reasonable cost.

With these and other objects in view, the invention consists in the novel construction, arrangement and formation of parts, as will be hereinafter more specifically described, claimed, and illustrated in the accompanying drawings, in which drawings:—

Figure 1 is a side elevation of my improved house boat showing a part of the pontoons broken away and in section.

Figure 2 is an end elevation of the house boat.

Figure 3 is a fragmentary plan view of the pontoons and supporting frame work for the body of the house boat.

Figure 4 is a longitudinal section taken on the lines 4—4 of Figure 3 looking in the direction of the arrows.

Figure 5 is a fragmentary side elevation of house boat showing the side stringers for supporting the body of the house boat.

Figure 6 is a detail transverse section taken on the line 6—6 of Figure 4 looking in the direction of the arrows showing the formation of the supporting brackets of the frame work.

Figure 7 is a fragmentary detail perspective view illustrating one of the pontoons and part of the novel frame work.

Figure 8 is a view similar to Figure 7 looking from the opposite side thereof.

Figure 9 is a fragmentary side elevation illustrating a slightly modified form of my house boat.

Referring to the drawings in detail, wherein similar reference characters designate corresponding parts throughout the several views, the letter A generally indicates my improved house boat which comprises a novel pontoon under supporting structure B; a novel frame work supporting structure C carried by the pontoons B, and a body or house portion D of the house.

The pontoon under structure B preferably comprises a pair of spaced longitudinally extending cylindrical pontoon members 10 and 11, which are joined and braced together by the novel frame work C for supporting the body D, in a manner which will be later described. If desired, intermediate longitudinal pontoons can be provided, but as stated, I prefer to provide two pontoons arranged on opposite sides of the house boat. These pontoons are preferably of such a length as to extend beyond the ends of the body D of the boat as clearly shown in Figure 1 of the drawings. Each of the pontoons 10 and 11 include a plurality of water tight compartments 12 which may be joined or connected together in any desired way. Thus it can be seen that if one or more of the compartments should become punctured, the pontoon would still have sufficient buoyancy for supporting the body D. The ends of the pontoons 10 and 11 have welded or otherwise secured thereto blunt nosed

shaped hollow conical prow and stern members 13 and 14 for permitting the effective cutting of the water by the pontoons and to permit the same to ride the waves. The outer terminals of the members 13 and 14 can be provided with eyes 15 for the reception of towing cables or the like.

I also prefer to reinforce and strengthen the pontoons 10 by longitudinally extending keel bars 16 which can be welded or otherwise secured to the lower surface of the pontoons, and it is to be noted that the lower surfaces of the end members 13 and 14 can also be provided with reinforcing keel pieces 17.

My novel frame work C comprises a plurality of equa-distantly spaced transversely extending attaching lugs or angle bars 20 which are welded, riveted, or otherwise secured to the upper surface of the pontoons 10 and 11. As shown, these attaching lugs or angle bars 20 on the pontoons 10 and 11 are arranged in transverse alignment relative to one another for a purpose, which will be later described. It is to be also noted that an attaching lug or angle bar is arranged adjacent to the end of each pontoon and an angle bar attaching lug on the opposite sides of the transverse center of each pontoon. These attaching lugs have bolted, riveted or otherwise secured thereto the upwardly and inwardly extending attaching brackets or plates 21 which have their lower edges bent at right angles to provide reinforcing flanges 22. The plates 21 are further braced by a gusset 23 and a vertically disposed angle bar 24 which is riveted to the attaching lugs or angle bars 20. Bolted, riveted, or otherwise secured to the plates 21 are transversely extending deck joists 25 and it can be seen that these joists or beams extend transversely of the pontoon structure B from one pontoon to the other and firmly unite the two. These joists are preferably formed from structural iron or steel units, such as angle bars, as shown. Bolted to the vertical angle bars 24, as at 26, are the longitudinally extending stringers 27, which can be formed from wooden beams. These stringers extend above the pontoons 10 and 11 and terminate short of the ends thereof, as shown.

This completes the frame work structure, but the frame work can be additionally braced in any desired way so as to resist all strains placed thereon and thus the transversely extending joists 25 can be connected by diagonally extending brace bars 28, the terminals of which can be riveted as at 29 to the vertical flanges of said joists. The bottom flanges 22 of the supporting plates 21, can also be braced by crossed braced rods 30 and the ends of these rods are bolted or riveted as at 31 to the flanges of the adjacent plates.

It is to be noted that the upper edges of the stringers 27 extend above the beams or joists 25 and these joists 25 are adapted to support the floor or deck 32 of the body B as shown. If desired, the horizontal flanges of these joists can have bolted to the upper faces thereof suitable boards to permit the flooring or deck 32 to be nailed thereto.

The body D other than in combination with the pontoon supporting structure B and the frame work C forms no part of the present invention per se and this body can be of any desired house boat type or character and of any preferred arrangement.

From the foregoing, it can be seen that I have provided a house boat which can be manufactured at a lower cost than the ordinary hull type boat and which will possess greater strength and durability than the hull type and have other advantages, which will now be pointed out.

In the construction shown, the body D is always maintained above the water level and the same will be free from dampness and stench of bilge water. Further the spaced pontoons 10 and 11 render the boat extremely sea worthy and allows the boat to be easily towed from one place to another. Further the construction permits of the use of an outboard motor directly therewith.

In large size house boats the frame can be further reinforced and as shown in Figure 9 the opposite ends of the boats can be provided with tubular braces 40 secured by saddles or brace plate 41 with the forward ends of the pontoons 11. These saddles or brace plate 41 can be welded to the pontoons and to the tubes 40.

If preferred, swinging platforms 42 can be provided and in rough weather these platforms 42 can be raised by suitable chains 43 as shown in Figure 9 of the drawings. Thus the platforms 42 will act as a spray dash in rough weather.

Changes in details may be made without departing from the spirit or the scope of this invention, but—

What I claim as new is:

1. In a boat, a pontoon structure comprising a pair of spaced parallel side pontoons, a supporting frame work including transversely extending arcuate angle bars rigidly secured to the upper faces of the pontoons, attaching plates secured to the angle bars extending inwardly and upwardly therefrom, vertically disposed angle bars secured to the plates and the attaching angle bars, reinforcing gussets for the plates and angle bars, transversely extending angle bar joists connected to the plates, and longitudinally extending floor stringers bolted to the vertical angle bars and extending above the joists, and a body fitted upon the joists and stringers.

2. In a boat, a pontoon structure comprising a pair of spaced parallel side pontoons, a supporting frame work including transverse-

ly extending arcuate angle bars rigidly secured to the upper faces of the pontoons, attaching plates secured to the angle bars extending inwardly and upwardly therefrom, vertically disposed angle bars secured to the plates and the attaching angle bars, reinforcing gussets for the plates and angle bars, transversely extending angle bar joists connected to the plate, longitudinally extending floor stringers bolted to the vertical angle bars and extending above the joists, a body fitted upon the joists and stringers, reinforcing flanges formed on the plates, and forked brace bars connecting the flanges together.

3. In a boat, a pontoon structure comprising a pair of spaced parallel side pontoons, a supporting frame work including transversely extending arcuate angle bars rigidly secured to the upper faces of the pontoons, attaching plates secured to the angle bars extending inwardly and upwardly therefrom, vertically disposed angle bars secured to the plates and the attaching angle bars, reinforcing gussets for the plates and angle bars, transversely extending angle bar joists connected to the plate, longitudinally extending floor stringers bolted to the vertical angle bars and extending above the joists, a body fitted upon the joists and stringers, reinforcing flanges formed on the plates, forked brace bars connecting the flanges together, and diagonally extending cross brace bars extending from one joist to the other.

4. In a boat, a pontoon structure, an elevated supporting frame work carried by the pontoon structure, a body on said frame work spaced at all points from the pontoon structure, and pivoted platforms carried by the ends of the frame work, means for holding the platforms in a raised position to act as a spray dash.

In testimony whereof I affix my signature.

LOUIS N. BELL.