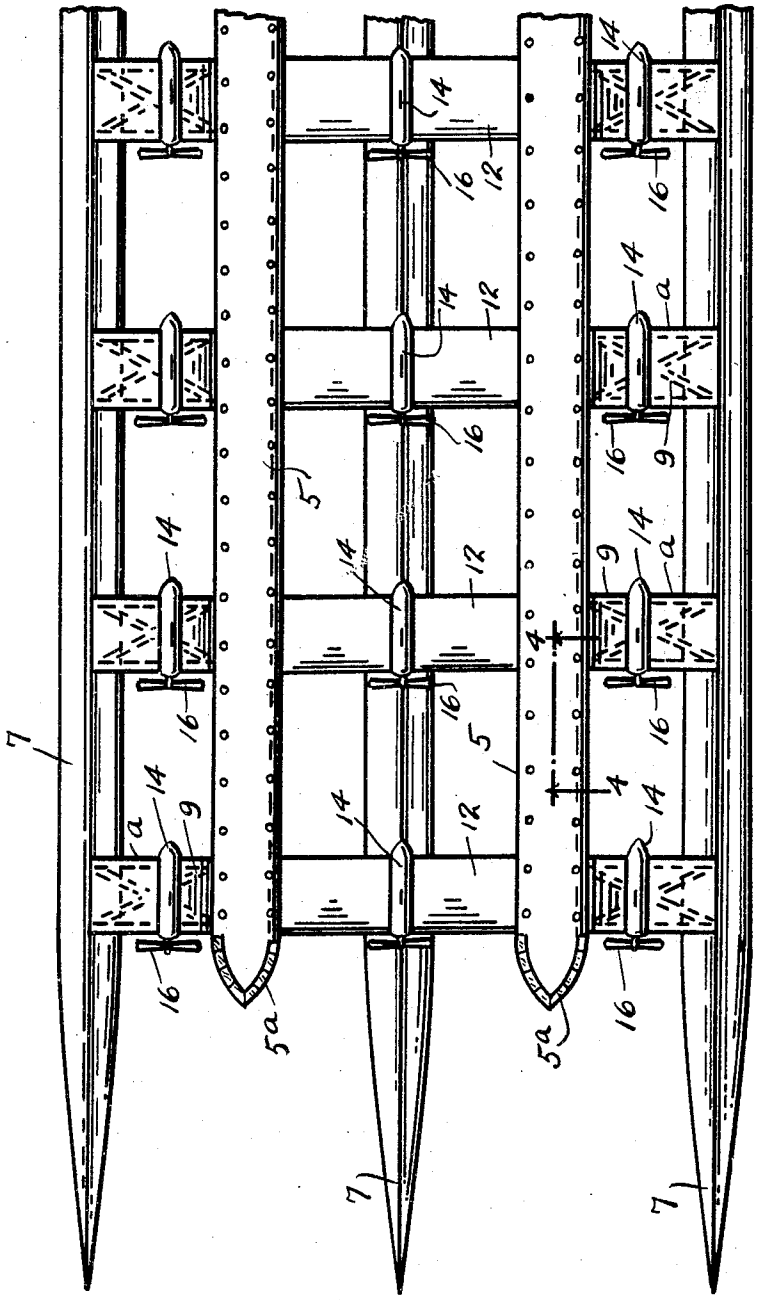
May 10, 1932. W. A. BEEBE 1,857,347

HYDROPLANE SHIP

Filed Dec. 7, 1931 5 Sheets-Sheet 1

Fig. 1.



Inventor

William A. Beebe

By Clarence O'Brien

Attorney

May 10, 1932. W. A. BEEBE 1,857,347

HYDROPLANE SHIP

Filed Dec. 7, 1931 5 Sheets-Sheet 2

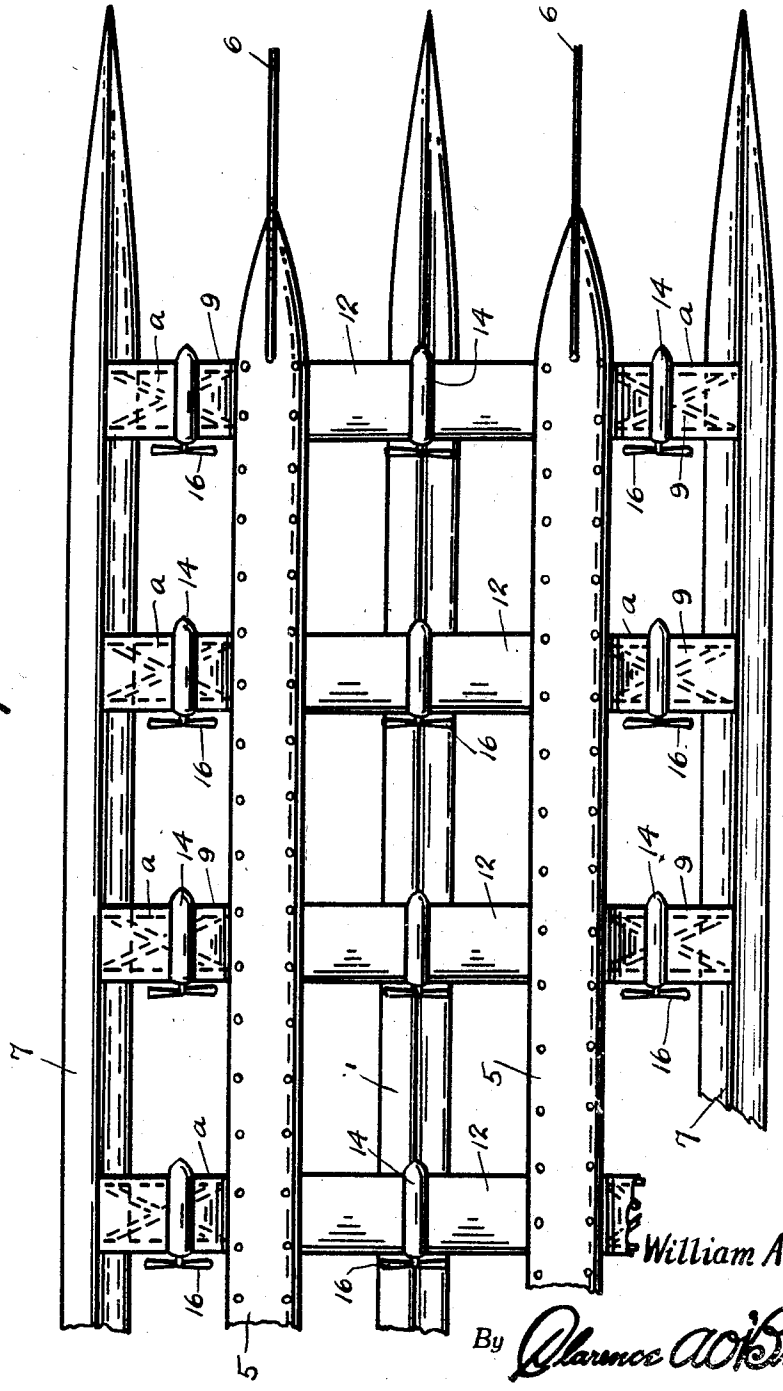


Fig. 1B.

Inventor

William A. Beebe

By Clarence A. O'Brien

Attorney

May 10, 1932. W. A. BEEBE 1,857,347

HYDROPLANE SHIP

Filed Dec. 7, 1931 5 Sheets-Sheet 3

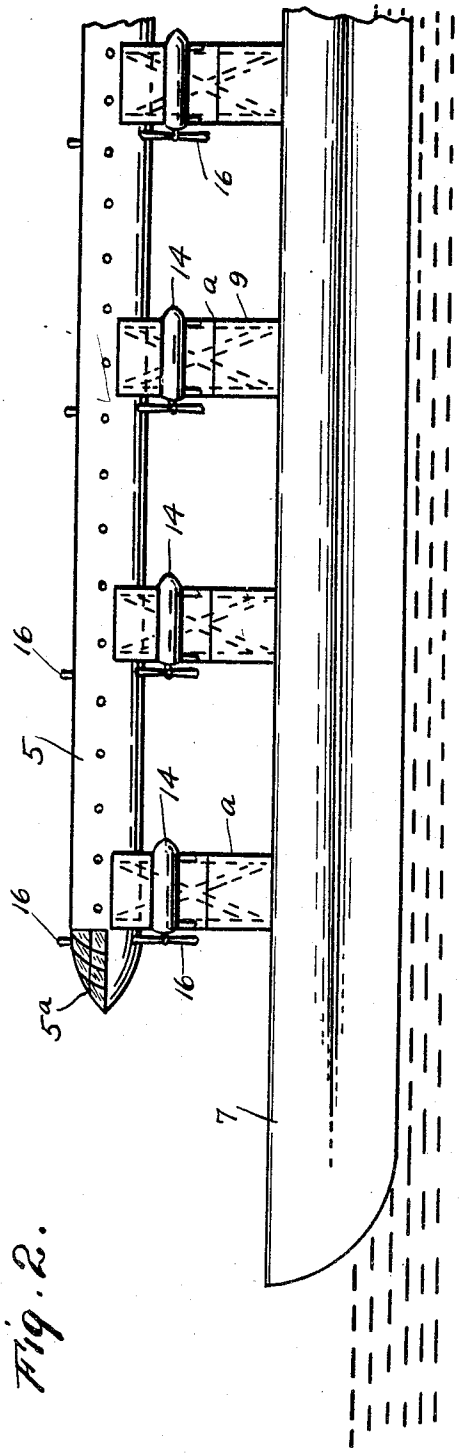


Fig. 2.

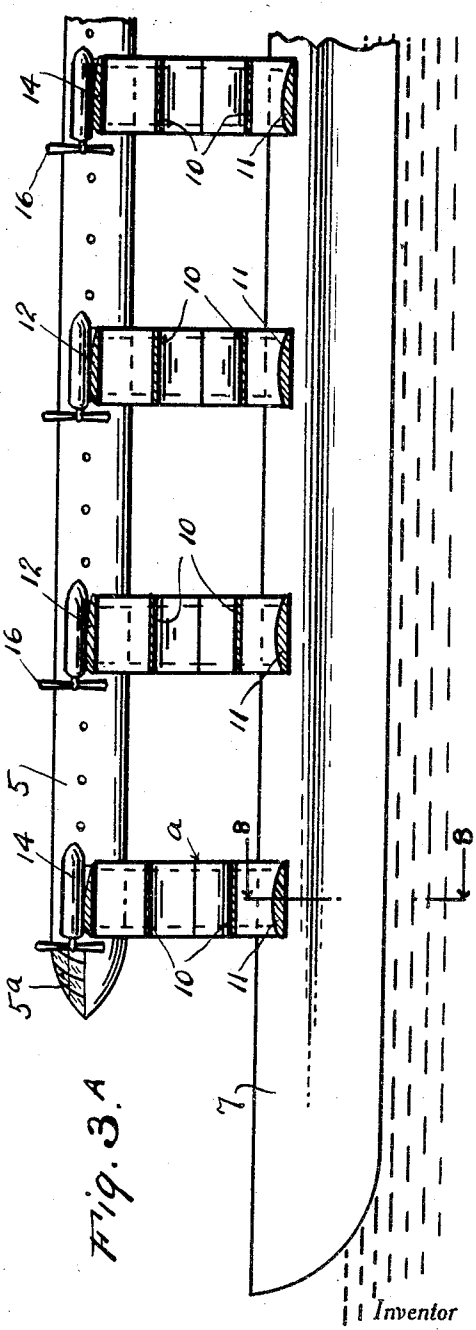


Fig. 3.

Inventor

William A. Beebe

By Clarence O'Brien

Attorney

May 10, 1932. W. A. BEEBE 1,857,347

HYDROPLANE SHIP

Filed Dec. 7, 1931 5 Sheets-Sheet 4

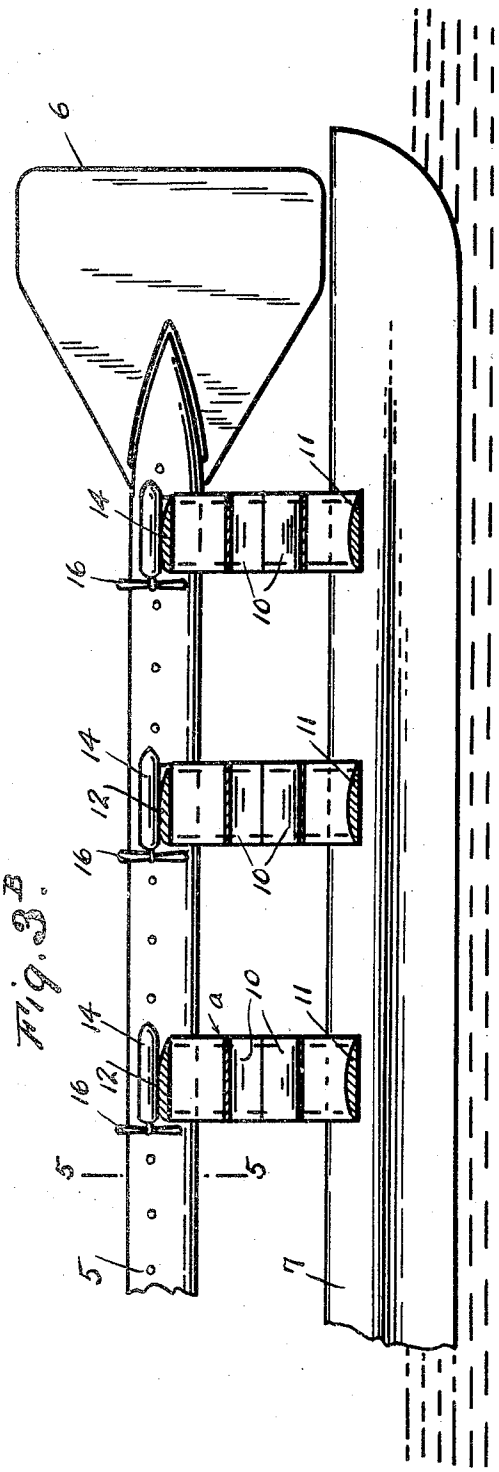


Fig. 3.

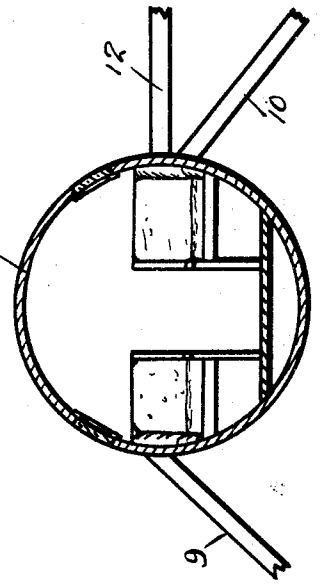


Fig. 5.

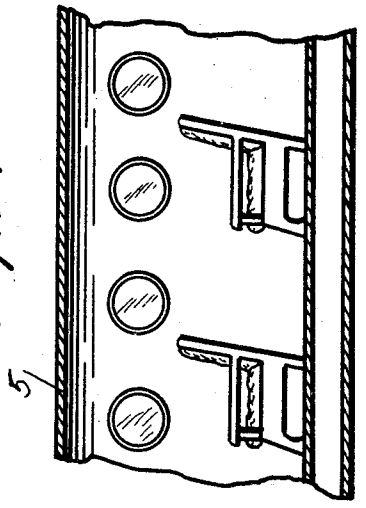


Fig. 4.

Inventor

William A. Beebe

By Clarence A. O'Brien

Attorney

May 10, 1932. W. A. BEEBE 1,857,347

HYDROPLANE SHIP

Filed Dec. 7, 1931 5 Sheets-Sheet 5

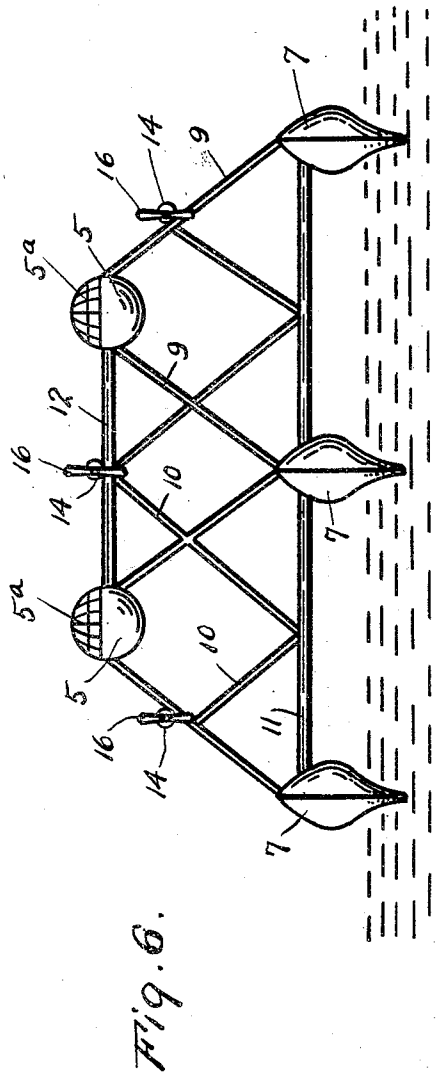


Fig. 6.

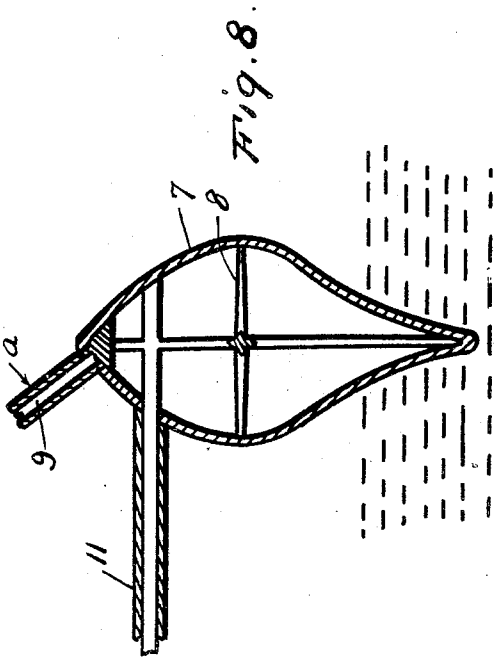


Fig. 8.

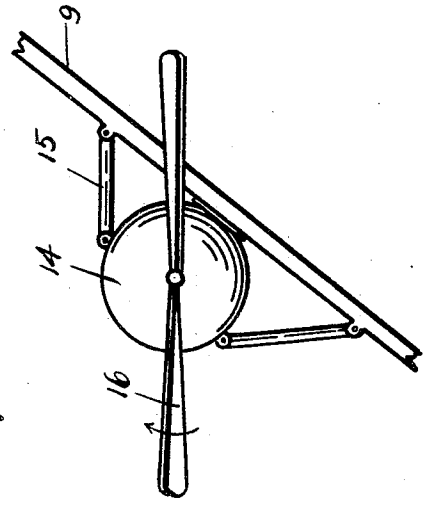


Fig. 7.

Inventor

William A. Beebe

By Clarence O'Brien

Attorney

Patented May 10, 1932 1,857,347

UNITED STATES PATENT OFFICE

WILLIAM A. BEEBE, OF NEW ORLEANS, LOUISIANA

HYDROPLANE SHIP

Application filed December 7, 1931. Serial No. 579,583.

The present invention relates to hydroplane ships and has for its prime object to provide a combination of three devices now in common use, arranged in such a manner so as to attain the most efficient results of each, namely speed, safety and larger weight carrying capacity.

Another very important object of the invention resides in the provision of a hydroplane ship of this nature which will ride smoothly in rough water at maximum speed.

Another very important object of the invention resides in the provision of a hydroplane ship of this nature which is simple in its construction, strong and durable, thoroughly efficient and reliable in use and operation and otherwise well adapted to the purpose for which it is designed.

With the above and numerous other objects in view as will appear as the description proceeds, the invention resides in certain novel features of construction, and in the combination and arrangement of parts as will be hereinafter more fully described and claimed.

In the drawings:

Figures 1*a* and 1*b* form a top plan view of the hydroplane ship embodying the features of my invention.

Figure 2 is a fragmentary side elevation thereof.

Figures 3*a* and 3*b* form a vertical longitudinal section therethrough.

Figure 4 is a fragmentary longitudinal section through one of the hulls.

Figure 5 is a transverse section therethrough taken substantially on the line 5—5 of Figure 3*b*.

Figure 6 is a front elevation of the craft.

Figure 7 is a front elevation of one of the engines, and

Figure 8 is a detail transverse section through one of the pontoons taken substantially on the lines 8—8 of Figure 3*a*.

Referring to the drawings in detail, it will be seen that numerals 5, 5 denote a pair of spaced parallel coextensive hulls designed in cylindrical formation throughout the major portions of their lengths by having their bows tapering forwardly and their sterns tapering rearwardly. Rudders 6 are mounted on the rear ends of the hulls 5 for steering the craft. Numerals 7, 7, and 7 denote three spaced parallel coextensive pontoons of stream line configuration tapering forwardly at their bows to cut through the water and also tapering rearwardly at their sterns to minimize friction with the water. These pontoons are of hollow construction and clearly indicated in Figure 8 and the bottom portions thereof have a keel like formation. Cross bracing 8 is provided inside the pontoons 7. Girder frames 9 extend upwardly from the pontoons. The girder frames extending from the two outer pontoons incline upwardly and inwardly while the girder frames extending from the center pontoons incline upwardly and outwardly and these girder frames support the hulls a distance above the pontoons and in an alternate arrangement with respect to said pontoons. Girder bracing frames 10 extend from wings 11 between the pontoons to intermediate portions of the girder frame 9.

Girder frame braces 10 extend from intermediate portions of the two center girder frames 9 and incline upwardly and inwardly toward each other to support the central portions of wings 12 between the hulls 5. The frames 9, 10 and 11 are covered as indicated at *a*. Propeller motors in stream line casings are denoted by numerals 14. Some of these motors are mounted above the centers of the wings 12 and others on intermediate portions of the girder frames 9 disposed to the sides of the craft. The motors 14 on the girder frames 9 are securely braced as is indicated at 15. Numeral 16 denotes the propellers at the front ends of the motors. In Figures 4 and 5 I have illustrated the cabinet structure and arrangement inside the hulls 5. At the fronts of the hulls 5 are control cabins 5*a* having transparent panels therein to give visibility to the operators located therein.

This hydroplane ship when not in motion remains on the surface of the water supported by the pontoons. When the motors are started and the hydroplane ship goes into motion, the wings take part of the weight off of the pontoons and as more speed is attained, the less friction of the water will be on the

pontoons until a great speed is attained. At that speed, the lengths of the pontoons will maintain an even keel while the weight of the craft will prevent it from flying out of the water.

The large rudders steer the hydroplane ship as an aeroplane is steered thereby eliminating a rudder structure in the water. This hydroplane ship is designed for ocean service but of course may be used on any large body of water which ordinarily would be too rough to travel at a very fast rate of speed.

The important feature of the novel arrangement of well known devices is that the pontoons, when the craft is moving at its normal fast rate of speed, slide through the crest of the waves thereby doing away with the pitching and rocking commonly experienced in ocean travel in ordinary ships.

It is thought that the construction, operation, utility and advantages of this invention will now be quite apparent to those skilled in this art without a more detailed description thereof.

The present embodiment of the invention has been described in considerable detail merely for the purposes of exemplification since in actual practice it will attain the features of advantage enumerated as desirable in the statement of the invention and the above description.

It is apparent that changes in the details of construction, and in the combination and arrangement of parts may be resorted to without departing from the spirit or scope of the invention as hereinafter claimed or sacrificing any of its advantages.

Having thus described my invention, what I claim as new is:

1. A hydroplane ship of the class described including, in combination, a plurality of elongated spaced parallel coextensive pontoons, a plurality of aeroplane wings disposed transversely between the pontoons, a plurality of hulls, means for supporting the hulls above the pontoons and between the pontoons, and aeroplane wings extending transversely between the hulls, comprising a plurality of covered girder frames disposed between the pontoons and the hull.

2. A hydroplane ship of the class described including, in combination, a plurality of elongated spaced parallel coextensive pontoons, a plurality of aeroplane wings disposed transversely between the pontoons, a plurality of hulls, means for supporting the hulls above the pontoons and between the pontoons, and aeroplane wings extending transversely between the hulls, comprising a plurality of covered girder frames disposed between the pontoons and the hull, propeller motors mounted on the girder frames to the outer sides of the hydroplane ship.

3. A hydroplane ship of the class described including, in combination, a plurality of elongated spaced parallel coextensive pontoons, a plurality of aeroplane wings disposed transversely between the pontoons, a plurality of hulls, means for supporting the hulls above the pontoons and between the pontoons, and aeroplane wings extending transversely between the hulls, comprising a plurality of covered girder frames disposed between the pontoons and the hull, propeller motors mounted on the girder frames to the outer sides of the hydroplane ship, rudders mounted on the rear ends of the hulls.

4. A hydroplane ship of the class described including, in combination, a plurality of elongated spaced parallel coextensive pontoons, a plurality of aeroplane wings disposed transversely between the pontoons, a plurality of hulls, means for supporting the hulls above the pontoons and between the pontoons, and aeroplane wings extending transversely between the hulls, comprising a plurality of covered girder frames disposed between the pontoons and the hull, propeller motors mounted on the girder frames to the outer sides of the hydroplane ship, rudders mounted on the rear ends of the hulls, said pontoons tapering forwardly at the bows and tapering rearwardly at their sterns and having their lower portions of keel like formation.

In testimony whereof I affix my signature.

WILLIAM A. BEEBE.