

Nov. 12, 1935.

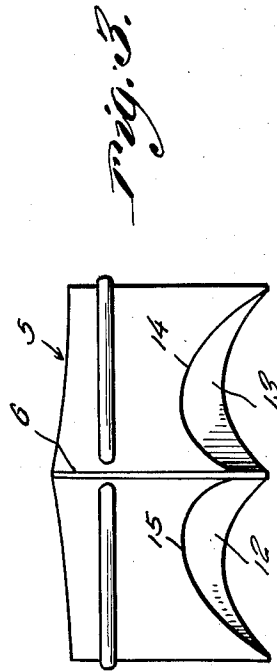
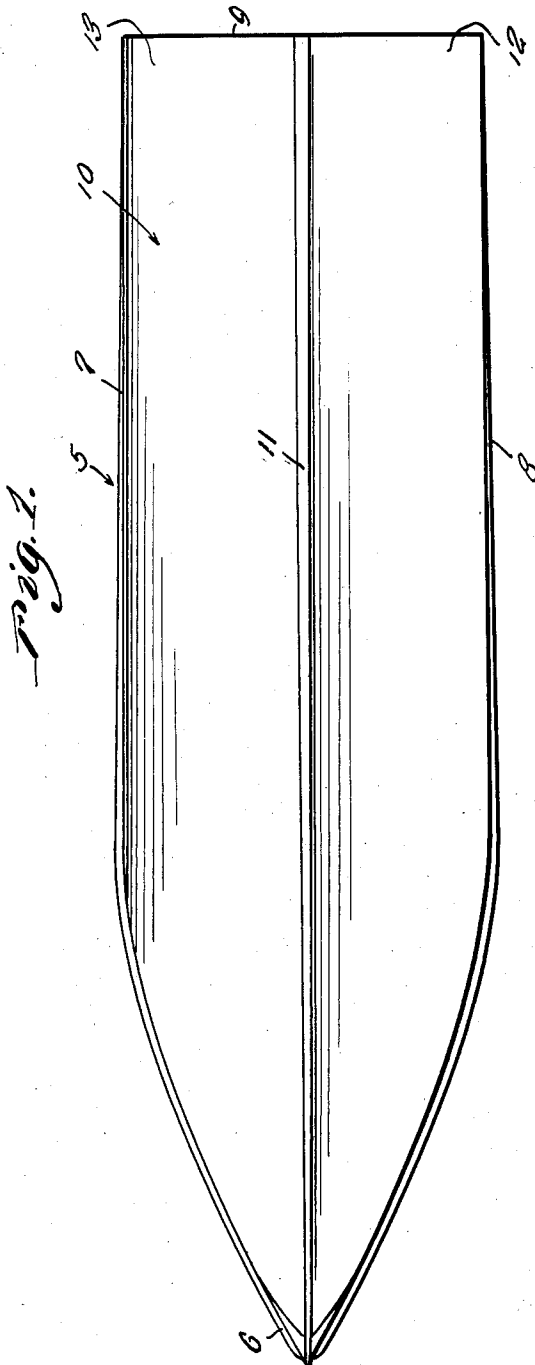
E. A. MAYNARD ET AL

2,020,792

WATER CRAFT

Filed Sept. 5, 1934

2 Sheets-Sheet 1



Inventors

*Ernest A. Maynard ~
Durwood G. Maynard ~*

By *Clarence A. O'Brien*
Attorney

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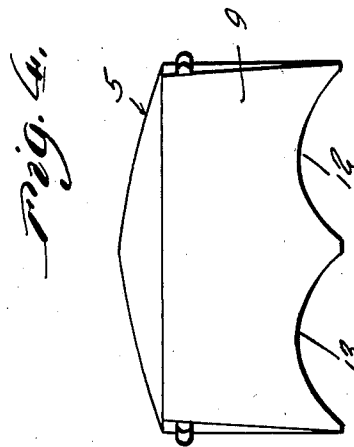
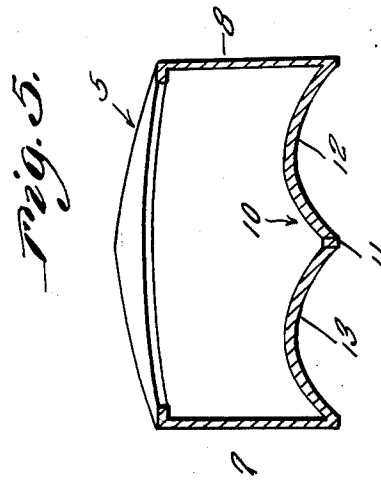
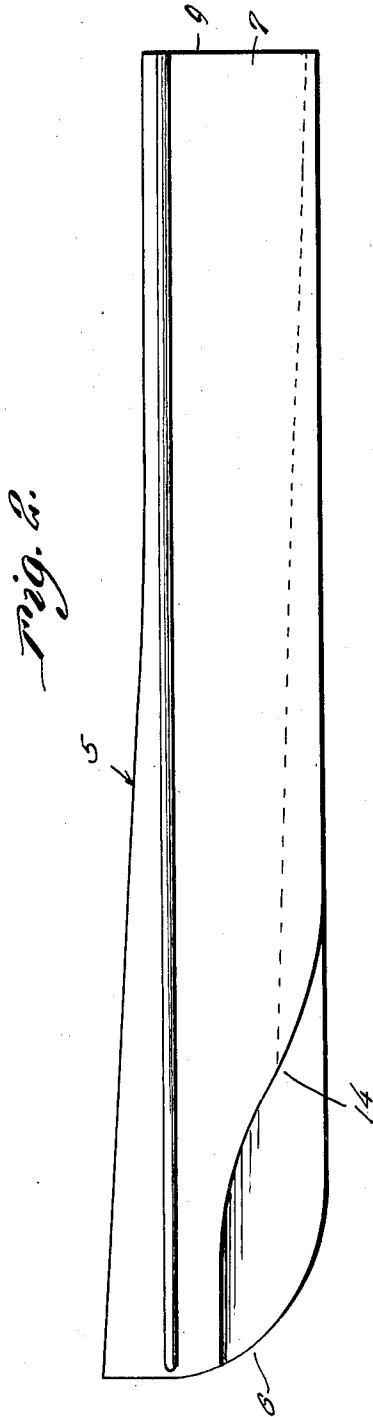
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WATER CRAFT

Filed Sept. 5, 1934

2 Sheets-Sheet 2



Inventors

Ernest A. Maynard
Durwood G. Maynard

By *Clarence A. O'Brien*
Attorney

UNITED STATES PATENT OFFICE

2,020,792

WATER CRAFT

Ernest Alton Maynard and Durwood George
Maynard, Gales Ferry, Conn.

Application September 5, 1934, Serial No. 742,786

1 Claim. (Cl. 114—66.5)

Our invention relates generally to watercraft and particularly to hull construction, and an important object of our invention is to provide a hull construction which produces buoyant characteristics as the result of movement of the watercraft through or on the water.

Another important object of our invention is to provide a hull construction of the character indicated which takes advantage of the buoyant effect of a combination of air and water moving in the direction opposite to the direction of movement of a watercraft or stationary with respect to the watercraft.

It is also an important object of our invention to provide a hull construction including water and air tunnels in the bottom thereof, the provision of which does not objectionably alter accepted hull construction or unduly reduce the interior space in the watercraft.

Other objects and advantages of our invention will be apparent from a reading of the following description in connection with the drawings, wherein for purposes of illustration we have shown a preferred embodiment of our invention.

In the drawings:—

Figure 1 is a plan view of the bottom of a hull constructed in accordance with the invention.

Figure 2 is a side elevational view of Figure 1.

Figure 3 is an elevational view of the front of the hull.

Figure 4 is an elevational view of the stern of the hull.

Figure 5 is a transverse vertical sectional view through the hull showing the contour of the air and water tunnels.

Referring in detail to the drawings, the numeral 5 generally designates a hollow construction hull having the pointed bow part 6, the straight sides 7, 8 and the square stern 9. It is to be observed that the portions illustrated are illustrated as described to teach the invention rather than restrict the invention, so that the invention is equally applicable to other forms and outlines of hulls.

The bottom of the hull which is generally designated 10 includes the keel or center board 11 which extends the length of the hull, and the air and water tunnels 12, 13, respectively.

The under part of the bow 6 is sharp and tapered and its opposite sides merge forwardly and gradually as indicated at 14 and 15, respectively, with the parts of the bottom which extend longitudinally of the hull on opposite sides of the keel 11 to form the air and water tunnels

which are simply parts of the bottom 10 having the upwardly curved contour shown in the drawings and extending to the rear of the hull in gradually diminishing depth.

As the hull moves forwardly on the water the action of the sharp bow is to meet the waves and divide the same so that the resulting agitated water combined with air come into position at opposite sides of the keel and has the effect of rushing rearwardly through the tunnels. The sharp bow 6 has the effect of dividing the wave into two parts, and at the points indicated by the numerals 14 and 15 the air bubbles and water mix and become an agitating mass which moves rearwardly the entire length of the tunnels such a way that air pockets and vacuums are produced in the tunnels which make the hull ride as if on air cushions, so that the hull is capable of planing through the water at unusual speed.

It is also to be noted that the buoying effect thus produced, being balanced on opposite sides of the hull and properly distributed forward and rearward with respect to the hull, produces an unusually safe hull which cannot be readily capsized and which is easy to navigate and steer despite a rough condition of the water.

It is to be noted that our type of hull bottom can be used on any style or type of boat or other watercraft including toy boats, hydroplane pontoons or any water pontoons.

Therefore, it is to be definitely understood that we do not desire to limit the application of our invention to the embodiment shown and described herein, and any change or changes may be made in the materials, and in the structure and arrangement of parts, within the spirit of the invention and the scope of the subjoined claim.

What is claimed is:—

A hull of the character described comprising a hull bottom including a centrally located keel, a pointed forward part on the bottom merging with the keel, said bottom having concave areas on opposite sides of the keel extending substantially the length of the bottom and gradually decreasing in depth toward the rear thereof to form longitudinal water and bubble traps for increasing the stability, buoyancy, and speed of the hull as the hull is moved forwardly through the water, the sides of said boat adjacent the front thereof being cut away forming a gradually curved edge portion from the midpoint of the front to a point in proximity to the center of the boat.

ERNEST ALTON MAYNARD.

DURWOOD GEORGE MAYNARD.