

Jan. 13, 1942.

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2,269,801

BOAT

Filed Feb. 24, 1939

2 Sheets-Sheet 1

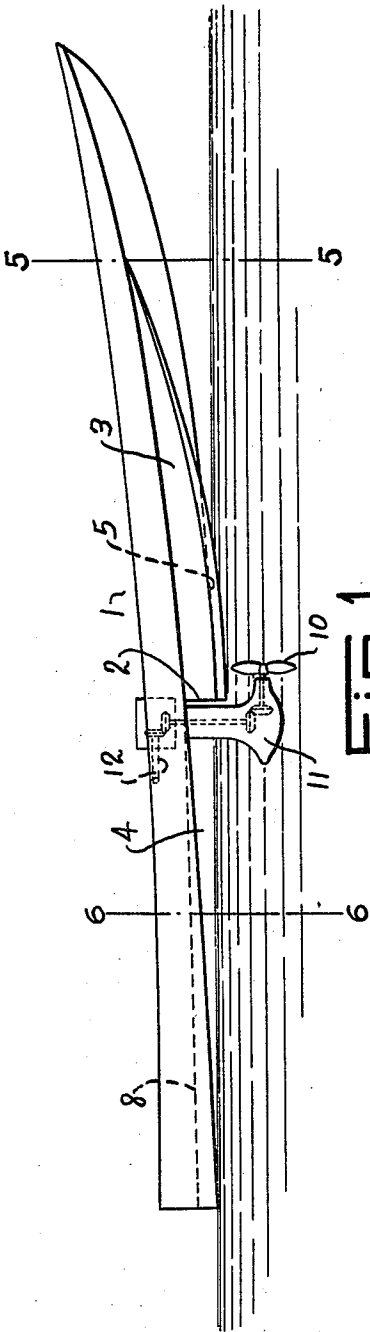


Fig. 1.

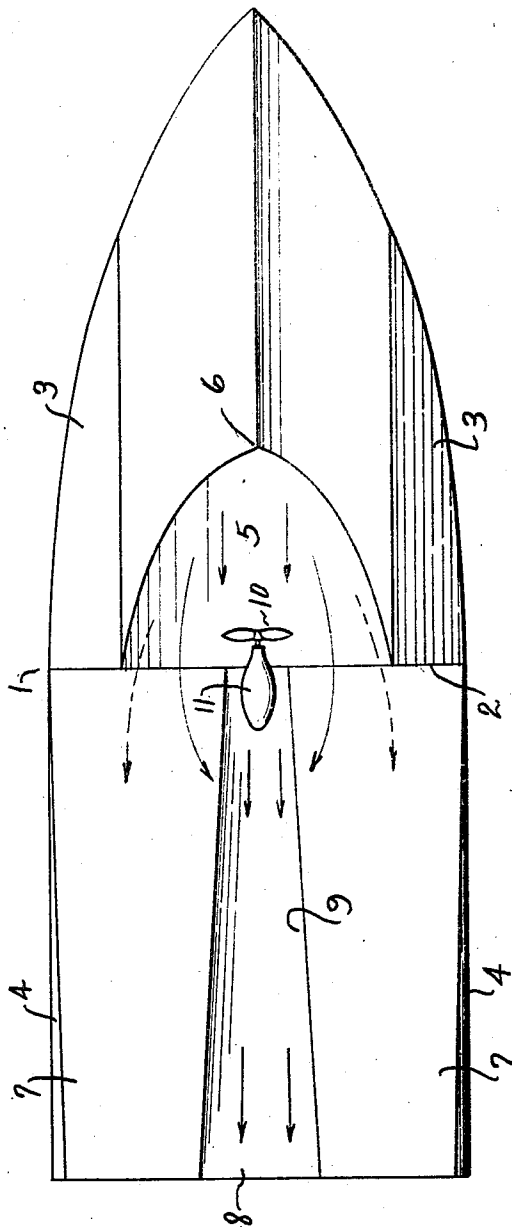


Fig. 2.

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2 Sheets-Sheet 2

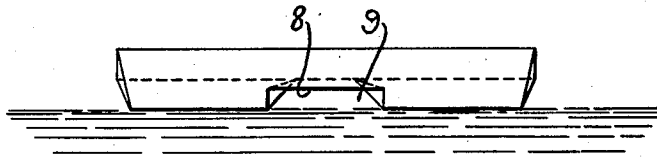


Fig. 3.

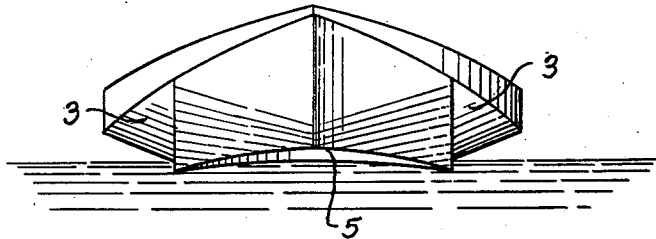


Fig. 4.



Fig. 5.



Fig. 6.

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BOAT

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4 Claims. (Cl. 114—66.5)

This invention relates to a boat and has more particular relation to the hull construction of a speed boat.

An object of the invention is to provide a boat of the type described having three planing surfaces arranged to glide over the surface of the water with a minimum of water displacement and a maximum of stability.

Another object of the invention is to provide a speed boat hull having a forward planing surface which is slightly convex thus increasing its lifting ability and two rear planing surfaces, said rear planing surfaces being so related to the front planing surface that they will be beyond the range of the disturbed water from the front planing surface.

Another object of the invention is to provide a boat of the character described wherein the propeller is located approximately midway of the hull and beneath the forward planing surface and so arranged as to pull the boat to the end that the concave forward plane will act to confine the agitated water from the propeller and whereby the boat will be pulled rather than pushed thus lending to stability.

The invention also embodies a chute, or channel, leading rearwardly from the transverse step of the hull between the two rear planing surfaces thus providing a clearance for the slip stream of the propeller to prevent drag and also to receive the exhaust from the motor to prevent back pressure or vacuum behind the transverse step.

With the above and other objects in view the invention has particular relation to certain novel features of construction, arrangement of parts and use, an example of which is given in this specification and illustrated in the accompanying drawings, wherein:

Figure 1 shows a side elevation of the boat, illustrated as in motion.

Figure 2 shows a bottom plan view.

Figure 3 shows the rear end of the boat in elevation.

Figure 4 shows a forward end view in elevation.

Figure 5 shows a diagrammatic view taken on the line 5—5 of Figure 1, and

Figure 6 shows a diagrammatic view taken on the line 6—6.

Referring now more particularly to the drawings wherein like numerals of reference designate the same parts in each of the figures, the numeral 1 designates the hull of the boat as a whole which is provided with a single transverse step 2 and has the forward chines 3, 3 in front of

the step and the rear chines 4, 4 leading from the step to the rear end of the hull. Between the chines 3 and extending forwardly from the step 2 there is the front planing surface 5 which is concaved upwardly, that is, which is upwardly curved in transverse cross-section as more clearly illustrated in Figure 4. The forward end of this planing surface terminates at the point 6, as shown in Figure 2 and said planing surface is forwardly and upwardly inclined as shown in Figures 1 and 4.

Behind the front planing surface 5 are the rear planing surfaces 7, 7 and between them there is the elevated surface 8 thus providing, in effect, a longitudinal chute 9. As will be observed from an inspection of Figure 1 the planing surfaces 7, 7 are inclined gradually forwardly and terminate at the step so that while the boat is in motion the rear ends only of said planing surfaces will be in gliding contact with the surface of the water as more clearly illustrated in Figure 1 and the chute 9 terminates at the step as clearly shown in Figures 1 and 3. Therefore, while the boat is in motion it will have a three point contact with the surface of the water and, for reasons hereinafter stated, these points of contact will be with the undisturbed surface of the water.

The forward planing surface 5 being concaved longitudinally will thus confine the water disturbed by said forward planing surface to a narrow range and the forward ends of the planing surface 7 will be elevated above this disturbed area and the rear ends of the planing surface 7 in contact with the water surface will be located out of the range of, and on each side of, the area disturbed by the front planing surface.

The slip stream from the propeller 10 will pass underneath the elevated surface 8 and will not create a drag against the hull of the boat underneath. Special attention is called to the location of the propeller 10. This propeller is located approximately underneath the front planing surface 5 and is arranged to pull the boat forwardly thus lending to stability. The propeller is driven through suitable gearing in the gear box 11 depending from the hull, the motor being located at any suitable place and driving through the shaft 12.

The disturbed water from the propeller and front planing surface 5 will follow generally the course indicated by the arrows shown in full lines in Figure 2, while the arrows shown in dotted lines in said figure, indicate the course

of the undisturbed water relative to the boat movement.

The drawings and description are merely illustrative, while the broad principle of the invention will be defined by the appended claims.

What I claim is:

1. A boat having a front, transversely concaved, planing surface and two transversely spaced, rear planing surfaces on the bottom thereof and a propeller located beneath the front planing surface.

2. A boat having a front, transversely concaved, planing surface and two transversely spaced, rear planing surfaces on the bottom thereof and a propeller located beneath the front planing surface and arranged to pull the boat.

3. A boat having a front, transversely concaved, planing surface and two transversely spaced, rear planing surfaces on the bottom thereof, said boat having an elevated surface between the rear planing surfaces providing a chute for the propeller slip stream and the disturbed water from the front planing surface.

4. A boat having a front transversely concaved planing surface and two transversely spaced rear planing surfaces and an elevated surface between the rear planing surfaces, extending from the forward end of the rear planing surfaces rearwardly to the rear end of the boat and a propeller located beneath the front planing surface.

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