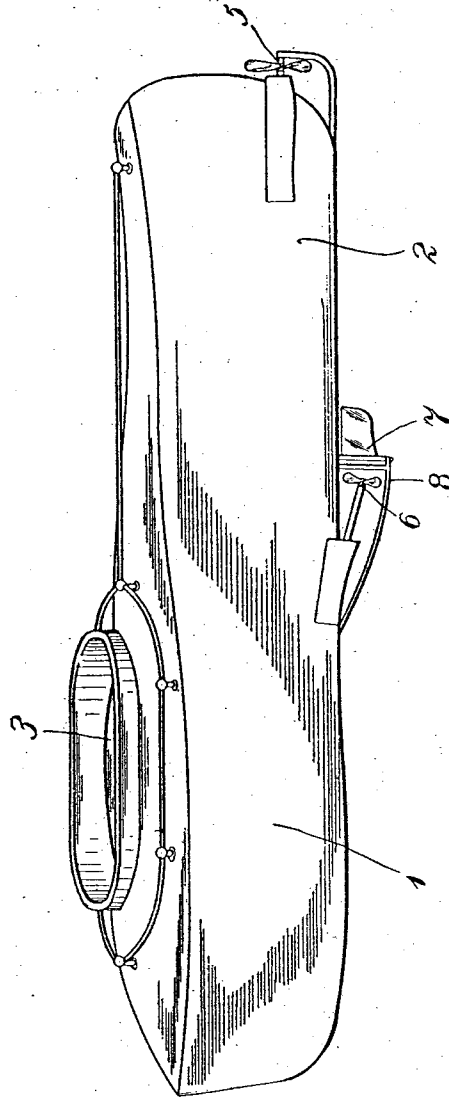


J. CAMPBELL.
BOAT HULL.
APPLICATION FILED MAY 6, 1911.

1,055,874.

Patented Mar. 11, 1913.
2 SHEETS—SHEET 1.

Fig. 1



Witnesses:
Geo. Knutson
C. C. Skinkle

Inventor:
John Campbell
By his Attorneys:
Williamson & McLeod

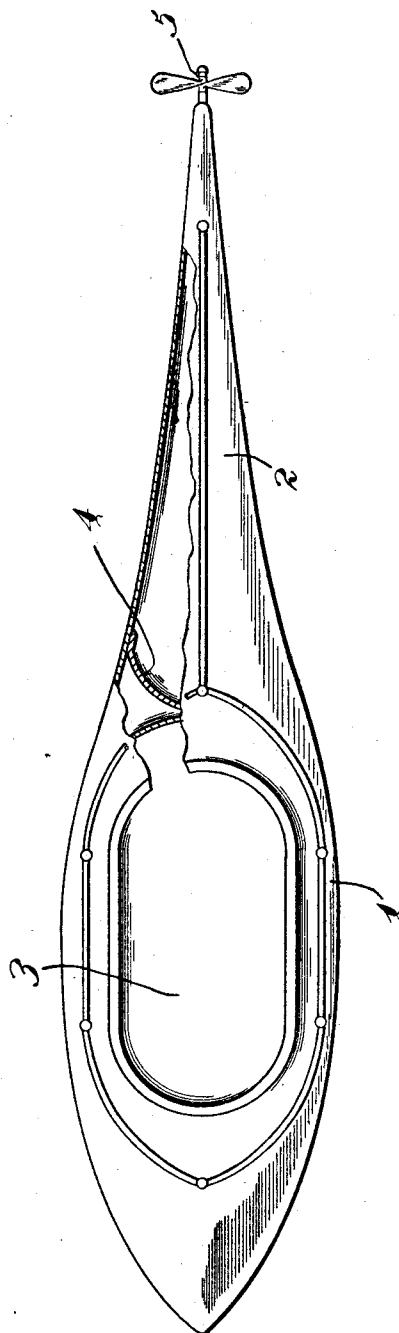
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2 SHEETS—SHEET 2.

Fig. 2



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UNITED STATES PATENT OFFICE.

JOHN CAMPBELL, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR OF ONE-HALF TO THOMAS E. McDERMOTT, OF MINNEAPOLIS, MINNESOTA.

BOAT-HULL.

1,055,874.

Specification of Letters Patent.

Patented Mar. 11, 1913.

Application filed May 6, 1911. Serial No. 625,524.

To all whom it may concern:

Be it known that I, JOHN CAMPBELL, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Boat-Hulls; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to provide a launch or motor boat of the highest possible speed capacity, and, to this end, the invention consists of the novel construction and arrangement of parts hereinafter described and defined in the claims.

In designing the hull or body of this motor boat, I have made the same much in the form of a fish. That is, the large or relatively wide body portion is placed in front close to the bow and a long narrow tail portion is extended at the stern. The cock-pit for the engine and the passengers is arranged in the relatively wide front portion and the tail or narrowed stern portion is preferably made an air-tight compartment. Also, as a feature of the invention, I provide two propellers, one located at the rear of the narrowed stern or tail and the other located below the intermediate portion of the hull, preferably slightly at the rear of the cock-pit. Both of these propellers may, and preferably will be, driven from the same engine. The rear propeller may have its axis and shaft horizontally extended, while the front or lower propeller will have its axis and shaft inclined. The rudder is preferably mounted beneath the boat just at the rear of the front or lower propeller.

In the accompanying drawings which illustrate the invention, like characters indicate like parts throughout the several views.

Referring to the drawings, Figure 1 is a perspective view, showing the improved boat; and Fig. 2 is a plan view thereof, with some parts broken away and some parts sectioned.

The relatively wide body or front portion 1 of the boat hull preferably extends about half the entire length of the hull, and the narrowed tail portion 2 extends approximately the other half of the length of the

hull. The body and tail portions 1 and 2 are united by gradually curved lines which are designed to best adapt themselves to the wake or roll of the water produced by the rapid passage of the boat through the water.

The numeral 3 indicates the cock-pit which is formed in the body 1, as already indicated, and the numeral 4 indicates the air-tight compartment formed within the tail portion 2.

The numeral 5 indicates the rear propeller and the numeral 6 the front or lower propeller, the shafts of which will be extended into the cock-pit and, as already stated, preferably connected to a common engine or motor, not shown, but which would preferably be of the multi-cylinder explosive type.

The numeral 7 indicates the rudder which is mounted at the rear front propeller 6, as shown, in a bracket 8 secured to the bottom of the boat. This rudder may be controlled by any suitable connections, not shown.

Boat hulls, as generally designed, have such short stern portions or these stern portions are so abruptly terminated that, under high speed, very great suction and back-draw is produced on the boat hull. The long gradually narrowing tail portion 2 reduces to a minimum the back-draw or drag of the boat hull under high speeds and, hence, correspondingly increases the speed that may be imparted to the boat with the motor of any determined power. Also, the arrangement of the propellers increases the speed capacity of the boat. The rear propeller 5 produces a direct forward pressure on the boat while the front propeller 6 produces a pressure which is mainly directly forward but which is also slightly upward, so that the draft of the hull, under high speed, is somewhat decreased.

The air compartment or chamber in the tail of the boat hull gives a buoyancy which is required to keep the hull approximately level even under high speeds and, furthermore, it serves as a safety device to prevent sinking of the boat in case of accident.

By reference to Fig. 1, it will be noted that the body portion 1 and tail portion 2 of the hull are approximately the same depth throughout. This is important where the long tail or stern is employed and is a

feature which, combined with the said long tail, makes it possible to keep the boat hull approximately horizontal under all speeds.

What I claim is:

3 1. A boat hull having a relatively wide body portion extended immediately rearward from its bow and having a relatively narrow and long tail portion extended rearward therefrom on curved concave lines, the said body and tail portions having approximately the same depth.

20 2. A boat hull having a relatively wide body portion extended immediately rearward from its bow and having a relatively

narrow and long tail portion extended rearward therefrom on curved concave lines, the said body and tail portions having approximately the same depth, the said wide portion having a cock-pit formed therein, and the said tail portion being formed hollow and air tight.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN CAMPBELL.

Witnesses:

HARRIET A. CREW,
HARRY D. KILGORE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."