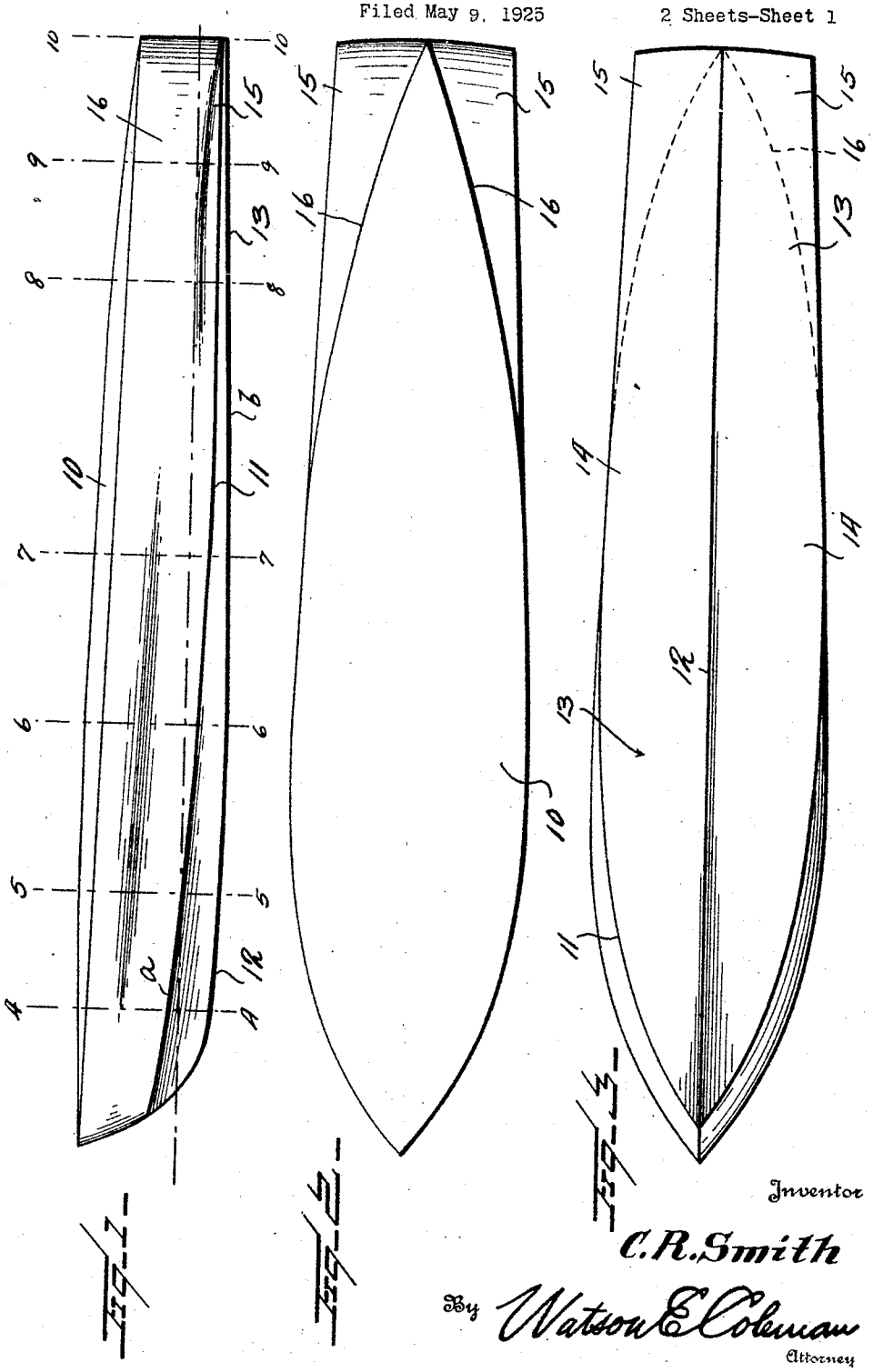
April 20, 1926. 1,581,881

C. R. SMITH

SPEED BOAT HULL

Filed May 9, 1925 2 Sheets-Sheet 1



Inventor

C. R. Smith

By Watson E. Coleman

Attorney

April 20, 1926. 1,581,881

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SPEED BOAT HULL

Filed May 9, 1925 2 Sheets-Sheet 2

Fig. 4.

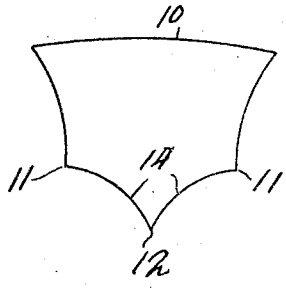


Fig. 5.

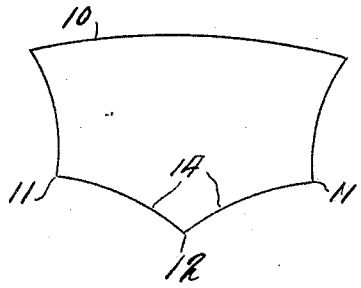


Fig. 6.

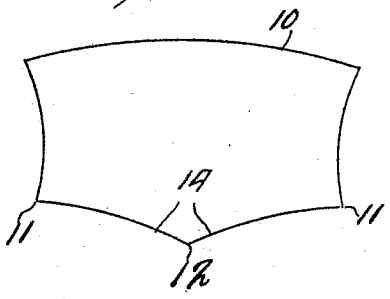


Fig. 7.

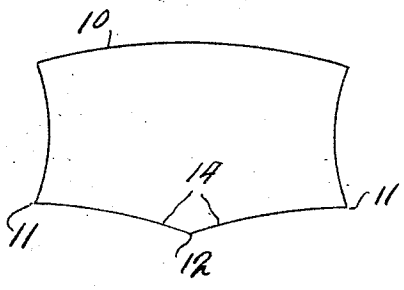


Fig. 8.

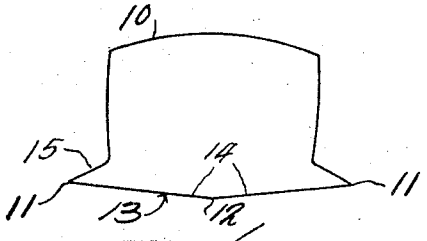


Fig. 9.

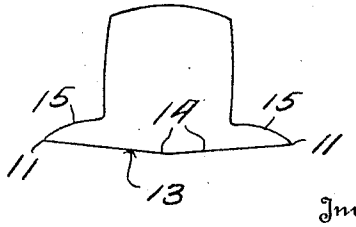
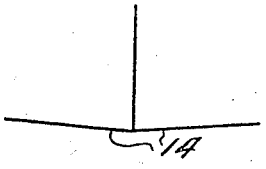


Fig. 10.



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Patented Apr. 20, 1926. 1,581,881

UNITED STATES PATENT OFFICE.

CLARENCE R. SMITH, OF MIAMI, FLORIDA.

SPEED-BOAT HULL.

Application filed May 9, 1925. Serial No. 29,221.

To all whom it may concern:

Be it known that I, CLARENCE R. SMITH, a citizen of the United States, residing at Miami, in the county of Dade and State of Florida, have invented certain new and useful Improvements in Speed-Boat Hulls, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to boats, and particularly to speed boats.

The object of the invention is to so form this boat as to reduce the vacuum normally found at the stern of the speed boat when the latter is running fast to thereby increase the speed and enable the boat to be turned in a shorter curve than would otherwise be possible.

A further object is to so form or design the stern of the boat as to keep the boat from "squatting" in the water or settling down when running at a high speed, and further to give such form and shape to the hull of the boat that back pressure will be reduced to a minimum.

A still further object is to provide a boat wherein the chine extends rearwardly and downwardly to the stern, while the keel extends rearwardly and upwardly to the stern of the boat.

My invention is illustrated in the accompanying drawings, wherein:—

Figure 1 is a side elevation of the hull of a boat constructed in accordance with my invention;

Figure 2 is a top plan view thereof;

Figure 3 is a bottom plan view thereof;

Figure 4 is a diagrammatic section on the line 4—4 of Figure 1;

Figure 5 is a section on the line 5—5 of Figure 1;

Figure 6 is a section on the line 6—6 of Figure 1;

Figure 7 is a section on the line 7—7 of Figure 1;

Figure 8 is a section on the line 8—8 of Figure 1;

Figure 9 is a section on the line 9—9 of Figure 1;

Figure 10 is a diagram taken on the line 10—10 of Figure 1 showing the relation of the vertical axis of the hull to the bottom at the extreme stern.

Referring to these drawings, it will be seen that I have illustrated the hull of the boat alone, as it is in the shape and form of this hull that my invention resides. In the drawings, 10 designates the deck of the boat. This deck is purely diagrammatically illustrated, but it will be seen that the deck is slightly rounded upwardly and transversely. The chines 11, which may be said to define the sides of the boat from the bottom of the boat, extend downwardly and rearwardly from the bow to the stern. The keel 12 of the boat extends downwardly and rearwardly from the bow and has its greatest distance from the chines at the point *a*. The keel 12 then extends upwardly and rearwardly to the extreme stern of the boat where it approximates or nearly intersects the line of the chines.

From the stern of the boat to a point about amidships, the bottom of the boat is nearly flat, as at 13, there being but a slight inclination downwardly and inwardly, but from the point *b* onward to the bow the bottom of the boat, as seen in cross section, is approximately V-shaped and the two portions 14 of the bottom on each side of the keel may extend straight downwardly and transversely to the keel or be concave or convex. From a point approximately midlength of the boat to the stern thereof the sides of the boat are formed to provide the sponsons 15. The side edges of these sponsons extend rearwardly with a very slight curve, while the hull of the boat above the sponsors extends rearwardly and toward the middle line of the boat, as at 16, so that the upper portion of the hull above the sponsons 15 has a streamline form. All that portion of the hull forward of the sponsons is slightly concavely curved vertically and the forward portions of the sponsons merge gradually into the hull at the line of the chine 11. As shown, the rear of the hull is preferably pointed and the rear edges of the sponsons terminate at the rear end of the hull.

It will be seen that with the construction which I have described, the forward end of the keel is much lower than the after end of the keel, the bottom of the boat extending rearwardly and upwardly with relation to the deck, while the line of the chine extends downwardly and rearwardly with relation to the deck. This design of hull will make the boat, as found by actual experience, extremely fast and will be suitable for boats of all sizes. The bottom of the boat is of the conventional V-type, as before

stated, and the laterally extending sponsons 15 prevent the boat from "squatting" in the water, while the shape of the stern of the boat rearward of the amidships section acts to reduce the vacuum at the stern, thus increasing the speed and enabling the boat to be turned in very short curves. The sides of the boat are formed with a streamline so that there is the least possible impediment to its forward movement in the water.

I claim:—

1. A boat of the character described having a hull, the chines of which extend downwardly and rearwardly from the bow of the boat to the stern thereof and the keel of which extends upwardly and rearwardly from the bow of the boat to the stern thereof, the keel at the stern nearly intersecting the plane of the chines, the stern portion of the hull above the plane of the chines being rearwardly tapered, the lower portion of the hull from a point approximately amidships to the stern being laterally extended to form two laterally projecting sponsons on each side of the stern, the lower faces of the sponsons intersecting the chines and keel.

2. A boat hull having sides and a bottom, the bottom being V-shaped and the chines of the hull extending downwardly and rearwardly from the bow and the keel of the boat extending upwardly and rearwardly from the bow into nearly the same plane as the chine at the stern of the hull, the sides of the boat being vertically concave from the bow to a point approximately amidships, the lower portion of the sides of the boat from a point approximately amidships being flared outwardly to form laterally projecting sponsons, the stern of the boat tapering to a point whereby to gradually increase the width of the sponsons, and the sponsons terminating at the extreme rear end of the boat.

3. A boat hull of the character described having sides and a bottom, the intersecting of the sides and bottom constituting the chines and said line of the chines extending downwardly and rearwardly from the bow of the boat to the stern thereof, the keel of the boat extending upwardly and rearwardly from the bow to the stern, the bottom of the boat extending, transversely, downwardly and inwardly to the keel of the boat and the angle of said bottom being extremely obtuse at the stern of the boat and gradually increasing in angularity toward the bow of the boat, the sides of the boat from the bow to a point about amidships extending upwardly and outwardly and from a point approximately amidships to the stern of the boat extending vertically upward, there being sponsons formed on each side of the stern of the boat, the lower faces of said sponsons being flush with the chines and the upper faces of the sponsons extending upwardly and inwardly to the sides of the boat and the forward portions of said sponsons merging into the sides of the boat, the rear of the hull above said sponsons extending rearwardly and inwardly.

In testimony whereof I hereunto affix my signature.

CLARENCE R. SMITH.