July 19, 1960 L. L. SHELTON 2,945,466

MOTOR BOAT STRUCTURE

Filed March 15, 1957

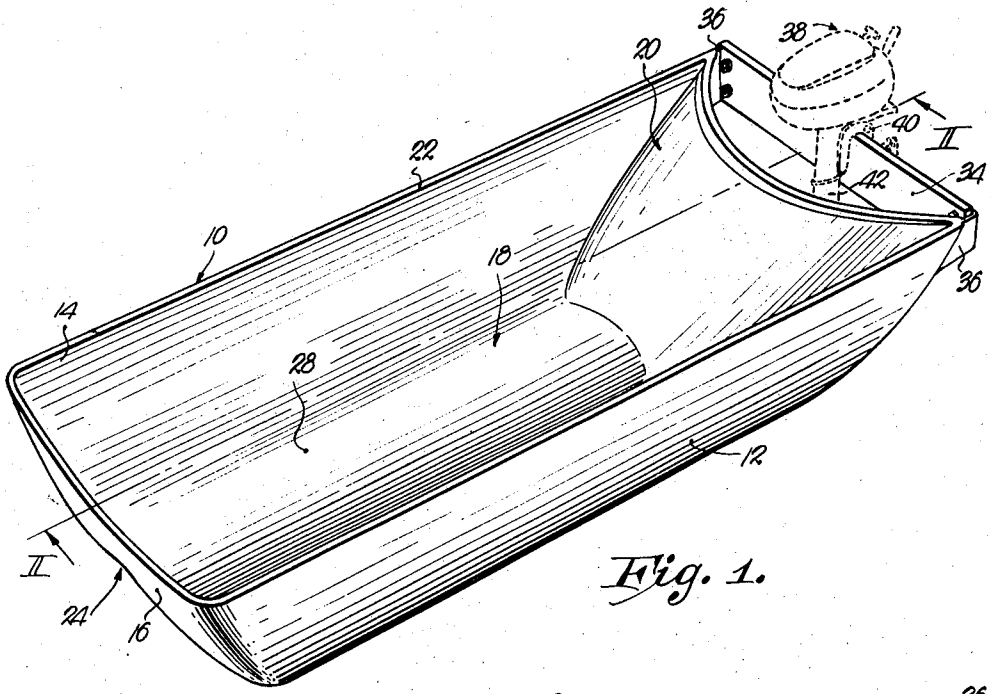


Fig. 1.

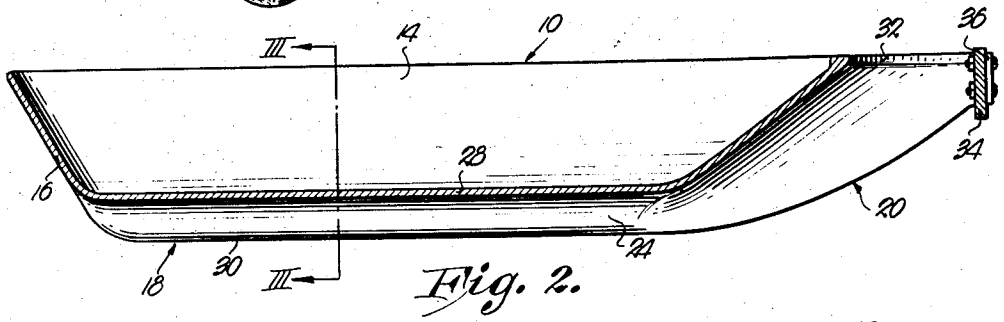


Fig. 2.

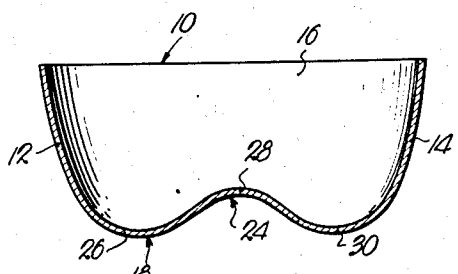


Fig. 3.

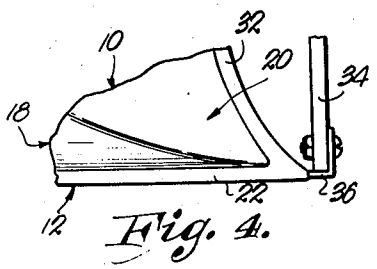


Fig. 4.

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MOTOR BOAT STRUCTURE

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1 Claim. (Cl. 114—62)

This invention relates to boats and particularly, improvements in the hull of small water craft commonly propelled by an outboard motor.

It is the most important object of the instant invention to control the flow of water beneath the boat and thereby minimize drag or water resistance whereby to improve upon maneuverability as well as to decrease the power requirements of the motor.

An important object of the instant invention is to provide a boat having a longitudinal, downwardly-facing groove throughout the length of the bottom of the hull for directing the flow of water to the center of the boat in lieu of forcing such water outwardly as in conventional constructions.

A further object of the instant invention is to provide a novel bow for a boat of the aforementioned character that cooperates with the median groove in attaining the said desired advantages by virtue of the inclined, arcuate configuration thereof.

In the drawing:

Figure 1 is a perspective view of motor boat structure made pursuant to the present invention.

Fig. 2 is a longitudinal, cross-sectional view taken on line II—II of Figure 1.

Fig. 3 is a transverse, cross-sectional view taken on line III—III of Fig. 2; and

Fig. 4 is a fragmentary, detailed plan view showing one corner of the forwardmost and uppermost end of the boat.

The boat shown in the drawing and chosen for illustration of the improvements of the instant invention includes an elongated, open top hull broadly designated by the numeral **10**. The hull **10** includes as its essential components a pair of sides **12** and **14**, a stern **16**, a bottom **18** and a bow **20**. As seen in Fig. 3, it is to be preferred that the sides **12** and **14** be longitudinally straight but slightly arched or bowed outwardly, whereas stern **16** and bow **20** both slope upwardly and outwardly as the uppermost edge **22** is approached (see Fig. 2).

The bottom **18** has a unique cross-sectional configuration as seen in Fig. 3 in that it is longitudinally corrugated. More specifically, the bottom **18** is provided with a cross-sectional contour that has substantially the shape

of an ogee, presenting a median, downwardly-facing, longitudinal groove **24** coextensive in length with the bottom **18**. Such configuration presents ribs **26**, **28** and **30**, each of which is convexo-concave, the upwardly bowed median rib **28** rising above the downwardly bowed ribs **26** and **30**, and all the ribs being longitudinally straight.

The bow **20** cooperates with the groove **24** in accomplishing the desired results in that said bow **20** is transversely arcuate and merges with the bottom **18** at the lowermost and rearmost end of the bow **20**. Such configuration presents an arcuate, uppermost and forwardmost edge **32**, the ends whereof are bridged by a motor mount **34**. Suitable brackets or other fastening means **36** extending forwardly from the side walls **12** and **14** at the zones of merger between the bow **20** and the sides **12** and **14** at edge **32**, serve to support the motor mount **34**. Outboard motor **38** of conventional construction may be easily clamped in place in the manner illustrated by Figure 1.

As above indicated, when the boat is placed in use, water flowing therebeneath is controlled by the groove **24** in that such water is pulled into the bow **20** and caused to flow freely along groove **24** beneath the boat. This is to be distinguished from conventional constructions wherein the water is forced laterally in opposite directions beyond the sides of the boat as the result of movement of the bow into the water which, of course, presents an uncontrolled drag or water resistance on the bottom thereof.

The motor **38** is swingable about a horizontal axis **40** in the usual manner and, therefore, the above-described novel shape and configuration of the bow **20** is advantageous further in that it clears the propeller shaft housing **42** as the latter swings rearwardly into the concavity of the bow **20** when the propeller (not shown) strikes an obstruction or the bottom of the lake or stream in shallow waters.

Having thus described the invention what is claimed as new and desired to be secured by Letters Patent is:

A boat comprising an elongated, open top hull having a bottom provided with a median, downwardly-facing, longitudinal groove of constant depth throughout the length thereof, and a transversely convexo-concave bow wall extending upwardly and forwardly from the forwardmost end of said bottom, the lowermost face of said bow being substantially concave transversely thereof, and substantially the same width as the longitudinal groove; and a motor mount bridging the uppermost and forwardmost ends of the bow.

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