March 12, 1929. E. G. MALLISON 1,705,413

BOAT

Filed Oct. 8, 1927

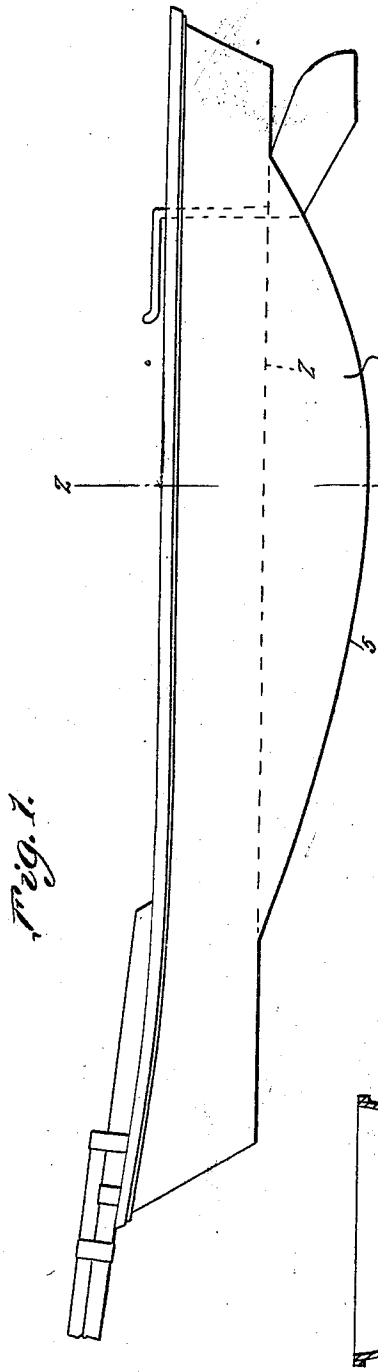

Fig. 1.

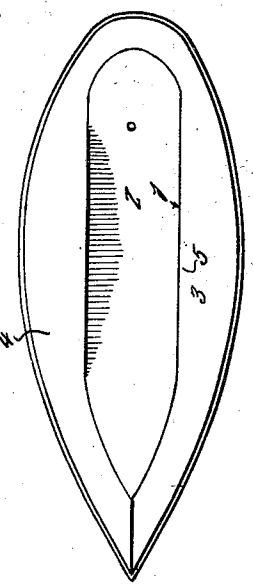

Fig. 3.

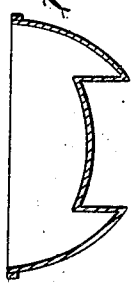

Fig. 5.

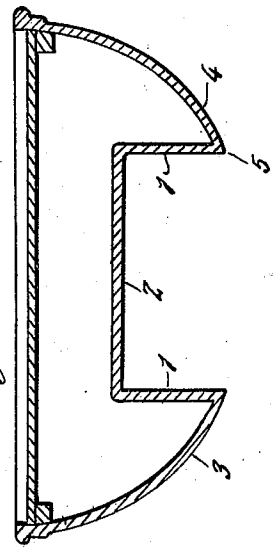

Fig. 2.

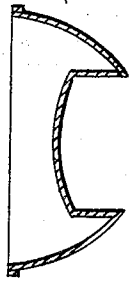

Fig. 4.

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INVENTOR

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Patented Mar. 12, 1929. 1,705,413

UNITED STATES PATENT OFFICE.

EDWARD G. MALLISON, OF WASHINGTON, NORTH CAROLINA.

BOAT.

Application filed October 8, 1927. Serial No. 224,931.

This invention relates to a sail boat, but is applicable also to other types of water craft, as the invention relates especially to a hull of special construction.

The object of the invention is to provide a craft with greater stability, and in a sail boat one able to carry more sail.

In carrying out the invention I provide a hull with a right angular channel extending axially of the hull bottom from stem to stern the upper boundary of the channel being flat or arched transversely. The walls of the channel thus form two parallel submerged bilges in the hull, making it somewhat like a catamaran.

My invention, therefore, consists in a water craft having a longitudinal right angular channel of desired contour from bow to stern. It comprises other more specific features, the novelty of which will be hereinafter fully described and will be definitely indicated in the appended claim.

In the drawings illustrating the invention:

Figure 1 is a side elevation of a boat embodying my improvements;

Fig. 2 is a cross section on the plane 2—2 of Fig. 1;

Fig. 3 is a plan on a reduced scale;

Figs. 4 and 5 show modifications of the contour of the channel.

Referring now particularly to the drawings, I form longitudinally in the hull a vertical walled recess forming a deep channel. The recess has vertical walls 1, 1, thus forming two immersion sides or bilges of the boat 3, 4 which steady its progress in the water and resist drifting. The horizontal floor 2 of the recess may be plane from stem to stern, as indicated in Fig. 2 and by dotted lines in Fig. 1 but the longitudinal contour of the hull is curved as indicated at 5 in Fig. 1. The longitudinal depression enables the craft to stand an exceptionally large amount of sail area, as the wind-like sides have a strong leverage against the water and requires an exceptionally small amount of ballast.

The longitudinal depression practically divides the hull into two separate chambers almost the entire length of the boat and acts very much as does a catamaran in the water in resisting drifting and in rapidity of travel. The floor of the recess offers almost no resistance to translation and the walls of the channel increase the superficial area and increase buoyancy. The floor may be of curved contour instead of flat. In Fig. 4 it is of convex form transversely and in Fig. 5 concave. The particular contour may be determined according to the choice of the designer. The plane form of Fig. 2 offers slightly less resistance while the curved form affords more stability. Aside from the features described, the boat may be of normal equipment, rudder, bowsprit, etc. I would remark that the invention is capable of slight modifications within the scope of my invention; the floor of the channel extending longitudinally midships, while plane in cross section, may in longitudinal section be somewhat curved.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

A boat having a hull with a right angular channel centrally from stem to stern in its bottom, the top wall of the channel forming a curved transverse convex surface on the water, thus forming double bilges and stabilizing the craft.

In testimony whereof I affix my signature.

EDWARD G. MALLISON.