Nov. 3, 1931. N. F. CARMICHAEL 1,830,015

SURFBOARD PONTOON STRUCTURE

Filed Feb. 9, 1931

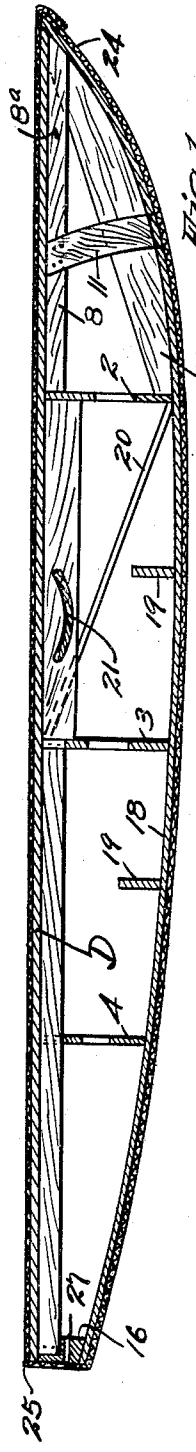

Fig. 1.

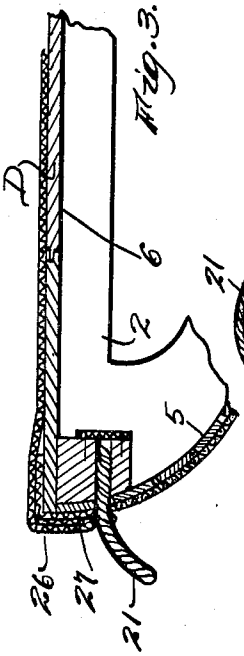

Fig. 3.

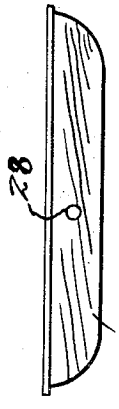

Fig. 4.

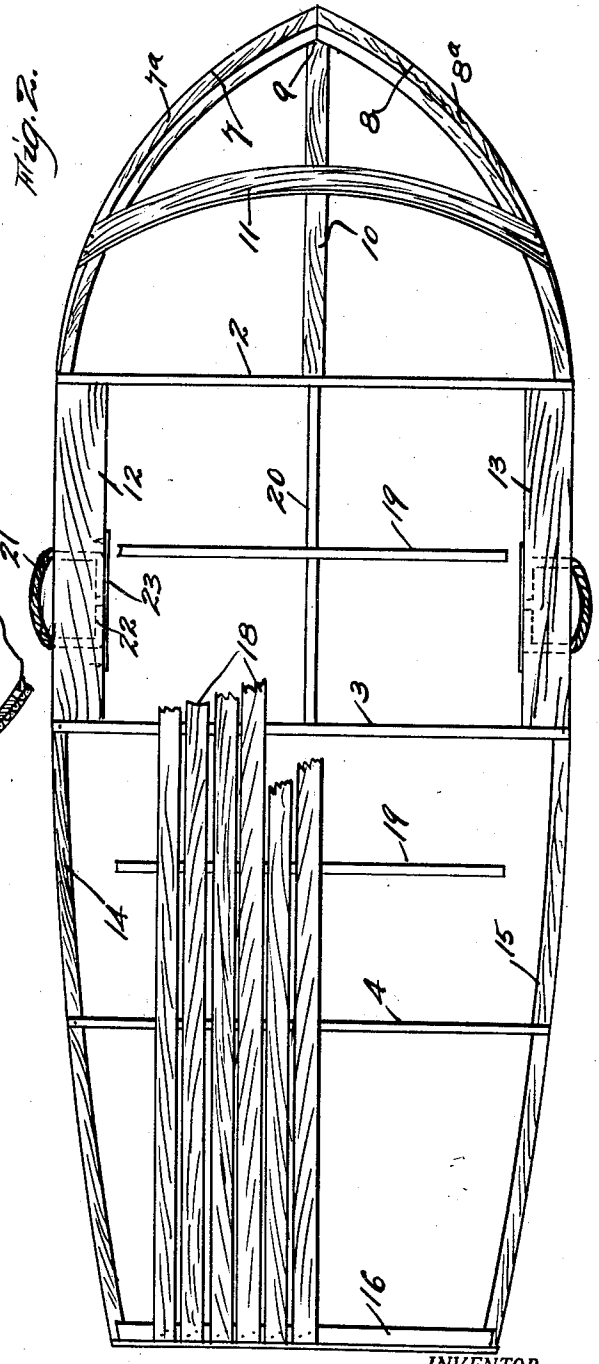

Fig. 2.

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UNITED STATES PATENT OFFICE

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SURFBOARD PONTOON STRUCTURE

Application filed February 9, 1931. Serial No. 514,541.

This invention relates to surf-boats and especially to a small, portable vehicle used for pleasure and amusement purposes.

An object is to provide a surf-rider which is light, substantial, durable; which presents a boat-like hull and flat top deck, and can be readily handled ashore or in the water.

A further object is to provide a surf-boat involving a substantial skeleton and a sealed sheath therefor, and a novel method for construction of the boat.

The invention consists in certain advancements in this art as set forth in the ensuing disclosure and having, with the above, additional objects and advantages, and whose construction, combination and details of means, and the manner of operation will be made manifest in the description of the herewith illustrative embodiment; it being understood that modifications, variations and adaptations may be resorted to within the scope, principle and spirit of the invention as it is more directly claimed hereinafter.

Figure 1 is an axial section of the boat.

Figure 2 is a bottom plan, partly broken away, omitting the sheath.

Figure 3 is a cross section of a wale and adjacent bottom and deck planking, and sheath or envelope.

Figure 4 is an elevation of the stern sheet, decked.

The boat structure and its method of production are more specifically disclosed as follows:

A set of transverse bulkheads 2—3—4 are cut from thin planks to a desired bottom mold line 5 and preferably with straight top deck line 6; the bulkheads varying in depth and length, and bottom line according to hull-shape desired. To reduce weight the bulkheads have cut-out centers.

Bowed bow-wale strips 7 and 8 are butted against and secured to the corners of the bulkhead 2 and brought together at the nose 9 and secured in any desired manner, as nailing or rivetting. A stiff stem piece 10 is heeled against the bottom of the forward bulkhead 2 and secured at the nose 9.

Preferably a bow-band strip 11 is mortised and nailed into the bottom of the stem and sprung up and nailed to the bow-wales.

Median wale sections 12 and 13 are fixed to and between the bulkheads 2 and 3, and from the ends of these extend wale strips 14—15 which are rebated and nailed into the corners of their supporting bulkheads 3—4, and also on to a flat stem plate 16 which forms the stem mold.

The bow-wales present outer, beveled faces 7^a—8^a and to these are nailed the fore-ends of bottom planking strips 18 of thin narrow wood stock. The strips 18 are nailed to the internal bulkheads to the band, and to the bottom edge of the stern plate; the strips being spaced as shown. The bottom planking 18 is laid well up to and on the wales from the bow to stem.

Then suitable stiffener boards 19 are nailed internally to the bottom planking intermediate of the bulkheads 2—3, 3—4, and a diagonal brace 20 is nailed in place from the bottom of bulkhead 2 to the top of bulkhead 3. On the skeleton is then laid thin tongue and groove decking D which is nailed to the deck line of the frame and trimmed to the side lines.

Substantial handles of loops 21 of rope are provided in the median wale pieces 12—13; the rope ends being rove through holes and laid in channels 22 in the inside faces of the pieces and nailed down. Sealing strips of canvas 23 are leaded over the ropes ends and tacked down.

The framed hull and deck is then smoothed to remove undesired rough places and a sheath of canvas is applied. This consists of a strip whose end 24 is tacked to the bow of the hull and then pulled tightly back to the stern and up along the sides. Crinkled parts are split and lapped smooth and laid and tacked at the stern corners and the sheet is bent over at 25 and drawn tense forward to the bow deck; the sides of the strip being lapped at 26 and undertucked at 27. A thick coat of lead pigment is applied on to which the lap 26 is sealed and nailed to secure a water-tight boat chamber.

If for any cause water should collect in the

hull it may be drained from a plug hole 28 in the stern plate.

What is claimed is:

1. A surf-riding boat whose skeleton is composed of a set of spaced transverse bulkheads constituting bottom molds, fore-end bow-wales butted against the forward bulkhead and meeting at the bow, a stem heeeled against the forward bulkhead and set against the bow-joint of the bow-wales, side-wales running aft from the forward bulkhead, a stern plate to which the rear ends of the side wales are secured, a rigid deck structure fastened to the wales and to the bulkheads, a rigid bottom structure molded by and fixed to the bulkheads, the stern plate and the bow-wales, and a fabric sheath enclosing the whole to exclude water.

2. A surf-riding boat including a watertight sheath, and a keelless and stringerless supporting and shaping skeleton therefor consisting of a single layer deck planking and bottom planking of continuous strips fixed directly to and molded by transverse internal bulkheads, a stern plate to which the rear ends of the planking is secured, and bow-wales on which the deck and bottom planking is lapped and secured.

3. A surf-riding boat including a watertight sheath, and a supporting and shaping skeleton therefor consisting of a continuous deck planking and a continuous bottom planking fixed directly to and molded by transverse internal bulkheads, a stern plate to which the rear ends of the planking is secured, and bow-wales on which the deck and bottom is lapped and secured, and a stem brace from the forward bulkhead to the nose of the bow-wales.

4. A surf-riding boat including a sealed sheath of fabric and a supporting and shaping skeleton having a flat top deck of continuous, close laid tongue-and-groove planking and a hull-shaped bottom of spaced, continuous planking, and mold bulkheads to which is rigidly secured the top and bottom planking.

5. A surf-riding boat including a sealed sheath of fabric and a supporting and shaping skeleton wholly covered by the sheath; the skeleton including wales from bow to stern and to which the fabric sheath is secured, and side hand loops of rope passed through median parts of the wales and having their ends counter-sunk in the wales and sealed over to avoid leakage into the boat.

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