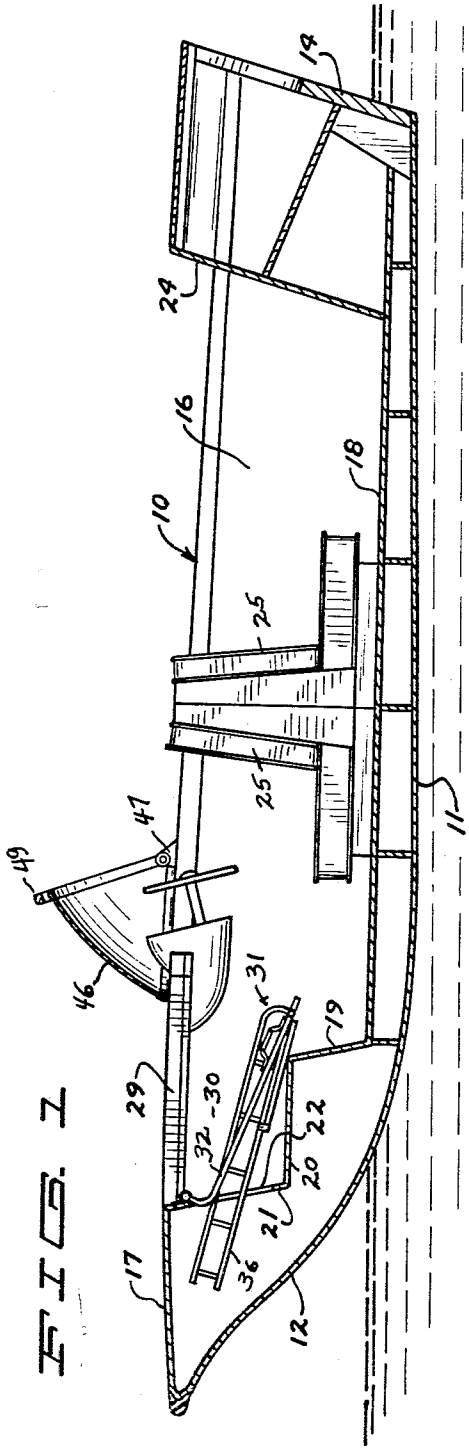
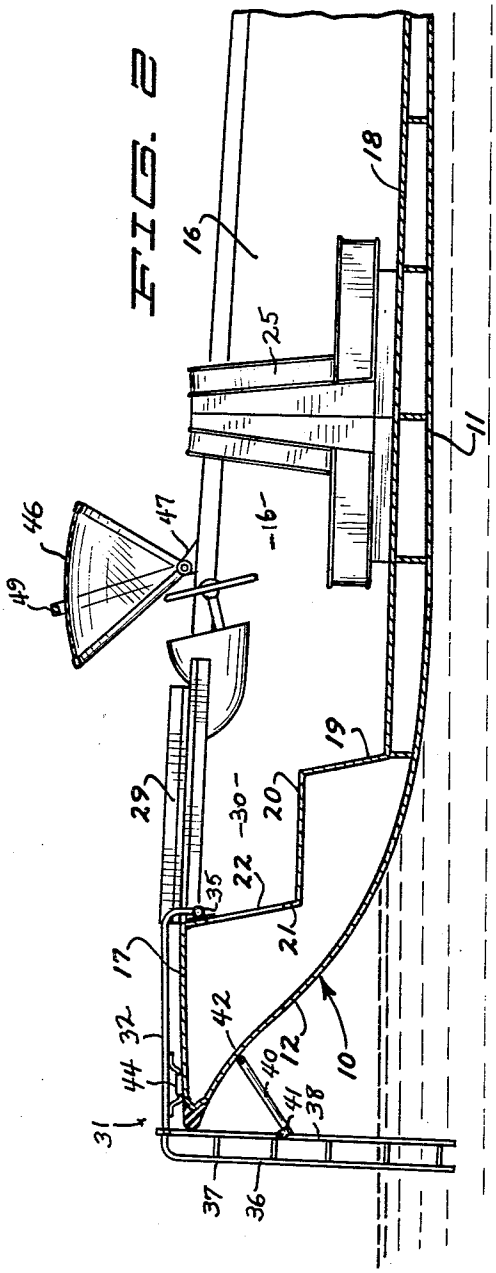
Sept. 11, 1962 D. D. BEACH 3,052,896

BOAT CONSTRUCTION

Filed June 21, 1961 2 Sheets-Sheet 1





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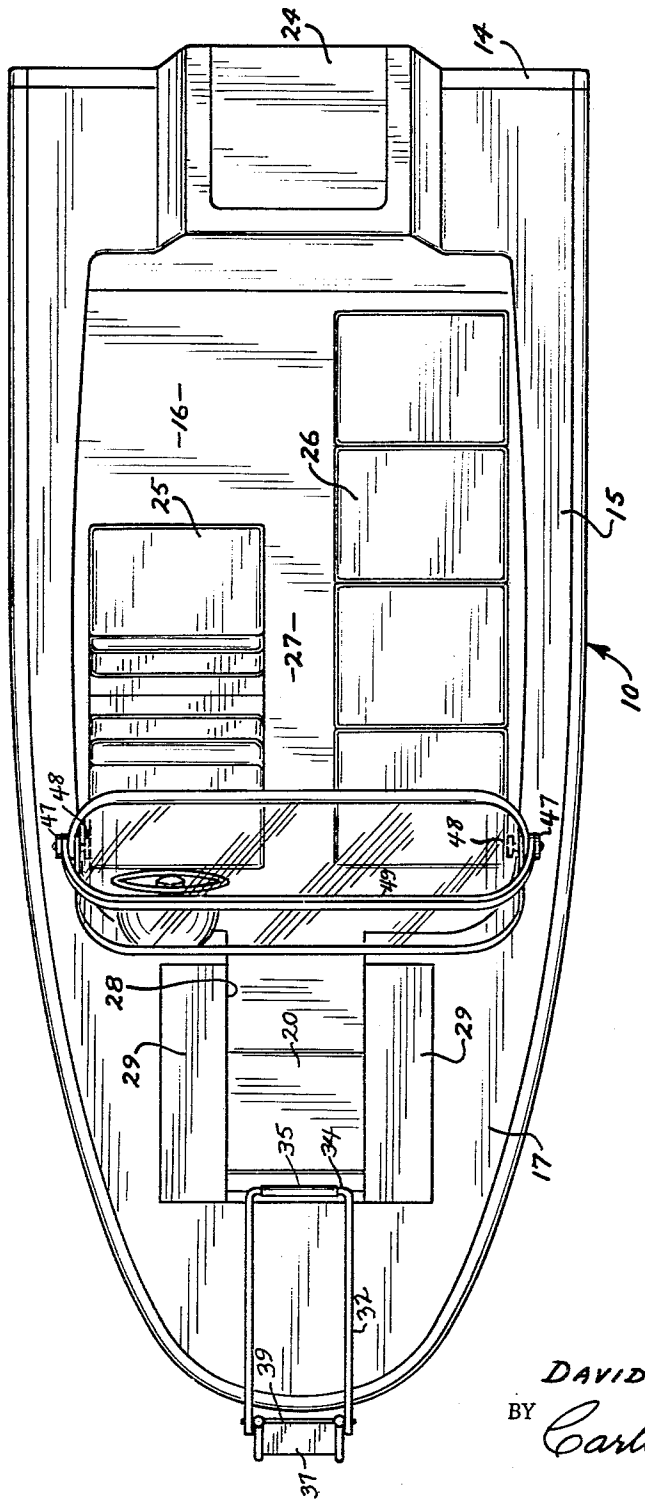


FIG. 3

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United States Patent Office 3,052,896 Patented Sept. 11, 1962

3,052,896
BOAT CONSTRUCTION

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Filed June 21, 1961, Ser. No. 118,737
2 Claims. (Cl. 9—1)

This invention relates generally to the construction of boats specifically of the relatively small runabout class such as might be used to tow water skiers.

Conventional runabout boats of the type here concerned are generally provided with an upwardly opening cockpit or passenger compartment immediately forward of which is disposed a bow compartment which is covered by a deck section. It is further conventional to provide a windshield to extend crosswise of the boat in the area of the juncture of the deck section and cockpit. With this arrangement it is extremely difficult for passengers to mount or dismount from the boat over the bow portion thereof, the windshield obstructing the path of travel.

It is highly desirable that a boat of this type provide for convenient ingress to or egress from the passenger cockpit over the bow of the boat. For example, when there is no or only limited dockage available, the bow of the boat can be used for entering or leaving the cockpit directly from shore or a small dock area. It is also desirable to provide a means for swimmers entering the boat over the bow thereof directly from the water.

Accordingly the primary object of the present invention is to provide a boat having a cockpit and a forward bow deck with an improved means for entering or leaving the cockpit over the bow of the boat.

Another and more specific object of the invention is to provide a runabout type boat with a rear cockpit and a windshield bow deck and ladder forward of the cockpit which are convertible between a first condition for boat operation and a second condition for facilitating passenger ingress to and egress from the cockpit over the bow of the boat.

With these objects in mind the invention broadly comprises a boat having a rear cockpit, a forward bow compartment covered by a bow deck, the bow compartment connecting with the cockpit, the deck having a hatch opening connecting with the cockpit and a hinged door section movable between closed and open positions over the opening, a windshield extending across the boat adjacent the juncture of the cockpit and bow deck, said windshield pivoted for swinging movement to an out-of-the-way position allowing passenger passage from the cockpit into the bow compartment, an elevated step in the bow compartment, and a ladder swingably connected to the deck for swinging movement between a stored position within the compartment and a usable position suspended from the bow of the boat.

The above mentioned and additional objects of the invention will be brought to light during the course of the following specification, reference being made to the accompanying drawings, in which—

FIG. 1 is a longitudinal vertical section through a hull of a boat embodying the improved construction and showing the windshield, hatch doors, and mounting ladder in positions for normal operation of the boat through the water.

FIG. 2 is a sectional view similar to FIG. 1 through a forward major portion of the boat but showing the windshield, hatch doors and ladder in positions for passenger ingress to or egress from the passenger cockpit over the bow and under the windshield.

FIG. 3 is a plan view of the boat in the same condition as shown in FIG. 2.

Referring now more particularly to the drawings reference characters will be used to denote like parts or structural features in the different views. The boat is designated generally by the numeral **10**. It comprises a conventional shaped hull **11** having a forward bow portion **12**, a rear transom **14** and a top deck **15** surrounding a cockpit or passenger compartment **16** within the boat. To distinguish from the deck **15** in general the portion thereof extending over the bow portion **12** of the hull is referred to as the bow deck and numbered **17**. The boat is provided with a flat floor **18** spaced above the hull bottom. A partition is disposed transversely across the bow portion of the boat extending upwardly as at **19** from the floor **18**, then forwardly as at **20** to form a step, then upwardly as at **21** to the bow deck **17**. Portion **21** has an opening **22** therein, the purpose of which will be later described. At the stern end, the boat is provided with a built-in housing **24** for shielding an outboard motor (not shown) mounted on transom **14**.

The boat is also provided with seats **25** and **26** in the passenger compartment **16** which are spaced apart transversely of the boat leaving a passageway **27** (FIG. 3) extending fore and aft therebetween. The steering wheel for the boat is disposed at one side of the center in front of a seat **25**.

The bow deck has a central hatch opening **28** therein which extends rearwardly to connect directly with the passenger compartment **16**. This hatch is normally closed by a pair of side by side doors **29** which have their outer edges hinged on parallel axes to the bow deck **17** for swinging movement between an inward position jointly closing the hatch and an outer open position, as shown in FIG. 3 with the doors resting on the deck. These doors may have their inner sides padded to serve as secondary seats when they are open.

The area within the bow portion of the boat and covered by deck **17** and doors **29** is herein referred to as a bow compartment and designated by the numeral **30**. This compartment, of course, opens rearwardly directly into the cockpit **16**, as shown in FIGS. 1 and 2.

A ladder assembly designated generally at **31** is mounted on the boat for movement between the positions shown in FIGS. 1 and 2. This assembly, more fully described in my copending application Serial No. 45,047, filed July 25, 1960, comprises a U-shaped support frame **32** with an offset bight portion **34** journaled in a bearing tube **35** mounted transversely on wall **21**, a ladder section **36** having steps **37** mounted between side rails **38** and pivoted by cross rod **39** to the extended end of frame **32**, and a U-shaped prop member **40** having its legs pivoted to the side rails at **41** and its bight portion **42** contoured to fit against the bow of the boat. Rest members **44** are mounted on the legs of the frame **32** for downward engagement with the deck **17**. The ladder assembly is normally carried in the compartment **30** with the lower end of the ladder section **36** projecting forwardly through the opening **22**.

A curved windshield **46** is mounted to extend transversely across the rear portion of the bow deck **17**. This windshield tapers toward each side end and the ends curve rearwardly and are coaxially pivoted on brackets **47** mounted on the deck **15** at each side of the front portion of the passenger compartment **16**. The pivots are effected by hand operated clamp screws **48** which pass through the corners of the windshield and are threaded into the brackets **47** to secure the windshield in any adjusted position about the axis of the screws. An arched frame **49** having its ends fixed to the brackets **47** extends over the windshield to lie immediately over the upper edge of the windshield when it is in its forward position as in FIG. 1. This frame is primarily for connection with the front end of a convertible top (not shown) for the cockpit.

FIG. 1 shows the boat in its normal operating condition with the ladder assembly **31** folded and stored within the bow compartment **30**. The hatch doors **29** are closed over the compartment and the windshield **46** is in its forward position over the doors **29**. The bow compartment is in open communication with the cockpit **16** under the windshield.

When it is desired to provide for convenient ingress to or egress from the cockpit over the bow of the boat it is converted to the condition shown in FIGS. 2 and 3. In other words, the windshield **46** is tilted upwardly and tightened in a fully raised position and doors **29** are then opened outwardly against the bow deck. Finally, the ladder assembly is swung outwardly about its pivot axes at **35** and **39** until the ladder section **36** depends from the bow of the boat and prop section **40** rests thereagainst.

It will now be apparent that a passenger may now conveniently enter the cockpit **16** from the front of the boat by climbing the ladder **16**, stepping on the bow deck **17**, and step **20** and then walk under the windshield and along passageway **27**. In leaving the cockpit the path of travel is reversed and, of course, the above mentioned steps are reversed to again place the boat in operating condition.

The construction accordingly affords the passengers a "walk through and over" passageway in entering or leaving the cockpit of a runabout or launch type boat. It is understood that suitable modifications may be made in the structure as disclosed, provided such modifications come within the spirit and scope of the appended claims. Having now therefore fully illustrated and described my invention, what I claim to be new and desire to protect by Letters Patent is:

1. In a boat having a cockpit and a bow compartment located forward of the cockpit and in open communication therewith and with a bow deck covering the bow compartment, the bow deck having a transversely centered hatch opening connecting with the cockpit, a pair of doors hinged to the bow deck at opposite sides of the hatch opening on fore and aft axes for movement between closed positions jointly covering the opening and open positions at the sides of the opening, a ladder, a frame

hinging said ladder to the boat on a transverse axis and transversely centered in the bow compartment for forward swinging movement of the ladder outwardly through said opening to a position depending from the bow of the boat, and a windshield extending transversely across the rear portion of the bow deck and having its side ends directed rearwardly and pivoted to the boat on a common axis for raising the windshield rearwardly and upwardly about said common axis so that when the doors are opened and the ladder is forward and the windshield is raised there is a clear path for passenger travel between the cockpit and the ladder.

2. In a boat having a cockpit and a bow compartment located forward of the cockpit and in open communication therewith and with a bow deck covering the bow compartment, the bow deck having a transversely centered hatch opening connecting with the cockpit, closure means movable between hatch opening and closing positions, a ladder connected to the boat by a support frame for swinging movement through the hatch opening between a stored position within the bow compartment and a use position depending from the bow of the boat, and a windshield extending transversely of the boat across the rear portion of the bow deck and having its side end portions curved rearwardly and pivoted to the boat on a common axis for raising the windshield upwardly and rearwardly to bring the central portion thereof disposed rearwardly of the hatch opening to an elevation substantially higher than the hatch opening allowing direct passenger access from the cockpit under the windshield and through the hatch opening to the ladder when the closure means is open and the windshield is raised.

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