Sept. 4, 1962 D. D. BEACH 3,051,967

COLLAPSIBLE TOP FOR BOATS

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FIG. 1

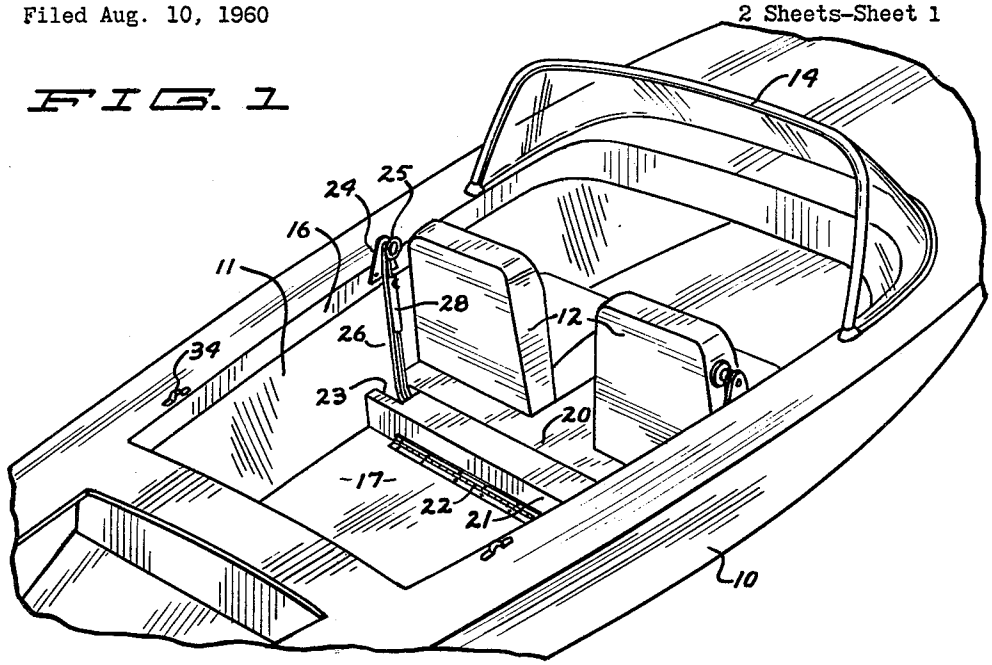
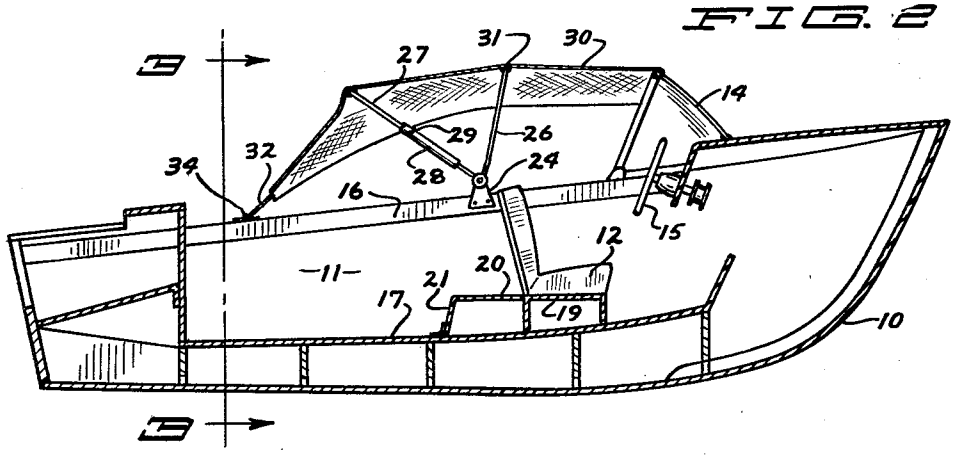


FIG. 2



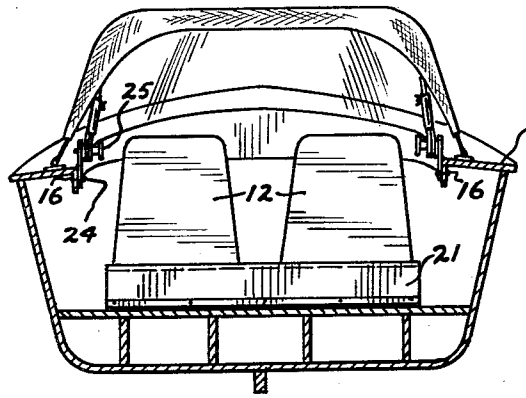


FIG. 3

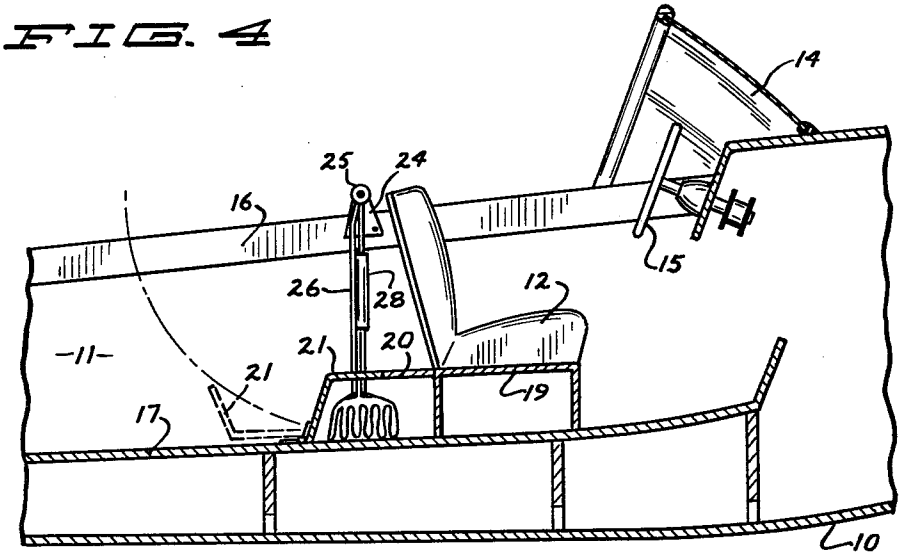
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FIG. 4



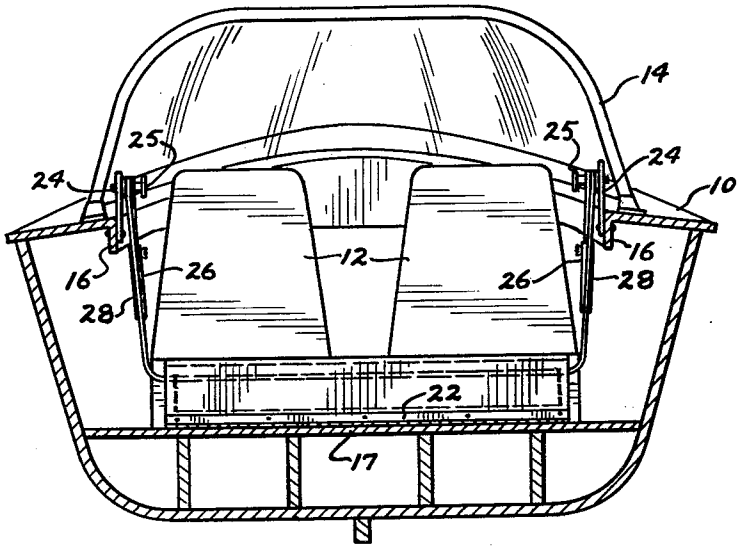


FIG. 5

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COLLAPSIBLE TOP FOR BOATS

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3 Claims. (Cl. 9—1)

This invention relates to convertible tops for marine craft.

The object of this invention is to provide a convertible top for pleasure boats or the like, which top is so constructed as to be readily and completely collapsed into an out-of-the-way storage compartment provided in the boat without detaching the top from its fixed connection to the boat.

The invention broadly comprises providing a boat with a rearwardly opening storage compartment on the floor thereof and a top supporting framework which is narrower than the boat interior and pivoted to the boat sides above the compartment for rearward and downward swinging movement of the framework, and a cover of pliant material carried thereon, between an erect condition over the boat interior and a collapsed or stored condition, with the framework depending downwardly from the pivots and the cover folded into said storage compartment.

The above mentioned and still further 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 top perspective view showing a view of a boat incorporating the present invention and showing the convertible top collapsed into the storage compartment.

FIG. 2 is a longitudinal vertical section through the boat with the top in erect condition.

FIG. 3 is a transverse vertical section through the boat, taken on line 3—3 of FIG. 2, and showing the erect top in rear elevation.

FIG. 4 is an enlarged longitudinal vertical section taken through the center portion of the boat with the top collapsed and showing the storage compartment door in open position in broken lines.

FIG. 5 is a transverse vertical section similar to FIG. 3 but showing the top collapsed to a stored position within the compartment.

Referring now more particularly to the drawings and using reference numerals to denote like parts or structural features in the different views, a pleasure boat incorporating the present invention is denoted generally by the numeral **10**. The boat **10** is provided with a conventional upwardly opening passenger compartment or cockpit **11** having seat **12** mounted therein. A windshield **14** is mounted to extend transversely across the bow portion of the boat. Steering wheel **15** is mounted on the boat dashboard immediately forward of one of the seats **12**. The compartment **11** opens upwardly with the lateral limits of the opening being defined by sideboards **16** and the compartment is provided with a horizontally flat floor **17** spaced above the bottom of the boat. Seats **12** are mounted on a platform **19** which is supported in elevated position above the floor **17** and which has a ledge **20** extending rearwardly beyond the seats in vertically spaced relation to the floor. Ledge **20** extends transversely across the entire width of the compartment **11**. A door **21**, which is generally L-shaped in cross section as best shown in FIG. 4, is hinged to the floor **17** by an elongated piano hinge **22** for movement between a closed position extending upwardly from the floor and against the rear edge of the ledge **20** and an open position folded rearwardly against the floor, as shown in broken lines in FIG. 4. Accordingly, the door **21**, when in closed position against the ledge **20**, provides a storage compartment extending transversely along the floor **17** immediately to the rear of the seats **12**. The top panel of the door **21** has its end portions cut away, as denoted at **23** (FIG. 1), to provide top openings at each end of the compartment.

A pair of triangular brackets **24** are mounted in transversely opposing positions one on each of the side members **16**. These brackets are integrally secured to the boat and are spaced vertically above the hereinbefore described storage compartment. Each of the brackets **24** has an internally threaded aperture which receives the threaded end of a clamp screw **25** with the head of the screw disposed inwardly from the bracket. Front and rear U-shaped bows, denoted respectively at **26** and **27**, each have their ends journaled on the clamp screw **25** for swinging movement about the axis thereof. Bow **27** of necessity must project a greater distance from the clamp screw and, accordingly, each leg thereof incorporates a tubular member **28** in which the legs of the bow are longitudinally slidable. A locking screw **29** is provided in each of the tubular members **28** to lock the bow **27** in any selected position of length adjustment.

A canopy or top of canvas or other pliant material is designated generally by the number **30**. This top is provided with transversely extending loops **31** which receive the bight portions of the bow members **26** and **27**. Cables **32** are attached one to each of the rear corners of the top **30** to be secured as by tying to the metal loops **34** mounted on the boat. The front edge of the top **30** is provided with snap fastenings to mate with similar fastenings mounted on the windshield to secure the cover to the windshield in a conventional manner.

The top is shown in erected or cockpit shielding position in FIG. 2, with the bows **26** and **27**, cables **32** and the windshield fastenings serving to hold the top **30** in a taut condition. Clamp screw **25** is tightened against the ends of the bow members to prevent their swinging about the axis thereof. When it is desired to store the top, the top fastenings to the windshield and cables **32** are disconnected, lock screw **29** is loosened to allow the bow **27** to be shortened to the length of bow **26**, and clamp screw **25** is loosened to allow the entire top assembly to swing rearwardly and downwardly through an arc of approximately 180 degrees into the rearwardly opening storage area provided under the ledge **20**. Door **21** is then swung closed and the top **30** is completely concealed from view and is protected against any substantial damage by the elements. The legs of the bow members **26** and **27** depend downwardly through the openings **23**. To re-erect the top the steps are, of course, reversed.

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 opposing side walls, a horizontal floor extending therebetween and an operator's seat mounted over the floor and facing the bow of the boat, a ledge extending between the side walls of the boat to the rear of the seat and spaced vertically above the floor, a pair of transversely opposing brackets mounted one on each side wall to the rear of the seat and vertically above the ledge, a framework having its ends coaxially pivoted to the brackets and having a canopy support bar extending parallel to said axis but spaced therefrom, said framework being transversely narrower than the space between said side walls allowing said canopy support bar to be swung approximately 180 degrees about said axis between a canopy supporting position above the brackets and a

stored position under said ledge, and a canopy of pliant material attached to said bar for extension over the seat when the bar is in canopy supporting position.

2. In a boat having an open cockpit, and a storage compartment at the bottom of the cockpit, a canopy of pliant material, a framework for supporting the canopy in covering position over the cockpit, said framework comprising a plurality of U-shaped bows pivoted to the sides of the boat for swinging movement about a common transverse axis between erect positions extending upwardly in relatively diverging relation from the pivot axis to support the canopy and collapsed positions extending downwardly in side by side relation from the pivot axis with the canopy folded within said storage compartment, said storage compartment comprising an elongated transversely extending enclosure opening rearwardly, and a closure door hinged on a transverse axis to the cockpit bottom for movement between an upright position closing the open side of the enclosure and an open rearwardly extending position.

3. The subject matter of claim 2 wherein said compartment has openings at its ends for receiving the downwardly extending portions of the bows.

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