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BOAT TOP

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This invention relates to boats of the open cockpit type, and more particularly to an accessory therefor in the form of a top that may be converted to serve as a rear deck.

Small boats, of the type employing outboard motors are often provided with a forward deck, and wind or splash shield, and are otherwise open to the weather. In some instances such boats are provided with permanent tops which cover the forward portion of the cockpit, immediately behind the splash shield. Where such tops are permanently applied, difficulty is encountered in boarding or leaving the boat, and under suitable weather conditions the permanent top is often not desired.

The present invention is directed to a top construction which may be applied to a boat of the open type described as original equipment, or as an accessory, the top, however, being so constructed and mounted on the boat as to be readily shifted from a forward position where it serves as a top, to a rearward position where it is lowered, and flush with the side rails, so as to serve as a rear deck.

More particularly the invention relates to a top adapted to be shifted in the manner described and wherein side roller trackways are employed for supporting the top from its rear end, the trackways being readily mounted on the inside of the boat sides, and having forward elevated horizontal portions, and downwardly and rearwardly inclined central portions and rearward extending lower horizontal portions adjacent the bottom of the boat.

The above and other novel features of the invention will appear more fully hereinafter from the following detailed description when taken in conjunction with the accompanying drawings. It is expressly understood that the drawings are employed for purposes of illustration only and are not designed as a definition of the limits of the invention, reference being had for this purpose to the appended claims.

Referring to the drawings wherein like reference characters indicate like parts:

FIGURE 1 is a side elevation of a boat, showing the top in elevated position;

FIGURE 2 is a plan view of the boat of FIGURE 1, with the top lowered to form a rear deck;

FIGURE 3 is a sectional view taken substantially on the line 3—3 of FIGURE 1;

FIGURE 4 is a sectional view taken substantially on the line 4—4 of FIGURE 1, with the top lowered to form a rear deck;

FIGURES 5 and 6 are sectional views similar to FIGURES 3 and 4, wherein the invention is applied to a boat having a narrow side decking around the cockpit;

FIGURE 7 is a side view of one trackway;

FIGURE 8 is a fragmentary sectional view through the trackway and one roller thereof; and

FIGURE 9 is a fragmentary perspective view of a sliding pin lock adapted to fix the top in elevated position, or in lowered rear deck forming position.

In FIGURES 1 and 2 there is a typical open cockpit type of boat adapted to be powered as by an outboard motor. The boat comprises a bow 20, forward deck 22, on which is mounted a wind or splash shield frame 24, with a curved windshield 25 of glass, Plexiglas or the like. A rear transom 26 is provided to which may be applied an outboard motor. While reference to an outboard motor is made, it will be seen that the invention may be

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applicable to a boat having an inboard motor, where the boat construction permits. The forward deck 22, and side rails 30 and 32 form an open cockpit in which seats 34 and 36 are arranged behind a steering wheel and suitable other controls, not shown.

In open cockpit boats of the type illustrated, it is desirable to provide a top which may act as a sunshield, or protection from the weather, and for ease in embarking or disembarking, it is desirable that the top be retractable, and when retracted serve a useful purpose, such as a rear deck.

In order to provide a retractable top, there is shown a top member 38 having rear side members 42 and 44, that are hinged as at 40 to the top. The hinges may be of the spring type tending to maintain the side members 42 and 44 at right angles to the top 38, the upper ends of the side members abutting the under side of the top adjacent the side edges thereof to provide rigidity between the side members and top when the side members depend perpendicularly from the top.

The forward end of the top is adapted to be detachably supported upon the splash shield frame by manually shiftable pins 62 and 64 slidably disposed in blocks 65 affixed to the underside of the top. The pins are adapted to be projected into apertured lugs 61 and 63 projecting rearwardly of the splash shield frame 24. The lower ends of the side members 42 and 44 are provided with two spaced rollers, riding in side trackways 46 and 48. Each of the trackways may be of channel formation with inward flanges 49 and 51 and be of a width to receive with slight clearance, the two spaced rollers 50 and 52 journaled on stub shafts 53 affixed to the lower ends of the side members 42 and 44. Each of the trackways have a forward substantially horizontal section or portion 54 of a length long enough to adequately accommodate both rollers of each side member. The trackways have an intermediate inclined section or portion 56, and a rearward horizontal section 58. In a boat having side walls 17 and 19 which converge inwardly toward the bottom and at the rear, the inclined and rearward portions of the trackways will converge inwardly toward each other as necessary toward the rear thereof and have a slight twist as indicated in FIGURE 3. Each trackway will be fastened to or mounted upon the side walls of the boat at suitably spaced points. It will be seen that by reason of the hinged connection of the side members 42 and 44 to the top 38, the lower ends of the side members may move inwardly as the rollers follow the trackway down the inclined and rearward portions of the trackways.

As indicated in FIGURE 1, the top, when released from its attachment to the splash shield frame, is readily rolled rearwardly on the trackway, the top shifting from the horizontal position shown to the tilted position indicated at 38', and finally to the horizontal position indicated at 38" where it is preferably flush with the side rails 30 and 32. By providing recess apertures in the side members as at 60, to receive the pins 62 and 64, the forward end of the top is rigidly supported and becomes a rear deck with sufficient rigidity to support a person.

In FIGURES 5 and 6, there is shown a slight modification, wherein the top 138 is fitted to a boat having narrow side decking 70 and 72 which overlies the inwardly sloping boat sides 74 and 76, so that the channel members 146 and 148 may be mounted immediately under the decking 70 and 72 at their forward ends and to the boat sides at their rearward ends, and both channel members will lie in vertical parallel fore and aft extending planes. In such a construction the top side members 142 and 144 may be rigidly affixed to the top, substantially at right angles thereto.

It will be appreciated that for the rollers to roll freely

within the channel trackways, the channels have a width slightly greater than the roller diameter. By disposing the axis of the rear roller of each side slightly above the axis of the other roll, the rearward roll may be caused to engage the upper flange of the trackway, while the forward roll engages the lower flange, when the forward end of the top is affixed to the splash shield frame, eliminate any loose play between the rollers and trackway. Similarly loose play may be eliminated when the top is lowered to serve as a deck by attaching the forward end of the top to the side rails with the spaced rollers bearing oppositely against the trackway flanges.

While hinged connections between the top and side members have been referred to for accommodating trackways that converge, it will be appreciated that such side members might have a degree of resilience to accommodate limited convergence of the trackways, thereby avoiding the necessity of hinges. In practice the top and side members may be an integral molded unit of fiberglass construction, the top being provided with sufficient strength to serve as a deck.

While a single modification of the invention has been illustrated and described, it is to be understood that the invention is not limited thereto. As various changes in the construction and arrangement may be made without departing from the spirit of the invention, as will be apparent to those skilled in the art, reference will be had to the appended claims for a definition of the limits of the invention.

#### What is claimed is:

1. The combination of a boat having a forward deck, side walls and side rails, and a transom defining a relatively open cockpit to the rear of said deck, a splash shield frame mounted on said deck, a pair of facing trackways affixed to said side walls on the inside thereof, said trackways each having upper forward generally horizontal portions disposed adjacent to a central portion of the respective opposite side rails, and intermediate downwardly inclined portions extending rearwardly merging into substantially horizontal rearwardly extending portions terminating adjacent the transom, and a top having opposed depending like side members adjacent the rear thereof, said side members at their lower ends each having spaced rollers riding in the respective opposite trackways, and means for detachably connecting the forward end of said top to said splash guard frame, when the top is in forward raised position and serving as a top, and for securing the forward end of the top to the opposed side rails, when in rearward lowered position and serving as a rear deck substantially flush with the side rails.

2. A top accessory for a boat having a forward deck, a splash guard frame thereon and side walls and rails, and a transom defining a relatively open cockpit to the rear of said deck, a pair of oppositely facing trackways adapted to be affixed to said side walls on the inside thereof, said trackways each having forward generally horizontal portions adapted to be disposed adjacent to a central portion of the respective opposite side rails, and intermediate downwardly inclined portions extending rearwardly merging into substantially horizontal rearwardly extend-

ing portions adapted to terminate adjacent the transom, and a top having opposed depending like side members adjacent the rear thereof, said side members at their lower ends each having spaced rollers riding in the respective opposite trackways, and means for detachably connecting the forward end of said top to said splash guard frame, when in forward raised position and serving as a top, and for securing the forward end of the top to the opposed side rails, when in rearward lowered position and serving as a rear deck substantially flush with the side rails.

3. The combination of a boat having a forward deck, side walls and side rails, and a transom defining a relatively open cockpit to the rear of said deck, a pair of facing continuous trackways mounted inwardly of and upon said side walls, having forward upper generally horizontal portions, intermediate inclined portions and substantially horizontal rearward lower portions terminating adjacent the transom, and a rigid top having opposed depending like side members adjacent the rear thereof, said side members at their lower ends each having means riding in the respective opposite trackways.

4. The combination of a boat having a forward deck, side walls and side rails, and a transom defining a relatively open cockpit to the rear of said deck, a splash shield frame mounted on said deck, a pair of facing trackways mounted inwardly of said side walls, said trackways each having forward generally horizontal portions and downwardly inclined portions extending rearwardly therefrom merging into substantially horizontal rearwardly extending portion terminating adjacent the transom, a top having opposed depending like side members adjacent the rear thereof, said side members at their lower ends each having two spaced rollers riding in the respective opposite trackways, and means for detachably connecting the forward end of said top to said splash guard frame, when in forward raised position and serving as a top, and for securing the forward end of the top to the opposed side rails, when in rearward lowered position and serving as a rear deck substantially flush with the side rails.

5. The combination set forth in claim 4, wherein the side walls of the boat incline inwardly towards the bottom thereof adjacent the transom end, and in which portions of the trackways converge towards one another rearwardly of the forward portions thereof in correspondence with the incline of the side walls of the boat, and wherein the top side members are hingedly affixed to the top to allow the lower ends of said side members to move toward one another upon shifting the side members rearwardly along the converging portion of trackways during shifting of the top to the rear deck forming position.

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