July 20, 1965 D. C. THORNBURG ETAL 3,195,680

SMALL CRAFT BOARDING PLATFORM

Filed July 2, 1963

2 Sheets-Sheet 1

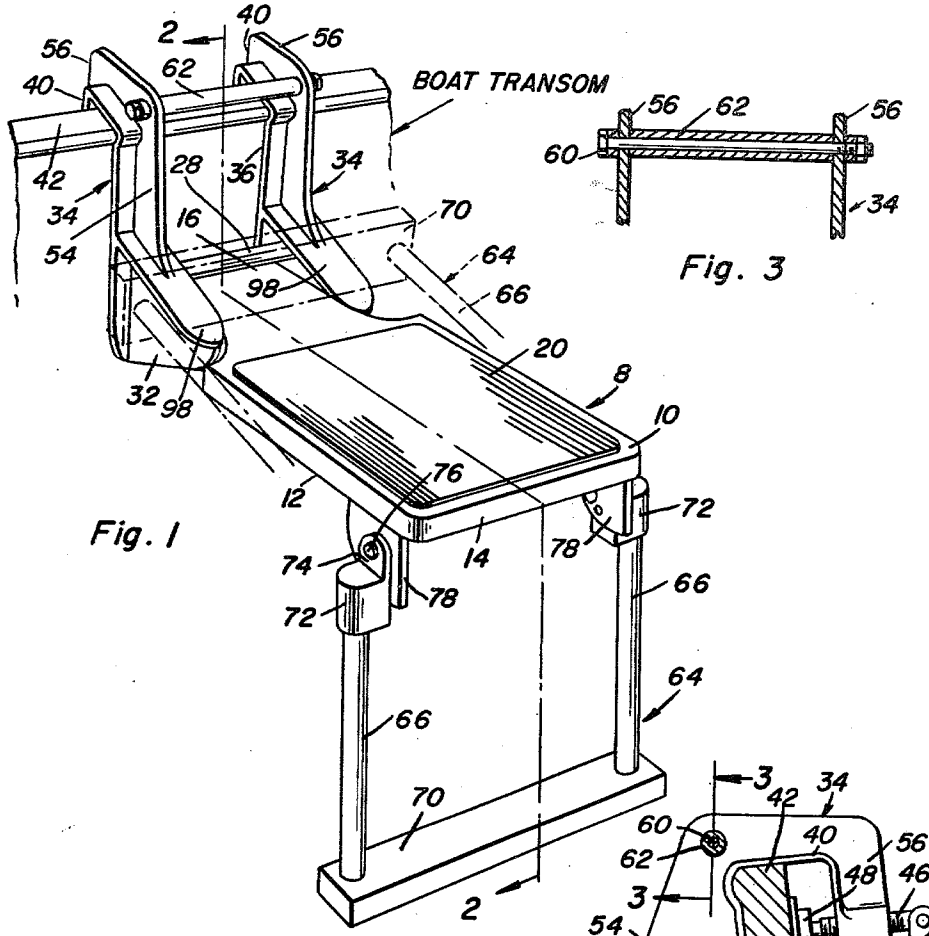


Fig. 1

Fig. 3

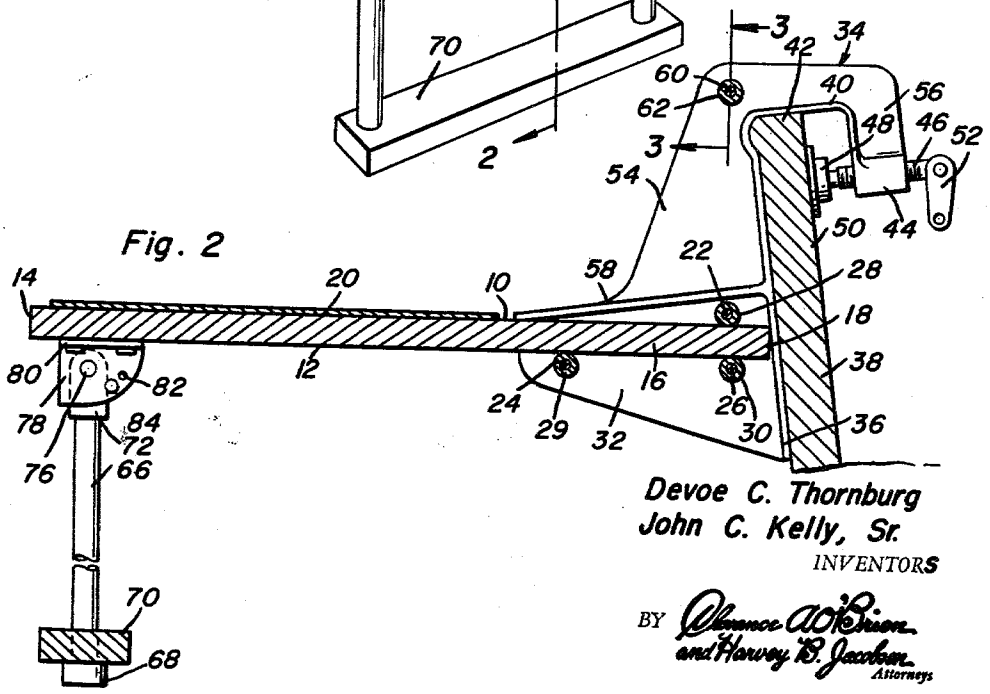


Fig. 2

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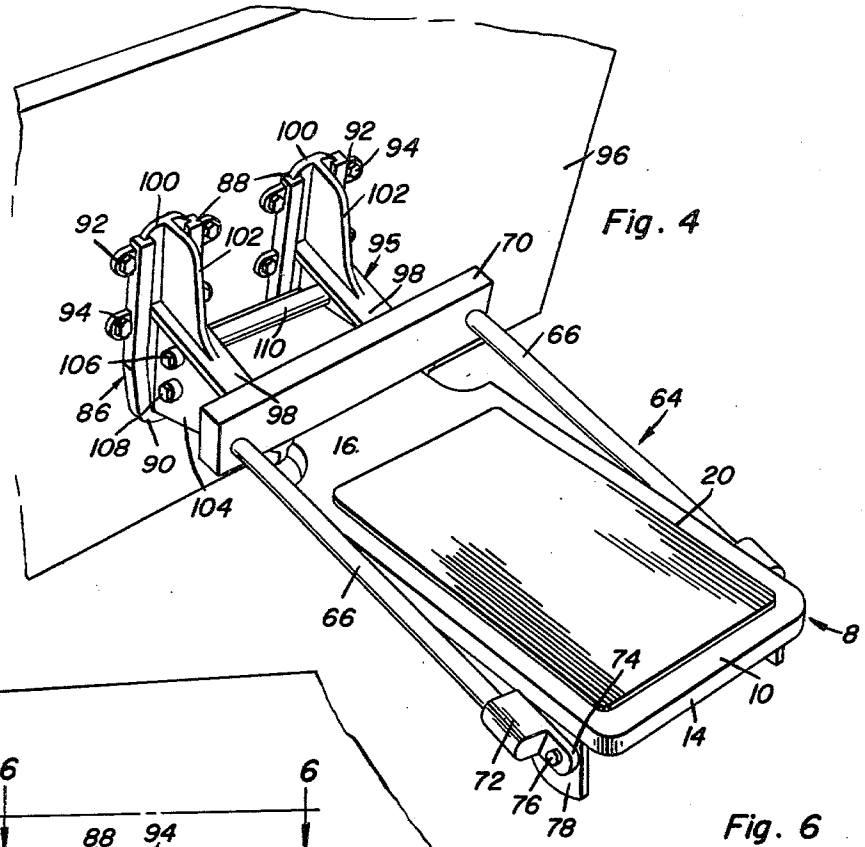


Fig. 4

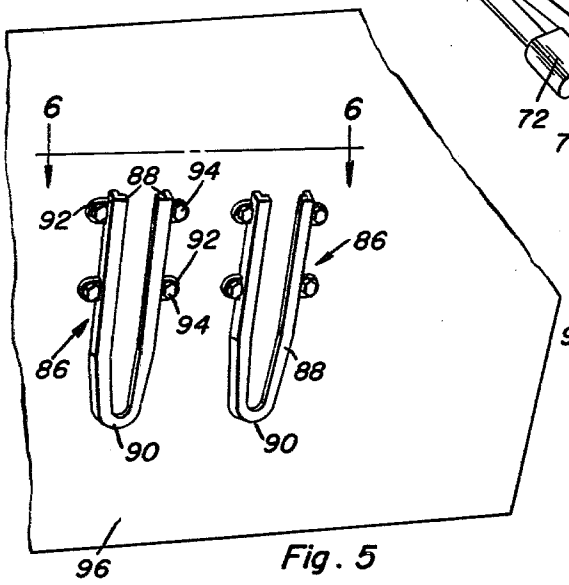


Fig. 5

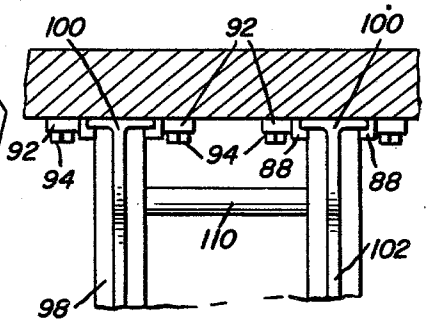


Fig. 6

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SMALL CRAFT BOARDING PLATFORM

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4 Claims. (Cl. 182—92)

This invention relates to small craft and boat boarding equipment, more particularly, to a multipurpose device designed for attachment to and feasible use on the transom of a boat and which, when properly attached, is available for use by swimmers as a safe and reliable boarding aid and, in addition, as a standing and diving platform.

As above suggested and hereinafter more specifically revealed, the instant concept relates, broadly construed, to a special purpose transom attachment characterized by a unique platform for boarding and diving and for other purposes which are regarded as a long-felt need for thoughtful and experienced boatsmen. To these ends, a strong and durable but light in weight platform is provided. It is such in construction that it promotes safe and sane boating pleasure and in addition provides a highly useful worker's or working platform affording access to the boat's propeller.

With further respect to the platform insofar as it pertains to the aforementioned worker's aid it should be added that it functions to provide the skipper with a reliable seating, standing and working surface and affords convenience and comfort while repairing or replacing a propeller, or while working on the power head or other accessible component part of an outboard motor. To this end the platform projects substantially horizontally and outwardly beyond the transom and has its forward end bracketed to the transom at a place within the convenient range of the outboard motor.

The invention features, in addition to the platform and means for bracketing the same on the transom, and a stirrup-like step which is suspended from a free or rearward end of the platform and constitutes a simple ladder which assists in conjunction with the platform in enabling the user to board the craft.

Further novelty is predicated on the bracket-attached platform with the suspended step or ladder wherein the latter is foldable, when not in use, to an out-of the-way position atop the cooperating platform. Then, too, novelty is present in the appropriation and use of a stirrup-type step wherein the step when down for use resides in a plane which is normally a few inches above the water line where it is in readiness for use in the event that an occupant of the boat, in case of accident, fails or tumbles overboard into the water. In this connection it is to be pointed out that this regulated position of the step or ladder is of significant importance on inboards and larger outboards many of which are being currently built with a higher freeboard.

It is also a matter of significance to note here that two forms or embodiments of the invention are herein disclosed and that one form or embodiment is expressly designed and adapted for outboard boats having a motor-cutout of sufficient width (12 to 15 inches) on either side of the usual outboard motor attaching and hanger bracket, or between motors where a twin motor installation is involved. This particular model or form clamps on the transom much like currently used outboard motors. The other embodiment or form is designed and adapted for use on inboards, inboard outdrives, or on outboard boats with transom cutouts which are too narrow for the first-named form. In connection with the second-mentioned embodiment permanently fixed mounting brackets are employed as will be hereinafter more particularly pointed out.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 is a view in perspective showing one embodiment of the invention and illustrating the above first-named embodiment, that is the embodiment for outboard boats having a transom with the aforementioned motor cutout (not shown) on either side of the outboard motor bracket and illustrating the platform and depending stirrup-like step in readiness for aid and boarding purposes;

FIGURE 2 is a view on a suitably enlarged scale with the cooperating component parts in section and elevation, said view being taken approximately on the plane of the section line 2—2 of FIG. 1;

FIGURE 3 is a detail section on the section line 3—3 of FIG. 2;

FIGURE 4 is a view in fragmentary perspective similar to FIG. 1 and showing the second form or modification wherein the main change is in the attaching brackets and mounting brackets which are fixed on the boat transom;

FIGURE 5 is a fragmentary view showing in perspective the mounting brackets; and

FIGURE 6 is a horizontal section on the plane of the line 6—6 of FIG. 5 showing the platform attaching brackets removably fitted and anchored in the mounting bracket.

Reference will be made first to FIGS. 1 to 3, inclusive, and particularly FIG. 1 which is exemplary of the first-mentioned embodiment or form of the invention. The platform is denoted by the numeral 8 and is elongated and generally rectangular in plan and has a flat top surface 10 and a flat bottom surface 12, a rearward free transverse end 14 and a forward gradually narrowed attaching neck or shank 16 with a free terminal edge portion 18 (FIG. 2). This platform can be made of marine plywood with all surfaces sealed and enameled. The major area of the top surface is provided with a fixedly attached non-skid mat 20.

The shank or neck portion 16 is detachably mounted between appropriately arranged bolts one of which is denoted at 22 (FIG. 2), this being above the top surface of the board, and a pair of companion bolts 24 and 26. The bolts are provided with sleeves which are denoted at 28, 29 and 30. These sleeves also serve as spacers in that they are interposed between spaced parallel depending flange or skirt portions 32 of the paired attaching brackets 34. These brackets are the same in construction and a description of one will suffice for both. To this end it will be noted particularly in FIG. 2 that each bracket has an abutment 36 which resides firmly against the cooperating surface of the boat transom 38, the upper part thereof being fashioned into a hook 40 which is engaged over the upper edge portion 42 of the transom. This hook terminates in a screw-threaded nut 44 having an adjusting and retaining screw 46 threaded therein and terminating in a swivelly mounted end thrust head 48 which is engageable with the surface 50 of the transom and which is provided at an outer operable end with an appropriate handle or fingergrip 52 for convenient operation. These coacting flanges 36 and 38 have stabilizing ribs 54 and 56 cooperable therewith and shaped conformingly. Then, too, additional outstanding flanges 58 are provided and these are integral at their inner ends with the abutment flanges 36. These flanges facilitate piloting the free end portion 18 of the shank 16 into the supporting position illustrated.

It will be evident that the brackets 34 are in many respects similar to outboard motor attaching brackets (not herein shown). However and in the instant situa-

tion the brackets are made precisely to anchor and support the shank portion **16** of the wooden or equivalent platform. In addition the bolts **22**, **24** and **26** assist in assembling and retaining the brackets in proper spaced relation. A fourth bolt **60** is provided and this bolt in turn is provided with a reinforcing and spacing sleeve **62**, said bolt extending through the upper portions of the ribs **56** as shown with particularity in FIG. 3.

The rearward end portion **14** of the supported and bracketed platform is provided with a foldaway stirrup-like step or ladder unit which is denoted at **64**. The unit comprises a pair of rigid spaced parallel depending legs **66** having headed lower ends **68** supporting the apertured end portions of the step **70**. The upper ends of the legs are carried by attaching brackets **72** having ear-like lugs **74** which are hingedly mounted at **76** on depending portions **78** of adapter clips **80** (FIG. 2). The depending portions **78** are provided with screw-threaded holes **82** to accommodate insertable and removable limit stop screws **84** which function (as shown in FIG. 2) to limit the swinging movement of the unit **64** in a direction from left to right, that is in a direction toward the boat transom. With this construction and by reason of the fact that the members **78** are flush with the lengthwise edges of the platform board and the hinging members **72** are mounted as shown, the step or ladder as a unit can be swung upwardly from the full line boarding position illustrated in FIG. 1 to the phantom line out-of-the-way (or out-of-use) position. It will be evident that the use of the platform and step as an assembly will function to keep the interior of the boat dry and tidy and will also provide swimmers and divers with safety and pleasure of using the ladder and platform as a boarding aid and also for diving purposes. The ladder legs, fixtures and brackets are made of cast aluminum and the platform and step are both made of specially prepared and coated wood or any equivalent but suitable material. The step and ladder are engineered as a structural entity, to give the user years of dependable service. The invention provides a variety of uses the need for which has long been felt by boatsmen.

With reference now to the form of the invention illustrated in FIG. 4 it will be evident that the same reference numerals are employed in FIG. 4 as have been used in FIG. 1 in describing the platform **8** and the boarding ladder or step means **64**. However, the brackets here are different in construction. For instance as shown in FIG. 5 a pair of substantially U-shaped mounting brackets are provided. These brackets are denoted at **86** and are the same in construction. This is to say the vertical elongated portions or members **88** are channel-shaped in cross-section and define holddown and anchoring tracks. The adjoining bight portion is denoted at **90**. Ear-like lugs **92** are provided and these lugs are bolted, screwed or otherwise fastened in place as at **94** on the surface of the transom **96**. For sake of distinction the mounting units **86** may be conveniently classed as mounting fixtures. The attaching and retaining brackets for the platform are denoted by the numeral **95** and each bracket has horizontal flanges **98** which are integral with and are at right angles to the keying and anchoring flanges **100**. The latter flanges are fitted down into the grooves or tracks and wedged into place in a seemingly evident manner. In addition, reinforcing webs or ribs **102** and **104** are provided. Then, too, the brackets are further provided and joined together with anchoring bolts **106** and **108** (FIG. 4) having spacing sleeves **110** thereon. In this construction the brackets can be permanently attached to the platform or the platform can be detachably connected to the brackets and the brackets in turn detachably joined to the U-shaped transom fixtures **86**. This second form of the invention is for use on inboards, inboard outdrives, or on outboard boats with transom cutouts which are too narrow for the form or type of the invention illustrated in FIG. 1.

It is believed that a careful consideration of the specification in conjunction with the illustrative figures of the drawing will enable the reader to obtain a clear and comprehensive understanding of the construction and arrangement and cooperation of the component parts in both embodiments of the invention and, in addition, the inherent features and advantages. Therefore, a more extended description is thought to be unnecessary.

The forgoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. In combination, a pair of opposed spaced parallel attaching units designed and adapted to be mounted in a given vertical position on the outboard surface of a boat transom, a plurality of coordinating upper and lower horizontally disposed platform attaching and retaining bolts carried by and joining said units together, a safety-type boarding platform projecting rearwardly from and lateral to said transom and having a forward end portion constituting an attaching and retaining shank, said shank being fitted between said units and having portions thereof oriented with and located in cooperating relationship with said bolts, a stirrup-like emergency boat boarding ladder comprising a pair of depending rigid legs straddling said platform and having their upper ends hingedly mounted on a cooperating outer end portion of said platform, said legs being of a length less than the length of said platform and being provided at lower ends thereof with an intervening and cooperatively attached step, said step being of a length greater than the width of said platform and of a transverse cross-section slightly greater than the corresponding cross-section of said legs and constituting and providing a conveniently grippable hand-hold.

2. An attachment for the stern of a small boat comprising: a rigid elongated multipurpose platform on which the user can stand, squat or sit while changing a propeller on a large outboard motor or an inboard outdrive unit, a pair of platform mounting and supporting brackets having vertical abutments adapted to bear directly and firmly against an exterior of said stern and detachably connectible therewith, said abutments having integral outstanding rigidifying ribs, the inner end of said platform being insertable and removably fitted between and connected to said ribs, said platform being of a length and width that it can be used for diving by swimmers, clips affixed to the corner portions of the outer end of said platform, said clips depending below the underneath surface of said platform and having outer surfaces flush with the respective longitudinal edges of said platform, a platform and boat boarding stirrup embodying a pair of rigid legs provided between their lower ends with a rigidly attached rung-like dual purpose safety step and hand-hold, and hinging members hingedly mounted on outer vertical sides of said clips, the upper ends of said legs being joined to said hinging members.

3. An attachment for the transom of a small boat comprising a pair of attaching brackets each embodying a vertically elongated flat abutment adapted to reside firmly and flatwise against an exterior surface of said transom, the upper end of said abutment having a hook to engage over the upper horizontal edge of said transom, said hook being provided with attaching and clamping means, each abutment being provided with an outstanding flange-like stabilizing rib coextensive in length therewith, an elongated rigid platform having a flat top side with an anti-skid surface, the inner end portion of said platform being insertably and removably fitted and secured between the ribs of the respective brackets, a boat board-

ing stirrup embodying a pair of rigid legs having a step between their lower ends, clips affixed to the respective corner portions situated at the outer free end of said platform, said clips being in opposed spaced-apart relationship, duplicated and having body portions depending below the plane of the underneath side of said platform and also having outer surfaces which are flush with the respective outer longitudinal edges of said platform, socket members hingedly mounted on said clips the upper ends of said legs being secured to their respectively cooperable socket members, said legs comprising cylindrical rods, said rods having lower headed ends and said rods passing upwardly through corresponding cooperating apertured end portions of the cooperating step.

4. In combination, a small boat having a transom, a pair of U-shaped adapter fixtures affixed flatwise on the exterior of said transom midway between the upper and lower horizontal edge portions of said tarnsom, said fixtures having channel-shaped portions defining and providing anchoring tracks, platform supporting brackets having anchoring flanges fitted and removably keyed in their respective tracks, said flanges being provided with outstanding reinforcing ribs, a plurality of horizontally disposed sleeve-covered bolts mounted between cooperating ribs and arranged to accommodatingly receive and support an inward end portion of a platform, an elongated platform having its inward end portion sheathed and secured between said ribs and fitted removably between and supported by said sleeve-covered bolts, and an upwardly forwardly folding rigidly constructed boat boarding stirrup hingedly mounted on the outward end of said platform.

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