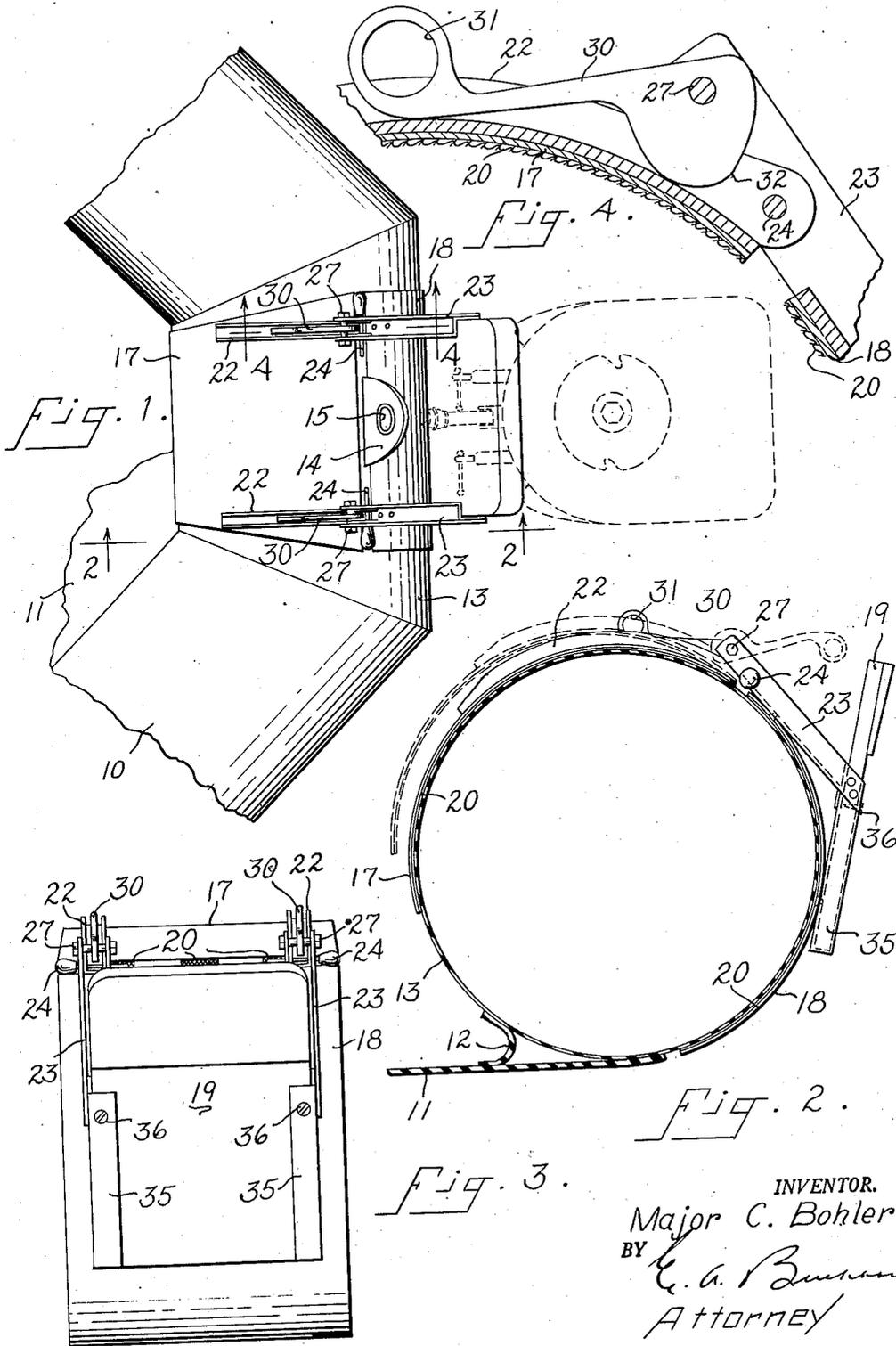


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OUTBOARD MOTOR MOUNT
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OUTBOARD MOTOR MOUNT

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7 Claims. (Cl. 248-4)

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The present invention relates to motor mounting means for boats of the type having an inflatable tubular gunwale. Such boats, or life rafts as they are sometimes called, usually comprise a fabric bottom having a gunwale of rubber-im-
pregnated fabric or the like which may be blown
up to support the boat and its occupants. The
gunwale may have various shapes but generally
comprises a tubular construction of cylindrical
cross section having a portion at the rear, the
axis of which is normal to the longitudinal axis
of the boat to form a section equivalent to the
transom of a boat of usual construction. The ob-
ject of the present invention is to provide a
mounting means whereby outboard motors may
be applied to such a boat, such mounting means
being instantly applicable to or removable from
the boat.

A principal object of the present invention is to provide a motor mounting means of the type described which may be applied to any boat having a tubular gunwale of the necessary dimensions and cross section, without the necessity for applying fixed anchoring members to portions of the boat as has heretofore been required. By the use of my invention an outboard motor may be mounted upon any standard inflatable boat as manufactured.

A further object of the present invention is to provide an outboard motor mount of the type described which may be stowed in a small space when not in use, the invention comprising two separable jaws which may be nested one within the other when detached from each other.

A further object of the present invention is to provide an outboard motor mount of the type described which may be clamped about the tubular gunwale of an inflatable boat when the gunwale is fully inflated, as distinguished from certain prior devices which could be applied only after deflating the gunwale to a considerable extent.

A further object of the present invention is to provide an outboard motor mount of the type described which may be clamped in position upon a cylindrical gunwale so as to position a motor mounting plate at any desired angularity, and which will not slip circumferentially from its adjusted position.

The foregoing and other objects and advantages of the present invention will be more readily apparent from inspection of the following specification taken in connection with the accompanying drawings wherein like numerals refer to like parts throughout, while the features of novelty will be more distinctly pointed out in the appended claims.

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In the drawings Fig. 1 is a fragmentary plan view of the transom portion of a boat having an inflatable gunwale, the motor mounting means of the present invention being applied thereto, and an outboard motor being indicated in skeleton outline;

Fig. 2 is a vertical section on an enlarged scale taken substantially along line 2-2 of Fig. 1;

Fig. 3 is a rear elevation of the motor mounting means; and

Fig. 4 is a vertical section on an enlarged scale taken substantially along line 4-4 of Fig. 2.

A portion of an inflatable boat is indicated in the drawings, the same comprising a tubular inflatable gunwale 10 and a fabric bottom 11 attached thereto, the joint being braced by a fabric gusset strip 12. A section 13 of the inflatable gunwale extends normal to the longitudinal axis of the boat in the position of the transom of a conventional boat, the section being provided with an upwardly extending fabric tab 14 having an eyelet 15 therein by means of which a painter may be secured.

A mount for an outboard motor is shown in position, the mount comprising a pair of jaws 17 and 18 hingedly connected together, with a space being provided between the jaws through which the tab 14 may project. In certain boats there is no tab projecting upwardly, in which case the jaws could be closer together at the hinge line, but the space is provided to accommodate all types of boats at present on the market. The jaws 17 and 18 comprise curved plates of substantial width forming, when hinged together, the greater portion of a cylindrical clamp adapted to embrace a substantial portion of the tubular gunwale, with the edges of the jaws being spaced sufficiently to avoid interference from such members as the fabric bottom 11 and the gusset strip 12. Considerable space is provided whereby the position of the clamp circumferentially may be varied in order to vary the angularity of a motor mounting plate 19 supported by the outer jaw 18. In order to prevent slippage of the mount when it has been located in adjusted position, the inner surfaces of the plates are preferably lined with a friction lining 20 which may comprise strips or sheets of cloth having a rubberized cork coating, coarse-grained fabric or similar material having a high coefficient of friction with respect to rubberized fabric.

The inner jaw 17 is preferably reinforced by a pair of curved, circumferentially extending channel bars 22, the ends of which extend beyond the hingeline and are received within the projecting ends of the side walls of a pair of channel bars 23 attached to the outer jaw 18, the bottom

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of members 23 being removed to permit angular displacement of the members 22 relative to the members 23. A pin 24 passes through aligned openings in each of the pairs of channel bars to provide hinges to hold the jaws together when in operative condition. The pins may be easily withdrawn in order that the jaw 17 may be reversed in relative position and nested within the jaw 18 so that it may be stowed in as small a space as possible.

The downwardly extending ends of the channel bars 23 are shaped to receive and embrace the side edges of the mounting plate 19, the bars 23 and plate 19 being angularly disposed with respect to each other and the lower end of plate 19 being attached to a central portion of the jaw 18, the members 23 and 19 thus forming a reinforcing structure for the jaw 18 as well as providing a motor attaching bracket. The jaws 17 and 18 and the channel bars are preferably formed of aluminum or light-weight sheet metal of suitable strength and rigidity, and the plate 19 is preferably formed of wood or other material having sufficient strength and water resistance.

The spaced ends of the side members of each channel bar 23 which project inwardly beyond the hinge 24 support a transverse bolt 27 upon which is pivotally mounted a lever 30 having a finger receiving opening 31 at its free end and a cam portion 32 adjacent its pivoted end, the cam being so shaped that when the lever is thrown forwardly and pressed downwardly into the channel bar 22 the cam surface thereof will engage in the channel bar 22 and force the jaw 17 into compressive contact with the gunwale portion 13. When the lever is raised and turned outwardly the jaw 17 may be opened until the side portions of the channel bars 22 strike the bolt 27, the extent of opening being preferably such that the jaws may be slipped from the gunwale or slipped thereover. Even though the space between the tips of the jaws may be less than the external diameter of the gunwale, such insertion and withdrawal is readily possible, since the gunwale may be distorted slightly even though the pressure therein is great enough to cause firm engagement of the motor mounting means when in use.

It is to be appreciated that various shapes of mounting plate 19 may be substituted for the one herein illustrated, particularly in view of the fact that the preferred construction comprises a pair of inwardly facing channel members 35 riveted to the ends of the channel members 23 and to the jaw 18, the members 35 thus forming guides into which may be slid the wooden plate 19, the plate being preferably attached in position by screws 36 or the like.

An inspection of Fig. 4 will disclose a preferred detail wherein it may be seen that the surface of cam 32 is approximately circular in outline but the center of curvature of the compressing portion thereof is so located as to pass beyond the line between the axis of bolt 27 and the point of contact of the cam with the surface of the channel bar 22 when the lever is in clamping position. Therefore, unclamping of the jaws by pivoting the lever 30 can be accomplished only by the application of force greater than any force created by vibration or shifting of portions of the gunwale as the occupants of the boat move about. The jaws are thus locked in their operative position. The frictional force between the several members is so great due to the clamping action that the pivot pins 24 will be firmly held in

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position against normal vibration and need not be locked in position.

While I have herein illustrated and described a preferred embodiment of the invention, it should be apparent to those skilled in the art that the same permits of modifications in arrangement and detail. I claim as my invention all such modifications as come within the true spirit and scope of the appended claims.

I claim:

1. An outboard motor mount for boats of the type having an inflatable gunwale comprising a pair of jaws of substantial width shaped to embrace a portion of the gunwale, an outboard motor mounting plate supported on one of said jaws, and jaw closing means mounted on one of said jaws and engaging the other of said jaws to force said jaws against the surface of a gunwale embraced thereby.

2. An outboard motor mount for boats of the type having an inflatable tubular gunwale comprising a pair of curved jaws of substantial width hinged together to form a substantially cylindrical clamp with the hingeline thereof extending substantially parallel to the axis thereof, an outboard motor mounting bracket supported on said clamp, and jaw closing means mounted on one of said jaws and engaging the other of said jaws to force said jaws against the surface of a tubular gunwale embraced thereby.

3. An outboard motor mount for boats of the type having an inflatable tubular gunwale comprising a pair of jaws of substantial width hinged together to form a substantially cylindrical clamp with the hingeline thereof extending substantially parallel to the axis thereof, an outboard motor mounting bracket supported on said clamp, and jaw closing means mounted on one of said jaws and engaging the other of said jaws to force said jaws against the surface of a tubular gunwale embraced thereby, said jaws comprising curved metal sheets having friction material lining the inner surfaces thereof.

4. An outboard motor mount for boats of the type having an inflatable tubular gunwale comprising a pair of curved plates hinged together to form a substantially cylindrical clamp, a pair of rigid bars fixed to the outer surface of one of said plates, an outboard motor mounting plate fixed to the outer surface of said one plate and braced by said bars, the ends of said bars extending beyond the hingeline of the clamp and overlying the adjacent portion of the other of said plates, and cam means pivotally mounted upon said overlying ends and rotatable to engage the other of said plates and force said plates against the surface of a tubular gunwale embraced thereby.

5. The structure of claim 4 wherein said plates are at least partially lined with a friction fabric material.

6. The structure of claim 4 wherein said cam means comprise a cam lever mounted upon each of said overlying ends.

7. The structure of claim 4 wherein said cam means comprise a cam lever mounted upon each of said overlying ends, the cam outline of said cam lever being such that the center of curvature of the portion in contact with the other of said plates when in clamping position is beyond the line of thrust between the pivotal axis of the cam lever and the point of contact.

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