Jan. 26, 1937. J. W. HARVEY 2,068,982

OUTBOARD MOTOR BRACKET FOR CANOES, ETC

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Fig. 1.

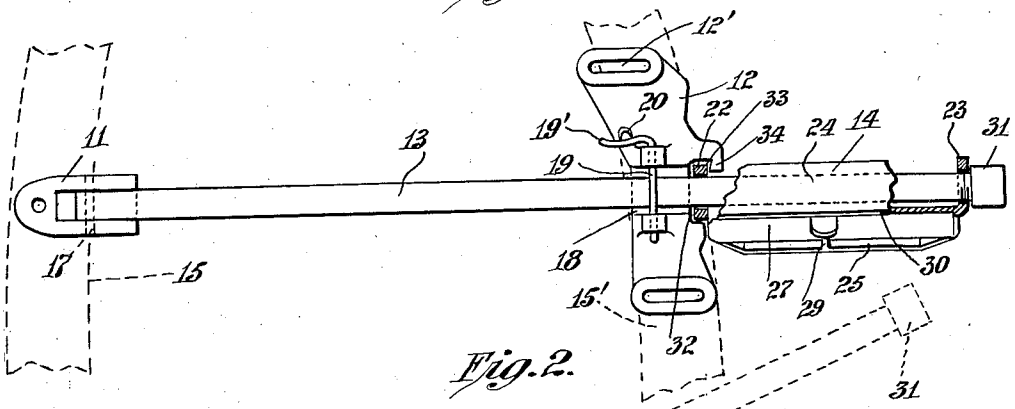


Fig. 2.

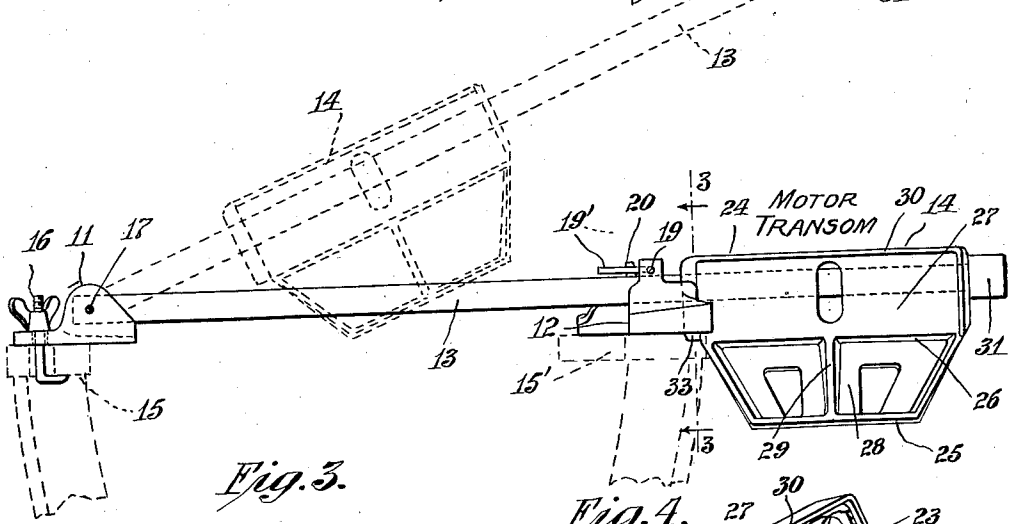


Fig. 3.

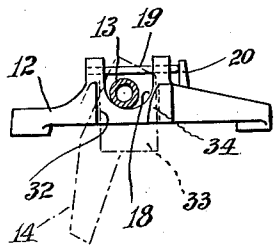


Fig. 4.

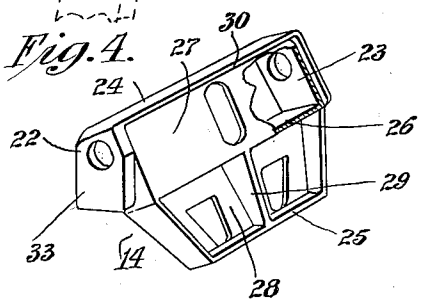
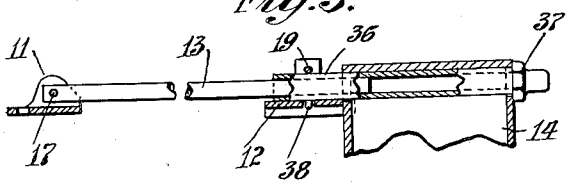


Fig. 5.



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Fig. 6.

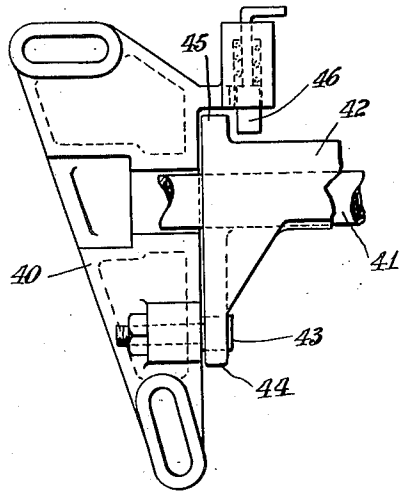


Fig. 7.

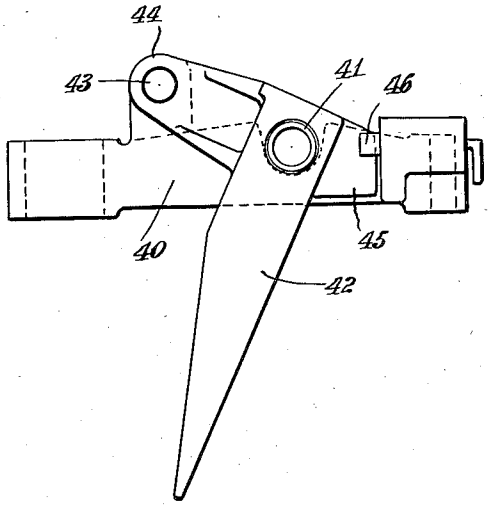


Fig. 8.

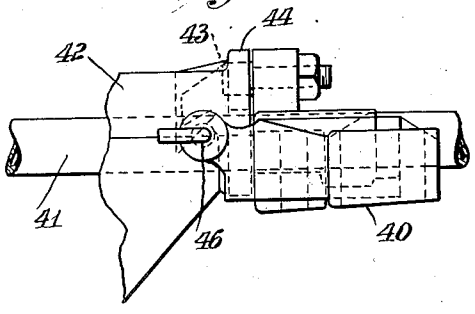


Fig. 9.

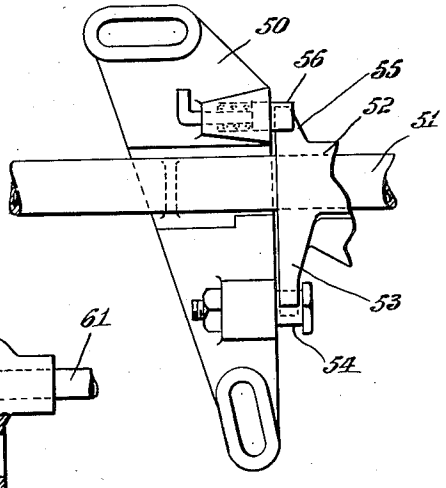
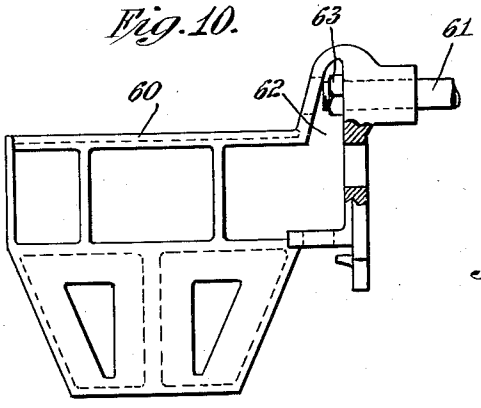


Fig. 10.



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UNITED STATES PATENT OFFICE

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OUTBOARD MOTOR BRACKET FOR CANOES, ETC.

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Application February 29, 1936, Serial No. 66,360

13 Claims. (Cl. 248—4)

The main object of my invention is to provide a bracket adapted to be readily secured to a small boat or canoe for supporting a motor in an outboard or inboard position.

Another object is to provide a bracket which is adapted to be adjusted to fit boats of different sizes.

A special object is to permit the motor to be quickly moved from an outboard to an inboard position.

Another object is to provide an outboard transom which is strong but light and inexpensive and which will securely hold a motor.

Another object is to provide a transom which is adapted to be readily attached to and detached from a supporting bar.

Another object is to provide an effective construction of the character described, the parts of which can be cheaply made and assembled.

In the preferred form of the device intended especially for supporting an outboard type of motor at the side of a canoe there are two plates adapted to be secured to the opposite rails of the canoe. A cross bar is hinged or pivoted to one plate, extends across the canoe and rests in a forked seat or crotch in the other plate where it is held in place by a latch pin.

A supporting block or "transom", adapted to have the motor attached to it, is slidably mounted on this cross bar and interlocked with the crotched plate when the motor is in running position. When the latch is retracted the cross bar may be swung upward about its pivot, together with the transom and its attached motor. The transom and motor may then be slid inboard and tilted on the cross bar so as to carry the motor inside the canoe when not in use. The transom itself is preferably made of a single metal casting.

The side plates may be readily attached to the side rails by hoe bolts and the plates are so constructed that the bracket is adapted to be applied to boats of different widths and shapes. The transom with motor attached may be removed completely from the cross bar if desired.

Fig. 1 is a plan view of the parts of one form of bracket embodying my invention, a portion being broken away and showing the motor-carrying transom interlocked in the outboard position.

Fig. 2 is a front view of the same also showing in dotted lines the cross bar raised and the transome slid inboard.

Fig. 3 is a side view of one of the rail plates.

Fig. 4 is a perspective view of the transom.

Fig. 5 is a front view and partial section showing a modification.

Fig. 6 is a plan view of a modified rail plate and transom fragment.

Fig. 7 is a side view of the same.

Fig. 8 is a rear view of the same.

Fig. 9 is a plan view of another modified form of rail plate and transom fragment.

Fig. 10 is a rear view of another modified form of transom and a fragment of the supporting arm.

The principal parts are the two side rail plates 11 and 12, the cross bar or swinging arm 13 and the transom 14 to which the motor (not shown) is attached.

Rail sections 15 and 16 on which the rail plates are supported are shown dotted. The rail plates are adapted to be secured in place by hoe bolts such as 16 which pass vertically through holes or slots in the plates and may be clamped to the side rails of the boat. The rail plates may be secured in such positions as are most convenient. By loosening the bolt 16 the plate 11 and the attached cross bar may be turned or adjusted about the vertical axis of the bolt.

The cross bar or arm 13 is hinged to plate 11 at 17 on a horizontal axis to permit the arm to be swung up and down.

The plate 12 is forked or crotched at 18 to receive the cross bar. It will be seen that as the plates 11 and 12 are independently mounted and the cross bar can slide back and forth in the crotch 18, the device is adapted to boats of different widths. The elongated slots 12' for the clamp bolts permit the plate to be fitted to rails of different taper.

The pin 19 extends over the top of the bar 13 to hold it down. This pin is preferably readily removable and may have a resilient finger piece 19' adapted to frictionally or otherwise engage the stud or lug 20 to detachably hold the pin in place.

The cross plate or substitute transom 14 to which the motor is clamped is preferably formed of a single casting of metal with side flanges 22 and 23 and top and bottom flanges 24 and 25. Across the center extends a substantially horizontal partition 26. The walls 27 and 28 receive the thrusts of the abutments and clamp screws of the motor (not shown). The transom is also reenforced by a vertical partition or rib 29. I also prefer to provide a top lip or rib 30 to assist in holding the motor in place in case the clamp screws become loosened. The transom is mounted to slide on the cross bar so that it can

be slid inboard (as shown by the dotted lines in Fig. 2) and a stop 31 is provided to limit the outward sliding movement.

The plate 12 is provided with a vertical guide groove 32 which loosely receives a lug or projection 33 on the inner edge of the transom to prevent the transom from rotating on the cross bar when in the outboard position. A hook-like lug 34 prevents the transom from sliding outboard when the cap 31 is removed or omitted.

When the latch 19 is retracted the arm 13 with the transom and attached motor may be swung upwardly about the pivot 17 whereupon the transom can be rotated about the cross bar to permit the motor to be swung into the most convenient position in the boat.

In the modification shown in Fig. 5 the cross bar is extensible and formed of two parts 13 and 36 which permits the part 36 to be slid inwardly with the transom. The cap 37 is detachably secured to the outer end of the tubular member 36. A pin or lug 38 prevents the transom from being rotated when in an outboard position. In this type of structure there is little or no projection at the side of the boat when the motor and transom are in the boat.

In the form shown in Figs. 6, 7 and 8 the plate 40 is of a somewhat different shape. The cross bar 41 carries the transom 42 which is held from rotating on the cross bar by the stud 43 which projects into an arm 44. The transom has a lug 45 which is held in the outboard position by a spring latch 46. By retracting the latch 46 the transom may be slid outwardly sufficient to permit the arm 44 to be disengaged from the stud 43. The transom may then be rotated and slid inwardly on the cross bar.

In the form shown in Fig. 9 the plate 50 supports the cross bar 51 and the transom 52 is prevented from sliding outwardly by the forked arm 53 which is engaged behind the head of the stud 54 and prevented from rotation by the stud 54 and the latch 56 which engages the projection 55.

The transom 60 of Fig. 10 is somewhat different in that it is secured to the end of the cross bar 61 by a nut 63 housed in a recess 62.

As the side rails of a canoe usually incline upwardly toward the stern, a considerable range of vertical adjustment of the transom may be secured and thus the depth of submergence of the propeller (not shown) by sliding the bracket backward and forward on the rack.

The construction has been developed after many experiments with various forms of brackets in order to obtain the greatest convenience and adaptability consistent with simplicity and low cost. By means of this invention one can readily mount a conventional type of outboard motor so that it can be used on a canoe or other boat and quickly swung into the canoe when desired without detaching it. Vice versa the motor can be readily attached to the bracket while in the canoe and then quickly swung overboard for use. The motor may also be attached to the transom and handled with it as a unit to be applied to or detached from the cross bar when the cap 31 is removed.

Furthermore the cross bar with the attached transom and motor may be readily detached from the boat by simply retracting the latch pin 19 and pulling out the hinge pin 17 and without detaching the rail plates.

I claim:

1. A canoe motor bracket comprising, supports independently secured to the opposite side rails, a cross bar hinged to one support, the other support having a cradle for the bar, a motor transom mounted to slide on the cross bar to a position outside the canoe or a position inside the canoe and means for interlocking the transom with the support having the cradle.

2. A canoe motor bracket comprising a cross bar hinged to one side of the canoe, a plate secured to the opposite side of the canoe and having means for detachably supporting said bar, a motor supporting transom slidable on said bar, and means for interlocking said transom with said plate in an outboard position to prevent rotation or sliding, said transom being rotatable on said bar when in an inboard position.

3. A motor bracket comprising a cross bar, a horizontal pivot and a vertical pivot for one end of the cross bar at one side of a boat, means for detachably supporting the cross bar at the opposite side of a boat, and a motor supporting transom detachably secured on the cross bar and slidable from an outboard to an inboard position on said cross bar.

4. A motor bracket comprising a cross bar having at least two sections telescopically connected together, a plate for securing one end of one section of said bar to one side rail of a boat, a plate secured to the opposite side rail of the boat and having means for detachably securing another section of the bar to said latter plate, a motor transom on the latter section of of the cross bar, means for limiting the outboard movement of the transom, said transom being movable transversely of the boat from an outboard to an inboard position and rotatable when in an inboard position.

5. A motor bracket including a rail plate having a horizontal cradle and a vertical groove, a cross bar supported in said cradle, means for detachably securing the bar in the cradle, a transom slidable on said cross bar and rotatable on said bar when in an inboard position, said transom having a portion engaged in said vertical groove to prevent rotation of said transom when in an outboard position and means for limiting the outboard sliding movement of said transom on said cross bar.

6. A motor bracket comprising two rail plates, means for independently securing said plates to the opposite side rails of a boat, a cross bar movably supported by said rail plates, a transom mounted on said cross bar to slide from an outboard position to an inboard position, said transom being rotatable on said cross bar when in an inboard position, means for limiting rotation of the transom on the cross bar when said transom is in an outboard position, means for limiting the outboard sliding movement of the transom and means for detachably holding said cross bar on at least one rail plate.

7. As an article of manufacture, a bracket plate adapted for attachment to the side rail of a canoe and having a forked seat to receive and detachably hold a cross bar and having a vertical groove for receiving one edge of a transom slidably mounted on the cross bar and a latch pin movably carried by said plate and extending in a position to detachably hold the cross bar in said forked seat.

8. A bracket for supporting an outboard motor over the side of a canoe comprising a plate having two points of support on a side rail of the canoe and having an open vertical groove in its outer edge with a return lug, a cross bar supported by said plate, means for movably sup-

porting one end of said bar on the opposite side rail of the canoe, a transom mounted for slidable and rotary movement on the opposite end of said cross bar and having a shoulder positioned in said groove and prevented from rotation by the walls thereof.

9. A motor supporting bracket for a canoe having a transom consisting of a single metallic casting having top, bottom and side flanges, a transverse partition connecting the side flanges, a supporting wall connecting the front edge of the partition with the front edge of the top flange and another supporting wall connecting the rear edge of the partition with the rear edge of the bottom flange and a supporting rod extending through an opening in at least one of said side flanges beneath the top flange.

10. A bracket member for supporting an outboard motor at the side of a canoe comprising a plate having means for connecting it to a side rail of the canoe and having a transverse socket in its upper face for supporting and holding a cross bar extending transversely of said plate, a latch pin rotatable and slidable at the front and back of said socket to extend over and hold down the cross bar when in said socket and having a resilient arm, and a lug projecting from said plate and engaged by said arm to hold the latch in position.

11. A motor supporting bracket for a canoe having a transom consisting of a single metallic casting having top and side flanges, a transverse partition connecting the side flanges, a supporting wall connecting the front edge of the partition with the front edge of the top flange and another supporting wall extending from the rear edge of the partition to the lower edge of the casting and means for securing a supporting rod to said casting.

12. As an article of manufacture, a cast metal transom for supporting an outboard motor over the side of a canoe, comprising side flanges having means for receiving a cross bar support, a transverse partition connecting the central parts of the two flanges, a rear motor-clamp supporting wall connecting said side flanges and extending from the rear edge of said partition to the lower edge of said transom and a front motor-clamp supporting wall connecting said side flanges and extending from the front edge of said partition to the upper part of said transom and a stop bead projecting forwardly from the plane of the upper edge of said front clamp supporting wall.

13. As an article of manufacture, a cast metal transom for supporting an outboard motor comprising side flanges having passages for receiving a cross bar, a centrally located partition connecting the side flanges, a clamp supporting wall for a motor clamp connecting the rear edges of the partition and lower parts of the side flanges, and a clamp-supporting wall connecting the front edge of the partition and upper parts of the front edges of the side flanges.

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