

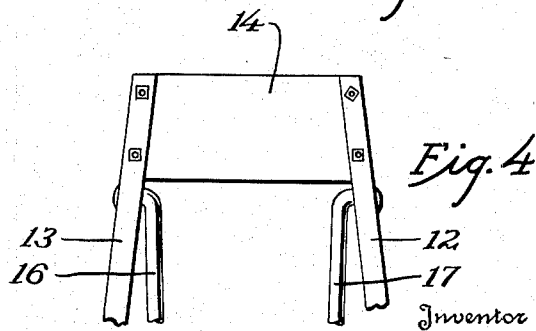
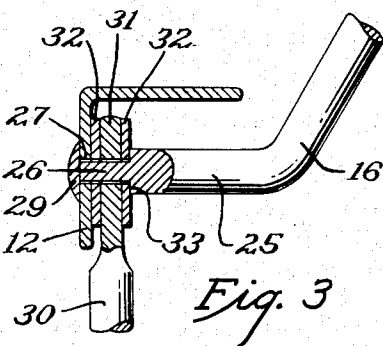
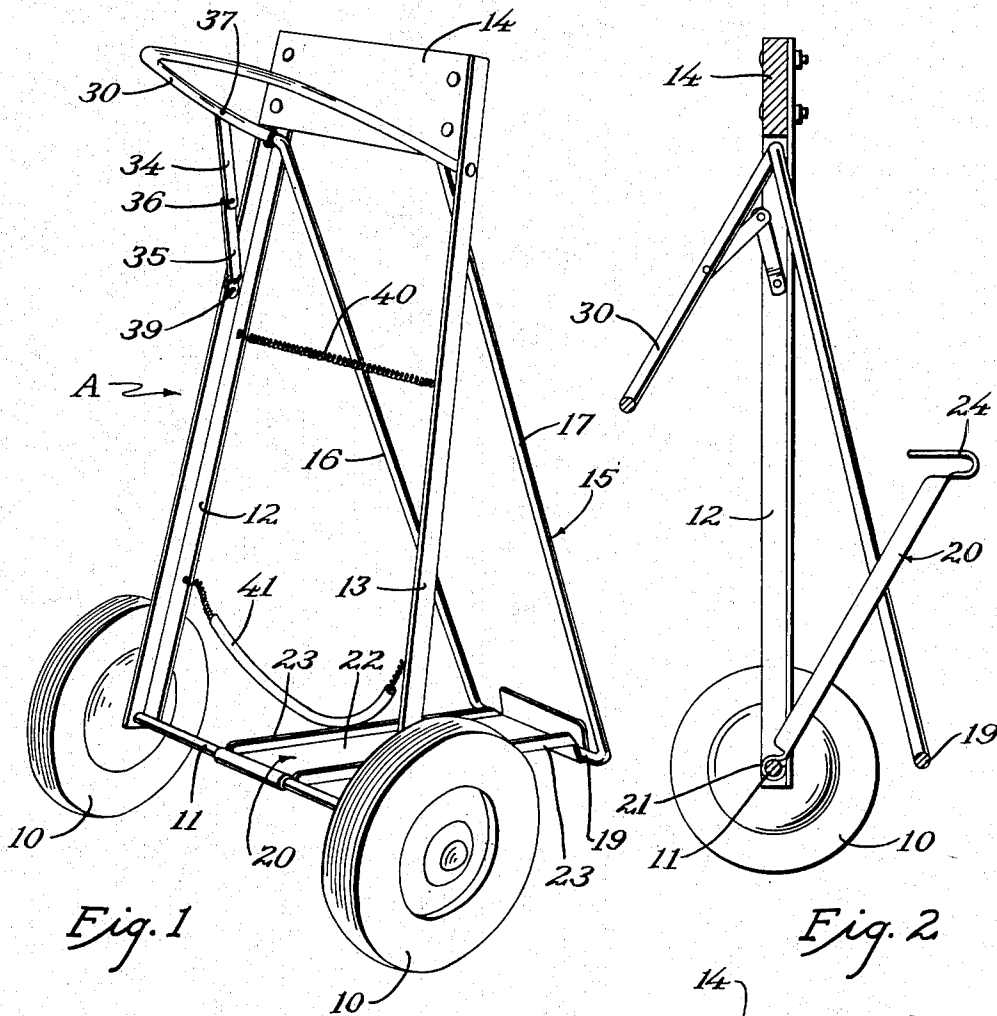
Nov. 10, 1953

R. J. BRINK ET AL
OUTBOARD MOTOR STAND

2,658,703

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3 Sheets-Sheet 1



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3 Sheets-Sheet 2

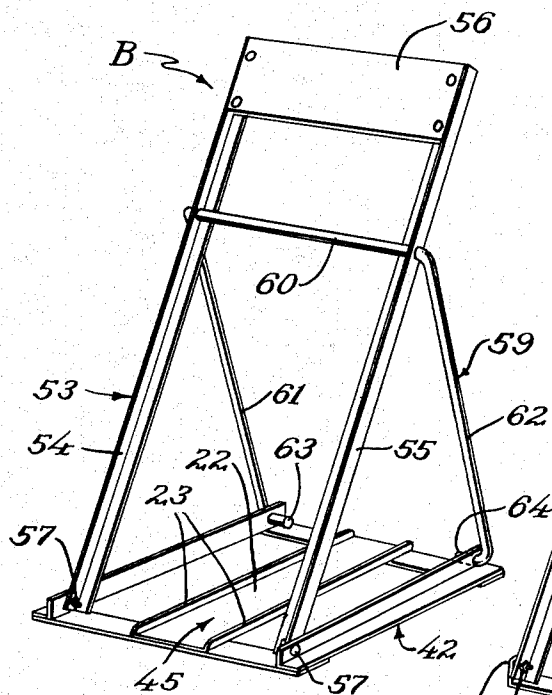


Fig. 5

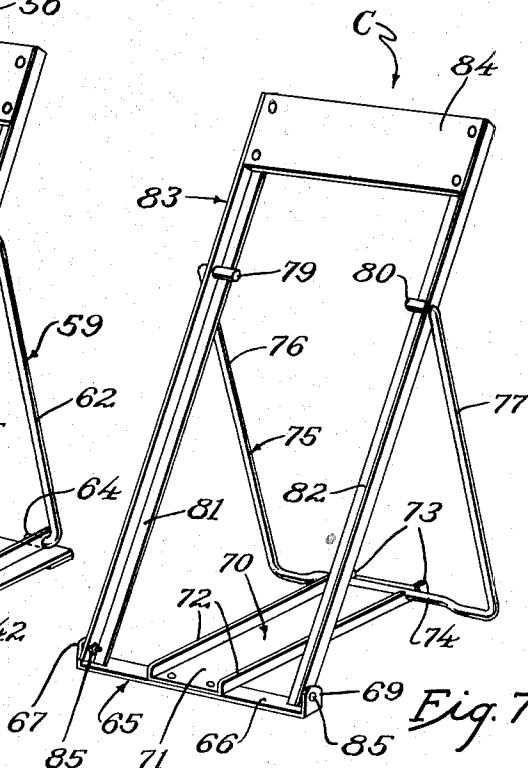


Fig. 7

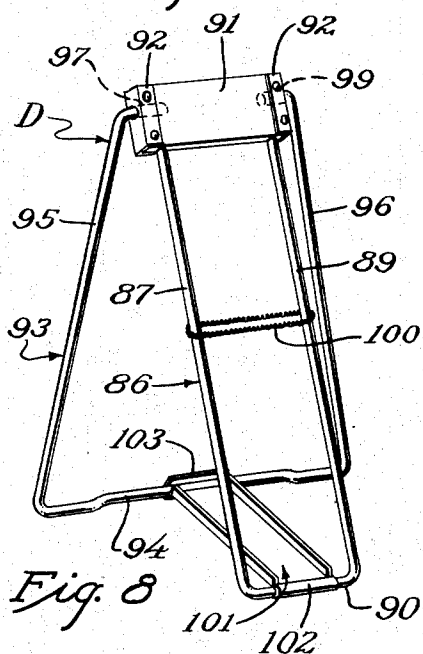


Fig. 8

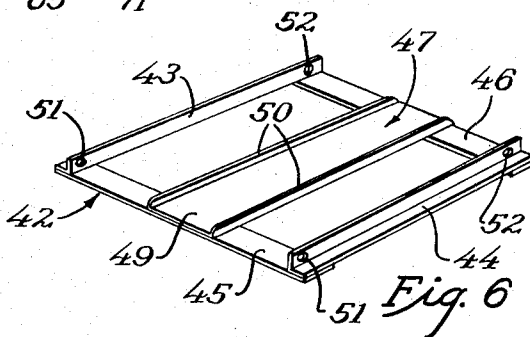


Fig. 6

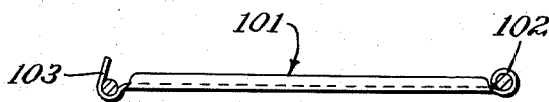


Fig. 9

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3 Sheets-Sheet 3

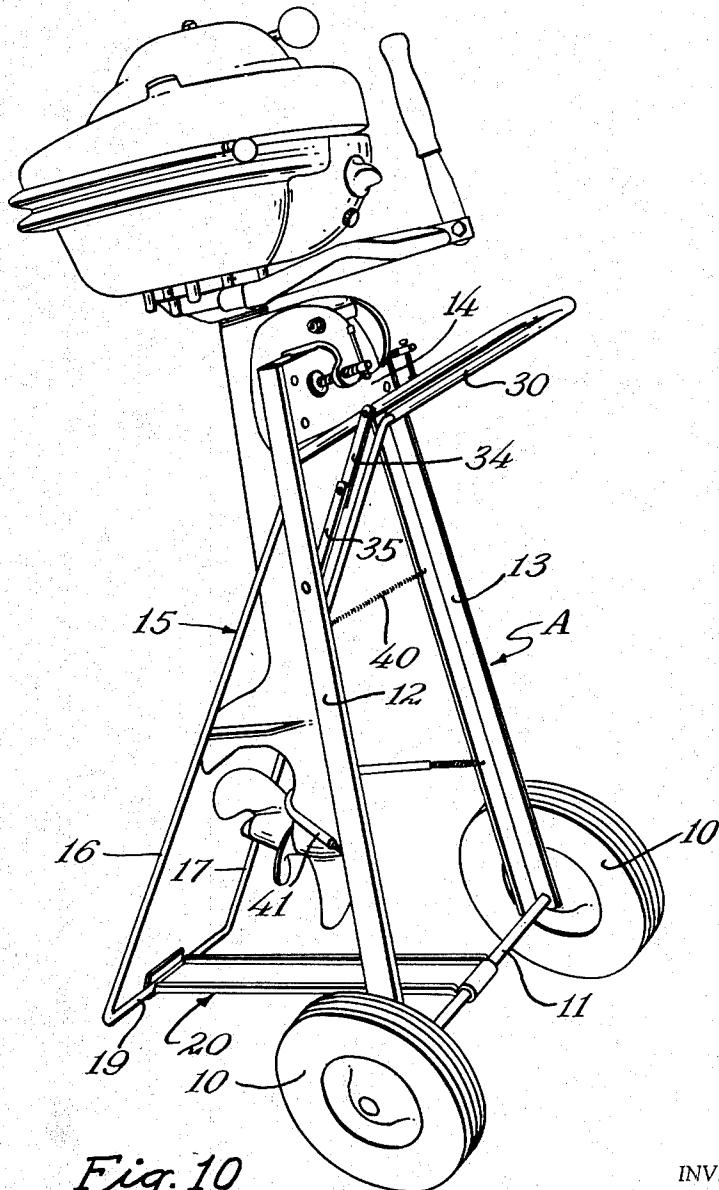


Fig. 10

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OUTBOARD MOTOR STAND

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3 Claims. (Cl. 248-13)

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The present invention relates to an improvement in outboard motor stands and deals particularly with a type of stand which may be folded up when not in use and which provides a convenient support for an outboard motor.

Outboard motors are often somewhat awkward to handle when they are not in use. Such motors often are provided with projecting portions of a relatively fragile or breakable type which may be injured if sufficient pressure is exerted thereagainst. Furthermore, the fuel tanks of such motors are usually provided with vent openings which are sometimes not closed and when a motor having such a vent is resting upon its side the fuel is apt to leak from this vent opening to drain over the surface of the motor and the floor beneath the motor. For these and other reasons it is desirable to support the outboard motor in a generally upright position when not in use.

The object of the present invention lies in the provision of a simple stand capable of supporting an outboard motor. Motors of this type are usually provided with clamps by means of which they may be secured suspended over the rear end of a row boat or the like. The present supporting stand is provided with a transverse ledge over which the motor clamps may be engaged so as to hold the motor suspended in much the same way as it would be suspended from the rear of a boat.

A feature of the present invention lies in the fact that the stands are collapsible in form and may be folded into a substantially flat package. Outboard motors are often transported from place to place and a stand is convenient to use in any location. By providing a structure which will fold flat, a stand is provided which may be easily transported in a minimum of space.

An added feature of the present invention lies in the provision of a drip trough supported beneath the lower end of the motor. Most outboard motors include a propeller shaft which extends downwardly into the water, the shaft usually being provided with a propeller on an axis at right angles to the supporting shaft. Water and oil sometimes drain from the motor particularly after the operation thereof and this water and oil usually drains down the casing toward the propeller and drops from the lower end of the propeller casing. A drain trough is provided immediately below the center of the stand so as to catch any water, oil, or fuel which drains from the motor. This trough also acts to catch any fuel draining down the exterior of the motor casing.

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These and other objects and novel features of the present invention will be more clearly and fully set forth in the following specification and claims.

5 In the drawings forming a part of the specification:

Figure 1 is a perspective view of an outboard motor stand showing the construction thereof.

10 Figure 2 is a vertical sectional view through the stand of Figure 1 showing the stand in partially collapsed condition.

Figure 3 is a sectional view through a detail portion of the stand.

15 Figure 4 is a view showing the upper extremity of the stand the view being taken from the rear side of the stand.

Figure 5 is a perspective view of a modified form of stand showing the construction thereof.

20 Figure 6 is a perspective view of the lower end of the stand shown in Figure 5.

Figure 7 is a perspective view of a stand very similar to the stand shown in Figure 5.

Figure 8 is a perspective view of another modified form of stand.

25 Figure 9 is a side elevational view of the drip pan shown in the stand of Figure 8.

Figure 10 is a view similar to Figure 1 showing an outboard motor in position upon the stand.

30 The outboard motor stand A illustrated in Figures 1 through 4 of the drawings is supported for movement over the surface of the ground. This stand includes a pair of spaced wheels 10 mounted upon a common axle 11. A pair of upwardly and inwardly converging angle members 12 and 13 are apertured near their lower ends to accommodate the axle 11. The angle members 12 and 13 are connected at their upper extremity by a generally rectangular block of wood 14 which is preferably of substantial thickness so that the clamps of the motor may engage over the same in the same way as if the member 12 comprised the back end of a boat. A generally U-shaped supporting member indicated in general by the numeral 15 is pivotally connected at its upper end to the angle members 12 and 13. The U-shaped supporting member 15 includes a pair of generally parallel spaced arms 16 and 17 connected by a base portion 18. The base portion 19 is preferably substantially parallel to the wheel axle 11 in assembled position of the apparatus.

45 A drip trough 20 is pivotally supported upon the axle 11 between the wheels 10. The drip trough 20 includes a generally cylindrical hollow barrel 21 which is at one end thereof to pivotally connect the trough with the axle 11. The trough

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20 includes a generally flat body 22 having a pair of spaced upwardly extending flanges 23 along opposite sides thereof. A hook shaped portion 24 is provided at the other end of the drip trough, the hook end 24 being of proper dimensions to support the drip trough in a rearwardly and downwardly inclined position and to accommodate the cross member 19 of the bracket 15.

The manner in which the upper ends of the arms 16 and 17 are connected to the angle members 12 and 13 is best illustrated in Figure 3 of the drawings. The ends of the arms 16 and 17 extend outwardly in aligned relation, the ends 25 of the two arms being axially aligned. A reduced diameter end portion 26 is provided on each portion 25, this end portion being designed to extend through a suitable aperture 27 in an angle member 12 or 13. The end of the reduced diameter portion 26 is riveted over as indicated at 29 so as to hold the bracket pivotally supported with respect to the angle members 12 and 13.

As also indicated in the drawings a rounded generally semi-circular guard member 30 is pivotally connected to the angle members 12 and 13. The guard member 30 is designed to encircle the body of an outboard motor and to prevent injury to parts thereof. The ends of the loop 30 are flattened at 31 as best indicated in Figure 3 of the drawings and the flattened ends are perforated to encircle the reduced diameter end portion 26 of the arms 16 and 17. Friction washers 32 may be interposed between the flattened arm end 31 and the angle members 12 and 13 and between the flattened arm ends and the shoulder 33 at the juncture between the arm portions 25 and the reduced diameter ends 26. Thus the guard loop 30 tends to remain in adjusted position.

As shown in Figures 1 and 2 of the drawings a pair of toggle links may connect the loop 30 to one of the angle members such as 12 so as to definitely hold the guard loop 30 in fixed relation to the remainder of the stand. Links 34 and 35 are pivotally connected at 36 and are so arranged as to pivot slightly beyond aligned position and to be limited at this point. The arm 34 is pivotally connected at 37 to the loop 30 and the arm 35 is pivotally connected at 39 to the angle member 12. When the links 34 and 35 are aligned as illustrated in Figure 1, the guard loop 30 is held in fixed relation to the standard. By pivoting the links 34 and 35 relative to each other as shown in Figure 2, the guard loop 30 may be swung substantially into the plane of the angle members 12 and 13.

A spring 40 may connect the angle members 12 and 13 and a chain or spring 41 may also connect these members near the lower end thereof. These elements 40 and 41 merely act as an additional support for a motor mounting upon the block 14. The manner in which the stand A may fold is believed obvious from an examination of Figure 2 of the drawings. The drip trough 20 may fold upwardly into the plane of the angle members 12 and 13 and the supporting stand 15 may also fold against the frame. The guard loop 30 may also fold into the plane of the angles 12 and 13 as previously described, and thus the entire device may fold into a very compact form for storage or transportation.

In Figures 5 and 6 of the drawings an outboard motor stand B is disclosed which is quite similar to the stand A, but is somewhat simpler in form. The stand B includes a base which is best illustrated in Figure 6 of the drawings. This phase is

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indicated in general by the numeral 42 and includes a pair of spaced angle members 43 and 44 which are connected at opposite ends by cross members 45 and 46. A drip trough 47 is secured to the cross members 45 and 46, mid-way between the angles 43 and 44. The drip trough 47 includes a flat bottom portion 49 and spaced parallel side flanges 50 along opposite longitudinal edges thereof. The trough 47 is normally positioned beneath the lowermost portion of the motor and therefore acts to catch water, oil and fuel which might drain from the motor.

A pair of aligned apertures 51 extend through the angles 43 and 44 near the forward end thereof and a similar pair of aligned apertures 52 extend through these angles near the rear end thereof. The apertures 51 provide a means of connecting the base to a motor supporting frame indicated in general by the numeral 53.

The frame 53 includes a pair of oppositely disposed angle members 54 and 55 which are connected at their upper extremity by a connecting block 56. The block 56 is preferably of substantial thickness to provide a support onto which the motor may be clamped. The lower ends of the angle members 54 and 55 are bolted to the frame 42 by means of bolts 57 or other suitable pivots. The bolts 57 extend through the apertures 51 to pivotally connect the base 42 and frame 53.

An inverted U-shaped supporting frame 59 forms a brace connecting the motor supporting frame 53 with the base 42. The member 59 includes a cross arm 60 which extends pivotally through the angles 54 and 55 and is bent to provide generally parallel arms 61 and 62 which are provided with intumed opposite ends 63 and 64 respectively. The ends 63 and 64 engage through apertures 52 of the base to hold the frame 53 in upwardly inclined position relative to the base. The arms 61 and 62 may be sprung apart sufficiently to disengage the ends 63 and 64 from the apertures 52 and to permit the folding of the stand B.

The stand C illustrated in Figure 7 is a simplified version of the stand B. The base 65 of this construction comprises a cross bar 66 having upturned end flaps 67 and 69. A drip trough 70 is secured to the cross member 66 to extend rearwardly therefrom. The drip trough 70 is provided with a substantially flat bottom 71 and spaced parallel side flanges 72. These flanges 72 are provided with notches 73 near their rear end to accommodate the cross bar 74 of a supporting bracket 75. The bracket 75 includes the cross bar 74 and a pair of substantially parallel arms 76 and 77 provided with opposed intumed ends 79 and 80. The ends 79 and 80 extend through aligned apertures in parallel angle members 81 and 82 forming a part of the motor supporting frame 83. A connecting block 84 is connected to the angles 81 and 82, the upper extremity thereof to provide a means of attachment for the motor clamps.

The base 65 is connected to the frame 83 by aligned pivot bolts 85 which extend through the flanges 67 and 69 and the angle members 81 and 82. Thus the base is foldably connected to the angle members forming a part of the frame 83 and the supporting brace 75 may be folded into substantially the plane of the remainder of the frame.

In Figs. 8 and 9 of the drawings still another motor stand D is disclosed. The stand D is extremely simple in form and may be made at low

cost of production. The frame D includes a motor supporting frame 86 which includes a pair of spaced substantially parallel arms 87 and 89 connected by a cross connecting member 90. These arms 87 and 89 extend into holes or sockets formed in the undersurface of a motor block 91. The block 91 may if desired be reinforced by light reinforcing channels 92, at opposite ends thereof.

The stand D also includes a generally U-shaped brace portion 93 which includes a transversely extending cross member 94 connected at opposite ends to a pair of converging arms 95 and 96. The ends 97 and 99 of these arms 95 and 96 are turned inwardly into alignment and pivotally engage into the block 91. A spring or chain 100 may be provided between the arms 87 and 99 to assist in supporting the motor.

A drip trough 101 forms the connection between the U-shaped frame 86 and the auxiliary frame 93. The drip trough 101 is provided with a substantially cylindrical hollow bearing 102 at one end thereof to encircle the cross member 90 and pivotally connect these two elements. A hook shaped end 103 is designed to accommodate the cross member 94 and to hold the cross members 90 and 94 in properly spaced relation. The drip trough 101 is formed with a flat base and parallel side flanges as in the previously described construction.

It will be noted that all of the forms of construction of our stand are similar in the drip trough extending beneath the center of the stand and also in the fact that the bases and supporting brace portions fold flat relative to the motor supporting frame. Thus while four different forms of invention have been shown, all of these forms include similar features which give them considerably similarity.

In accordance with the patent statutes, the principles of construction and operation of the outboard motor stand have been described, and while it has been endeavored to set forth the best embodiments thereof, it is desired to have it understood that obvious changes may be made within the scope of the following claims without departing from the spirit of the invention.

We claim:

1. An outboard motor stand including a motor supporting frame having a pair of substantially spaced side members and a transversely

extending connecting member connected between the said side members near the upper ends thereof, this connecting member comprising a block of substantially rectangular section to which the motor may be clamped, a second transverse connecting member connected between said side members near the lower ends thereof, an easel frame including substantially parallel side members pivotally connected near their upper ends to said side members of said motor supporting frame along aligned transverse pivots, a cross member connected between the lower ends of said easel frame side members, and a drip trough between the sides of said frames and extending from the second transverse connecting member of said motor supporting frame to the cross member connecting the lower ends of said easel frame, said drip trough including a plate member having opposed side flanges thereon and being narrow relative to the distance between the sides of said motor frame, one end of said drip trough being pivotally connected to one frame and the other end thereof being detachably connected to the other frame.

2. The structure described in claim 1 and including a motor guard loop connected to opposite side members of one of the frames and projecting outwardly from the motor supporting frame on a plane substantially normal thereto on the side of the motor supporting frame opposite that from which the easel frame extends.

3. The structure of claim 1 and including an extensible connector connected between the opposite side members of the motor supporting frame.

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