Dec. 24, 1957 W. B. SIMPSON 2,817,436

OUTBOARD MOTOR STORAGE AND TRANSPORTATION RACKS

Filed July 19, 1955 2 Sheets-Sheet 1

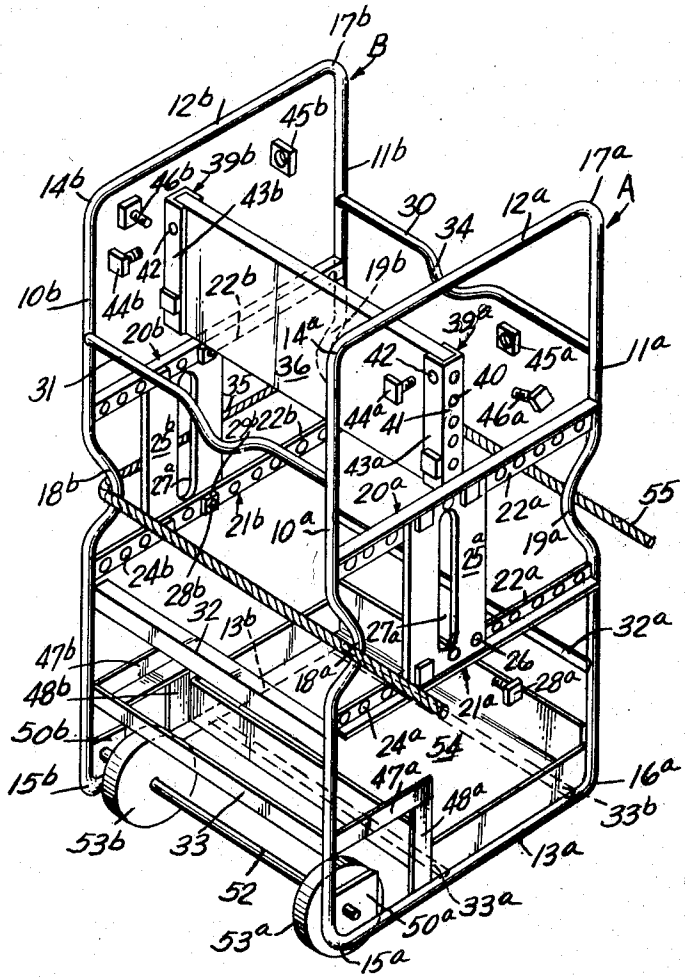


Fig. 1

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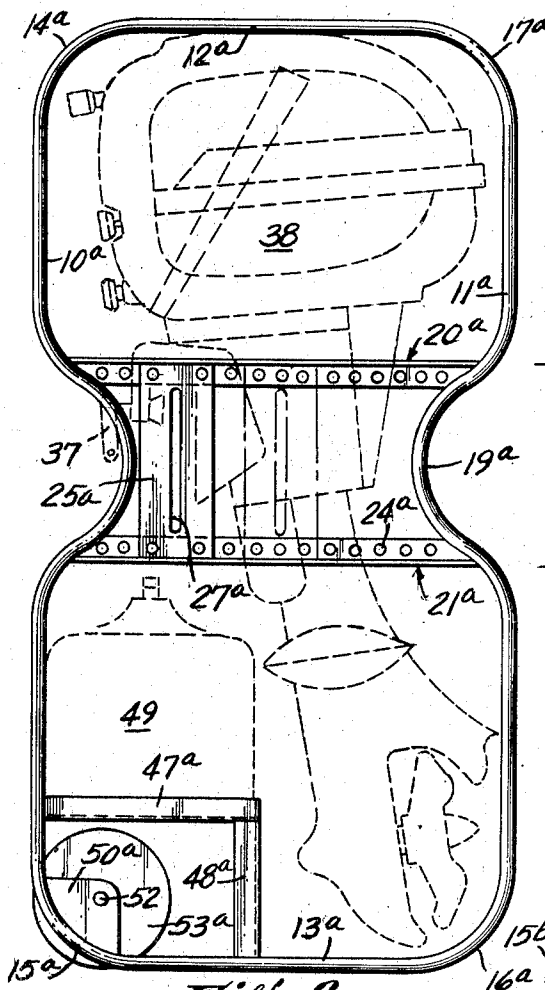


Fig. 2

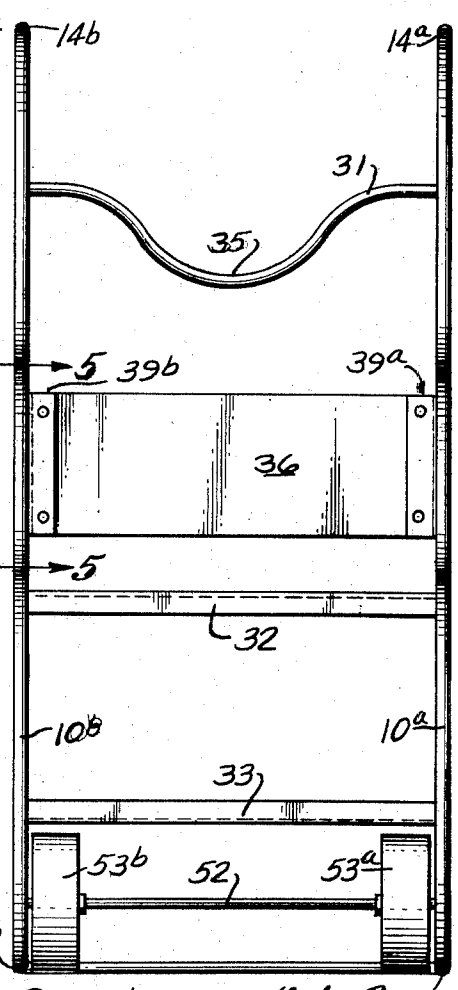


Fig. 3

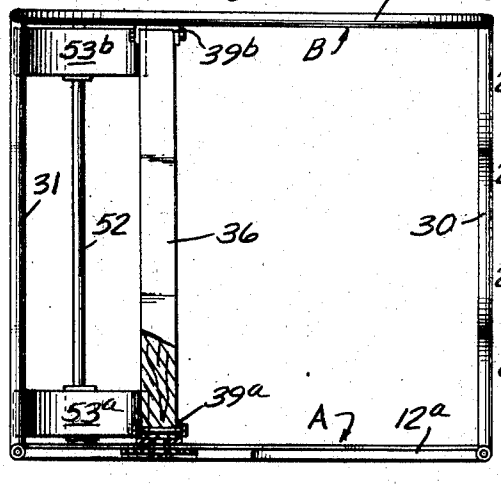


Fig. 4

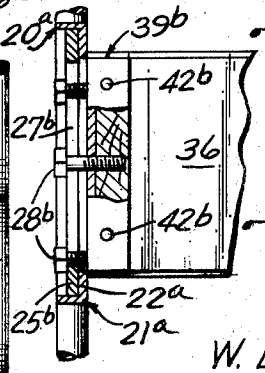


Fig. 5

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United States Patent Office 2,817,436 Patented Dec. 24, 1957

2,817,436

OUTBOARD MOTOR STORAGE AND TRANSPORTATION RACKS

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Application July 19, 1955, Serial No. 522,998

2 Claims. (Cl. 206—46)

The present invention relates to outboard motor storage and transportation racks and has for an object to provide a rack for outboard motors which protects the motor from damage due to falls during either storage or transportation.

Another object of the present invention is to provide a rack of the character described which may be adjusted to accommodate outboard motors of varying sizes.

A further object of the present invention is to provide a rack simple in construction, light in weight and durable in use.

A still further object of the present invention is to provide a rack of the character described which may be rolled on wheels from the place of storage to the place of use and which is also provided with means for storing the gasoline tank for the motor within the confines of the rack.

With the foregoing and other objects in view, the invention will be more fully described hereinafter, and will be more particularly pointed out in the claims appended hereto.

In the drawings, wherein like symbols refer to like or corresponding parts throughout the several views:

Figure 1 is an exploded perspective view of an outboard motor storage and transportation rack constructed in accordance with the present invention.

Figure 2 is a side elevational view of an outboard motor storage and transportation rack constructed in accordance with the present invention having the outboard motor and gasoline tank shown in phantom lines thereon.

Figure 3 is an end elevational view taken from the left hand end of Figure 2.

Figure 4 is a top plan view of the rack of Figures 2 and 3 having parts broken away and parts shown in section.

Figure 5 is a fragmentary sectional view taken at an enlarged scale along the line 5—5 in Figure 3 having parts broken away and parts shown in section.

Referring more particularly to the drawings, one form of rack constructed in accordance with the present invention is illustrated, wherein A and B designate two identically constructed frames which are shown in spaced apart relation. Each frame has two longitudinal rods 10^a, 11^a and 10^b, 11^b joined at their upper and lower portions by transverse rods 12^a, 13^a and 12^b, 13^b. The joints between the longitudinal and transverse rods are rounded as at 14^a, 15^a, 16^a, 17^a and 14^b, 15^b, 16^b, 17^b. Lying proximate the middle of the run of the longitudinal rods 10^a, 11^a and 10^b, 11^b are inwardly bowed portions 18^a, 19^a and 18^b, 19^b which have ogee type curves to define handles and for purposes set forth more fully hereinafter under the operation of the rack.

Above and below each of the inwardly bowed portions 18^a, 19^a and 18^b, 19^b are guide rails 20^a, 21^a and 20^b, 21^b each having a web 22^a, 22^b and a flange 23^a, 23^b substantially normal thereto.

Each of the webs 22^a, 22^b is provided with openings 24^a and 24^b. Riding between the flanges 23^a, 23^b and abutting the webs 22^a, 22^b are two positioning plates 25^a, 25^b

each having openings 26^a, 26^b and an elongated slot 27^a, 27^b therethrough. The plates 25^a, 25^b are retained in place against the webs 22^a, 22^b by bolts 28^a, 28^b and nuts 29^a, 29^b.

The two frames A and B are maintained in spaced relationship to define a receiving area for an outboard motor by spacer rods 30, 31, angle iron 32, rod 32^a, and rods 33^a and 33^b at the base of the two frames. The rods 30, 31 have bowed portions 34, 35 defining handles by which the rack may be held.

Lying between the spacers 30, 31 and positioning plates 25^a, 25^b, is the motor mount board 36 adapted to receive thereover the transom clamp 37 of an outboard motor 38. Each end of the board 36 is provided with a channel wear plate 39^a, 39^b having openings 40 through the bottom web 41 and openings 42 through the side flanges 43^a, 43^b. The openings 42 accommodate bolts 44^a, 44^b which pass through the flanges 43^a, 43^b and board 36 and which are locked in place by nuts 45^a, 45^b. The openings 40 receive positioning bolts 46^a, 46^b which pass through the elongated slots 27^a, 27^b in the positioning plates 25^a, 25^b and which are threadedly received into the ends of the motor mount board 36. The width of the slots 27^a, 27^b is smaller than the heads of the positioning bolts 46^a, 46^b.

The spacer 33 has two adjoining side members 47^a, 47^b supported from the transverse beams 13^a, 13^b by struts 48^a, 48^b which are secured to rods 13^a, 13^b, the assemblage of which defines a rack for supporting a gasoline tank 49 for the motor.

Beneath the gasoline tank rack at the rounded corners 15^a, 15^b are two plates 50^a, 50^b having openings therethrough to receive an axle 52 upon which is carried a pair of transportation wheels 53^a, 53^b. These wheels are of a radius greater than the radius of the rounded corners 15^a, 15^b whereby when the rack is tilted to the left, Figure 1, it may be rolled from place to place.

Located between the struts 48^a, 48^b and the longitudinal bars 11^a, 11^b is a drip pan 54 positioned to lie beneath the propeller of the motor to catch drippings of gasoline and oil to prevent soiling the floor of the area in which the rack and motor are stored. This is of particular importance when the motor is stored in the closet of a dwelling where shoes may be lying about.

In operation

When it is desired to store or transport an outboard motor 38, without fear of damaging same due to dropping or falls, a rack constructed as described is obtained and the mount board 36 is first positioned with respect to the size of the motor 38. This entails a determination of the height of the motor as well as its depth. The vertical adjustment is obtained by backing off the positioning bolts 46^a, 46^b and sliding the mount board up and down to obtain the proper vertical height, the positioning bolts 46^a, 46^b riding up and down in the elongated slots 27^a, 27^b of the positioning plates 25^a, 25^b. When the desired height is obtained the bolts are drawn tight so that their heads bind against plates 25^a, 25^b and draw the plates into frictional binding contact with the bottom webs 41 of the wear plates 39^a, 39^b.

As shown in Figure 1, there are five openings 40 in the bottom web 41 of the channel plates 39^a, 39^b, all of which are employed for positioning a particular size motor. However vertical adjustment up or down from the central position employing all five openings may be effected by removing the top or bottom one or two bolts and sliding the mount board 36 up or down until the shank of the next bolt strikes the end wall of the slots 27^a, 27^b. The inside or bottom surface of the bolt heads 46^a, 46^b bind upon the area of the positioning plates 25^a,

25[b] surrounding the slots 27[a], 27[b] and lock the mount board in place.

The horizontal adjustment is then accomplished by sliding the positioning plates 25[a], 25[b] along the guide rails 21[a], 21[b] until the openings 26 of the plates come into registry with the desired openings 24 in the webs 22 of the guide rails 20[a], 20[b] and 21[a], 21[b] at which time the bolts 28[a], 28[b] are inserted through the openings and secured in place by the nuts 29[a], 29[b].

When these two adjustments have been effected the outboard motor is then set in place by introducing same through the top of the rack between spacers 30, and 31 so as to present the motor mount board 36 to the transom clamp 37 of the motor 38 at which time the clamp is tightened against the board and the motor is locked in place. The physical confines of the rack are so designed that the motor 38, when set in place in the rack, lies wholly within the rack having no portions thereof extending beyond the physical boundaries of the rack whereby if the motor and rack are dropped the rack will take the blow and not the motor.

When the motor is secured in the rack it may be easily moved about by tilting the rack so that it will roll on the wheels 53[a] and 53[b]. This rack permits the motor to be rolled into the water for a warm up period prior to its application to the motor boat or for a check up after repairs have been made to the motor.

During transportation of the rack and its motor the inwardly bowed portions 18[a], 18[b] and 19[a], 19[b], serve as a restricted waist about which a lashing line 55 may be passed without fear of the line sliding down the sides of the longitudinal bars 10[a], 10[b] and 11[a], 11[b] and releasing the rack and motor to slide about in the transportation vehicle.

All of the inwardly bowed portions 18[a], 18[b], 19[a], 19[b], 34 and 35 also serve as handles by which the rack may be grasped and lifted or pulled.

The rack may be constructed for example of tubular steel or lightweight aluminum and may be constructed of members of different cross section such as square or triangular, although tubular is shown, and they may be either hollow or solid members. The positioning plates should be of a material having at least some degree of resiliency such as thin sheet steel which will permit the plates 25[a], 25[b] to be bowed slightly under the influence of the positioning bolts 46[a], 46[b].

While I have shown and described but one form of the invention I reserve unto myself all modifications and variations in construction falling within the scope of the following claims.

What I claim is:

1. For use with an outboard motor having a transom clamp, a motor storage and transportation rack comprising a pair of spaced frames each comprising a pair of upright rods and a pair of horizontal rods connected between the end portions of the upright rods, a pair of spaced horizontal rails secured at their ends to the upright rods, a motor mount board between said spaced frames, means for selectively adjusting said board in two separate planes at substantially right angles to one another comprising a pair of positioning plates each having a vertically elongated slot therethrough, means for selectively positioning said plates along said rails, and means cooperating with said elongated slots and said mount board for vertically adjusting the position of said board with respect to the spaced frames whereby the motor when the transom clamp is positioned over said mount board will be held wholly within the confines of the rack.

2. For use with an outboard motor having a transom clamp, a motor storage and transportation rack comprising a pair of spaced frames each comprising a pair of upright rods and a pair of horizontal rods connected between the end portions of the upright rods, a pair of spaced horizontal rails secured at their ends to the upright rods, a motor mount board between said spaced frames, means for selectively adjusting said board in two separate planes at substantially right angles to one another comprising a pair of positioning plates each having a vertically elongated slot therethrough, means for selectively positioning said plates along said rails, means cooperating with said elongated slots and said mount board for vertically adjusting the position of said board with respect to the spaced frames whereby the motor when the transom clamp is positioned over said mount board will be held wholly within the confines of the rack, a rack adapted to support the motor gasoline tank connected to one of the upright rods of each pair of upright rods and to the lower horizontal rods, and a drip pan connected to said gasoline tank supporting rack and to the other upright rods and adapted to be positioned beneath the motor when the motor is supported within said motor storage and transportation rack.

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