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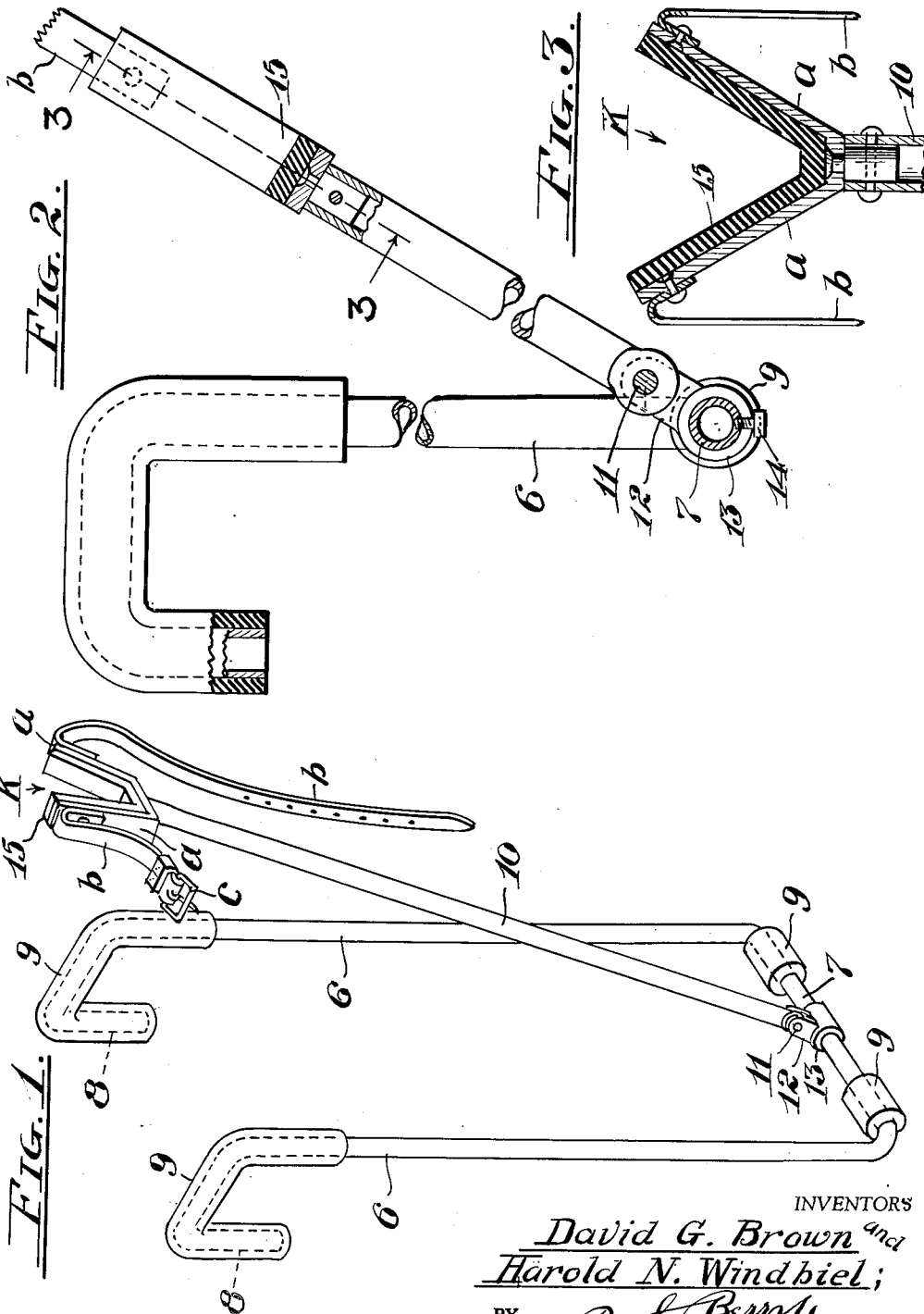
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2,977,084

OUTBOARD MOTOR TILT-UP RACK

Filed May 11, 1959

2 Sheets-Sheet 1



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FIG. 4.

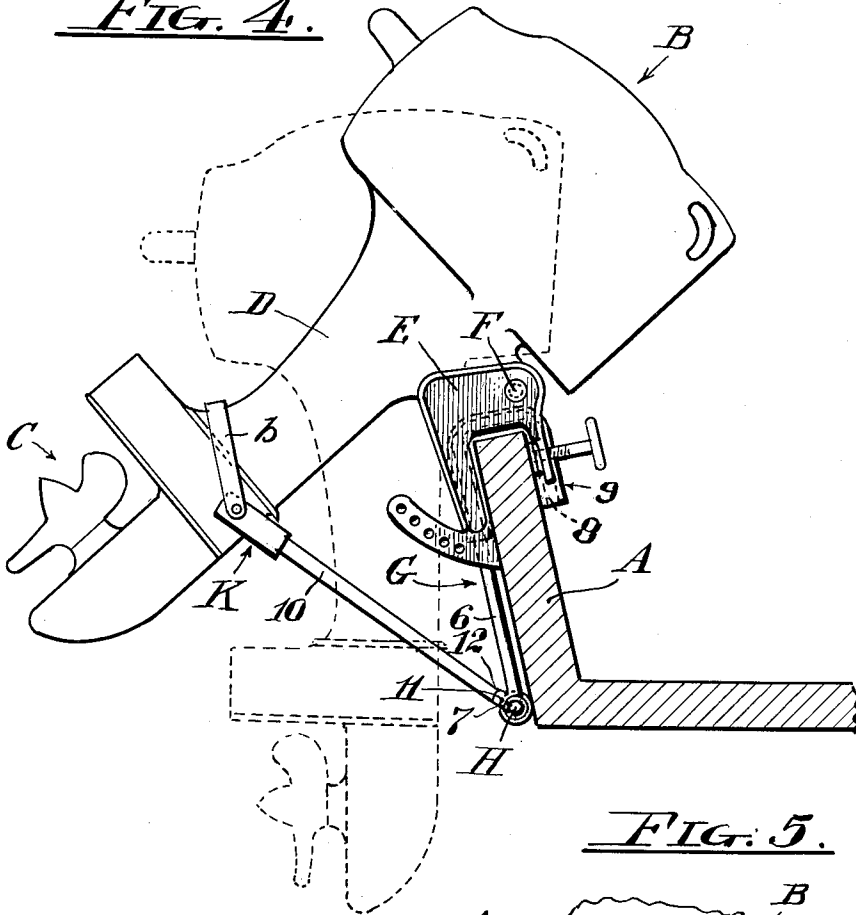
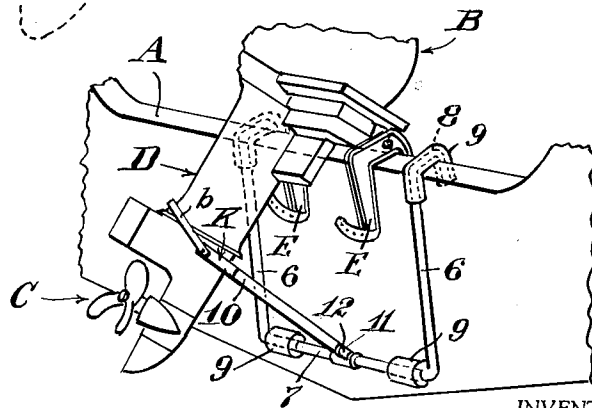


FIG. 5.



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OUTBOARD MOTOR TILT-UP RACK

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2 Claims. (Cl. 248—351)

This invention relates to a rack and has as its primary object the provision of a portable rack which is adapted to be mounted on the stern or transom of a boat equipped with an outboard motor and propeller assembly mounted for vertical swinging movement, for temporarily supporting the motor and propeller assembly in a tilt-up position when not in use, particularly when transporting the boat overland on a wheeled carriage.

Outboard motor and propeller assemblies as now extensively employed are mounted on the stern or transom of a boat by means of a pair of clamp brackets to which the assembly is pivotally connected for movement between an operative upright position and an inclined or tilted inoperative position. In the upright position the propeller of the assembly is ordinarily positioned on a plane below the keel of the boat where the propeller is subject to damage by impact with solids when hauling the boat ashore and when transporting it overland on a conveyance such as a dolly or trailer. To obviate this hazard it is customary to swing the assembly to a tilted position wherein the propeller is elevated above the plane of the keel of the boat and to fasten the assembly in such position.

It is now general practice to support the motor and propeller assembly in its tilt-up position on a boat by means of an unattached wooden block interposed between the stern of a boat and the underside of the assembly.

In some instances the block is lashed in place but generally is unattached and held in place against the stern of the boat and the underside of the housing of the motor propeller assembly by the pinching action of the weight of the assembly imposed on the block. Manifestly a block held in place by this pinching action is subject to being misplaced as by a jolt or jar such as to cause the block to be dislodged and fall from beneath the assembly and thereby allow the latter to drop with possible resultant damage to the propeller.

A particular object of the invention is to provide a rack which may be readily applied to the stern of a boat and also removed therefrom without necessity of detaching the outboard motor assembly from its connection with the boat, and which may be easily and quickly manipulated in and out of its motor tilt-up position, and which when in its operative position will securely support the motor propeller assembly in an elevated inclined position without danger of accidental disengagement.

Another object is to provide a rack of the above character which is simple and economical in construction, and which is highly efficient in operation.

A further object is to provide a rack for the purpose set forth which constitutes a portable unit adapted to be attached to and removed from the transom of a boat equipped with an outboard motor independent of such motor, and which when unattached may be readily transported as in merchandising and also transferred from one boat to another, if need be, apart from outboard motor equipment.

With the foregoing objects in view together with such other objects and advantages as may subsequently appear,

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the invention resides in the parts and in combination, construction and arrangement of parts hereinafter described and claimed, and as illustrated by way of example in the accompanying drawing in which:

Fig. 1 is a perspective view of the rack showing it as detached;

Fig. 2 is a view in side elevation with portions broken away and showing parts in section;

Fig. 3 is a detail in section taken on the line 3—3 of Fig. 2 showing the saddle for effecting seating engagement with the motor propeller assembly;

Fig. 4 is a view in side elevation with portions broken away and partly in section showing the invention as applied to the transom of a boat and as disposed when supporting an outboard motor and propeller assembly in a tilt-up position; and

Fig. 5 is a diagram in perspective of a fragmentary portion of the structure shown in Fig. 5 as viewed toward the stern of the boat.

Referring to the drawings more specifically A indicates the transom or end wall of a boat's stern, B designates generally a conventional outboard motor and propeller assembly embodying a propeller C and an elongated housing D enclosing propeller driving mechanism (not shown) in a usual manner, and E—E indicates a pair of clamp brackets affixed to the transom A to which the upper portion of the housing D is pivotally connected by a horizontal pivot pin F for vertical swinging movement of the housing between an upright position indicated in dotted lines in Fig. 4 and an inclined or tilt-up position as shown in full lines in Figs. 4 and 5.

The essence of the invention resides in a rack G for supporting the outboard motor assembly in a tilt-up position while carried on the clamp brackets E—E and pivot pin F. The rack G is constructed so that it may be supported on the transom A and applied thereto and removed therefrom while the clamp brackets E—E are affixed to the transom and while the outboard motor assembly is supported on said brackets by the pivot pin F. To this end the rack G includes a U-shaped frame J embodying spaced apart side members 6—6 having lower ends interconnected by a transverse rail 7 and having parallel downturned hook-shaped hangers 8—8 on their upper ends projecting rearwardly therefrom which hangers are engageable with the upper margin of the transom A in such fashion as to suspend the rack G therefrom with the rack frame H extending in transverse parallel relation to the outer surface of the boat's stern.

The frame H and the arm 10 are here shown as formed of metal tubing but manifestly may be fabricated of any other material and bar stock having requisite strength and rigidity.

The frame H of the rack is equipped with cushions 9 arranged to seat against surface portions of the boat to prevent marring thereof, which cushions may be of any suitable construction and located on the rack wherever required. As here shown the cushions 9 on the rack include resilient tubes encompassing the hangers 8—8 and the upper portions of the side members 6—6; and also include resilient tubes encompassing the end portions of the rail 7.

A brace-arm 10 is pivotally mounted on the rail 7 intermediate the ends thereof to swing vertically for positioning at an upward and outward inclination from the rail, which brace-arm has an inner end connected by a pivot pin 11 to a yoke 12 on the sleeve 13 encompassing and rigidly affixed to the rail 7 as by a screw 14.

The outer end of the arm 10 is equipped with a V-shaped saddle K the inner sides of the diverging side members a—a of which are surfaced by a resilient pad 15. The saddle K is designed to be positioned astride the underside of the housing D when the rack is disposed in

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its operative position wherein the arm 10 is inclined upwardly and outwardly as particularly shown in Figs. 4 and 5.

Means are provided for releasably fastening the housing D in its seated position on the saddle K, which means is here shown as comprising straps *b—b* attached to the outer ends of the side members *a—a*, one of which straps has a buckle *c* or similar fastening on its outer end adapted for detachable engagement with the other strap in a usual manner.

In the application and operation of the invention, when it is desired to dispose the motor-propeller assembly B in its tilt-up position, the U-shaped frame H of the rack G is put in place on the transom A by initially lifting the outer end of the motor propeller assembly a short distance, then positioning the upper ends of the side members 6—6 of the frame H astride of the pair of clamp brackets E—E followed by advancing the hangers 8—8 into hooked engagement with the upper margin of the transom as shown in Figs. 4 and 5.

During this operation the arm 10 may be suspended in a downwardly extended position on its pivot pin 11, but upon engaging the hangers 8—8 with the transom so as to suspend the frame H thereon, the motor propeller assembly B is lifted to its upwardly extended position, the arm 10 is swung upwardly and the saddle K on its outer end disposed beneath the housing D. On this being accomplished the housing D is lowered into a seated position in the saddle K whereupon the motor propeller assembly will be rigidly supported on the arm 10 as shown in Figs. 4 and 5. The housing D is then fastened in its seated position in the saddle K by passing one of the straps *b* over and around the housing D and engaging it with the buckle *c* on the other strap *b*. Manifestly the housing D may be otherwise secured to the saddle in any desired manner, such as by lashing with cord or rope.

When it is desired to restore the motor propeller assembly B to its upright operative position, such may be accomplished by reversing the operations above described, or if need be may be effected from the interior of the boat when afloat by disengaging the straps *b—b* to free the housing D, whereupon, on further tilting the motor-propeller assembly so as to elevate the housing D free of the saddle K to thereby allow the arm 10 to drop to a downwardly extended position, the rack is lifted to free

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the hangers from the transom A, then turned laterally and upwardly around the housing D, and finally lifted clear of the motor propeller assembly.

By reversing the operations just described, the rack may be applied from the interior of the boat.

While we have shown and described a specific embodiment of the invention, we do not limit ourselves to the exact details of construction set forth, and the invention embraces such changes, modifications and equivalents of the parts and their formation and arrangement as come within the purview of the appended claims.

We claim:

1. The combination with the transom of a boat, an outboard motor assembly embodying a housing, clamp brackets attached to said transom, and a pivotal connection between said housing and said brackets; of a U-shaped frame having a pair of side members and a connecting end member and end hangers on said side members engageable with said transom to suspend said frame from said transom in a dependent position with said end member lowermost, an arm pivoted on the end member of said frame having an outer end, and a saddle on said outer end adapted to receive and support said housing in a tilted position.

2. The combination of a boat transom, a pair of clamp brackets mounted on said transom, an outboard motor and propeller assembly embodying a housing pivotally mounted on said brackets for vertical swinging movement; a U-shaped frame suspended from said transom astride said clamp brackets apart from said brackets and said motor and propeller assembly, an arm pivoted to swing vertically on said frame beneath said housing, and a saddle on said arm adapted to receive and support said housing to disposed said outboard motor and propeller assembly in a tilted position.

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