March 22, 1960 W. L. JACKSON 2,929,348

WATER SKI TOW ROPE HITCH

Filed June 4, 1957

Fig. 1

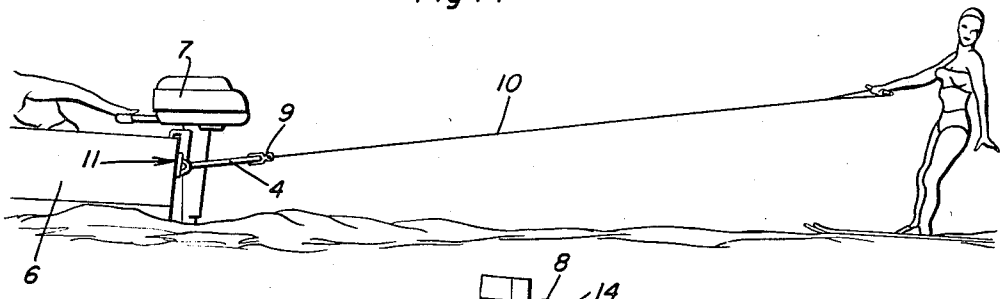


Fig. 2

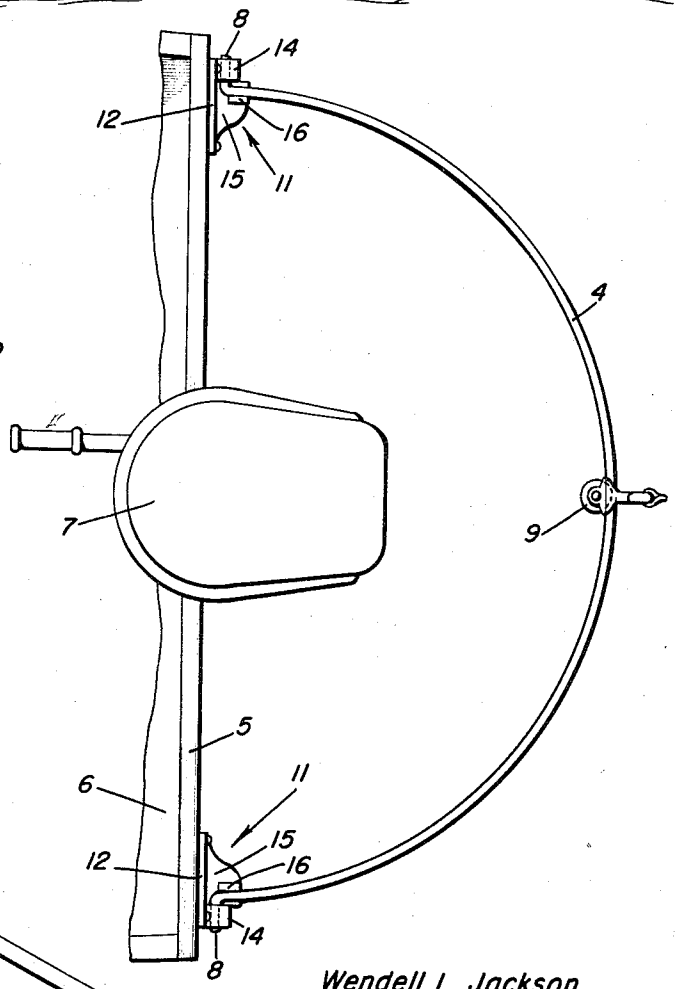
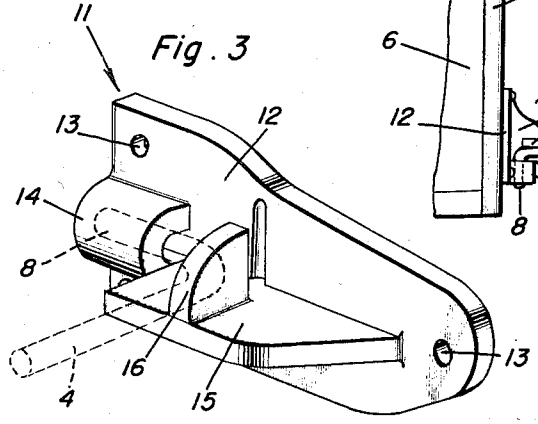


Fig. 3



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WATER SKI TOW ROPE HITCH

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2 Claims. (Cl. 114—235)

This invention relates to water ski tow rope hitches of the type constituting the subject matter of my copending application Ser. No. 626,155, filed December 4, 1956, now abandoned.

An important object of the present invention is to provide, in a manner as hereinafter set forth, a hitch of the character described comprising a substantially semi-circular resilient shock absorbing rail or track adapted to be removably mounted on a boat transom, in spaced, concentric relation to an outboard motor thereon.

Another important object of this invention is to provide a hitch of the aforementioned character which will permit the outboard motor to swing or tip up when necessary, as, for instance, when an underwater obstruction is struck.

Still another important object of the present invention is to provide novel means for positively locking a resiliently, vertically swingable and removable rail or track in operative position on the boat transom without the use of bolts, pins, etc.

Other objects of the invention are to provide a hitch of the character set forth of relatively simple construction, which will be strong and durable but of light weight and which may be produced at low cost.

All of the foregoing and still further objects and advantages of the invention will become apparent from a study of the following specification, taken in connection with the accompanying drawing wherein like characters of reference designate corresponding parts throughout the several views, and wherein:

Figure 1 is a view in side elevation, showing an improved hitch embodying the present invention in use;

Figure 2 is a top plan view; and

Figure 3 is a perspective view of one of the brackets.

Referring to the drawing in detail, it will be seen that the embodiment of the present invention which has been shown comprises a substantially semi-circular or arcuate rail or track 4 of suitable resilient metal. The rail 4 is adapted to be removably mounted for vertical swinging movement on the transom 5 of a boat 6 powered by a conventional outboard motor 7 mounted on said transom. Toward this end, the rail 4 terminates in outturned trunnions 8. A trolley 9 on one end of a tow rope 10 is operable on the rail 4.

Mounted on the end portions of the transom 5 is a pair of brackets 11 of suitable metal. The brackets 11 include mounting plates 12 which are apertured, as at 13, for the passage of bolts or screws for securing said brackets on the transom 5.

The brackets 11 further include aligned, horizontal bearings or sleeves 14 on the outer end portions of the plates 12 for the reception of the trunnions 8. Inwardly of the bearings 14 horizontal flanges 15 project rearwardly from the plates 12. Substantially segmental stop lugs or ears 16 rise from the flanges 15 and are spaced from the plates 12 and the inner ends of the bearings 14.

In use, to mount the rail 4 on the boat 6, the outboard motor 7 is swung or tipped upwardly. Holding the resilient rail 4 in an upright or vertical position, said rail is compressed or contracted and the trunnions 8 thereof are brought to rest on the flanges 15 in alignment with the bearings 14. The resilient rail 4 is then permitted to expand for engaging the trunnions 8 in the bearings 14,

said trunnions passing between the stop lugs or ears 16 and the plates 12. With the trunnions 8 journalled in the bearings 15, the rail 4 is swung downwardly to a substantially horizontal position where it comes to rest on the flanges 15. The elements 16 now function as stops for positively preventing disengagement of the trunnions 8 from the bearings 14. Of course, to remove the rail 4 when desired, the foregoing procedure is substantially reversed. The swingable rail 4 permits the outboard motor 7 to tip up in the usual manner and ride over any underwater obstruction that may be encountered. This constitutes a highly important and desirable feature of the present invention. The construction and arrangement is such that the outboard motor 7 must be tipped up in order to install or remove the spaced, concentric rail 4. The rail 4, being of resilient metal, absorbs shocks to which the skier would otherwise be subjected.

It is believed that the many advantages of a water ski tow rope hitch constructed in accordance with the present invention will be readily understood and although a preferred embodiment of the device is as illustrated and described, it is to be understood that changes in the details of construction and in the combination and arrangement of parts may be resorted to which will fall within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A tow rope hitch comprising; a pair of brackets for mounting at transversely spaced points on the transom of a boat, said brackets including axially aligned sleeve bearings, an arcuate, resilient rail including axially aligned end trunnions journalled in the bearings for upward and downward swinging of said rail, and a trolley operable on the rail, said brackets further including flanges engageable beneath the end portions of the rail for preventing downward swinging of said rail and supporting said rail in a substantially horizontal position, said brackets still further including upstanding lugs on the flanges spaced from the bearing and engageable with the end portions of the rail for retaining the trunnions in the bearings.

2. A water ski tow rope hitch comprising: a pair of brackets for mounting at transversely spaced points on the transom of a boat, said brackets including mounting plates, axially aligned sleeve bearings on said plates, an arcuate, resilient rail comprising outturned axially aligned trunnions on its ends journaled in the bearings for removably mounting said rail on the transom for upward and downward swinging movement, a trolley operable on the rail, horizontal flanges on the plates spaced from said bearings and engageable beneath the end portions of the rail for preventing downward swinging of the rail and supporting said rail in a substantially horizontal position on the brackets, and lugs rising from said flanges spaced from the bearings and engageable with and confining the end portions of the rail therebetween for retaining the trunnions in the bearings, said lugs being spaced from said plates for the passage of the trunnions therebetween.

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