Aug. 12, 1952 R. E. WADE 2,606,332

OAR SUPPORT

Filed June 12, 1950 2 SHEETS—SHEET 1

FIG. 1

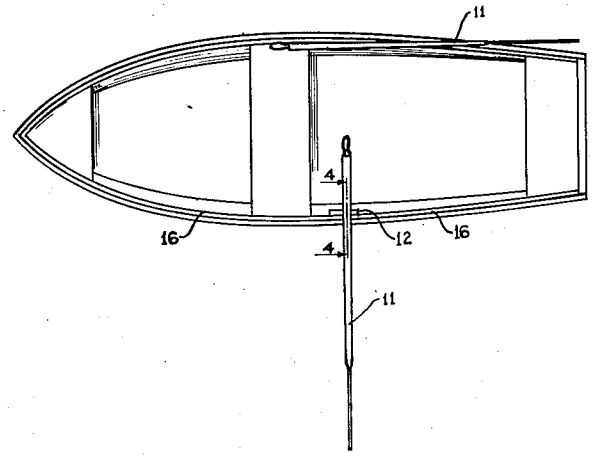


FIG. 2

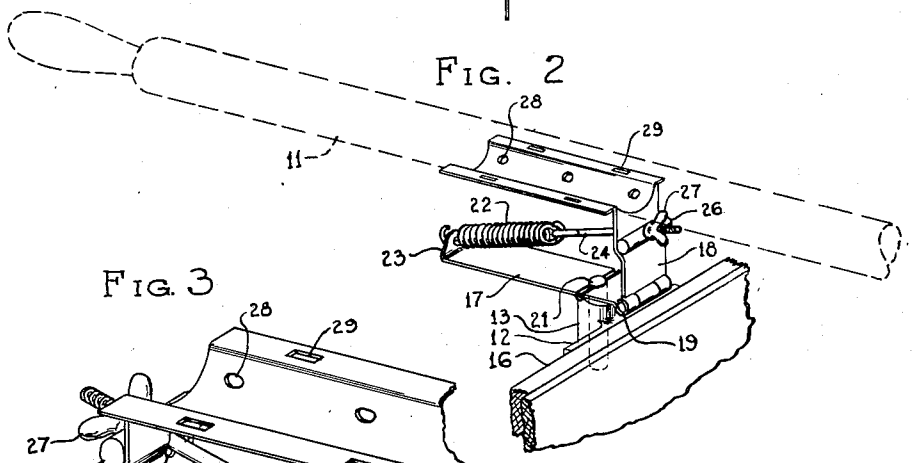
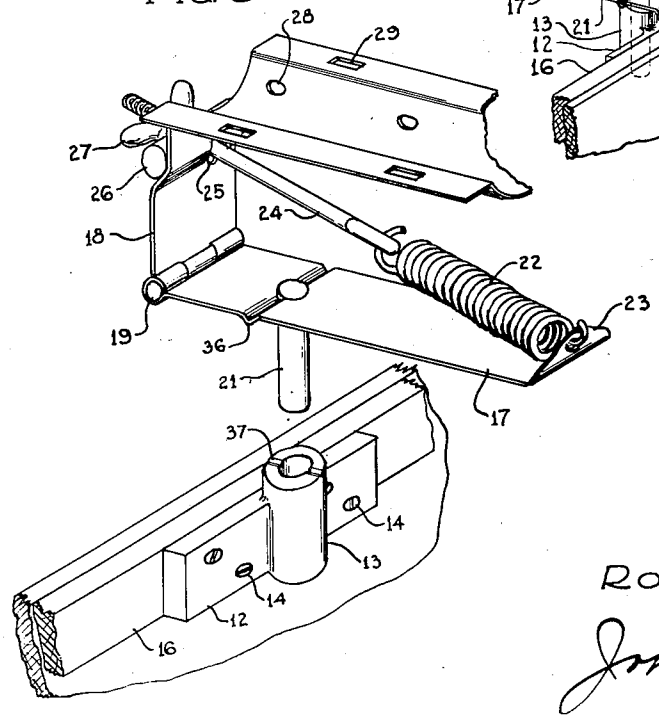


FIG. 3



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FIG. 4

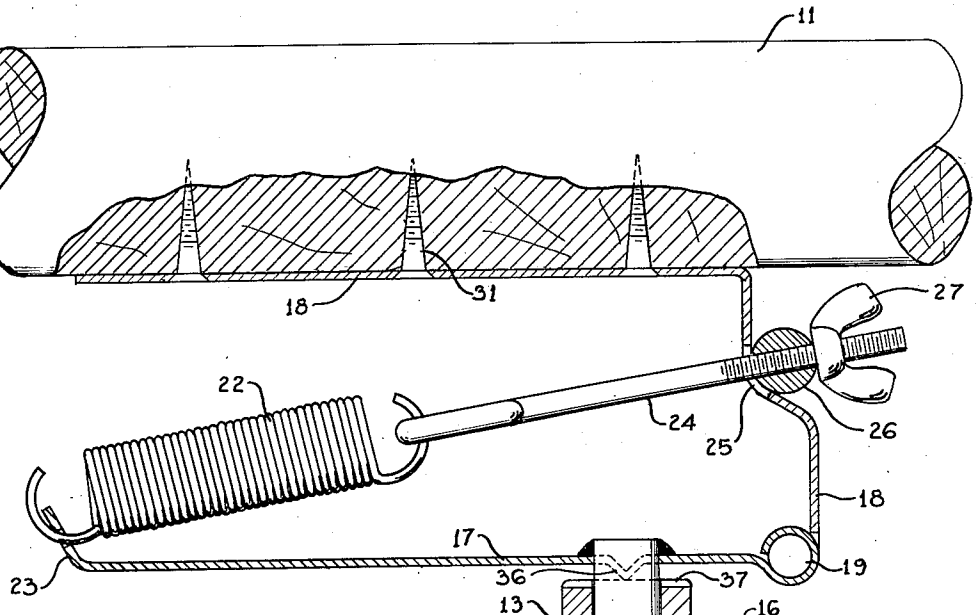


FIG. 5

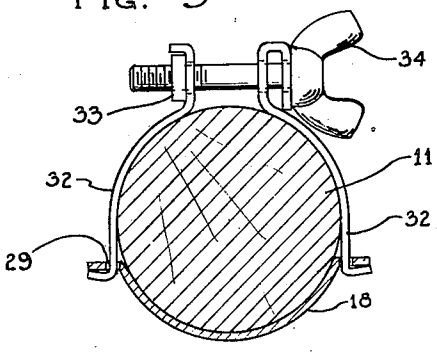
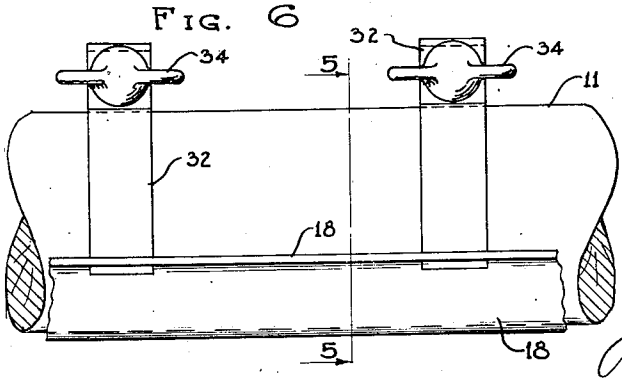


FIG. 6



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OAR SUPPORT

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Application June 12, 1950, Serial No. 167,577

5 Claims. (Cl. 9—26)

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My invention relates in general to means for supporting an oar with respect to a rowboat, and more in particular to an oar support which functions to withdraw the oars from the water when they are released by a rower.

Many different connections have been used between oars and rowboats which will produce the necessary function in which the oar is pivoted with respect to the gunwale of the boat about a substantially vertical pivot. Modern devices of this kind, comprising an oar lock having a pivot pin and an oar lock socket for supporting the pin, take many forms; but in all of them it is either necessary to withdraw the oar lock pivot pin completely to support the oar out of the water, or to rotate the oars a sufficient distance that the oar handles are extended beyond the gunwale of the boat and the paddle portion of the oars rests within the body of the boat. None of these constructions offers any convenience in supporting oars when it is desired to remove them temporarily from the water, as in fishing and indeed in many other instances in which the rower may wish only temporarily to release the oars.

The principal object of my invention is the provision of improved means for supporting oars with respect to rowboats.

Another object is the provision of such a support which may adjusted to automatically remove the paddle portions of the oars from the water when the oars are temporarily released.

Still another object is the provision of an oar support of the type identified in which the oars are automatically withdrawn from the water and also supported against rotation in the oar lock sockets.

A further object is the provision of an oar support adapted to be used in all conventional ways and to utilize existing oar lock sockets, but having the additional feature of automatically removing the oars from contact with the water when they are released by a rower.

Other objects and features of the invention will be apparent from the following detailed description taken with the accompanying drawings, wherein:

Fig. 1 is a plan view of a rowboat, the oars of which are supported in accordance with the features of any invention.

Fig. 2 is a fragmentary perspective view looking from the outside of the boat, a portion of the oar being shown in broken lines and the support mechanism itself being shown in full lines.

Fig. 3 is a fragmentary perspective view looking from the inside of the boat but showing the oar support above the oar lock socket.

Fig. 4 is a fragmentary sectional view enlarged to substantially full scale, the view being taken along the line 4—4 of Fig. 1, a portion of the oar being shown in elevation and a portion broken away in order to show one way of attaching the oar to its support.

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Fig. 5 is a transverse sectional view having the same scale as Fig. 4, and showing another method of attaching the oar, the view comprising Fig. 5 being taken along the line 5—5 of Fig. 6.

Fig. 6 is a fragmentary elevational view showing another method of attaching the oar.

The oar-supporting mechanism of my invention is adapted for use with any usual rowboat, and can be used with any usual oars 11. The oar lock socket may be of any standard type, but in the drawings I have shown a plate 12 with an integral tubular portion 13 secured by screws 14 to a reinforcing strip 16 near the top edge or gunwale of the boat. The support itself comprises a bracket 17 which is relatively stationary and a bracket 18 of generally L-shape connected to the bracket 17 by a hinge 19 and thereby comprising a relatively movable bracket. The bracket 17 has rigidly secured thereto a pin 21 which functions as an oar lock pin and engages in standard fashion in the socket formed by the tubular portion 13. The L-shaped bracket 18 is adapted to support one of the oars 11 in a suitable manner, as will be explained, so that the two brackets together form the equivalent of the usual oar lock permitting the oars to be used for rowing the boat exactly in accordance with conventional practice.

The two brackets 17 and 18 together define a general U-shape as shown particularly in Fig. 4, and a tension spring 22 is disposed between them to normally withdraw an oar from the water when it is released. In the preferred form of the invention, one end of the spring 22 is connected to a tailpiece 23 on the bracket 17 some distance from the pin 21, and the opposite end is connected to the adjustable link 24. The link 24 extends through a slot 25 in the web portion of the U which is also one leg of the L comprising the bracket 18. This end of the link also extends through a rocker bar 26, and a wing nut 27 tightens against the rocker bar to shorten or lengthen the link 24. Thus the tension of spring 22 can be controlled; and it will be noted that the rocker bar 26 engages in a recessed portion of the bracket so that under any and all conditions assembly is maintained and the wing nut can be turned in either direction.

The longer leg of the L-shape member 18 is of arcuate cross section to receive the oar 11, and is provided with a number of screw holes 28 and a series of edge slots 29. When it is desired to attach the oar permanently to the support, screws 31 (Fig. 4) may be used through the screw holes 28. The oars, however, may be engaged by extending fastening rings 32 through the edge slots 29 and pulling them together around the round portion of the oar by means of a nut 33 and headed bolt 34 (Figs. 5 and 6).

To hold the oar against rotation when it is removed from the water, there is provided at least one projection 36 on the bottom side of the brack-

et 17 and at least one top groove 37 on the tubular portion 13 defining the oar lock socket. Other or equivalent structure may be provided, but the simple form shown makes it possible to fit my support to already pre-existing sockets by merely filing a groove across the top of the same. In this way it is unnecessary to provide special sockets when my support is sold; and of course if the user does not wish to employ this particular feature, he may leave the top of the socket smooth. It will be apparent at once that by means of this particular arrangement, the projection and grooves do not respond to each other during normal rowing operations, but when the oar is rotated about the axis of pin 21 to a point where the oar is generally in alignment with the gunwale of the boat, as shown in Fig. 1, the projection will engage in the groove and prevent further turning of the oar. The position of the groove in the drawings is such that water dripping from the oars will not enter the boat.

The support of my invention is shown for convenience in the form of stampings from sheet steel, and the parts are of such construction as to facilitate production in this manner. It is obvious that neither this form of construction nor the particular shape of parts is essential, it being only necessary that the brackets, one carrying the oar and the other carrying the oar lock pin, be hinged with respect to each other and that resilient means be provided between them biased in such direction as to retract the oar from the water when it is released. I have found from experiment, however, that there is a very definite advantage in the use of a spring under tension, and also an advantage if the total linkage comprising this spring is relatively long. This construction provides ample spring capacity for supporting the oars, while still permitting the oars to be dipped into the water without appreciable effort on the part of the rower.

While the spring means between the brackets can be fastened, I have found a very great advantage in using a construction in which the tension on the spring is adjustable. This not only makes it possible to adjust the tension for the particular oar, but it also makes it possible to adjust the tension for a particular user of the oar or, if it is desired for any reason, to release the tension entirely so that the oar may be used in a completely conventional manner. In connection with the balancing of the spring tension and suspended weight of the paddle portion of the oar, it will be apparent that some adjustment is also possible by changing the pivot point on the oar, a change which is easily made particularly with the oar-supporting mechanism shown in Figs. 5 and 6. The desired balance between the suspended part of the oar and the spring 22 can of course also be obtained by weighting the oar, which can be accomplished by putting a metal edging around the paddle portion. Thus, regardless of conditions, it is always possible to adjust the support of my invention so that the paddle portion of the oars will be raised but there will never be enough tension to add appreciably to the labor of the rower.

Whatever the form of invention used, the brackets 17 and 18 move somewhat with respect to each other about the hinge 19 during rowing. When the oar blade is dipped into the water, these two brackets form in effect an open U, and when the oars are raised by depressing the handles, a closed leg U is formed. The spring 22 may be adjusted to raise the oars sufficiently to form a closed leg U, but in general, better balance is obtained if the spring force is only strong enough to raise the oars to horizontal position as shown in the drawings.

Since my invention may take various forms and be used with any conventional boats, oars, oar lock sockets, and the like, I do not wish to be bound by any particular form of the invention, but the scope thereof is defined solely by the claims.

What I claim as new and desire to protect by Letters Patent of the United States is:

1. The combination with an oar lock comprising an oar lock socket and oar lock pin adapted for insertion in the socket, of an oar lock bracket integral with the said pin, an oar attachment bracket hinged to the oar lock bracket, a spring connected to and tensioned between the two brackets, and means for controlling the tension of the said spring to hold an oar out of water in substantially a horizontal position.

2. An oar suspension device comprising a bracket carrying an oar lock pin, a bracket adapted to support an oar, a hinge between the two said brackets, spring means connected between the brackets to swing the said oar-supporting bracket on said hinge in a direction to move the oar out of water, and means for controlling the bias of said spring means.

3. An oar suspension device comprising a pair of brackets hinged together for relative movement about a horizontal axis, said brackets together defining a generally U-shape, an oar lock pin carried by one such bracket, means for securing an oar to the other end of said bracket, and a spring connected to and tensioned between the brackets to normally hold an oar out of water when said pin is supported in an oar lock socket.

4. An oar suspension device comprising a pair of brackets hinged together for relative movement about a horizontal axis, said brackets together defining a generally U-shape, an oar lock pin carried by one such bracket, means for securing an oar to the other end of said bracket, a spring connected to and tensioned between the brackets to normally hold an oar out of water when said pin is supported in an oar lock socket, and means for controlling the point at which said attaching means is secured to the oar.

5. An oar suspension device comprising an oar lock bracket with a downwardly directed pin adapted for support in an oar lock socket, an L-shaped bracket hinged to the oar lock bracket for movement about a horizontal pivot, the said two brackets together defining a U, means for supporting an oar on said L-shaped bracket, a spring having one end secured to said oar lock bracket, a link secured to the other end of said spring and having a threaded end projecting through that portion of the L-shaped member comprising the web of said U, and an adjusting nut on the said threaded end to control the tension of said spring.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
530,519	Harbers	Dec. 11, 1894
772,264	Wheeler	Oct. 11, 1904
2,466,613	Richardson	Apr. 5, 1949