P. OLSEN.

OAR AND OAR LOCK.

APPLICATION FILED AUG. 29, 1919.

1,319,356.

Patented Oct. 21, 1919.

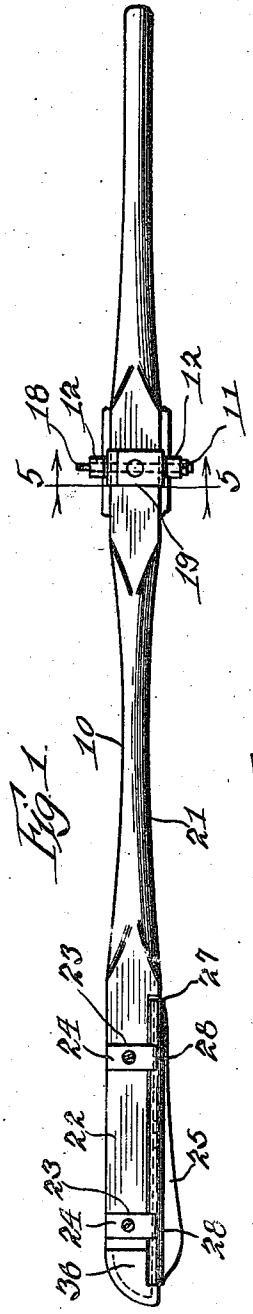


Fig. 1.

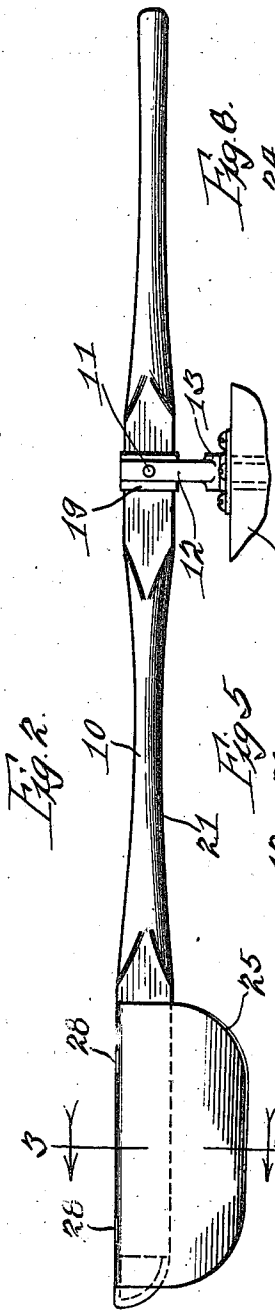


Fig. 2.

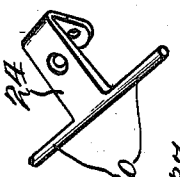


Fig. 6.

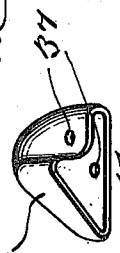


Fig. 4.

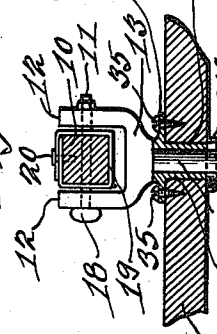


Fig. 5



Fig. 3.



Fig. 7.

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UNITED STATES PATENT OFFICE.

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OAR AND OAR-LOCK.

1,319,356. Specification of Letters Patent. Patented Oct. 21, 1919.

Application filed August 29, 1919. Serial No. 320,560.

To all whom it may concern:

Be it known that I, PETER OLSEN, a subject of the King of Great Britain, residing at Sydney, Nova Scotia, Canada, have invented certain new and useful Improvements in Oars and Oar-Locks, of which the following is a specification.

This invention relates to improvements in oars and oarlocks of the kind used for propelling or rowing and steering row boats of different sizes, and it consists in certain peculiarities of the construction, novel arrangement and operation of the various parts thereof as will be hereinafter more fully set forth and specifically claimed.

The principal object of the invention is to provide an oar and lock therefor which shall be simple and inexpensive in construction, light in weight, strong, durable and highly efficient in operation, with its parts so made and arranged that when mounted on the gunwale or side of a boat the oar will be held against accidental dislocation, yet in such a manner that it can be moved in almost any direction whereby great command thereof will be afforded to the user or rower. Another object is to so construct the different parts of the oar that its inner or handle portion will substantially counterbalance the weight of its outer or longer and water engaging parts thereby causing it to be operated with less fatigue and exertion by the user. Still another object is to provide means on the water engaging part of the oar shaft to cup or hold water on the pulling strokes of the oar, yet, which will on the return strokes "feather" the oar or glide over or through the water without material hindrance.

Numerous other objects and advantages of the invention will be disclosed in the following description and explanation.

In the accompanying drawing, which serves to illustrate an embodiment of the invention,—

Figure 1 is a top plan view of the oar and lock.

Fig. 2 is a front face view thereof.

Fig. 3 is a cross-sectional view taken on line 3—3 of Fig. 2 looking in the direction indicated by the arrows, showing by dotted lines about the position the pivoted blade or paddle of the oar will assume on the return stroke of the latter.

Fig. 4 is a detached perspective view of a protecting cap for the outer end of the oar shaft.

Fig. 5 is a cross-sectional view taken on line 5—5 of Fig. 1 looking in the direction of the arrows.

Fig. 6 is an enlarged detached perspective view of one of the hangers for the blade or paddle of the oar, and

Fig. 7 is a view similar to Fig. 2 but showing the oar shaft shortened for the convenience of illustration and illustrating a modification in its construction.

Like numerals of reference refer to corresponding parts throughout the different views of the drawing.

The numeral 10 designates the oar shaft which may be of any suitable length and desired material, but by preference of wood.

As shown in Figs. 1 to 3 inclusive and Fig. 5 of the drawing, the shaft 10 is pivotally mounted on a rod 11 between the prongs 12 of a yoke or crutch-shaped oar lock 13 which has extended from its lower portion a cylindrical projection 14 provided in its lower end with a transverse opening 15 to receive a securing pin 16 which may be connected to the lower end of the projection 14 by means of a string 17 so as to prevent the loss of said pin.

As shown, the rod or bolt 11 is extended through a suitable opening in the oar shaft 10 at a point located about one-third of the length of the oar shaft from its front end and said rod or bolt has on one of its ends a thumb-piece 18 by which it can be readily turned so as to screw its opposite end into an opening in one of the prongs 12 of the lock 13, it being understood that the end of the rod or bolt opposite the thumb-piece 18 is provided with screw threads.

Surrounding the shaft 10 between the prongs 12 of the lock 13 is a metal band 19 which is fastened to the upper portion of the shaft 10 by means of a screw or nail 20. The oar shaft 10 at this point is by preference rectangular in cross-section as shown in the different views of the drawing, but has outwardly of said rectangular portion a reduced part 21 preferably round in cross-section and enlarged rearwardly. From the rear end of this enlarged portion the oar is formed with a thickened portion 22 which is triangular in cross-section and is formed on the oar shaft in such a way that one of the walls of the triangular figure

will be presented in substantially a vertical plane as is clearly shown in Fig. 3 of the drawing. This vertical wall will be termed the front wall of the part 22 as it is the wall thereof that will be presented to the water in the forward movements of the oar in rowing. The upper or horizontal wall of the triangular part 22 is provided with two transversely extended recesses 23 in each of which is located a portion of a strap 24 of one of the hangers for the paddle or blade 25 which is made of an elongated piece of sheet metal of any suitable size and length. This paddle is outwardly dished as shown at 26 and has at its upper edge a tubular or circular flange 27 which is provided at points to register with the recesses 23 with openings 28 to receive the ends of the straps 24 adjacent to said flange. Each of the straps 24 is shaped to conform to the rear upper portion of the triangular part 22 of the oar-shaft and is fastened thereto by means of screws 29 or otherwise.

That end of each of the straps 24 adjacent to the flange 27 of the paddle or blade 25 is provided on each of its side edges with a pintle 30 around which the flange 27 of the paddle is located. By this arrangement it is evident that the paddle will be hinged to the triangular part 22 at the juncture of its vertical and horizontal walls and that when the pulling stroke is given to the oar the blade 25 will rest at its upper portion against the vertical wall of the triangular part 22 and thereby be prevented moving backwardly on its hinges.

As the portions of the straps 24 of the hangers adjacent to the paddle are extended into the recesses 28 of its flanged part, it is obvious that the upward movement of the paddle will be restricted to about a horizontal plane, thus preventing the operation of the paddle from being interfered with when rowing with the current or with the wind.

Referring again to Fig. 5 of the drawing, it will be seen that the stem or projection 14 of the oar lock 13 is extended through a vertically disposed sleeve or tube 31 which is mounted in a suitable opening 32 in the gunwale 33 or side of the boat. This tube or sleeve 31 is secured to the upper surface of the gunwale or side of the boat by means of a perforated plate 34 and screws 35 extended through suitable openings therein and engaging the upper surface of the gunwale. The outer end of the oar-shaft 10 is provided with a cap 36 which may be made of any suitable metal and of a shape corresponding to that end of the oar-shaft on which it is mounted. This cap can be secured in place on the oar-shaft by means of nails or screws extended through suitable openings 37 in said cap and engaging the shaft.

In Fig. 7 of the drawing I have shown a modification in the construction of the oar-shaft which consists in enlarging that portion thereof inwardly of the prongs 12 of the oar lock to a point near its inner end as is clearly shown at 38 in said figure of the drawing. By this means or construction of the oar-shaft it is apparent that additional weight will be given to its inner portion and that this additional weight will in a degree counterbalance that portion of the oar-shaft extended outwardly from its pivot 11 on the oar lock.

By my improvements it is obvious that the blade or paddle 25 will cup or hold the water by reason of its outwardly dished formation when the oar is being moved in the proper direction to propel the boat, and that when the return stroke of the oar is made the blade or paddle 25 will assume about the position shown by dotted lines in Fig. 3 thus offering practically no resistance to the water but rather facilitating its passage in its return movement or stroke over the surface of the water or through the same. It is also evident that on the return stroke of the oar the rear angular portion and inclined wall of the triangular part 22 will assist in " feathering " the oar.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent is—

1. The combination with an oar-shaft provided at its outer portion with a longitudinally extended thickened part triangular in cross-section, of a paddle or blade hinged at its upper edge to the upper edge of one of the walls of said triangular portion, and means to restrict the upward movement of the paddle.

2. The combination with an oar-shaft provided at its outer portion with a longitudinally extended thickened part, said part being triangular in cross-section and disposed with respect to the shaft in such a manner that its front face will be located in substantially a vertical plane of an outwardly dished paddle or blade located alongside the front face of said part and having at its upper edge a curved flange provided with a cut-out portion near each of its ends, and a pair of hangers each consisting of a strap secured to the shaft across the same and a pintle located within the said flange of the paddle, the said straps being located at their ends adjacent to their pintles in said cut-out portions.

3. The combination with an oar-shaft provided at its outer portion with a cross-sectionally triangular part disposed with one of its faces in substantially a vertical plane, of an outwardly dished paddle or blade hinged for restricted movement to the upper portion of said part, an oar lock supporting the shaft near one of its ends for

pivotal and swiveling movement, the inner portion of said shaft being enlarged to partially counterbalance the outer portion thereof.

4. The combination with an oar-shaft, of a forked oar lock adapted to swivel in the gunwale or side of a boat, a band surrounding and fixed to the shaft between the prongs of the lock, and a pivot rod or bolt extended transversely through said prongs, band and oar-shaft.

In testimony whereof I have hereunto set my hand, this 18th day of August, 1919.

PETER OLSEN.