June 19, 1928. 1,674,307

A. SMITH

OARLOCK

Filed Sept. 6, 1927

Fig. 1.

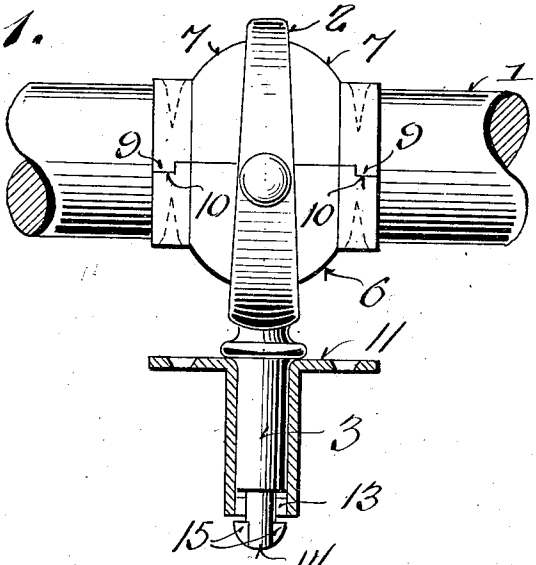


Fig. 2.

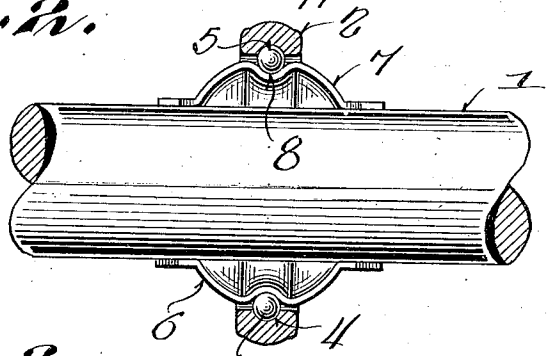


Fig. 3.

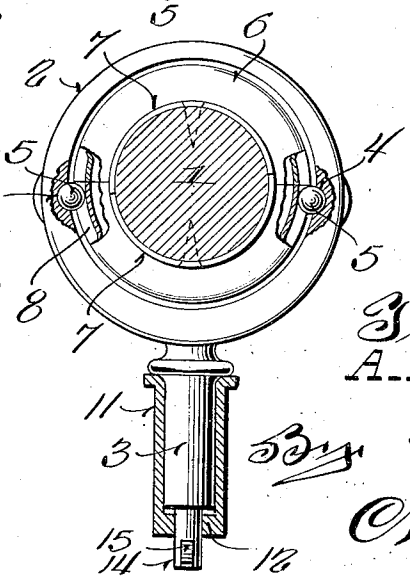
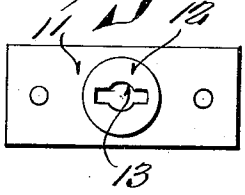


Fig. 4.



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UNITED STATES PATENT OFFICE.

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OARLOCK.

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This invention pertains to improvements in oar locks, and has primarily for its object the provision of a simple, durable, and efficient oar lock, which permanently retains the oar in operative position and allows the necessary movement of the oar in the lock for feathering purposes.

Incidental to the foregoing, a further object is to provide an oar lock of the foregoing character in which means is provided for preventing the removal of the oar lock from its socket except when the oar is positioned longitudinally with relation to the boat, thus preventing accidental dislodgment and loss of the oar, which frequently results where it is possible to remove the oar lock when the oar is in operative position at right angles to the boat.

Another object is to provide an anti-friction engaging means between the oar lock and oar sleeve, which means allows for easier operation of the oar and replacement in the event of wear upon the same.

A still further object resides in the novel structure of the sleeve, wherein both members are formed by the same die, and are arranged to interlock in assembly on the oar, thus issuing a rigid assembly and evenly distributing all strain on the sleeve, which eliminates the possibility of the attaching screws working loose.

With the above and other objects in view, which will appear as the description proceeds, the invention resides in the novel construction, combination and arrangement of parts substantially as hereinafter described and more particularly defined by the appended claims, it being understood that such changes in the precise embodiment of the herein disclosed invention may be made as come within the scope of the claims.

In the accompanying drawings is illustrated one complete example of the physical embodiment of the present invention constructed according to the best mode so far devised for the practical application of the principles thereof.

Embodiments of the invention are shown in the accompanying drawing, in which:

Figure 1 is a side elevation of an oar equipped with the present invention, the socket being in section to more clearly illustrate the structural features.

Figure 2 is a plan section through the oar lock.

Figure 3 is a transverse section through the oar, with parts of the lock broken away and in section, and

Figure 4 is a bottom plan view of the socket.

Referring now to the accompanying drawing the numeral 1 designates a portion of a conventional oar to which the present invention is attached, the same comprising an oar lock 2 provided with the usual shank 3. The lock 2 is illustrated as annular in form, but it will be obvious, as the description proceeds, that the same may be open at the top similar to other conventional types of locks.

The lock 2 on its inner periphery is provided with a pair of opposed recesses 4, which recesses receive the balls 5, adapted to project into a circumferential groove formed in the oar sleeve 6. The sleeve 6 is preferably formed from stamping and comprises two sections 7, which abut one another along a transverse center line, the sections 7 being spherical in shape. The circumferential groove 8 is formed at right angles to the longitudinal axis of the sleeve. The butting edges of the sleeve 7 are provided with tongues 9 which project in the recesses 10 formed on the edge of the adjacent sleeve. Thus it will be seen that as the sleeves are assembled upon the oar 1 the interlocking engagement of the sleeve sections provides a rigid assembly and any strain upon one of the members will be evenly distributed to both sections, thus reducing the possibility of the attaching means, which in the present instance comprises screws, becoming loosened.

In order to prevent removal of the oar lock, except when the oar is in longitudinal position with relation to the boat, the socket 11 which receives the shank 3 is provided with a closure 12 at its lower end, which closure has formed therein key-hole slots 13 for the reception of the reduced end 14 of the shank 3, which end is provided with lateral projections 15. The projections 15 normally engage the end closure 12 to prevent removal of the lock therefrom until the same is swung to such position that the oar is in a longitudinal relation to the boat, in which position the projections 15 pass through the key-hole slot.

As best shown in Figure 3, the balls 5, which project into the circumferential groove 8 to hold the oar against longitudinal movement, are positioned below the

transverse axis of the oar sleeve 6. This arrangement is essential in order to permit assembling of the sleeve on the oar. The foregoing is accomplished by first attaching one of the sections 7 of the sleeve to the top half of the oar, then inserting the oar into position in the lock with the groove of the section alined with the balls 5, and thereafter attaching the top sleeve, after the first attached section has been rotated one-half a turn to bring the groove into engagement with the balls.

From the foregoing it will be obvious that a very simple, durable, and efficient oar lock structure has been provided in which the oar is permanently held in the lock, and at the same time universal movement of the oar is provided to allow all of the essential operations, including feathering of the oars. It will further be seen that inasmuch as the sleeves 7 are provided with projecting tongues upon their corresponding edges, and recesses for the reception of said tongues on their opposite edges, both sleeves are identical in structure and may therefore be formed from a single die, which reduces the cost of manufacture to a minimum. Further, because of the engagement of the tongues 9 with the recesses 10, the sections of the sleeve are securely locked together and any strain exerted upon one section will be distributed to the adjacent section, thus preventing loosening of the attached screws and disalignment of the sleeves.

Should the balls 5, which lock the sleeve within the oar lock, become worn they can readily be replaced, and it is obvious that the use of the balls eliminates friction in the operation of the oar, thus reducing wear upon the movable parts and materially facilitating operation of the oar.

I claim:

1. The combination of an oar lock, a spherical sleeve provided with a circumferential groove, spaced projections carried by said oar lock for engagement in said groove, a shank for said oar lock, projections carried upon the end of said shank, and a socket for the reception of said shank, said socket being provided with a key-hole slot in its lower end to permit the withdrawal of the shank only when the said shank projections are aligned with said slot.

2. The combination of an oar lock provided with spaced recesses, a split spherical sleeve provided with a circumferential groove, balls positioned in said recesses for engagement in said groove, the corresponding edges of said sleeve sections being provided with tongues and recesses for interlocking engagement when the sleeves are assembled on an oar, a depending shank for said oar lock, projections on the lower end of said shank, said socket being provided with a key-hole slot in its lower end to permit withdrawal of the oar lock only when the shank projections are aligned with said key-hole slot.

In testimony that I claim the foregoing I have hereunto set my hand at Milwaukee, in the county of Milwaukee and State of Wisconsin.

ANDREW SMITH.