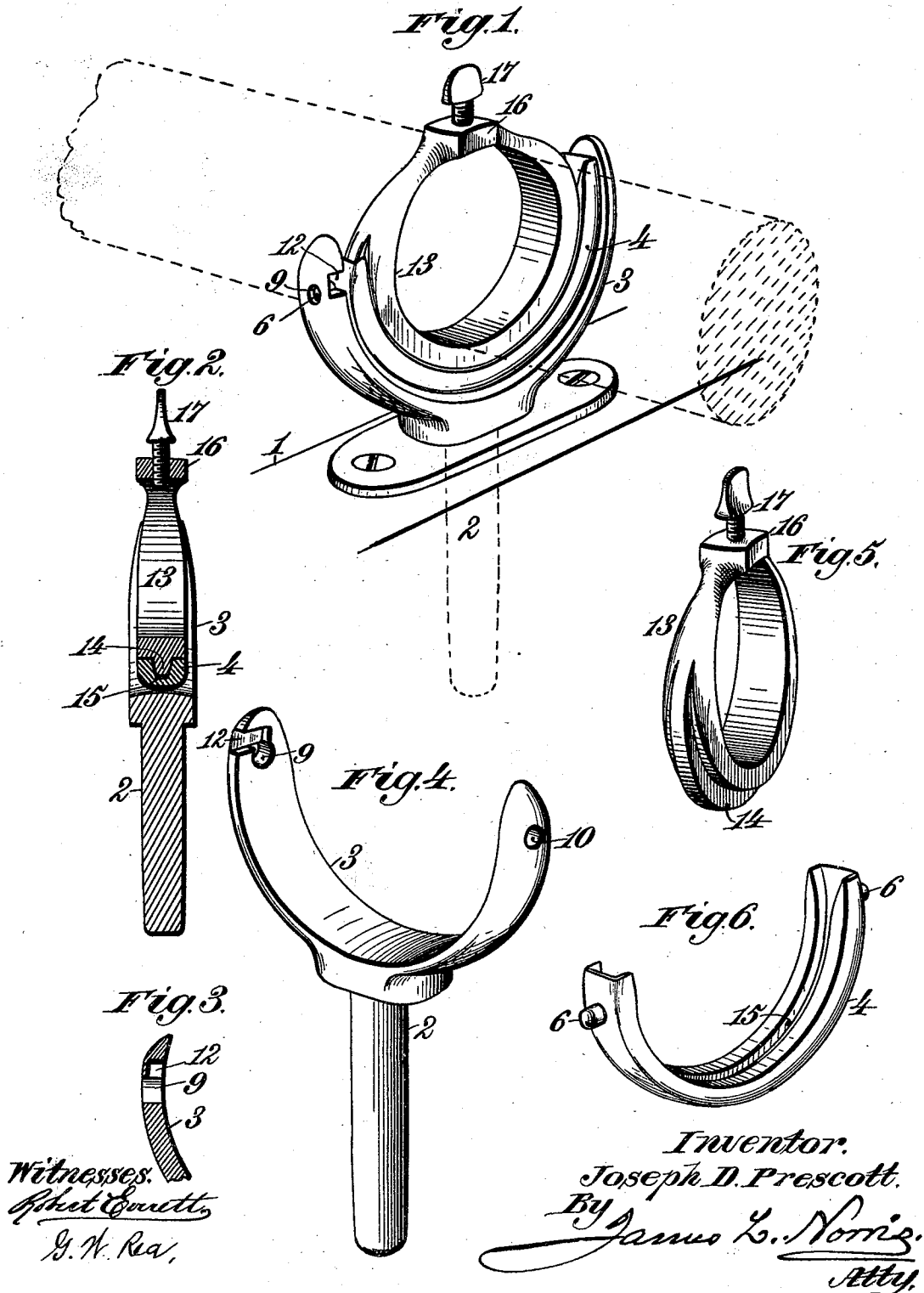


(No Model.)

J. D. PRESCOTT.
OAR LOCK.

No. 521,890.

Patented June 26, 1894.



UNITED STATES PATENT OFFICE.

JOSEPH D. PRESCOTT, OF BOSTON, ASSIGNOR OF ONE-HALF TO CHARLES H. WILDER, OF CHELSEA, MASSACHUSETTS.

OAR-LOCK.

SPECIFICATION forming part of Letters Patent No. 521,890, dated June 26, 1894.

Application filed July 29, 1893. Serial No. 481,881. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH D. PRESCOTT, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Oar-Locks, of which the following is a specification.

The object of this invention is to provide a new and improved row-lock or oar-lock for boats, and it consists in the features of construction and the combination or arrangement of devices hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1, is a perspective view showing the oar-lock mounted upon the gunwale of a boat, or in a seat supported by or formed in said gunwale, the loom of the oar being shown in place. Fig. 2, is a central section taken in the axial line of the swivel-pin of the crutch oar-lock. Fig. 3, is a detail section of one end of the crutch-arm, showing the construction whereby the ring-seat is rendered detachable. Fig. 4, is a detail view of the crutch oar-lock with the ring-seat removed. Fig. 5, is a detail view of the fulcrum ring removed from the oar and from the ring seat. Fig. 6, is a detail view of the ring-seat, showing its construction and the formation of the open ends of the groove therein, for facilitating the shipping of the oar.

In the said drawings the reference-numeral 1 indicates the gunwale of a boat of any desired form, in or upon which is formed, or mounted, a seat for a crutch oar-lock having a swivel-pin 2, and a crutch-arm 3, centrally mounted or formed thereon, in such manner that the parts of the crutch-arm on opposite sides of the point of attachment or union shall be substantially equal. Within this crutch-arm 3, and coinciding therewith in curvature, or nearly so, is arranged a ring-seat consisting of a semi-circular, segmental, or curved arm, or seat-bearing 4, formed of metal, or any other suitable material. At or near the ends of this ring-seat are formed, or mounted, trunnion-pins, or pivotal supports, 6, which engage with bearings in the crutch-arm, in the manner described hereinafter. Said pivotal supports are shown in the drawings as projecting from the outer face of the

ring-seat, at points a little removed from the ends of the latter. Preferably, the axes of these pivotal supports coincide with the diametrical line of the ring-seat, and from these points the two extremities of the latter rise, or extend, a short distance, in substantial parallelism, the purpose being to maintain the maximum, or interior diametrical distance at all points above the axial line of support, in order to provide for the ready and unobstructed removal and replacement of the fulcrum-ring. In addition thereto, I may, and preferably do, dress off the inner face of the extremities of the ring-seat, to produce a divergence above the line of pivotal support, the object being to promote the ease of removal and replacement and to obviate all danger of binding, or sticking, due either to the accidental bending, or displacement of the ends, or to unequal expansion, or contraction.

As it is desirable that the parts fit as closely as is consistent with freedom of movement, the outer face of the ring-seat and the inner face of the crutch-arm are struck, preferably, from substantially the same center, the former being slightly convex, transversely, to enable it to swing within the crutch-arm without contact.

The ring-seat is supported by the engagement of its trunnions, or pivotal supports, with bearings 9 and 10, formed in, or near, the ends of the crutch-arm. These bearings are simply drilled, or otherwise formed, in such manner that the pivotal axes may turn therein without unnecessary play. In the inner face of one extremity is cut, or formed, an entrance-slot 12, having substantially horizontal upper and lower edges or walls and extending from one edge to a point over the bearing and then extended downward, or into said bearing. This permits the easy insertion and removal of the ring-seat, by inserting one of its trunnion-pins in the other bearing, and then pushing the other through the entrance-slot, until it drops into place, where it will be retained by the sides of the vertical portion of the slot. I may slightly change this construction by forming the entrance-slot 12 from the end of the crutch-arm directly downward, into the bearing.

Within the curved, or semi-circular, ring-

seat is detachably mounted the fulcrum-ring 13, which is preferably of complete circular form. The periphery of this ring, which is concentric with the inner face of the curved or semi-circular seat, is provided with a central tongue or rib 14, which enters and has free longitudinal play in a central groove, or channel 15, in the inner face of the ring-seat, the extremities of said groove being expanded to, or nearly to, the width of the inner face of the ring-seat, to aid in shipping the oar quickly and accurately. The tongue, or rib 13, is extended over the greater portion of the periphery of the fulcrum-ring, but as it is not necessary that the latter have complete circular adjustment in the ring-seat, the upper part of the fulcrum-ring is cut away, or otherwise removed, on its exterior, leaving the interior of circular or other proper form, that it may substantially fit the loom of the oar. By removing a part of the exterior, the weight is diminished, the neat and graceful appearance of the parts is promoted, and ample strength is preserved for the purpose in view.

The diminished, or attenuated portions, of the fulcrum-ring unite with, or support, a boss 16, through which is tapped a set-screw 17, which may be screwed down upon the oar, when the latter is idle, to secure said oar within the oar-lock and prevent its loss.

By the improvement described, a rower can obtain every possible action of the oars and can, at the same time, avoid much fatigue of certain of the muscles. In feathering the oar, adjusting the angle of action of the blade

upon the water, and varying the length of oar outside the fulcrum-ring, the constant strain upon the muscles produced by maintaining these several adjustments, is, in a great measure, removed.

The oar can be at any moment thrown out of the oar-lock, by simply lifting it, or throwing the loom up, whereby the fulcrum-ring will be instantly withdrawn from its ring-seat, the disengagement being accomplished with as much ease as in the old form of crutch-oar-lock. It is as readily replaced, also, both movements being accomplished without removing, or detaching, any of the parts.

What I claim is—

An oar-lock, consisting of a swivel-pin 2 having a crutch-arm 3, the ends of which are provided, respectively, with the pivot bearings 9 and 10, the former constructed with the horizontally walled entrance-slot 12, the continuous fulcrum-ring 13 having the set-screw 17 and the central rib 14 vanishing into the body of the ring toward the set-screw, and a segmental ring seat provided with a circular groove 15 to receive said central rib, and having pivots 6 detachably engaging the said pivot bearings of the crutch-arm, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOSEPH D. PRESCOTT.

Witnesses:

LUKE A. WILDER,
JOHN W. MACKINTOSH.