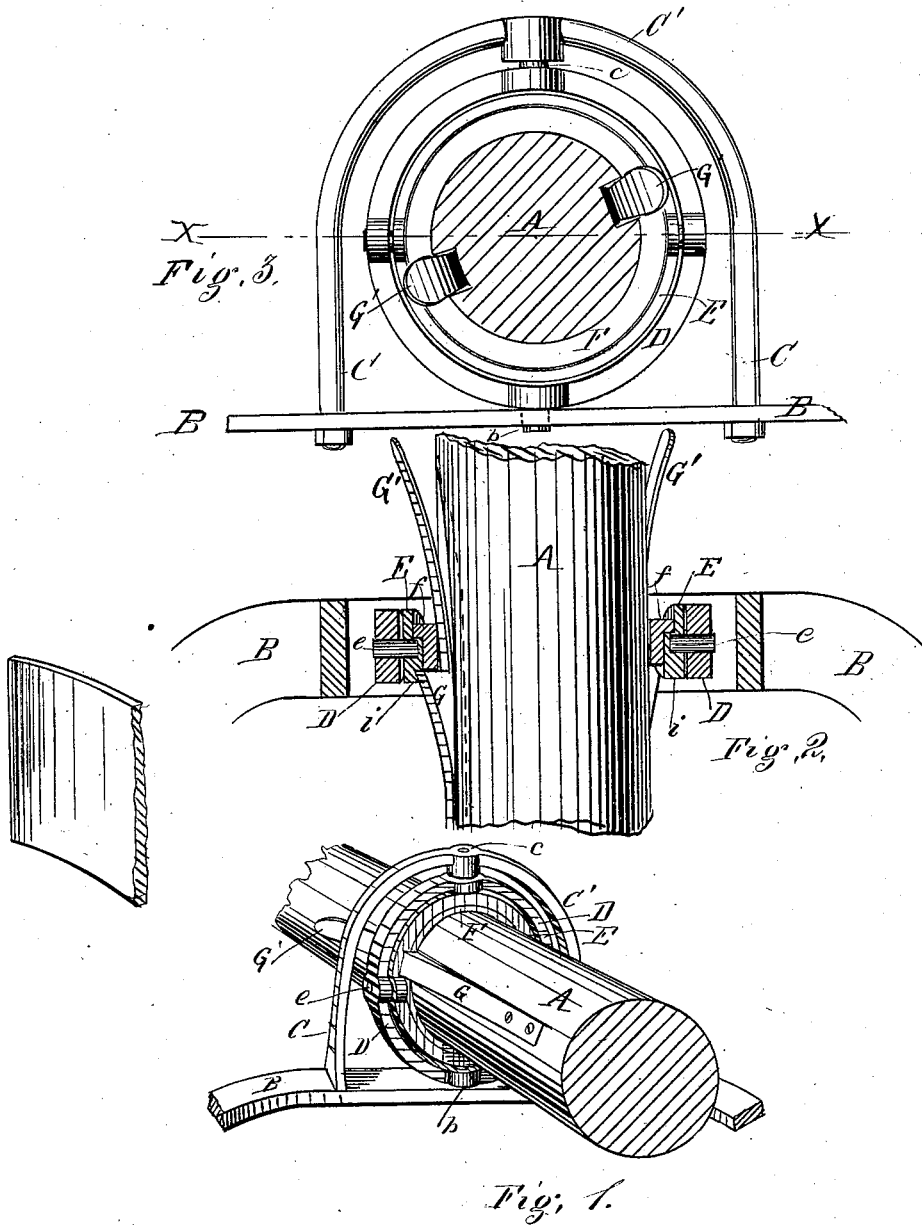


J. WEYMAN.
Rowlocks.

No. 207,465.

Patented Aug. 27, 1878.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN WEYMAN, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN ROWLOCKS.

Specification forming part of Letters Patent No. **207,465**, dated August 27, 1878; application filed February 2, 1878.

To all whom it may concern:

Be it known that I, JOHN WEYMAN, of the city of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new, useful, and Improved Rowlock, which invention is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a perspective view of the invention, having a short piece of the oar in the rowlock, and a detached section of the oar-blade. Fig. 2 is a horizontal section taken at the line *xx* in Fig. 3. Fig. 3 is a front view of the invention, the oar being in section.

My invention relates more to that class of rowlocks in which hand-ears or sculls are used to propel small boats, especially those used for racing purposes, and has for its object the securing the oar in the rowlock, so that it has a free, horizontal, vertical, and a partial rotary movement, as required, without lost motion—that is to say, all the movements necessary in rowing a boat, to wit: moving the blade of the oar forward, (horizontal,) dipping it vertically down into the water, pulling it horizontally back, raising it up out of the water, partly rotating it, so that the blade will be horizontal or feathered as it is moved forward, the attachment of the oar to the rowlock being such that it can easily be removed whenever desired. This I accomplish by the combination of an outrigger provided with a short upward-projecting pin or pivot situated in the center of its length, and at each side of said pivot with standards, which join together at the top and form an arch, from the center of which, and opposite to the said outrigger-pivot, projects downward a similar pivot. On these pivots is pivoted a ring of metal, which has a free vertical rotary movement. Inside of this ring is another ring of metal, which journals on horizontal pivots which project inward from the first ring, so that this second ring has a free horizontal rotating movement. Said second ring has a seat turned out around its inside face on the outer side, in which fits the collar of a third ring, to which the oar is attached, and through which the stem passes or is inserted. Two springs are let into and attached to the oar longitudinally, the free ends of which pass outwardly and under said

third ring and project out from the longitudinal axis of the oar, so as to form a latch, which, in combination with the collar of the third ring or button, prevents any longitudinal movement of the oar in the rowlock. Said third ring has a rotary movement inside of the second ring, which, however, is limited by the latch of the springs engaging projections or stops on the ring No. 2 when the blade of the oar is in a vertical position.

In the drawings, A is a section of an oar-stem. B is the outrigger; *b*, the outrigger-pivot projecting upward; C C, the two standards; C', the arch of said standards. *c* is the downward-projecting pivot. D is the first ring, which pivots on the pivots *b c*, and provides for the free horizontal movement of the oar, and is termed the "horizontal-movement ring." At the point where the said pivots enter and journal in the walls of this ring it is strengthened, as shown. It has also two pivots projecting in from its internal face in line with its horizontal transverse axis, one on each side, which give bearing to the ring No. 2.

E is the second ring inside of the first or outside ring. It is the same in width of face and thickness as said first ring, and is in diameter of such size as will move freely in it. It journals on the pivots *e e* of ring No. 1. No. 2 ring, turning on its horizontal transverse axis, gives a free vertical movement to the oar; therefore is termed the "vertical-movement ring." F is the third or inside ring, technically called the "oar-button." It has a collar, *f*, which fits in the seat in ring E, and prevents ring F and the oar, to which it is attached by screws, from passing longitudinally (of the oar) inwardly. G G are two springs, which are inserted in and attached at one end to the sides of the oar near the oar-handle, the free ends projecting so as to form a latch, which engages the inside of ring No. 2 when the collar *f* is seated in said ring, thereby preventing the oar from slipping or moving longitudinally out of the rowlock. Said latch of the springs also engages with the projection on ring No. 2 when the oar is down in the water and in the act of propelling the boat, thus limiting the rotary movement of the oar and relieving the hand of the oarsman. Said springs are bent so as to pass out under

the button-ring and then turn up, and are formed into short handles $G' G'$, by which the springs are pressed down into recesses in the oar, that the latches may pass out through ring No. 2 when it is desired to remove the oar from the rowlock.

In place of the springs and collar of the button, the said button may have a screw-thread cut round its periphery and be loosely inserted into ring No. 2. This I claim as an equivalent.

Having thus described my invention and its operation, what I claim, and desire Letters Patent for, is—

1. The combination of the ring D, journaling on the vertical pivots $b c$ of the outrigger and arch, and the ring E, journaling on the horizontal pivots $e e$ of the ring D, all operating as described, and for the purpose of allowing the oar to move horizontally and vertically.

2. An outrigger, arched standards C C, a series of pivoted rings, and one or more latch-springs, all combined and operating as and for the object set forth.

3. The combination, in a rowlock, of one or more latch-springs and a ring or button, for the purpose of locking the oar in the rowlock against longitudinal movement of the same, as described.

4. The vertical pivots $b c$, horizontal pivots $e e$, rings D and E, the arch C' of the standards C C, and the outrigger B, all combined, constructed, and operating in manner as described.

JOHN WEYMAN.

Witnesses:

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