

T. S. POPPLEWELL.

ROW-LOCK.

No. 189,135.

Patented April 3, 1877.

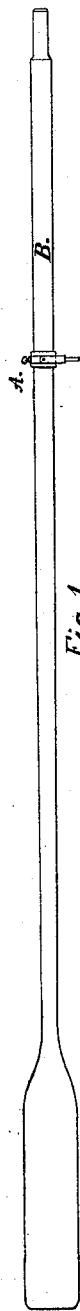


Fig. 1.

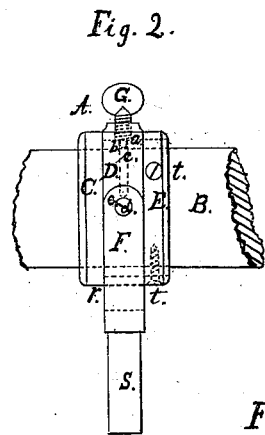


Fig. 2.

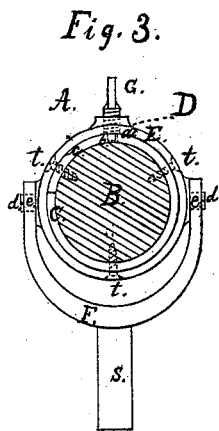


Fig. 3.

Fig. 4.

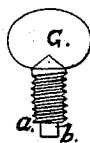
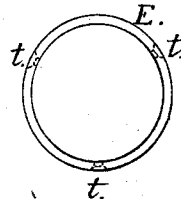
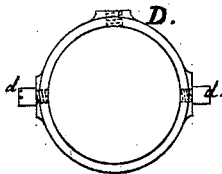
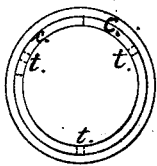
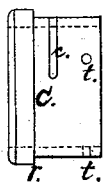


Fig. 5.



Witnesses;
P. L. Ellsworth
C. S. Mackey

Inventor;
Charles S. Popplewell,
J. H. Egbert Attorney

UNITED STATES PATENT OFFICE.

THEODORE S. POPPLEWELL, OF ITHACA, NEW YORK, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO HORACE J. LINDERBERRY, OF SAME PLACE.

IMPROVEMENT IN ROWLOCKS.

Specification forming part of Letters Patent No. **189,135**, dated April 3, 1877; application filed August 25, 1876.

To all whom it may concern:

Be it known that I, THEODORE S. POPPLEWELL, of Ithaca, in the county of Tompkins and State of New York, have invented a new and useful Rowlock, which invention is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of my invention is to so construct a rowlock that the oar may easily and rapidly be adjusted, so that it will be a loose (and, when loose, so that it will stop at just the right position, either feathered or straight) or tight oar, by simply turning a thumb-screw, G, as it is necessary, without my invention, for those owning row-boats to let to have two sets of oars for each boat—one loose, one tight—that the oarsman may take which he prefers. With my invention only one set is needed.

My object is also to prevent the oar from slipping endwise, and to make the rowlock fast to the oar, to prevent its being lost; these to be done by a combination of rings C D E, yoke F, and wood-screws *t t t*, as shown in Figures 2 and 3 in the accompanying drawings. These show a side and end view of a section of the oar on which is the rowlock. Fig. 1 is merely to show the position of the rowlock A on the oar B.

The thumb-screw and rings are shown separately in Figs. 4 and 5. These may be made of malleable iron or brass castings. The ring or sleeve C, Fig. 5, which slips on and is made fast to the oar B, is made larger at one end, with a shoulder, *r*, against which the ring D is placed. Next to ring D on the sleeve C is placed the ring E. Wood-screws *t t t*, (the same letters are used to represent both screws and screw-holes,) passing through ring E, sleeve C, and into the oar B, hold the three rings together, and fasten the rowlock to the

oar. The ring D has a boss on each side, into which pins *d d* are screwed. On these pins the oar swings in a hole in each end of the yoke F, Figs. 2 and 3. This ring is made loose enough to turn easily on the sleeve C, which is fast to, and turns with, the oar B, thus allowing the oar to be used as a loose oar, which is feathered or straight, by the oar and sleeve C turning until the ends of the slot *c* in sleeve C hit the pin *b* on the end of the thumb-screw G, Fig. 4, and stop in just the required position.

The thumb-screw G and slot *c* are shown in position in Figs. 2 and 3. The yoke F, in which the oar swings, is not shown separately, as it is thought to be shown clearly enough in Figs. 2 and 3.

Each end of the yoke F has a hole, *e e*, into which are inserted the pins *d d* in ring D. On these pins *d d* the oar B swings. The pin *s* at the bottom of the yoke F goes into a hole in a block that is attached to the edge of the boat. The thumb-screw G, Fig. 4, is made with a pin, *b*, and shoulder *a* on the end. The pin *b* extends downward into the slot *c* in sleeve C.

Said pin and slot are in use only when the oar is loose. The shoulder *a* is screwed against the sleeve C on each side of the slot *c*, preventing the sleeve C and oar B from turning in the ring D, and thus making a tight oar, which is preferred by most beginners in rowing.

I claim as my invention—

The combination in rowlocks, substantially as described, of a thumb-screw with a slotted ring, so as to make a tight or loose oar by simply turning the thumb-screw.

THEODORE S. POPPLEWELL.

Witnesses:
P. G. ELLSWORTH,
L. S. MACKEY.