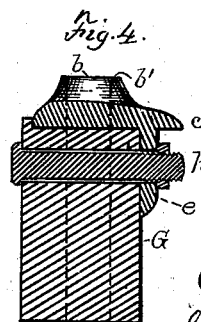
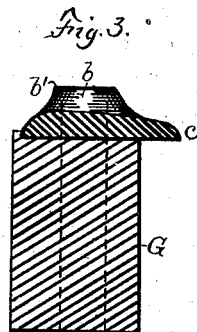
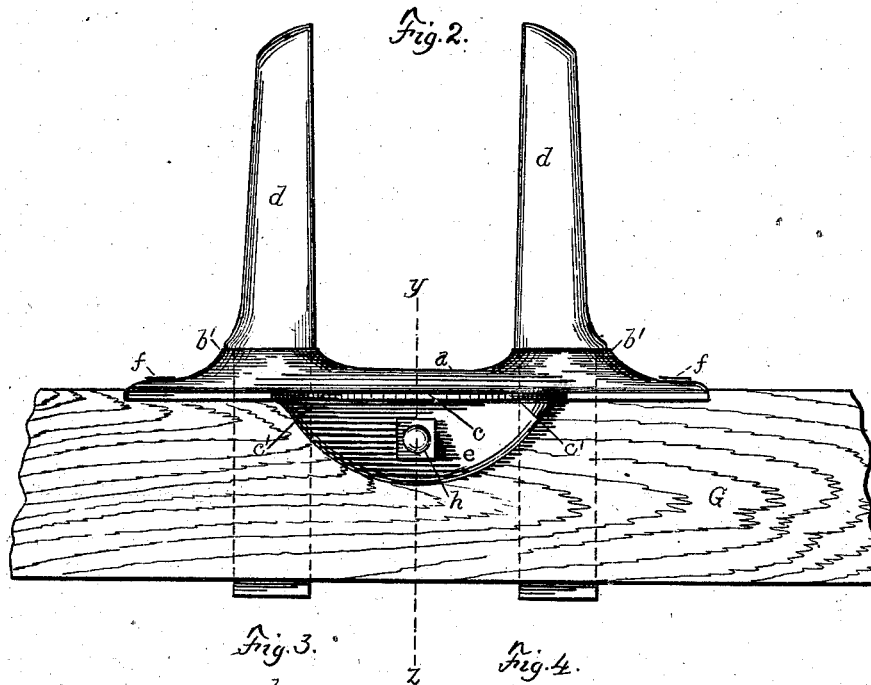
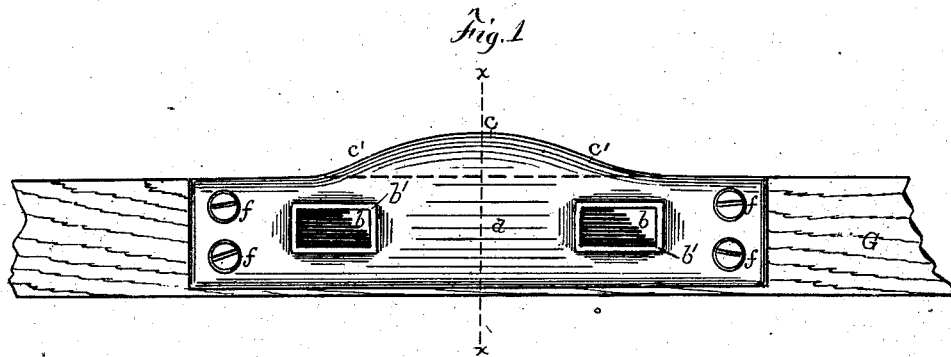


G. W. McKENZIE.  
Rowlock.

No. 216,876.

Patented June 24, 1879.



Witnesses:  
Chas. E. Lewis  
A. C. Eader

Inventor:  
Geo. W. McKenzie  
By his Atty  
Chas B. Mann

# UNITED STATES PATENT OFFICE.

GEORGE W. MCKENZIE, OF HARRINGTON, MAINE.

## IMPROVEMENT IN ROWLOCKS.

Specification forming part of Letters Patent No. **216,876**, dated June 24, 1879; application filed June 13, 1878.

*To all whom it may concern:*

Be it known that I, GEORGE W. MCKENZIE, of Harrington, in the county of Washington and State of Maine, have invented a new and useful Improvement in Rowlocks, of which the following is a specification.

The invention relates to a metallic plate for rowlocks with which wooden thole-pins are to be used, and is designed to overcome some of the difficulties that exist with the common method of forming the rowlock of wooden pins which rest in holes through the gunwale. When thus constructed the gunwale wears away very fast, and also the oar is worn rapidly, weakening it in a short time. The holes in the gunwale for the thole-pins wear large at the top, and thus the pins work loose and are rickety, making it difficult sometimes to keep the oar in the rowlock. The gunwale is liable to be split, as it frequently is, by the oar-blade being caught when in the water, and thus prying between the pins. The common socket rowlocks are apt to be lost or stolen, and when this occurs in a foreign port it is a serious inconvenience, because they cannot be replaced.

This improvement, it is thought, effectually overcomes these difficulties.

My invention will now first be described in connection with the drawings, and then pointed out in claim.

Figure 1 is a top view of a boat's gunwale broken off, showing my rowlock-plate attached. Fig. 2 is an outer-side view of a boat's gunwale broken off, showing my improved rowlock. Fig. 3 is a transverse section taken through *xx* in Fig. 1. Fig. 4 is a transverse section taken through *yz* in Fig. 2.

The plate is made of cast-iron or other metal, and if of iron may be made malleable.

*a* represents the top or face of rowlock-plate between the thole-pin holes *b b*. Around these holes the plate is of extra thickness, the edge *b'* forming a raised seat for the shoulders on thole-pins *d*, thus making the metal socket in which the pins sit of an increased depth, whereby the pins have greater steadiness. In the direct line between the holes the face of the plate is shown as being slightly hollowed out, the highest point being the edges of the

holes, as seen in Fig. 2, and in the transverse direction the face is slightly rounded and slants gradually off to the outer edge, *c*, which is a rounded projecting edge extending over the outer edge of gunwale *G*, and serves as a rest upon which the oar sweeps at each stroke between the two points *c'*.

The ends of the plate are provided with holes, through which screws *f* enter to secure it to the gunwale. In addition to this means of securing it, the under side of the rounded projecting edge *c* is provided with a depending plate, *e*, at right angles and running lengthwise. When secured in position this part *e* will come against the outer side of the gunwale, as seen in Fig. 2, and, being provided with a bolt-hole, may be firmly secured by the bolt or screw *h*.

I prefer to cut into the top of gunwale a seat for the metal rowlock-plate, about an eighth of an inch in depth, and then to secure it by screws. Holes for the thole-pins are to be mortised vertically through the gunwale to coincide with those in the plate.

A rowlock constructed on this improved plan is a permanent fixture to a boat, cannot accidentally become loosened, and, being smooth on the surface between the thole-pins, will not rapidly wear the oar, as the common device does.

I am aware that metal plates for rowlocks, which are to be secured to the gunwale of a boat and used in connection with wooden or metal thole-pins, are not new, and I do not claim, broadly, a metal rowlock-plate adapted to be secured to the gunwale.

Having described my invention, I claim and desire to secure by Letters Patent—

The improved metallic rowlock-plate herein described, having the thole-pin holes *b b*, with the raised edge *b'*, and transversely between the holes slanting gradually off to the outer rounded projecting edge *c*, which is provided on its under side with the depending plate *e*, as set forth.

GEORGE W. MCKENZIE.

Witnesses:

GILMAN P. SMITH,  
JAMES H. WALLACE.