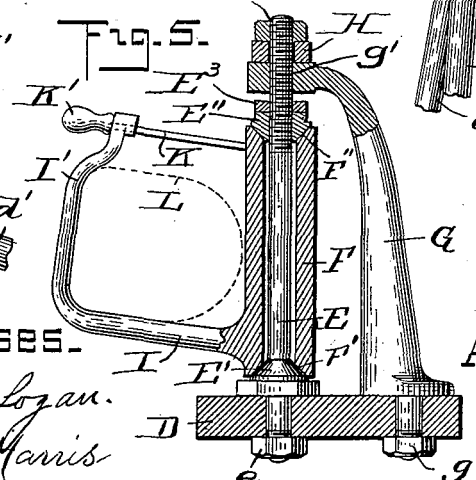
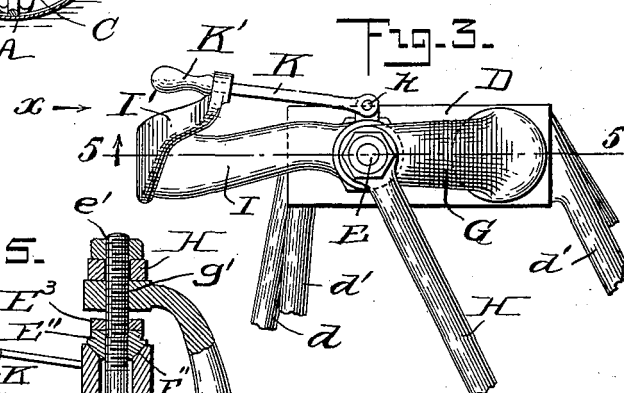
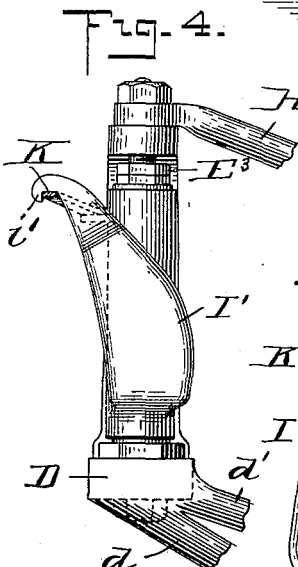
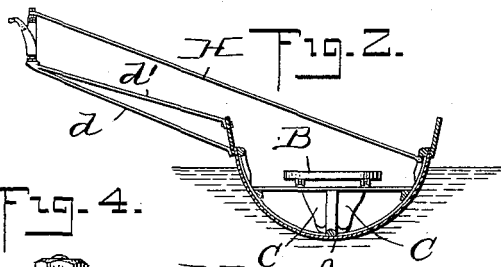
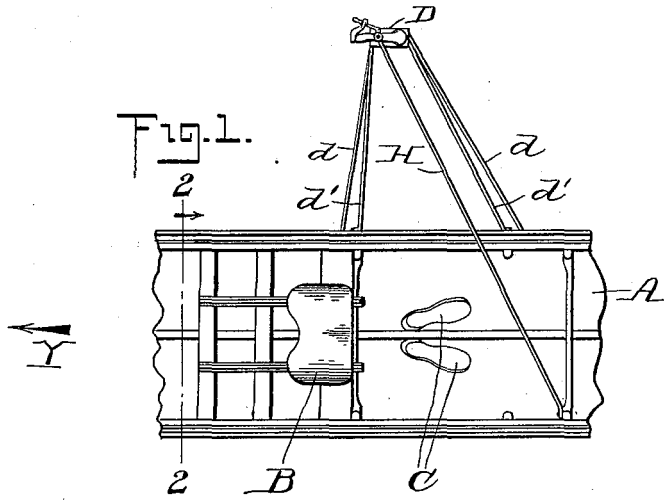


No. 700,827.

Patented May 27, 1902.

A. H. ROLLINS.
SWIVEL ROWLOCK.
(Application filed Aug. 3, 1901.)

(No Model.)



Witnesses.

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UNITED STATES PATENT OFFICE.

ALDEN H. ROLLINS, OF CAMBRIDGE, MASSACHUSETTS.

SWIVEL-ROWLOCK.

SPECIFICATION forming part of Letters Patent No. 700,827, dated May 27, 1902.

Application filed August 3, 1901. Serial No. 70,791. (No model.)

To all whom it may concern:

Be it known that I, ALDEN H. ROLLINS, a citizen of the United States, residing at Cambridge, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Swivel-Rowlocks, of which the following is a specification.

This invention relates to improvements in swivel-rowlocks particularly designed for racing-shells having outriggers, although it may to advantage be used on other kinds of row-boats.

The invention has for its object to provide an improved swivel-rowlock of simple and inexpensive construction in which the friction on the thole-pin will be reduced to a minimum and in which the parts may be readily adjusted to compensate for wear.

It also has for its object to provide improved means for supporting and bracing the rowlock in such manner that the strain will be partially sustained by each side of the boat.

The invention is carried out as follows, reference being had to the accompanying drawings, wherein—

Figure 1 represents a partial top plan view of a racing-shell, showing one of my improved rowlocks arranged at one side of such shell or boat. Fig. 2 represents a cross-section on the line 2 2 shown in Fig. 1. Fig. 3 represents a detail top plan view of one of my improved rowlocks. Fig. 4 represents an end view of Fig. 3 as seen from X in said figure; and Fig. 5 represents a cross-section on the line 5 5 in Fig. 3, parts being shown in elevation.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

In Figs. 1 and 2, A represents the hull of a racing shell or boat of any well-known form or construction, having a sliding seat B and foot-rests C C, as usual. The boat when rowed travels in the direction of the arrow marked Y in Fig. 1.

In the drawings, D represents the outrigger-sill, having secured to it or made integral therewith the outrigger stays or braces $d d'$, the inner ends of which are secured in a suitable manner to the hull of the boat, as usual.

To the outrigger-sill D is secured, preferably by means of a nut e , the thole-pin upright spindle E, on which is loosely journaled the rowlock-sleeve F. In practice I prefer to make on the lower portion of the spindle E a cone-bearing E' , adapted to fit against a conical recess F' in the lower end of the sleeve F, as shown in Fig. 5. The upper end e' of the spindle E is screw-threaded, as shown in Fig. 5, and onto it is screwed an adjustable cone E'' , journaled in a correspondingly-shaped conical bearing F'' in the upper end of the sleeve F, as shown in Fig. 5. By adjusting the cone E'' on the screw-threaded portion of the spindle E relative to the sleeve F the wear on the bearing-surface of said sleeve may be taken up from time to time as may be found necessary, and this may be accomplished without loosening the spindle E or disturbing any of the other parts of the rowlock.

E^3 is a check-nut on the screw-threaded portion e' on the spindle E for the purpose of securing the adjustable cone E'' relative to the upper end of the sleeve F after said cone E'' has been adjusted.

G is a post, the lower end of which is secured to the outrigger-sill D, preferably by means of a nut g . The upper end of the said post is provided with a female screw-thread, (shown at g' in Fig. 5,) and through it is screwed the screw-threaded portion e' of the spindle E, as shown.

Above the upper end of the post G is secured on the screw-threaded portion e' of the spindle E the outer end of the brace or stay rod H, which is extended diagonally across the boat or shell in front of the seat B and secured in any suitable manner to the opposite side of the boat or shell, as shown in Figs. 1 and 2. By means of such brace or stay from the rowlock-spindle to the opposite side of the shell or boat I cause the rowlock-spindle to be rigidly attached to the opposite side of the boat or shell, thus causing a portion of the strain to be sustained by each side of the boat and preventing undue vibration of the latter during the rowing operation.

In one piece with the pivoted sleeve F is made the yoke for receiving the oar, composed of the horizontal or nearly-horizontal portion I and the vertical or nearly-vertical portion

I', as shown in Figs. 3, 4, and 5. The upper end of the vertical arm I' of the yoke is provided with a locking-notch *l'*, adapted to be interlocked with a lock-bar K, having a head or projection K' in its free end and pivotally connected at *k* to the sleeve F, as shown.

L in dotted lines in Fig. 5 represents the oar, which when inserted in the rowlock rests upon the substantially horizontal arm I of the yoke, and during the rowing operation the upright arm I' of the rowlock serves as a movable fulcrum against which the oar is held, as shown. During the rowing operation the yoke is caused to oscillate with the sleeve F upon the stationary spindle E in such a manner as to cause the yoke to swing outward during the pulling of the stroke of the oar, and vice versa during the opposite or recovery motion.

20 What I wish to secure by Letters Patent and claim is—

1. A swivel-rowlock comprising a vertical spindle provided with means for rigidly affixing it to an outrigger-sill, said spindle being provided near its lower end with a conical collar and screw-threaded at its upper end, a sleeve journaled on said spindle and carrying an oar-yoke consisting of an approximately horizontal arm provided at its free end with a vertical arm, and a pivoted latch connecting the upper end of the vertical arm to the

sleeve, said sleeve being provided at its opposite ends with conical recesses or bearings, the lower of said bearings fitting the conical collar on the spindle, a cone adjustably fitted on the upper threaded end of the spindle and fitting the upper conical bearing in the spindle, a check-nut fitted on the spindle over the cone, and a post provided with means for fixing its lower end to the outrigger-sill abaft the spindle and connected at its upper end to the upper end of the spindle, substantially as described.

2. In combination with a shell or boat, an outrigger-sill D, secured at one side to the shell or boat by braces and having a spindle E, secured to said sill and a rowlock pivotally arranged on said spindle, a post G, secured to said sill and to the upper end of the spindle E, and a brace or stay H, secured at its outer end to the spindle E, and at its inner end to the opposite portion of the shell or boat substantially as and for the purpose set forth.

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

ALDEN H. ROLLINS.

Witnesses:

ALBAN ANDRÉN,
SAMUEL J. CRADDOCK.