

J. W. NORCROSS.

ROW-LOCK.

No. 179,128.

Patented June 27, 1876.

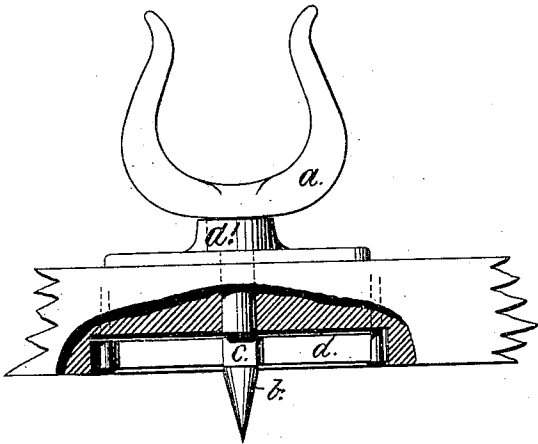


Fig. 1.

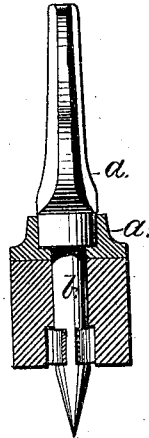


Fig. 2.

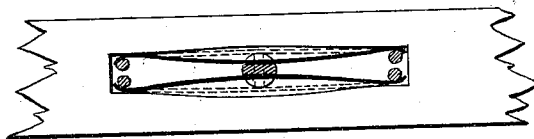


Fig. 3.

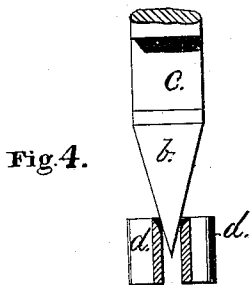


Fig. 4.

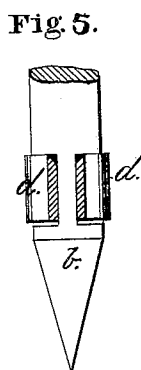


Fig. 5.

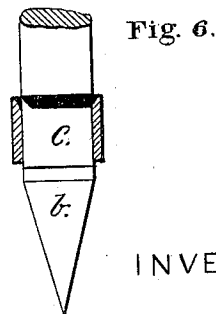


Fig. 6.

WITNESSES.

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN ROWLOCKS.

Specification forming part of Letters Patent No. **179,128**, dated June 27, 1876; application filed April 3, 1876.

To all whom it may concern:

Be it known that I, JOSEPH W. NORCROSS, of the city of Boston, county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Rowlocks; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

Figure 1 is a side view of my improved rowlock, shown partly in section. Fig. 2 is an end view of the same, also partly in section. Fig. 3 is a plan view, showing the arrangement of the springs in connection with the flattened portion of the spindle. Fig. 4 shows the point of the spindle as entering between the springs. Fig. 5 shows the springs pressing against the flattened portion of the spindle. Fig. 6 shows the spindle as turned, ready to be withdrawn from between the springs.

The first object of this invention is to so arrange a rowlock that the same may be easily secured to the socket, be firmly held, and readily withdrawn; that it shall be simple, not liable to be lost, and self-contained, so as not to depend for its security on chains, pins, or other externally-visible means.

The second object of this invention is to so arrange a rowlock that, while the same may freely yield to the motion of the oar, it shall automatically return to and retain the proper position to receive the oar.

The nature of the invention consists in providing the rowlock proper with a spindle, the lower end of which is pointed, and on which a flattened surface or surfaces are arranged, against which a spring or springs press, and thus firmly secure the rowlock, and also keep the same in the proper position to receive the oar, while the rowlock may freely give to the motion of the oar, as will be more fully set forth hereinafter.

In the drawings, *a* is the rowlock proper, secured to the spindle *b*, which enters into and rests in the rowlock-socket *a'*, and provided with a shoulder or boss, as is usual in metallic rowlocks. The spindle *b* is pointed at its lower end, and is provided with one or more flattened surfaces, *c*. *d d* are two

springs, arranged to press against the surfaces *c c*, and thus firmly hold the rowlock; to prevent its being lost, and also to return it to the proper position to receive the oar, and while retaining it in this position, to allow it to yield to the motion of the oar.

I prefer to use two springs, *d d*, as shown, to firmly hold the rowlock in the socket, and to maintain the same in the proper position, and also to provide two flattened surfaces on the spindle, against which the springs bear; but it is obvious that only one spring may be used to obtain, measurably, a like result.

The operation of my rowlock is as follows: When the spindle is pushed into the socket, the pointed end enters between the springs *d d*, and to facilitate the entrance the upper edges of the springs are beveled at the place where the point enters. The springs are, therefore, forced apart, and the spindle enters, (until the springs enter the recess formed by the flattened surfaces,) when they spring into this recess, and thus firmly hold the rowlock in a fixed position, and still allow the same to give to the motion of the oar.

The rowlock being always in the proper position to receive the oar, the oar can in any emergency be placed quickly and with certainty, and thus many of the accidents caused when a boat in a heavy sea is launched, and the oar cannot be instantly used, prevented.

This rowlock combines all the advantages of the permanently-fixed old-fashioned rowlock, with the swinging metallic and more modern rowlock, having none of the disadvantages of either.

When the rowlock is to be withdrawn, the same must be turned at right angles to its proper position, as shown in Fig. 6, to open the springs, and allow the spindle to be withdrawn, which can never be done by accident, and is readily done when required.

In place of the springs *d d*, coiled springs may be placed longitudinally with the side of the boat, arranged to press against flattened sides of the spindle, so as to accomplish the same end. The springs may be secured in a separate block, or placed in a box forming part of the rowlock-socket.

Having thus described my invention, I claim

as new and desire to secure by Letters Patent—

The combination, with the rowlock *a*, provided with the spindle *b*, of the flattened surface *c*, or surfaces *c c*, against which the spring or springs are arranged to press, so as to maintain the rowlock in its proper posi-

tion, substantially as and for the purpose set forth.

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Witnesses:

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