

J. W. Norcross.
Oar Lock.

N^o 46,816.

Patented Mar. 14, 1865.

Fig. 1.

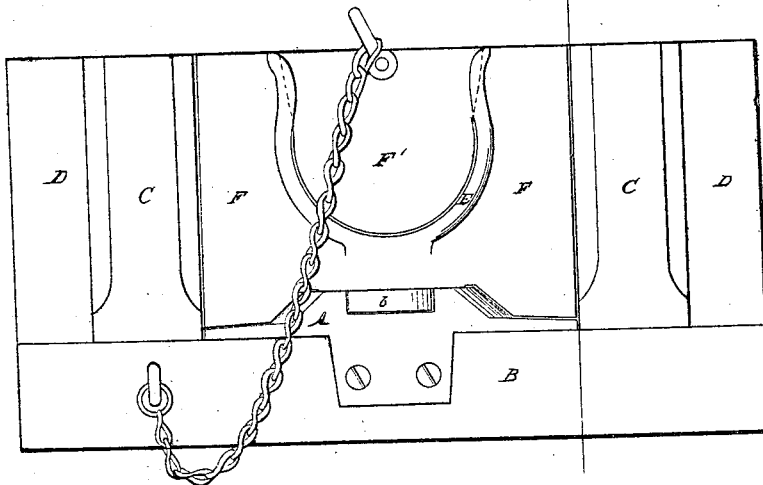


Fig. 2.

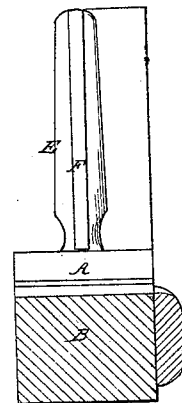


Fig. 3.

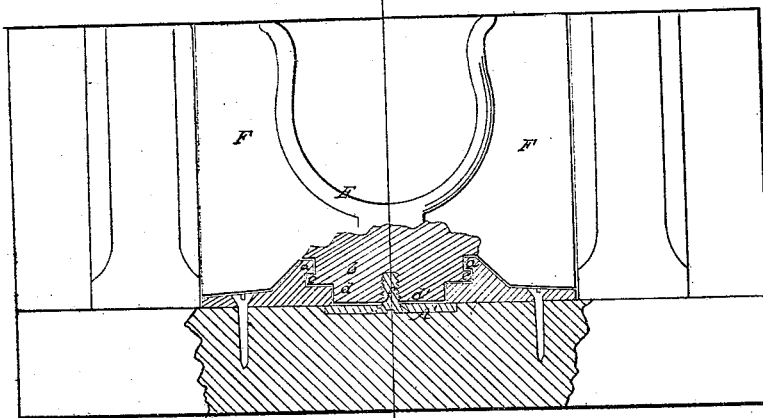


Fig. 4.

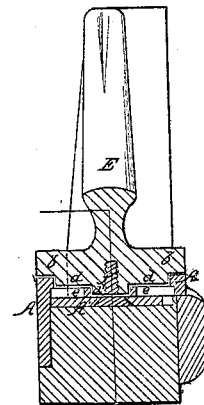


Fig. 5.

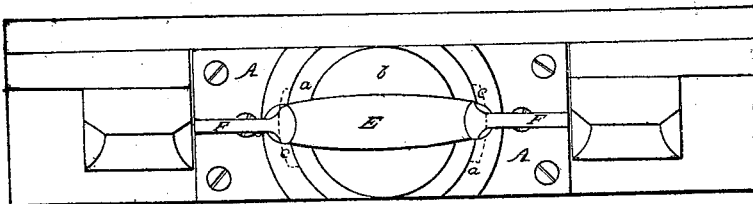
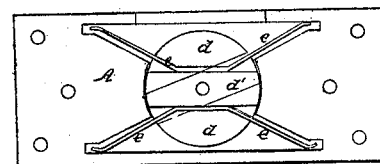


Fig. 6.



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UNITED STATES PATENT OFFICE.

JOSEPH W. NORCROSS, OF MIDDLETOWN, CONNECTICUT.

IMPROVED ROWLOCK.

Specification forming part of Letters Patent No. 46,816, dated March 14, 1865.

To all whom it may concern:

Be it known that I, JOSEPH W. NORCROSS, of Middletown, Middlesex county, State of Connecticut, have invented a new and Improved Rowlock; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side view of my rowlock adapted to a "wash-streak" boat. Fig. 2 is an edge view of the rowlock as seen by making a section through the gunnel, as indicated by red line *y y*, Fig. 1. Fig. 3 is a sectional view showing the manner of applying the rowlock to the gunnel. Fig. 4 is a vertical cross-section of Fig. 3 taken through the center thereof. Fig. 5 is a top view of the rowlock. Fig. 6 shows the application of springs to my rowlock.

Similar letters of reference indicate corresponding parts in the several figures.

The main object of my invention is to so apply a pivoted or swiveling rowlock to the gunnel of a boat that all the strength necessary to insure durability can be obtained without in any manner weakening the gunnel, as will be hereinafter described.

Another object of my invention is to adapt a swiveling rowlock to a wash-streak boat, and to prevent the entrance of water into the boat through the openings which are made through the wash-streak to receive the rowlock and the oar, as will be hereinafter described.

To enable others skilled in the art to understand my invention, I will describe its construction and operation.

One of the most common modes of applying swivel-rowlocks to the gunnel of a boat is to form strong pins on the former and to seat these pins into socket-plates which are secured to the gunnel. This involves the necessity of boring holes into the gunnel large enough to receive the pintles on the rowlocks, and consequently weakening it very much at such points where the greatest strength is required.

The drawings represent my invention applied to the wash-streak of a boat in such manner that no portion of the pivoted rowlock extends below the surface of the gunnel.

A represents a plate, which is secured rigid-

ly to the upper surface of the gunnel B, between two stanchions, C C, which support the wash-streak D, as shown in Figs. 1 and 3. This plate A has a circular recess formed in it, and also two segmental brackets with overhanging lips *a a*, which are adapted for receiving a circular plate, *b*, and its segmental lips *c c* and holding the rowlock E in place on plate A, yet allowing the rowlock to turn and accommodate itself to the horizontal vibrations of the oar in rowing. When the rowlock is turned at right angles to the plate A or gunnel B, the lips *c c*, which project from the base-plate of the rowlock, will pass out from beneath the lips *a a* on the brackets and admit of the rowlock being removed from its plate; but in no other position than that above described can the rowlock be so removed. A circular projection, *d*, on the base-plate *b* fits into the corresponding recess, which is formed in the fixed plate A, and serves to steady the rowlock in its oscillating movements, and on the bottom of said plate or projection *d* is a narrow projection, *d'*, extending diametrically across *d* and serving to act upon two semi-elliptical springs, *ee*, which are seated into recesses formed in the bottom of the plate A, as shown in Figs. 4 and 6, and which by their elasticity tend to keep the rowlock in a plane with the gunnel, as shown in Figs. 1, 2, 3, 4, 5.

During the act of rowing, the springs *ee* will both yield and allow the rowlock to vibrate about its axis of motion and accommodate itself to the full sweep of the oar; but when the oar is unshipped or allowed to remain at rest, said springs will keep the rowlock in the position shown in the drawings.

The springs *ee* may be inclosed within the plate A by means of the cap A', which is secured in place by a screw, *f*, that also serves to steady and hold in place the rowlock, as shown in Figs. 3 and 4. The horns of the rowlock may be curved in any suitable manner; but I prefer to curve them in such manner as will admit of very little play of the oar in rowing.

F F represent two wings, which may be formed on or applied to the horns of the rowlock in any suitable manner. These wings F F are intended for rowlocks which are applied to wash-streak boats for closing up the space between the horns and the stan-

chions C C, so as to prevent the boat from shipping water at these points. These wings or shutters, being formed on the rowlock, will move with it, and the springs *ee* will keep both in the desired position to effect the object above mentioned. When the oar is in the rowlock, the space within the horns thereof will be closed by the oar, and when the oar is removed this space may be closed by the removable shutter F', as shown in Fig. 1.

If desirable, a single vertical pin may be cast on the rowlock, or on the fixed plate A, to be received into sockets formed in said rowlock or plate, and, if desirable, the lipped brackets may be dispensed with, and in the case of the winged rowlock the pivot-pin may pass into or through the gunnel. When the center-pin is cast on the plate A and fitted into a socket in the rowlock, this pin may be made sufficiently large to enable me to dispense with the brackets or other similar contrivances; or the pins may be dispensed with and the brackets which I have above described used alone for making the swivel connection of the horns of the rowlock with the plate A, which is secured upon the upper surface of the gunnel. It will be seen from the above description that I not only do not weaken the gunnel in attaching my improved rowlock to it, but that the plate A serves as a strengthening-brace for the gunnel at the

point where it receives the greatest strain in rowing.

If desirable, the plate A may be secured rigidly to the top surface of the gunnel by means of clamps or bands, or screws may be used, as shown in Figs. 1 and 5. If desirable, the lips *ee* on the rowlock may be wholly inclosed in a circular flange, in which case one-half of this flange would have to be removed to admit the rowlock-flange.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. Pivoting a rowlock to a plate, A, by means of a horizontally-turning joint in such manner as to obviate the necessity of cutting away the gunnel-rail to apply the rowlock, substantially as described.
2. The use of wings or shutters F, in combination with a rowlock and the wash-streak of a boat, substantially as described.
3. Forming the wings F upon the horns of the rowlock, substantially as described.
4. Applying the springs *ee* directly to and beneath the plate A of the rowlock, substantially as described.

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Witnesses:

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