

J. W. Norcross.

Oar Lock.

N^o 4,6,132.

Patented Jan. 31, 1865.

Fig. 3.

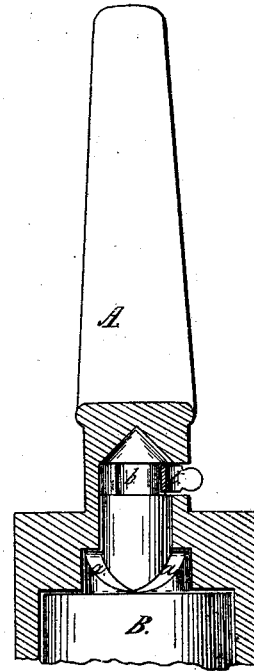
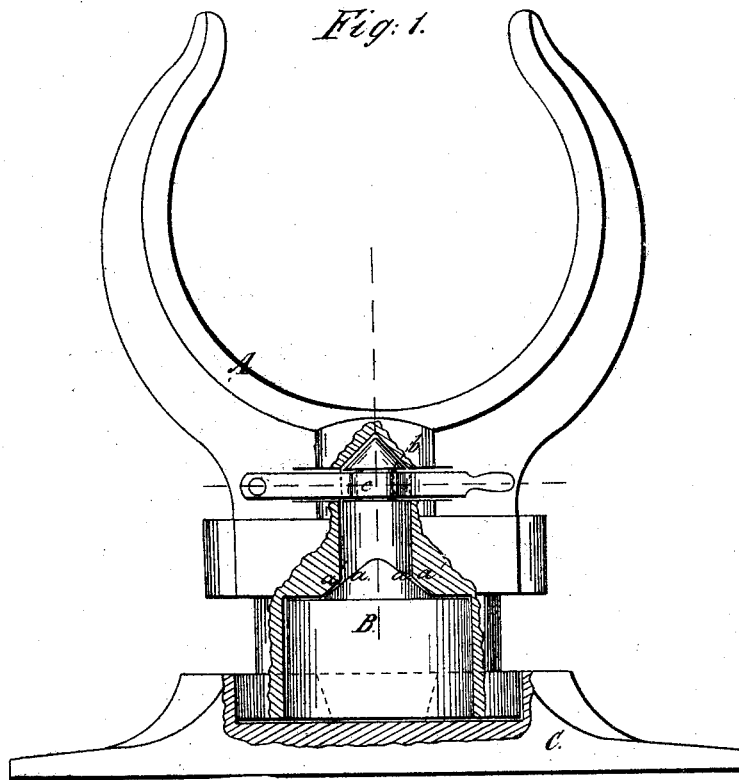
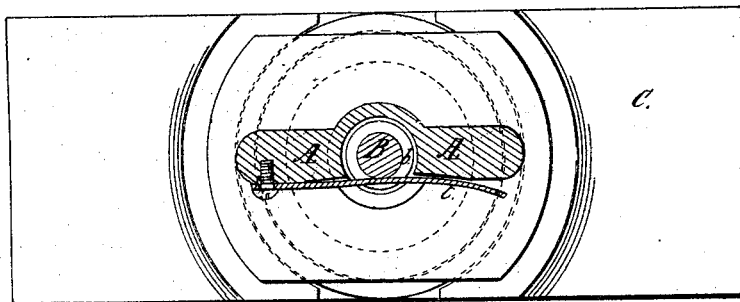


Fig. 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOSEPH W. NORCROSS, OF MIDDLETOWN, CONNECTICUT.

IMPROVED ROWLOCK.

Specification forming part of Letters Patent No. **46,132**, dated January 31, 1865.

To all to whom it may concern :

Be it known that I, JOSEPH W. NORCROSS, of Middletown, in the county of Middlesex and 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, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a sectional elevation of this invention. Fig. 2 is a plan or top view of the same, partly in section. Fig. 3 is a sectional side view of the same.

Similar letters of reference indicate corresponding parts.

This invention consists in the use of inclined planes, in combination with the rowlock and pin on which the same swivels, whether the same be secured to the plate or gunwale or to the rowlock in such a manner that by the action of said inclined planes, combined with that of the inherent gravity of the rowlock, said rowlock is always turned to a position parallel with the keel.

The invention consists, further, in the application of a spring-catch, in combination with the rowlock and with the pin in which it swivels, in such a manner that the rowlock is securely held in place and prevented from coming out spontaneously.

In using rowlocks it is essential for the safety of the boat that the same shall always be kept in a proper position at all times to receive the oar. The common swivel rowlock frequently by the motion of the boat, caused by the rocking of the wave or by striking against the side of a vessel or dock, gets displaced and crosswise of the boat, so that the oar can not be shipped in time to save the boat from swamping.

The rowlock A, which forms the subject of this invention, is made to swivel on a pin, B, which extends up from the flanged plate C, or, instead of securing the pin to the plate, said pin might be secured to the rowlock and made to swivel in a suitable socket in the plate, which is fastened down to the edge of the gunwale. In this latter case, however, the socket is liable to become choked up with ice in cold weather or with impuri-

ties, and the operation of introducing the rowlock is rendered difficult. For this reason I prefer to cast the pin solid with the plate, and to make a corresponding socket into the rowlock, as shown in the drawings. Said pin is provided with four inclined planes, *a*, arranged as shown in Figs. 1 and 3 of the drawings, and corresponding inclined planes *a'*, or simple rollers or pins, are secured in the interior of the socket in which the pin turns. Said inclined planes are so combined that they form four right-angled triangles, the hypotenuses of which are inclined toward the keel of the boat, and if the rowlock is in its proper position parallel with the keel of the boat, the apexes of the inclined planes *a'* fit into the cavities between the inclined planes *a*, and if by some cause the rowlock is disturbed from this position its inherent gravity carries it back, and it is therefore always in the proper position to receive the oar.

The pin B is made to extend above the inclined planes, and it is provided with a circular groove, *b*, to receive a spring-catch, *c*, which is secured to the side of the rowlock, and which drops into said groove and prevents the rowlock from dropping out accidentally. This spring-catch does not interfere with the revolving motion of the rowlock, and it is obvious that the same can be constructed in various different ways, and if the pin B is cast solid with or secured to the rowlock, the catch must be secured to the plate or socket in which said pin swivels. A rowlock is thus produced which will always be in the proper position to receive the oar, and all accidents caused by the displacement of the rowlock are avoided.

If inclined planes are used both on the pin and in the socket, those in the socket can be produced in a cheap and simple manner by running Babbitt's metal into it and pulling in the pin. The inclined planes are thus made to fit each other perfectly, and the friction between the rubbing-surfaces is reduced by making the same of two metals of different hardness.

I claim as new and desire to secure by Letters Patent—

1. The inclined planes, in combination with the rowlock and pin on which the same

swivels, whether the same be secured to the plate or gunwale or to the rowlock, substantially as and for the purpose herein set forth.

2. The spring-catch, applied in combination with the rowlock, and with the pin on which it swivels, substantially as herein described, for the purpose of holding the row-

lock in and prevent its coming out spontaneously.

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Witnesses:

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