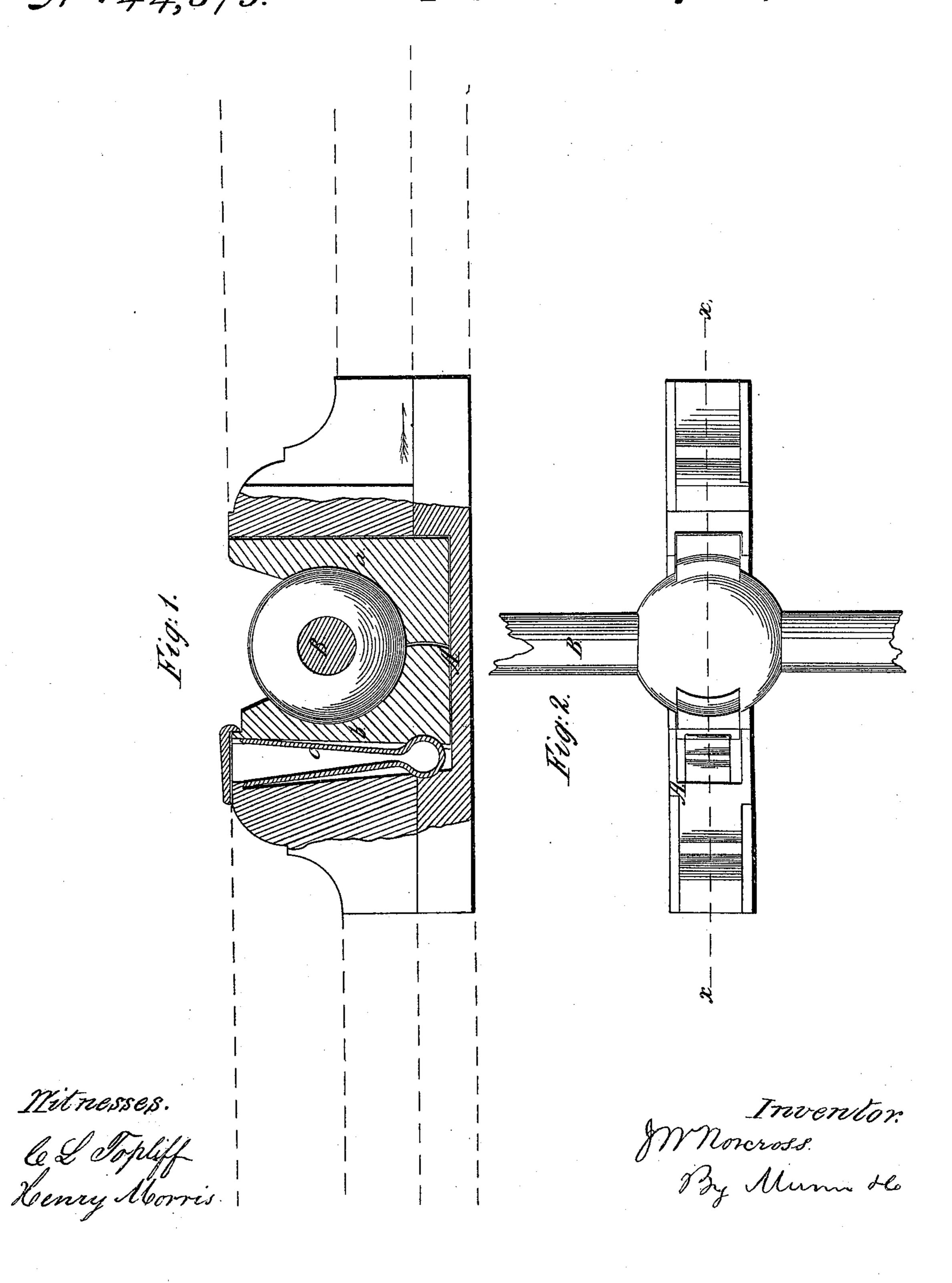
## J. W. Norcross. Oar Lock. Patented Sep. 20, 1864



## United States Patent Office.

JOSEPH W. NORCROSS, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO W. W. WILCOX AND JOSEPH HALL, JR., OF MIDDLETOWN, CONNECTICUT.

## IMPROVED ROW OR SCULL LOCK.

Specification forming part of Letters Patent No. 44,373, dated September 20, 1864.

To all whom it may concern:

Be it known that I, Joseph W. Norcross, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and Improved Row and Scull Lock; I and do hereby declare that the following is a full, clear, and exact description thereof, which will enable others 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 longitudinal vertical section of my invention, taken in the plane indicated by the line x x, Fig. 2. Fig. 2 is a plan or top view of the same.

Similar letters of reference indicate like

parts.

This invention consists in the combination with the oar and row or scull lock of a universal joint, arranged in such a manner that the oar is prevented from being thrown out of the rowlock by the force of the sea or by any other accident, and yet it can be moved freely in either direction.

It consists, further, in the application of one or two movable or yielding jaws, in combination with the movable joint and oar, in such a manner that the oar can be instantly shipped or unshipped, as circumstances may dictate.

A represents a rowlock, composed of a ball and-socket, or other universal joint, and made of wood or any other suitable material. The handle B of the oar is connected to the universal joint, either permanently or so that it can be detached therefrem, and the universal joint may either be permanently fixed to the gunwale of a boat, or within the ordinary rowlock, or it may be made in such a manner that it can be shipped or unshipped.

The most convenient form of making the universal joint, suitable for my rowlock, is that of an ordinary ball-and-socket joint, and the ball may be cast of iron, or made of any other suitable material, and provided with two arms extending in opposite directions, so that the handle of the oar may be secured to them or the handle may be passed through the ball, or connected to it in any other suitable manner. The socket may be formed either of two jaws, which inclose the ball completely after the same has been introduced and do not allow of its being unshipped except if one of the jaws is removed, or said socket may be made of one stationary jaw, a, and

one yielding jaw, b, formed as shown in the drawings. These jaws are so formed that the pressure of the ball in rowing presses the same down, and, moreover, the yielding jaw is situated behind the ball, so that inrowing the stationary jaw sustains the principal pressure.

The jaw b is made yielding, so that the oar can be instantly shipped or unshipped. A spring, C, may be applied behind said yielding jaw to keep the same close up to the sur-

face of the ball.

This improved rowlock allows of performing all the motions which can be performed with an ordinary oar. The blade of the oar can be turned so as to meet the wind edgewise, or, as it is commonly termed, to bring the blade to a "feather-edge." Unlike all the rowlocks, it makes no noise in the operation of rowing, and for steering purposes or for sculling it has many apparent advantages. It can be used as a sweep on all kinds of floats or boats. The rowlock can be fastened to the boats or floats with screws, rivets, bolts, or nails, or by any other ordinary method of fastening rowlocks. It can be used with or without springs, and the ball can be made solid or hollow. In the movable rowlock is a pin-hole to fasten the ball effectually, should it be desirable. The socket can be connected either to the boat or to the oar. The oar, when used as an elastic oar, has strong springs in front of the rowlock, and in that case the rowlock is made to work in a slide.

The principal advantages of my rowlock are as follows: First, it works without noise; second, it is durable; third, it is perfectly reliable, and cannot be unshipped with the motion of the sea; fourth, it is worked and used with much more ease than any other rowlock; fifth, it enables a common oar to be used in place of the rudder; sixth, it allows of having the oar remain connected with the boat or unshipped at pleasure.

I claim as new and desire to secure by Let-

ters Patent—

The movable or yielding jaw b, with the retaining-spring C, applied in combination with the universal joint and with the oar, in the manner and for the purpose substantially as herein shown and described.

JOSEPH W. NORCROSS.

Witnesses:

J. E. LATHROP, HOMER CHURCHILL.