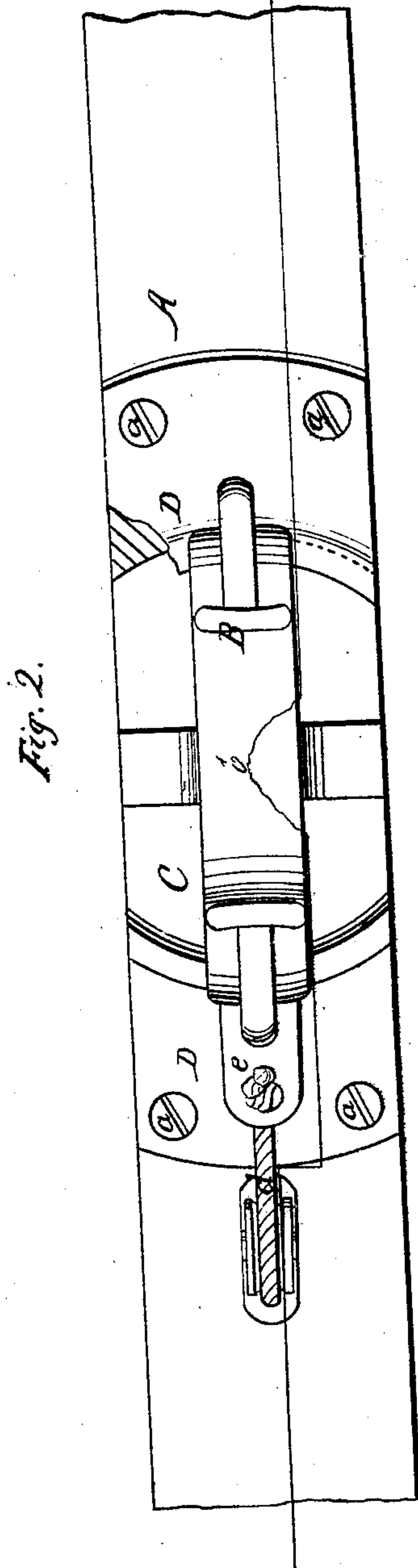
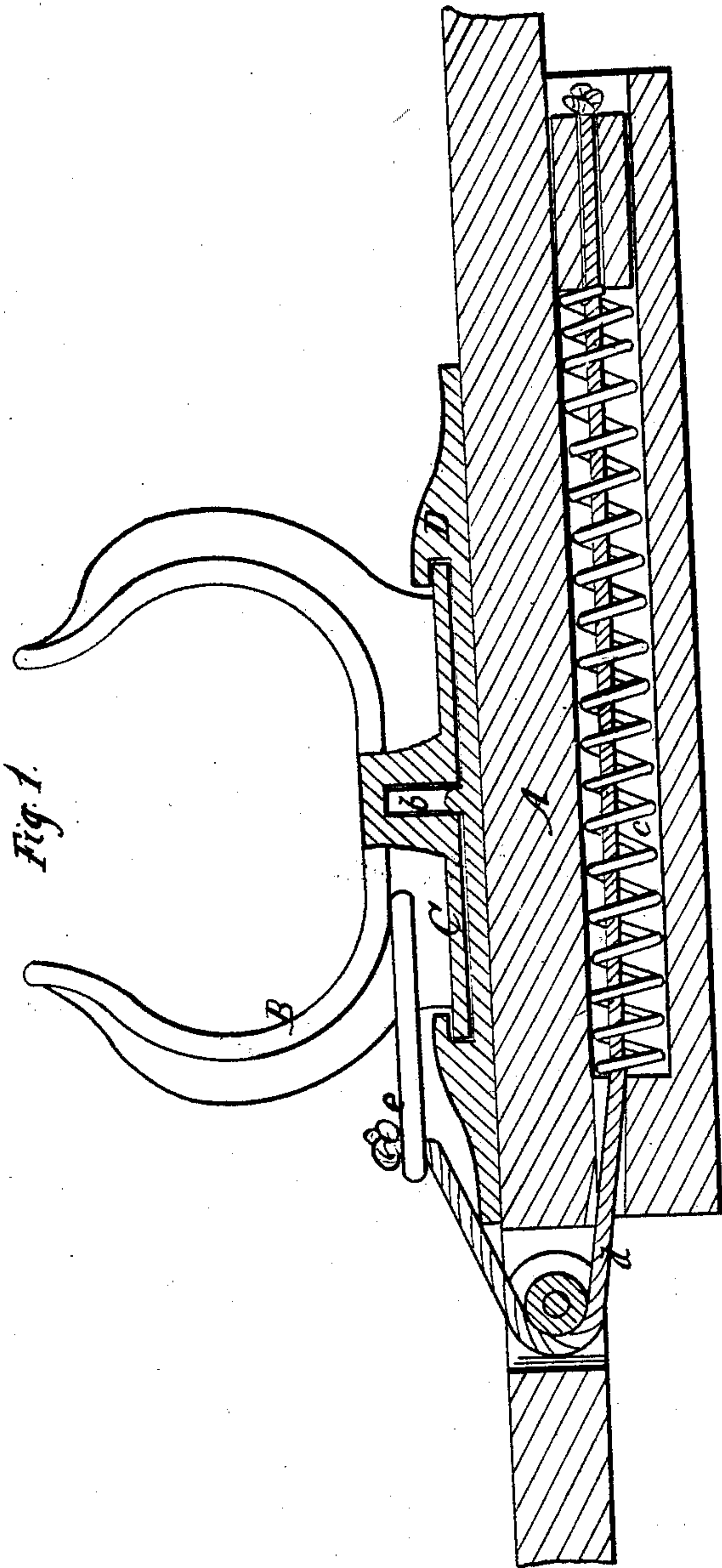


J. W. Norcross.

Oar Lock.

N^o. 44,446.

Patented Sept. 27, 1864.



Witnesses.
W. Hauff
C. L. Topliff

Inventor
J. W. Norcross

UNITED STATES PATENT OFFICE.

J. W. NORCROSS, OF BOSTON, MASSACHUSETTS.

IMPROVED ROWLOCK.

Specification forming part of Letters Patent No. 44,446, dated September 27, 1864.

To all whom it may concern:

Be it known that I, Capt. J. W. NORCROSS, of Boston, in the county of Suffolk and State of Massachusetts, 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 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 sectional side elevation of this invention. Fig. 2 is a plan or top view of the same.

Similar letters of reference indicate like parts.

This invention consists in the employment or use of a grooved guide-bracket, in combination with a flange attached to or cast solid with the rowlock in such a manner that in rowing the full strain of the oar is sustained by the guide-bracket, which is firmly screwed down to the gunwale of the boat, and that portion of the gunwale to which the rowlock is fastened is strengthened by said bracket, whereas by the ordinary rowlock its strength is diminished, and, furthermore, the rowlock is so constructed that it has no possible chance to break.

The invention consists also in combining with the rowlock a spring of any desirable form and construction in such a manner that by the action of said spring the rowlock is kept parallel with the keel and prevented from turning edgewise, and consequently it is always in the proper condition to ship the oar.

A represents the gunwale of a boat, to the edge of which the rowlock B is secured. This rowlock is cast with or otherwise attached to a segmental flange, C, which fits in a grooved bracket, D. Said bracket is cast of malleable iron or other metal, or made of any suitable material, and is firmly secured to the edge of the gunwale by four (more or less) screws, *a*. A central pivot, *b*, keeps the rowlock in the center of the bracket, and by turning the rowlock on this pivot the flange is brought in such a position that it is free

from the grooves in the bracket, and that the rowlock can be withdrawn and removed. If the rowlock is in position, the entire strain of the oar in rowing is sustained by the bracket D, which, being secured to the gunwale by a number of screws, rather strengthens the same, and the construction of the rowlock with the flange C prevents the possibility of breakage, whereas by rowlocks of the ordinary construction the gunwale is weakened, and the shank of the rowlock is liable to break off just at the time when it is most needed. A small chain may be attached to the bracket D and to some portion of the rowlock to prevent it from dropping out accidentally. In practice, however, it is most desirable to prevent the rowlock turning crosswise to the keel, which happens with the ordinary rowlock, and many a boat has been swamped and many lives lost because in lowering the boat the rowlocks were turned and the men not able to ship their oars in time to prevent an accident. This disadvantage I have overcome by applying a spring, *c*, which is situated in a suitable cavity under the rowlock, and connects by a cord or chain, *d*, with an arm, *e*, projecting from the same. This spring is connected to the rowlock so that it will turn the same parallel with the keel, and at the same time it is so arranged that it does not prevent the turning and unshipping of the rowlock.

It is obvious that the connection between the spring *c* and the rowlock might be effected in various different ways. I do not wish to confine myself, therefore, to the precise construction of the spring and its connection with the rowlock as shown in the drawings, but reserve the right to alter the same as convenience may dictate. By the action of this spring the rowlock is held parallel with the keel, and whenever it is accidentally thrown out of this position it will return to the same spontaneously, and it is therefore always in the proper position to receive the oar.

The shape of my rowlock is such that the curvature of the two horns corresponds to the diameter of the oar and the bottom part of the lock is flat. By this shape the oar is pre-

vented from rising up at every stroke. It rests on the bottom of the rowlock, and moves back and forth between the horns without rising.

The rowlock will turn with every stroke of the oar and work entirely noiselessly.

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

1. The application of the segmental flange C and grooved bracket D, in combination with

a rowlock, B, of any desirable construction, substantially as and for the purpose set forth.

2. The spring *c*, applied in combination with the rowlock B, in the manner and for the purpose substantially as shown and described.

J. W. NORCROSS.

Witnesses:

M. M. LIVINGSTON,
W. HAUFF.