

I. A. RICHARDS.

Improvement in Boat Detaching Apparatus.

No. 115,360.

Patented May 30, 1871.

Fig. 1.

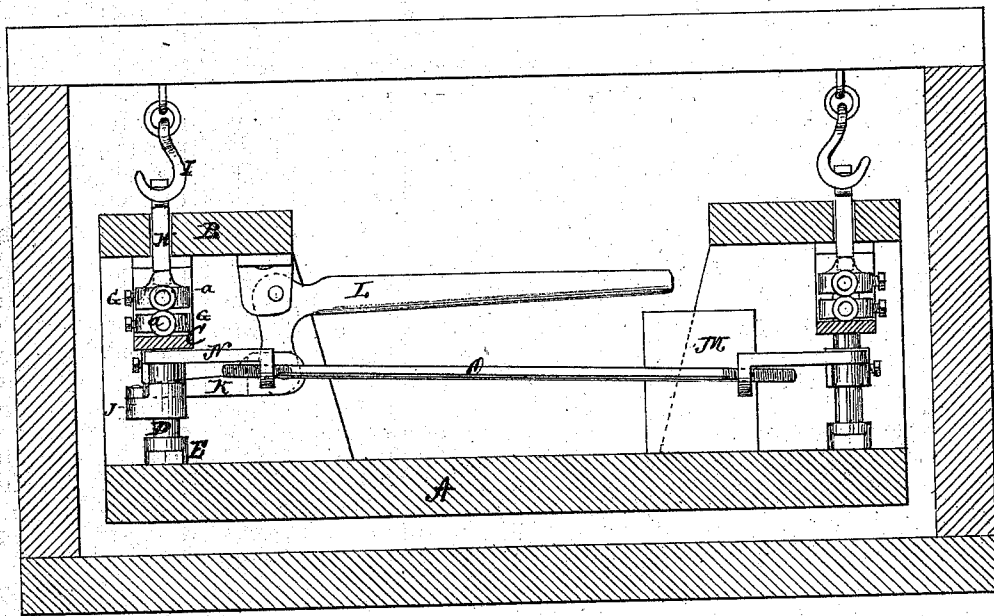


Fig. 2.

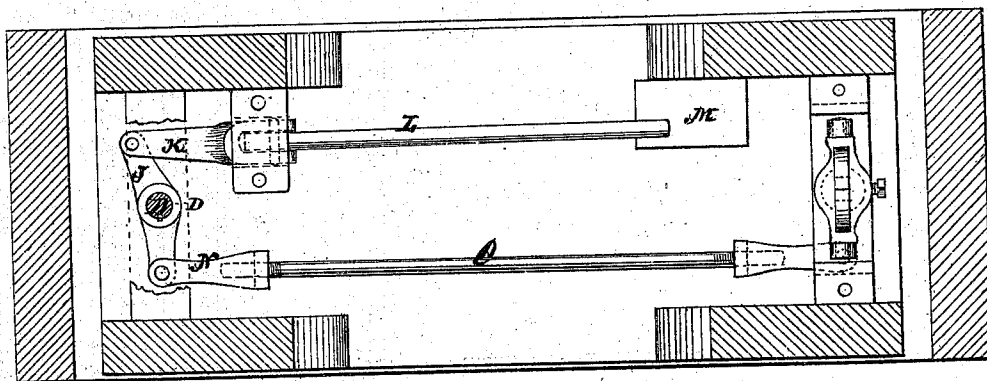
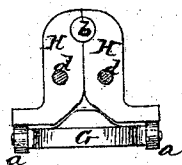


Fig. 3.



Witnesses.

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IRA ABIEL RICHARDS, OF MIDDLETOWN, CONNECTICUT.

IMPROVEMENT IN BOAT-DETACHING APPARATUS.

Specification forming part of Letters Patent No. 115,360, dated May 30, 1871.

To all whom it may concern:

Be it known that I, IRA ABIEL RICHARDS, of Middletown, in the county of Middlesex and in the State of Connecticut, have invented certain new and useful Improvements in Boat-Detaching Apparatus; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a device or apparatus for detaching ships' boats from their davits, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a longitudinal vertical section, and Fig. 2 a horizontal section of my device. Fig. 3 is a side view of the jaws which suspend the boat.

A represents the keel of the boat, and B the stern-seat. C is a metal frame, secured on the under side of the seat B, and within which frame the principal parts of my apparatus are arranged. D is an upright shaft, passing through the frame C and resting in a step, E, fastened to the keel, for the purpose of holding the lower end of the shaft or spindle in position. On the spindle D, within the frame C, are two arms, G G, placed parallel with each other, one above the other, as shown, and provided at their ends with rollers *a a*. The lower set of these rollers rests on the bottom plate of the frame C, while the upper set rests on the lower set, as shown in Fig. 1. On the upper rollers rests hooks H H, which are constructed in the peculiar manner shown in Fig. 3, and are pivoted in a slot made in the seat B. The hooks or rather jaws H H extend above said seat, and are provided with an opening, *b*, half in each jaw, to receive the hook I of the tackle-block as suspended from the davit. *d d* are the pivots or pins, on which the jaws swing apart at the top to release the hook I. On the spindle D, below the frame C, is an arm, J,

connected by the rod K with the bent lever L, which lever may rest with the forward part on the top of one of the middle seats M, and is used for operating the whole mechanism. Another arm, N, on the spindle D, connects, by a rod, O, with another set of jaws, &c., in the bow of the boat, exactly like the one already described, with the exception of the arm J, rod K, and lever L, which are only needed at one end of the boat. It is intended to have the frame C securely fastened to the under side of the seat and metal straps embedded in the top side of the seat, and bolts passing through the straps, down through the keel, to hold the whole firmly in place. It will readily be seen that, the lever L resting on the block or seat M, no reasonable amount of weight will part the jaws, bearing, as they do, through the line of centers of the jaws and rollers on the lower plate of the frame C; but, with very little power applied in lifting, the lever L can be raised, and the rollers will pass out from under the ends of the jaws, and both ends of the boat will be instantly and simultaneously released from the davit-tackle at any point desired, before or after reaching the water.

My double roller-trip is susceptible of various modifications, which, however, all involve the same principle. For instance, I may put the top rollers on the tangs of the jaws, and the bottom ones in suitable bearings in the bottom plate, and then provide an arm on the spindle, with a wedge-shaped front to pass between the rollers. The same device, namely, the double roller-trip, may be arranged in various other ways.

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

A double roller-trip, constructed and arranged substantially as shown and described, and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 12th day of December, 1870.

IRA ABIEL RICHARDS. [L. S.]

Witnesses:

C. L. EVERT,

JAMES CURTIS LAMB.