

(No Model.)

S. F. PALMER, Jr.
HATCH ROLLER.

No. 436,046.

Patented Sept. 9, 1890.

FIG. 1.

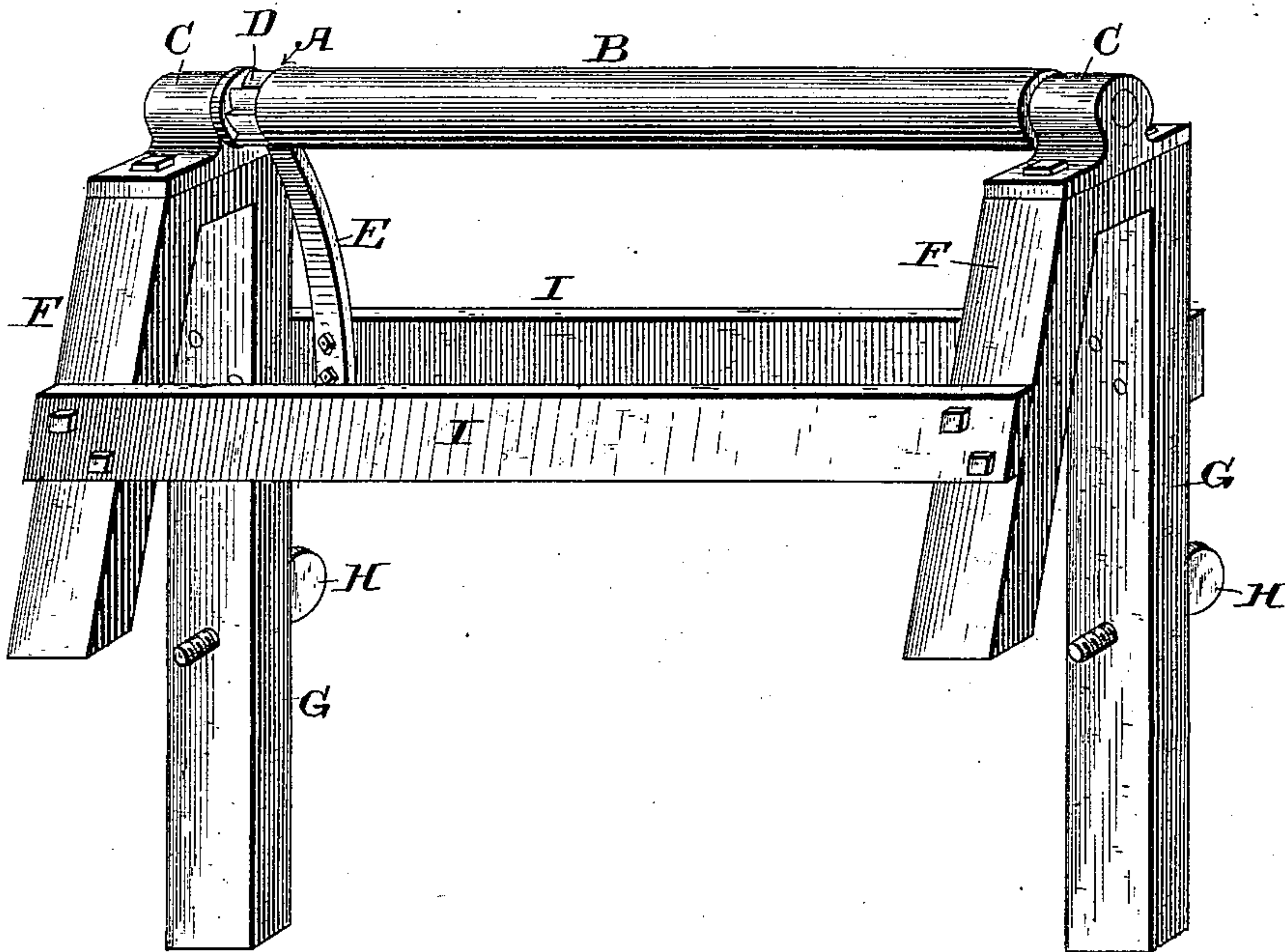
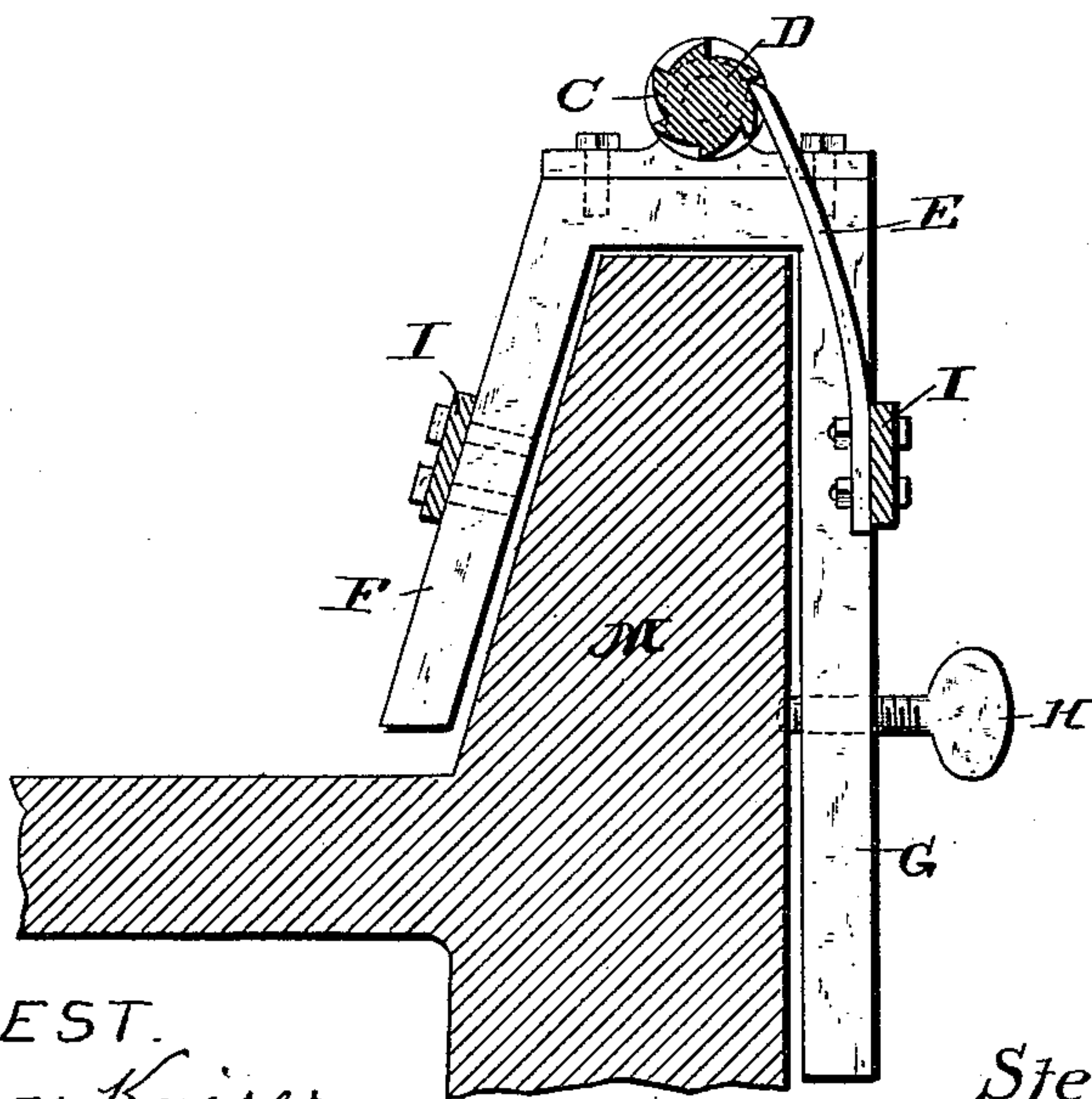


FIG. 2.



ATTEST.
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HATCH-ROLLER.

SPECIFICATION forming part of Letters Patent No. 436,046, dated September 9, 1890.

Application filed July 3, 1890. Serial No. 357,649. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN F. PALMER, Jr., a citizen of the United States of America, and a resident of Ogdensburg, in the county of St. Lawrence and State of New York, have invented certain new and useful Improvements in Hatch-Rollers for Unloading Lumber from Vessels; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my improved hatch-roller, and Fig. 2 is a transverse sectional view at the divisional point marked A in Fig. 1.

Like letters of reference indicate corresponding parts throughout both figures.

The usual method of unloading lumber from a vessel's hold is to rest the side of the plank to be unloaded against the upper edge of the hatch-combing, and while the plank is resting thereupon force it upward and outward until sufficiently above deck to be grasped and lifted bodily therefrom. When unloaded in this manner, the rubbing of the plank against the upper edge of the hatch-combing greatly adds to the labor of unloading, and also has a tendency to mar the plank and tear the hatch-combing.

The object of my invention is to obviate this additional labor and risk of damage by providing a roller mounted upon a portable frame-work and adapted to rest over and fasten upon the hatch-combing as ordinarily constructed in vessels, and by means of which the said rubbing and friction of the plank against the hatch-combing is overcome.

Referring to the accompanying drawings, B represents the roller journaled in the bearings C C at either end and provided with a ratchet-wheel D near one end, the teeth of which engage with the ratchet E, movably attached to the frame-work, as shown. The legs F F of the frame-work are intended to rest over the outer edge of the hatch-combing, while the legs G G rest over the inner edge thereof and are secured thereto by means of the set-screws H H in Fig. 2.

M represents a section of the hatch-comb-

ing with my improved hatch-roller in position thereon. The cross-bars I I may be integral with the frame-work or fastened thereto by rivets or screws, as shown. The bearings C C, I make preferably detachable, as shown, so that when they are detached from the frame the roller may be readily removed; but it is obvious that they may be drilled into the frame-work and the roller removed by separating the frame-work at the cross-bars, as shown.

My entire improved hatch-roller I make preferably of wrought-iron; but it may be made of any suitable known material.

In operating my improved hatch-roller I first attach it to the combing of the hatch in the position shown at Fig. 2 by turning the set-screws H H. I then rest the side of the plank to be unloaded against the inner side of the roller B, the lower end of the plank being in the hold of the vessel. I then force the plank upward and outward from the hold of the vessel, while still resting against said roller, until the plank is sufficiently expelled from the hold of the vessel to be grasped and lifted bodily from the roller. The pawl E, engaging with the ratchet-wheel D, prevents the roller from turning backward and returning the plank resting thereon to the hold when the workman releases the strain upon the plank in order to get a fresh grasp thereof.

Having now described my improved hatch-roller and method of using the same, what I claim as my invention, and desire to secure by Letters Patent of the United States, is—

1. A hatch-roller journaled into a frame-work provided with legs adapted to straddle the hatch-combing and fastened thereto, substantially as shown and described.

2. A hatch-roller journaled into a frame-work provided with legs adapted to straddle the hatch-combing and fastened thereto, in combination with the ratchet-wheel and ratchet, substantially as shown and described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

STEPHEN F. PALMER, JR.

Witnesses:

LESLIE WILLS,

ROBERT H. HARDY.