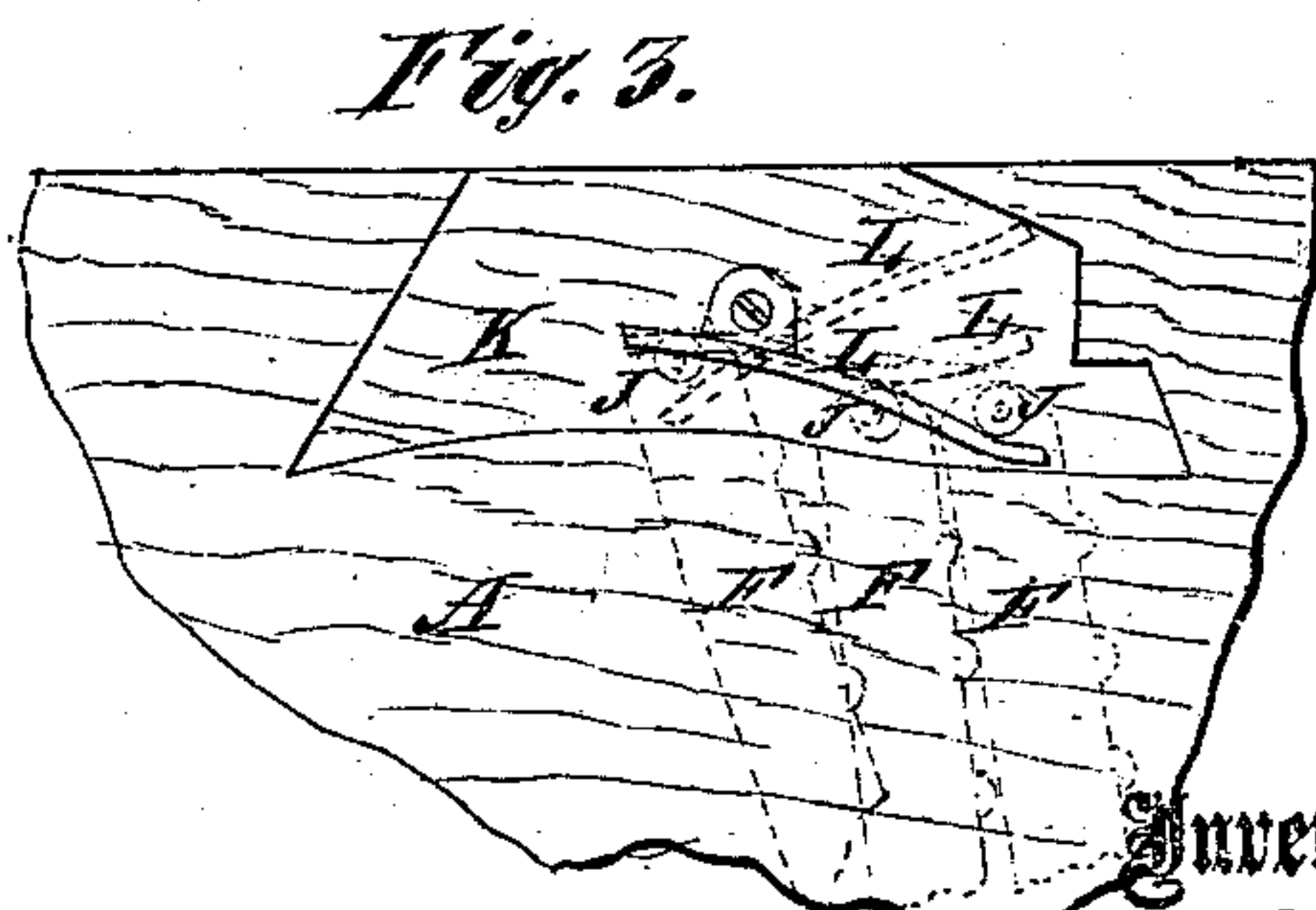
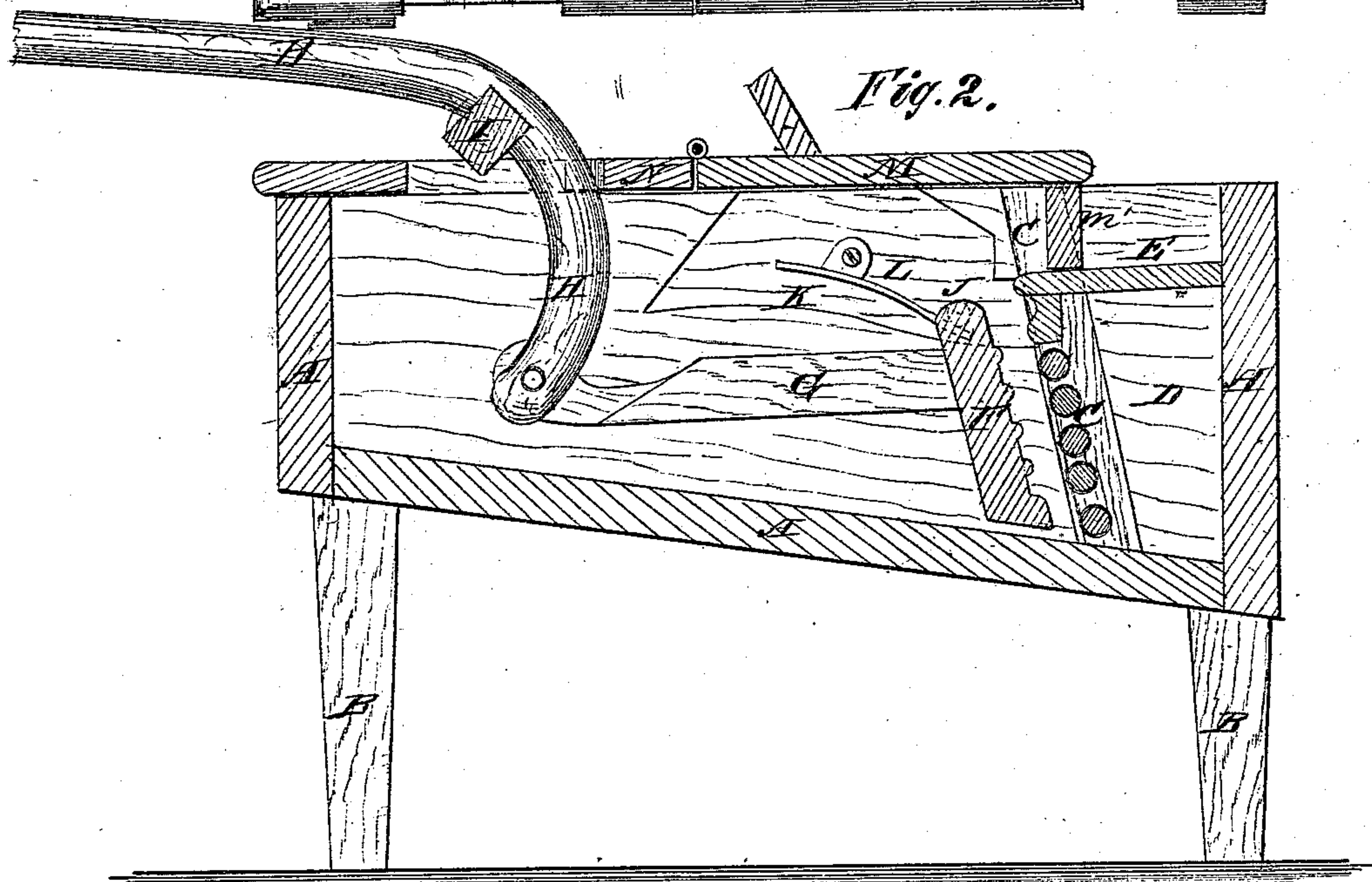
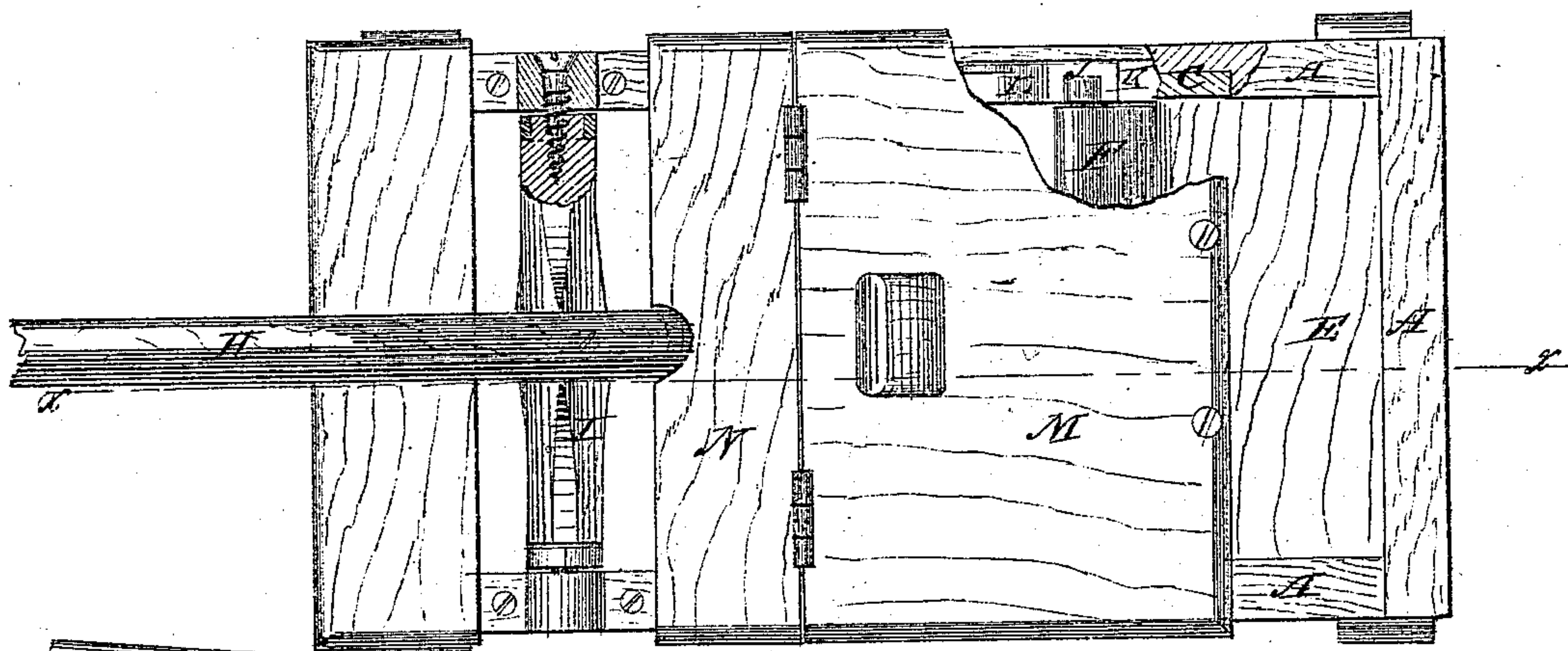


JOHN W. HUNT.  
Improvement in Washing-Machines.  
No. 126,211. *Fig. 1.* Patented April 30, 1872.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

JOHN W. HUNT, OF LIBERTY, MISSOURI.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 126,211, dated April 30, 1872.

Specification describing a new and useful Improvement in Washing-Machine, invented by JOHN W. HUNT, of Liberty, in the county of Clay and State of Missouri.

Figure 1 is a top view of my improved washing-machine, part of the cover or lid being broken away to show the construction. Fig. 2 is a detail vertical longitudinal section of the same taken through the line *xx*, Fig. 1. Fig. 3 is a detail view of one of the pivoted guide-bars.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved washing-machine, simple in construction, convenient in use, and effective in operation, washing the clothes quickly and thoroughly, and without injuring them in the least; and it consists in the construction and combination of various parts of the machine, as hereinafter more fully described.

A is the box of the machine, the bottom of which is made inclined, and which is supported upon legs B, of such a length as to raise the machine to a convenient height. C is a rack, the side bars of which are set in inclined grooves in the sides of the box A, toward its forward or deeper end. The rounds or rods of the rack C are arranged at a little distance apart, so that the water forced forward by the plunger or beater and the water squeezed out of the clothes may pass through freely into the space D, between the rack C and the forward end of the box A. The space D is covered by a platform or apron, E, which is slightly inclined to the rearward, and is attached to the sides and end of the box A a little below their upper edges. The apron E keeps the water from dashing out of the end of the tub, leaves a clear space for the attachment of a wringer, and guides the water wrung from the clothes back into the box A. F is the plunger or beater, which is made solid, and the forward side of which is corrugated, as shown in Fig. 2. The plunger F is inclined to correspond with the inclination of the rack C, so that the clothes may be pressed squarely between the said plunger F and the rack C. To the rear side of the plunger F is rigidly attached the end of an arm, G, to the rear end of which is pivoted the lower end of a lever, H, which is attached to the center of a cross-bar, I, the

ends of which are pivoted to the sides of the box A, or to bearings attached to said sides. The lever H is curved, as shown in Fig. 2, so that the power may be conveniently applied to it, and so that when the plunger F is near the rack C and the greatest power is required the outer end or handle of the lever H may be in the most favorable position for the muscles of the arm to act with their greatest power. To the upper end of the side edges of the plunger F are pivoted friction-rollers J, which roll along grooves or shoulders K formed in the sides of the box A, and thus support and guide the plunger F in its forward and backward movements. To the sides of the box A, above the shoulders K, are pivoted bars L, to serve as guides to the friction-rollers J, and which are made of such a length that the said rollers may pass beyond their ends in their forward and rearward movements. The guide-bars L are so arranged that they may be inclined to bring either end in contact with the shoulders K, and are so pivoted or formed that their forward ends may be the heavier, and may always drop down.

By this construction, when the plunger is moved forward the rollers J will pass in beneath the rear ends of the guide-bars L, and, as they advance, will raise the forward ends of said bars L and pass out from beneath them. As the plunger F is drawn back the rollers J will pass up the guide-bars L, raising the plunger F out of the water and carrying it back to make another stroke. As the rollers J pass the pivoting points of the guide-bars L, said guide-bars will incline or tip in the other direction and allow the rollers J to pass down to the shoulders K, bringing the plunger F into position for making another stroke. As the plunger F moves forward it pushes the water and clothes before it, the free water and the water squeezed out of the clothes passing, between the rods or rounds of the rack C, into the space D, between said rack and the forward end of the box A. As the plunger F is drawn back the accumulated water will flow from the space D, through the rack C, and turn or partially turn the clothes over, so that they may be always acted upon by the plunger in a different place.

The part of the box through which the plunger F moves is covered with a cover, M,

to keep the water from spattering out, and which is hinged to the stationary board N attached to the box A close in front of the lever H. To the under side of the forward edge of the cover M is attached a downwardly-projecting flange, *m'*, which closes the space between the apron E and the forward edge of the cover M to keep the water from spattering out through said space.

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

1. The arrangement of the rack C, apron E, plunger F, arm G, lever H, pivoted cross-bar

I, rollers J, and grooves or shoulders K with respect to each other and the box A B and cover M *m'*, said parts being constructed and operating substantially as herein shown and described, and for the purpose set forth.

2. The combination of the pivoted guide-bars L with the shoulders K, rollers J, plunger F, arm G, lever H, and box A B, substantially as herein shown and described, and for the purpose set forth.

JOHN W. HUNT.

Witnesses:

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