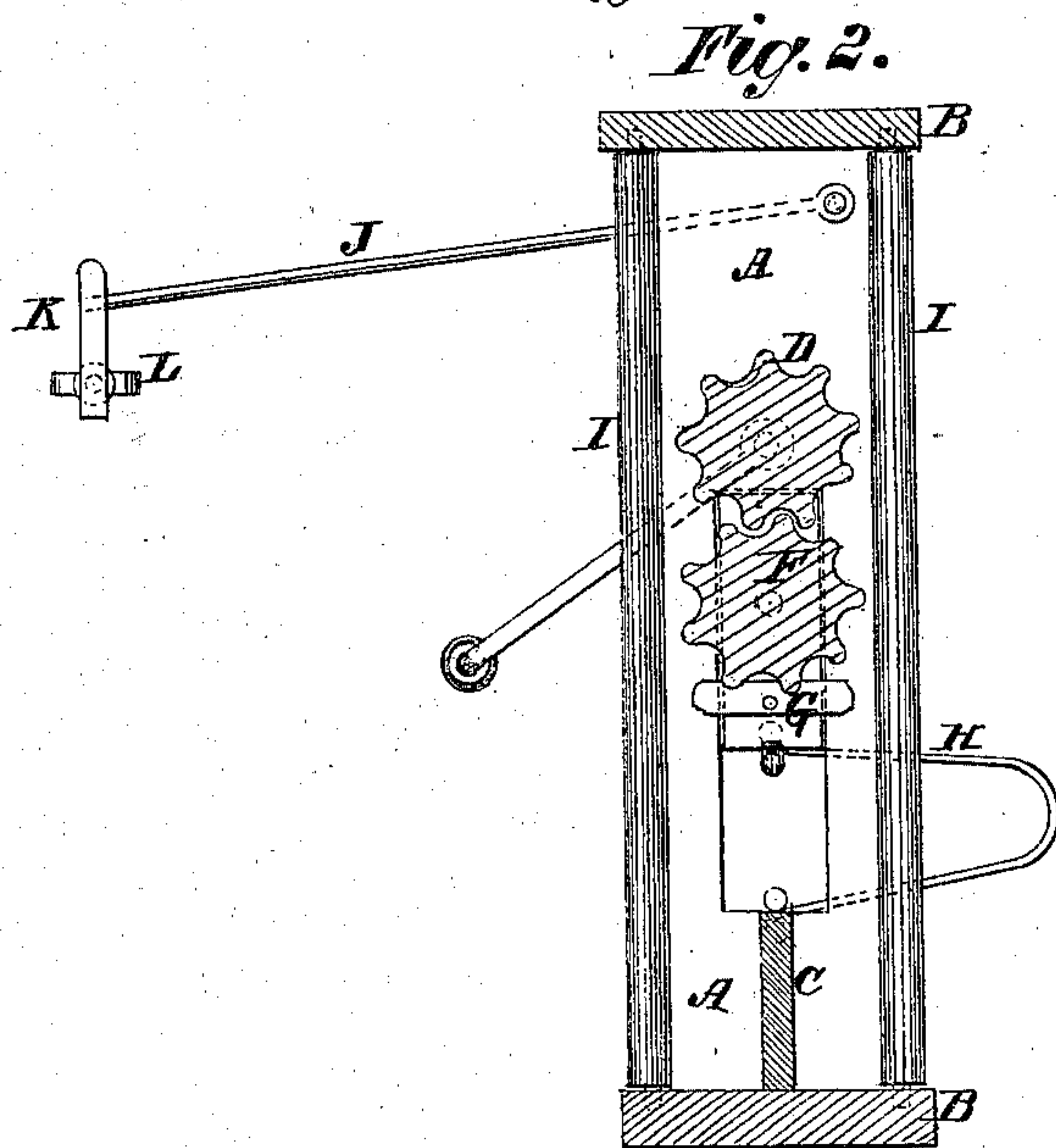
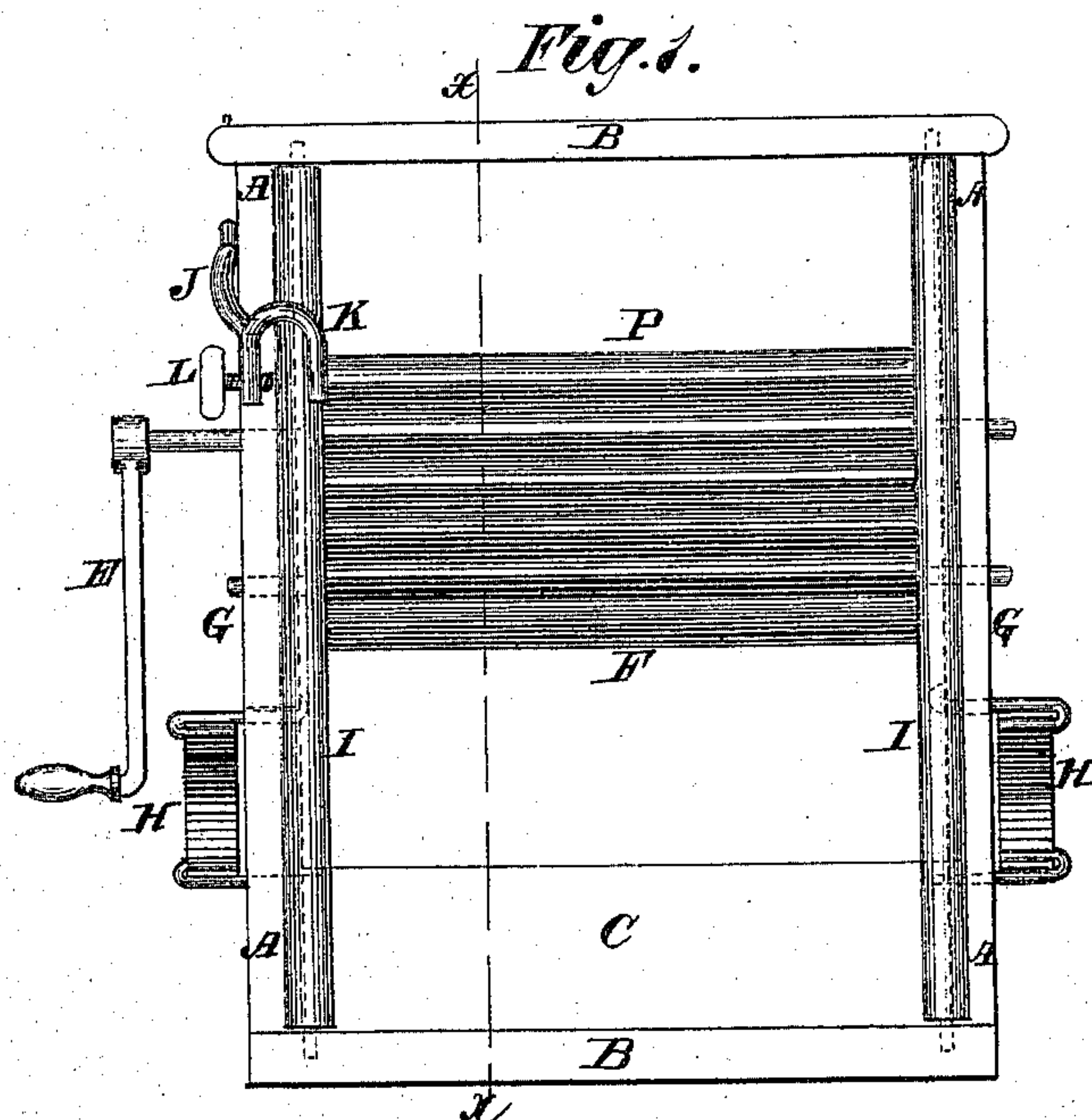


J. GLINES.
Washing-Machines.

No. 141,044.

Patented July 22, 1873.



Witnesses:

Wm. A. Ardy.
A. Scugurto

Inventor:

J. Glines
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UNITED STATES PATENT OFFICE.

JOSIAH GLINES, OF POSTVILLE, IOWA.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **141,044**, dated July 22, 1873; application filed May 31, 1873.

To all whom it may concern:

Be it known that I, JOSIAH GLINES, of Postville, in the county of Alamakee and State of Iowa, have invented a new and useful Improvement in Washing - Machines, of which the following is a specification:

Figure 1 is a side view of my improved machine. Figure 2 is a vertical cross-section of the same taken through the line *x x* of Fig. 1.

Similar letters of reference indicate corresponding parts.

The invention consists in the improvement of washing-machines, as hereinafter described and pointed out in the claims.

A are the uprights, which are connected at their upper and lower ends by the cross-bars B. To the bottom bar B and the lower parts of the uprights A is secured a board, C, set on edge, and which is designed to keep the clothes upon the opposite sides of the machine separate from each other. D is the upper roller, which is fluted or corrugated longitudinally, and the journals of which revolve in stationary bearings in the uprights A. To one of the journals of the roller D is attached the crank E, by means of which the machine is operated. F is the lower roller, which is also fluted or corrugated longitudinally, and the journals of which revolve in bearings G, which slide up and down in slots in the lower part of the uprights A. To the lower ends of the sliding bearings G and to the upper edge of the ends of the division-board C are attached pins or studs, to which are secured the ends of the

U-shaped springs H, by which the roller F is held up against the roller D, so as to apply pressure to the clothes while passing through the machine, whether said clothes may be thick or thin. I are four rollers, the journals of which are pivoted to the cross-bars B in such positions that the said rollers may stand at the inner corners of the uprights A to diminish the friction as the clothes are passing into and out of the machine. To the upper part of the upright A, upon the same side of the machine as the crank E, is pivoted the inner end of a rod, J, of such a length that the U-shaped bar or clamp K pivoted to its outer end may be dropped over the edge of the wash-tub in which the machine is placed, and where it is secured by a set-screw, L, so as to hold the machine firmly in place.

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

1. The arrangement of the uprights A, cross-bars B, division-board C, corrugated or fluted rollers D F, crank E, and U springs H with respect to each other, substantially as herein shown and described.

2. The combination of the pivoted bar J and clamp K L with the uprights A, cross-bars B, and rollers D F, substantially as herein shown and described.

JOSIAH GLINES.

Witnesses:

N. W. STILES,
W. A. MCGONIGLE.