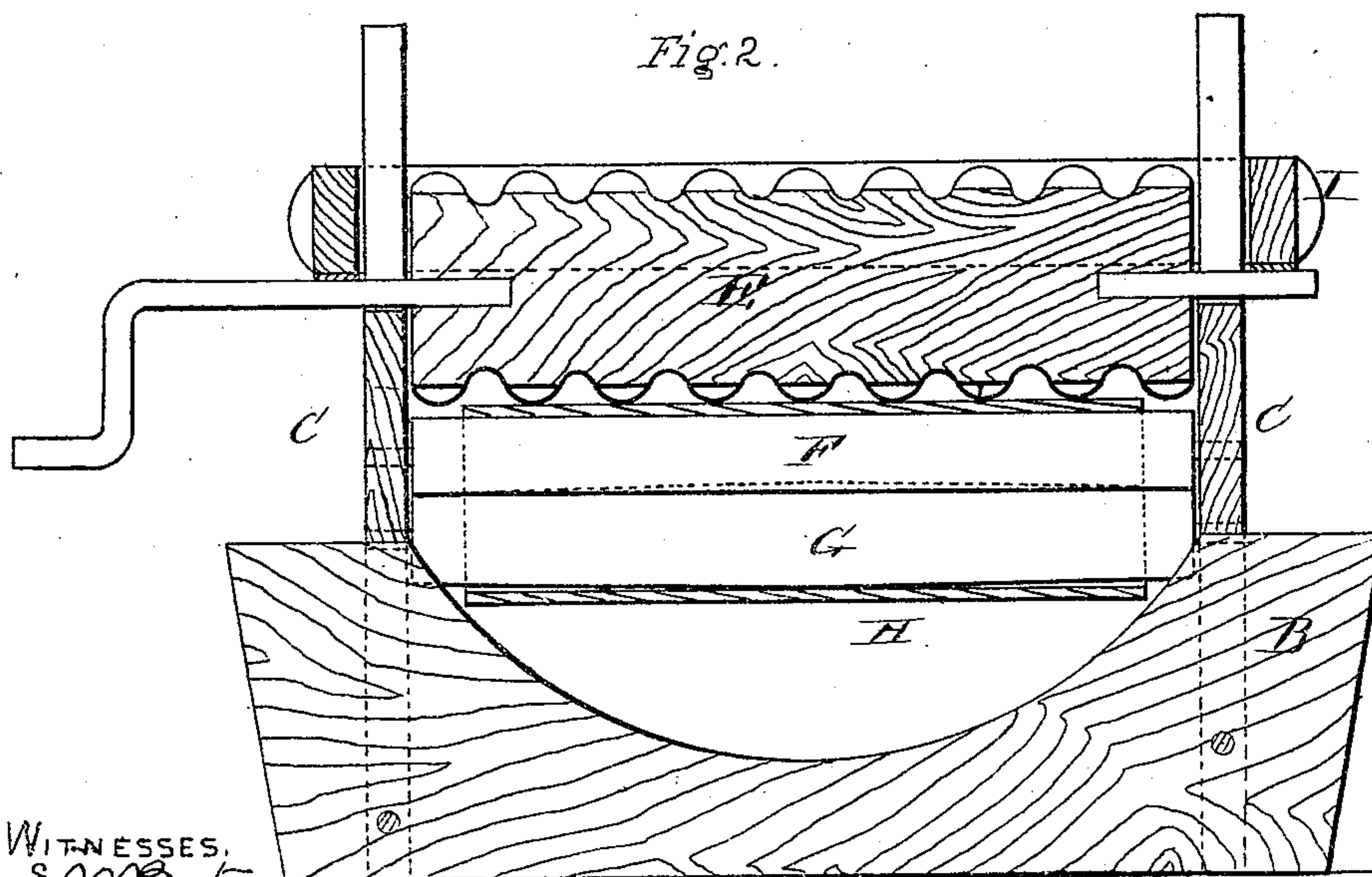
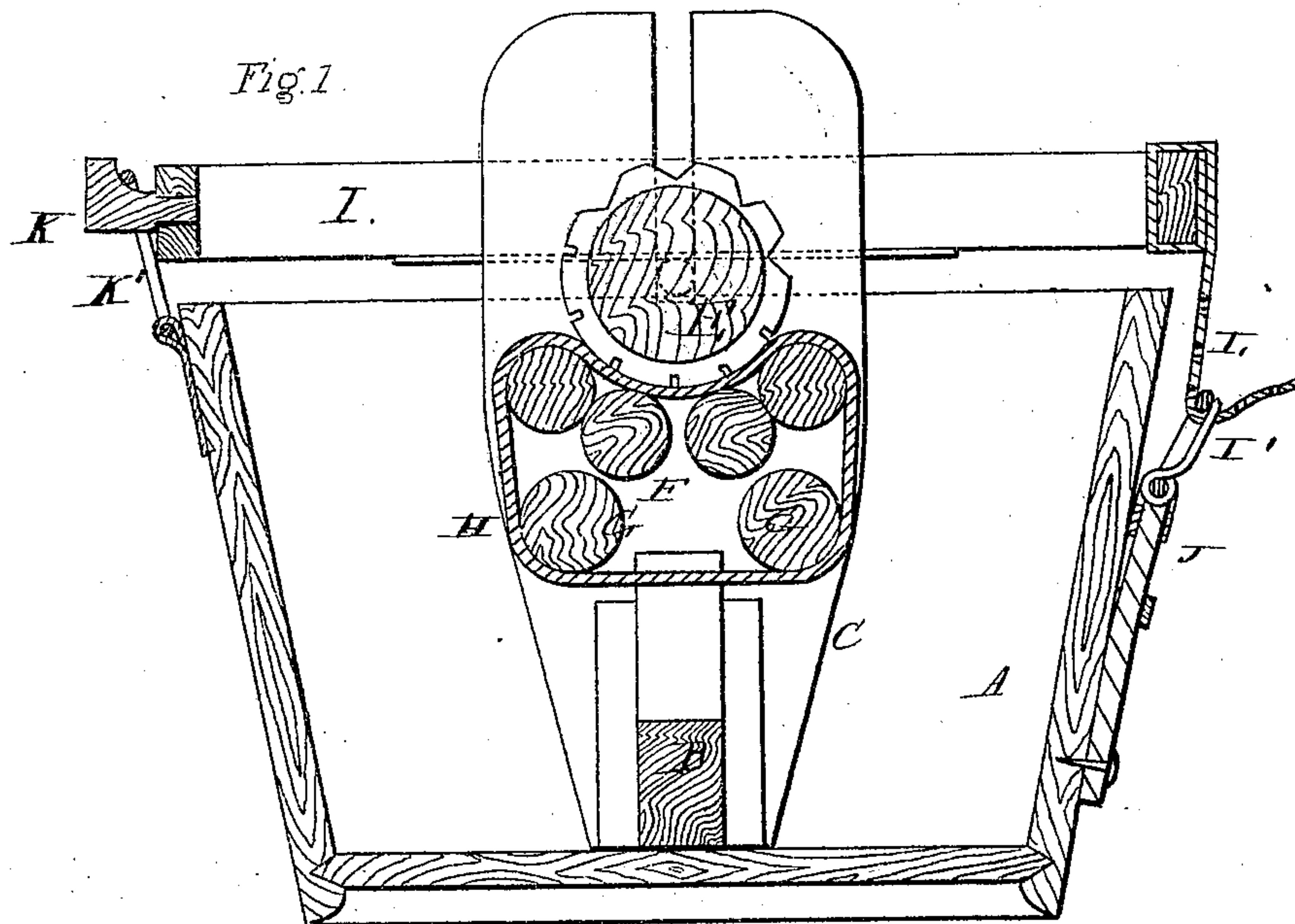


C. W. REEDER

Improvement in Washing-Machines.

No. 132,106.

Patented Oct. 8, 1872.



WITNESSES.

E. A. Bates

Geo. E. Upham.

INVENTOR

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# UNITED STATES PATENT OFFICE.

CHARLES W. REEDER, DECEASED, (JOSEPH REEDER, ADMINISTRATOR,) OF  
CHILLICOTHE, MISSOURI.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 132,106, dated October 8, 1872.

*To all whom it may concern:*

Be it known that I, CHARLES W. REEDER, of Chillicothe, in the county of Livingston and State of Missouri, have invented a new and valuable Improvement in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a transverse sectional view of my invention. Fig. 2 is a longitudinal section of the same.

This invention has relation to washing-machines; and consists in the construction and novel arrangement of the frames supporting the rollers, and of devices for regulating the pressure of the main roller, all as hereinafter described.

Referring to the drawing, A designates a vessel, which may be either a wash-tub or a box; B, a cross-piece fitting between cleats attached to the sides of said vessel and capable of being removed at will. The upper part of said cross-piece is concave to allow the water to pass and to allow space for the movement of the endless apron. C designates standards slotted to straddle the cross-piece B, and also slotted to receive the crank-shaft of the grooved roller E. The latter may be grooved around its periphery lengthwise or both. F represents a series of small rollers journaled to the standards C underneath and concentric with the main roller. G are other rollers arranged underneath the rollers C. H designates an endless apron of canvas or other suitable material passing around the small rollers, as shown. This apron travels around when the machine is in motion, being moved by the rollers F, which are actuated by the main roller, and

feeds the clothes through between the main and small rollers, preventing them from being drawn between the rollers F and injured thereby. The rollers G are bulged at their middle parts and are designed to keep the cloth H in its place, preventing it from moving laterally. I designates a horizontal frame, the side bars of which rest on the shaft of the main roller while the ends project over the sides of the vessel A. These ends may either be straight or curved to conform to the outline of said vessel. A hook, K, at one end of said frame connects with a pivoted loop, K', attached to the vessel A, and thus forms a hinge upon which the frame may be raised or lowered. At the other end of said frame is a strap, L, which is attached to a buckle, I', on the end of a spring, J, secured to the side of the vessel, as shown. By shortening or lengthening this strap the pressure of the upper roller is regulated. The rollers G may in some cases be dispensed with and plain rollers substituted. In such cases a transverse bar, B', having a convex or angular edge or top, must be substituted for the one B, having a concave recess, to prevent the lateral movement of the cloth.

What I claim as new is—

1. The frame I, transverse cross-piece B, and movable slotted standards C, in combination with the rollers G, F, and E and apron H, substantially as specified.

2. The hinged frame I, strap L, buckle I', spring J, and adjustable roller E, combined substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

CHARLES W. REEDER.

Witnesses:

L. S. BEARCE,  
J. G. HEMLEY.