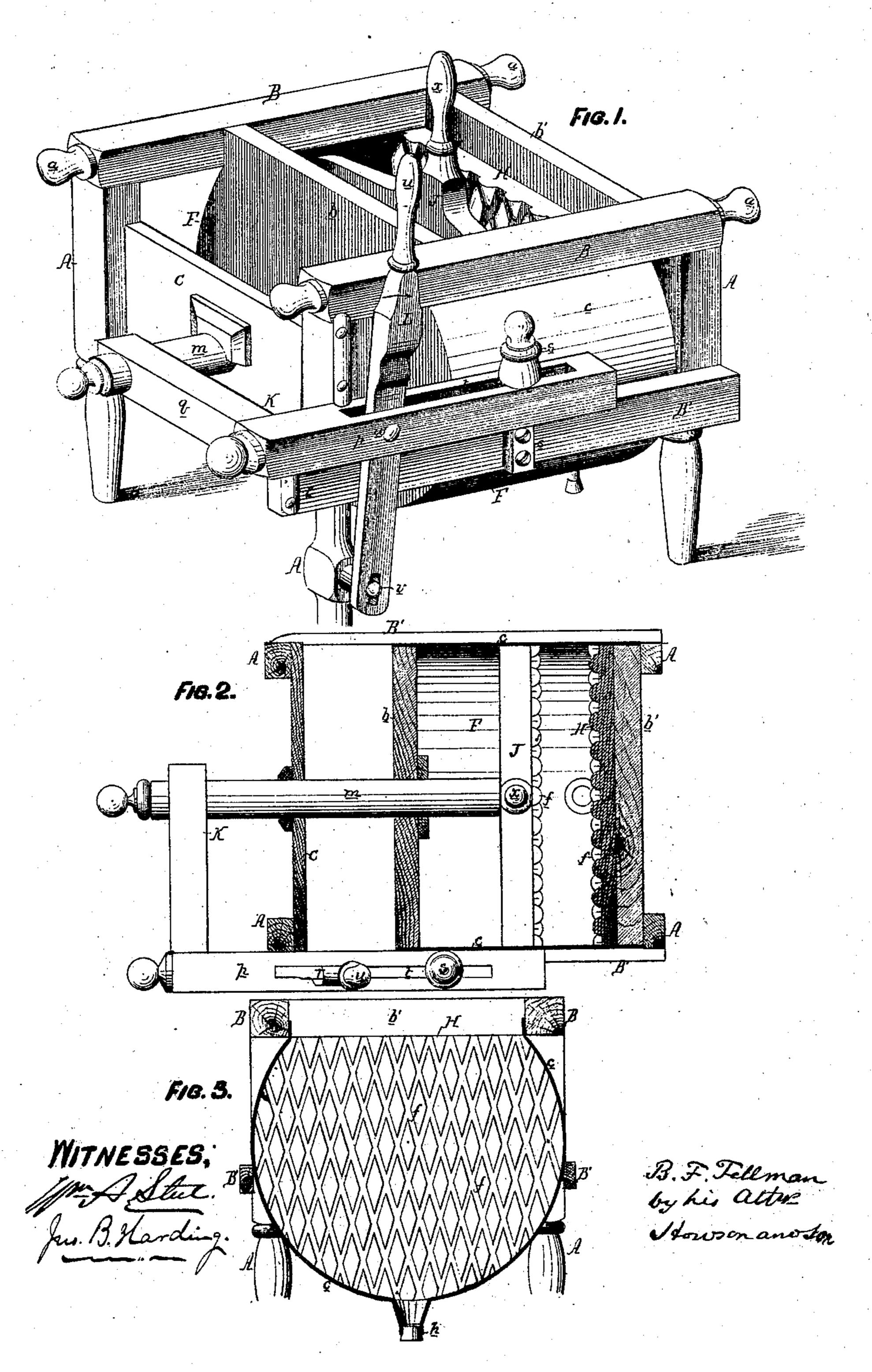
F. I. I. P. Machine

10.99549.

Patented Feb. 8. 1870.



PETERS, PROTO-LITHOGRAPHER, WASHINGTON, D. C.

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B. F. FELLMAN, OF SELLERSVILLE, PENNSYLVANIA.

Letters Patent No. 99,549, dated February 8, 1870.

IMPROVED WASHING-MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

I, B. F. Fellman, of Sellersville, county of Bucks, State of Pennsylvania, have invented an Improved Washing-Machine, of which the following is a specification.

Nature and Object of the Invention.

My invention consists in the combination of a certain lever, a horizontal-sliding frame, and a vibrating rubbing-board, the whole being so arranged on the frame of a washing-machine, and in respect to the vessel containing the clothes, that the latter, when introduced between the said vibrating rubber and a stationary rubbing-bed, can be subjected to any required degree of pressure.

Description of the Accompanying Drawing.

Figure 1 is a perspective view of my improved washing-machine;

Figure 2, a sectional plan view of the same; and Figure 3, a transverse vertical section, on the line 1-2, fig. 1.

General Description.

The frame of the machine consists of the uprights or legs A, connected together by rails B and B', and by a cross-piece, C.

Each of the upper rails, B, has, at its opposite ends, handles a a, for convenience in moving the machine from place to place.

A tub or vessel, F, consisting of vertical end-pieces b and b', and of a curved bottom and sides, c, of thin metal or wood, is suspended within the frame of the machine in the manner clearly shown in the drawing, and in the bottom of this vessel is an opening closed by a plug, h, through which the soap-suds or water may be drawn off. (See fig. 3.)

A stationary rubbing-bed, H, is secured to the head b' of the vessel, and has, upon its face, rounded diamond-shaped projections f, which constitute an efficient rubbing-surface; and within the vessel there is also a movable rubber, J, hung to a spindle, m, which is arranged to turn and slide longitudinally in the head b of the vessel, and in cross-pieces C of the frame of the machine, this spindle forming part of a sliding frame, K, which consists, also, of a slotted bar, p, parallel with the spindle, and connected to the same by a cross-bar, q.

The bar p rests upon one of the rails, B', of the frame, and is guided partly by a bar, r, of the same, and partly by a pin, s, secured to the said rail, and projecting upward through the slot t of the bar.

A lever, L, the lower slotted end of which is hung to a pin, v, of one of the legs A, projects upward through the slotted bar p, and is pivoted to the same by means of a pin, w, the said lever terminating at its upper end in a suitable handle, u.

By means of this lever L the sliding frame K can

manner as to cause the movable rubber J to approach or recede from the stationary rubber within the vessel F, and the said movable rubber, which has also diamond-shaped projections f, is furnished with a handle, x, by means of which a vibratory motion may be imparted to it.

A suitable quantity of soap-suds having been introduced into the vessel F, the clothes or other articles to be washed are placed in the same, between the movable and stationary rubbers J and H, the lever L (and consequently the sliding frame and movable rubber) being then turned in the direction of the arrow, fig. 1, and held firmly, so as to cause the clothes to be pressed against the stationary rubber H.

When the several parts have been brought to this position, the rubber J is vibrated, by means of its handle x, in such a manner as to cause the clothes to be rubbed between the two sets of projections f, which will rapidly remove the dirt from the same.

The lever L and movable rubber may be drawn back at intervals in order to permit the mass of clothes to be turned, preparatory to a fresh squeezing and rubbing of the same.

After the clothes have been thoroughly washed, the soap-suds may be drawn off through the opening h, and the vessel filled with clean water, the great pressure which can then be exerted upon the mass of clothes between the two rubbers, by a proper operation of the lever L, rendering the operation of rinsing both rapid and effective.

I am aware that washing-machines somewhat resembling the above have been constructed, in which the movable rubber is caused to slide in the vessel by means of a toothed segment or cog-wheel, gearing into teeth on the spindle of the rubber, but this plan is objectionable, inasmuch as the desired pressure cannot be brought to bear upon the clothes without risk of breaking the teeth of the cog-wheel or rack.

It will be evident, however, that by the use of the lever L, acting through the medium of the sliding frame K, any required pressure can be obtained.

Claim.

The sliding frame K, consisting of the slotted bar p, cross-piece q, and rod m, in combination with the operating-lever L, arranged at the side of the machine, and with the vibrating rubber J, substantially as described.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

B. F. FELLMAN.

Witnesses:

ISAAC S. GRAFF, W. C. HARR.