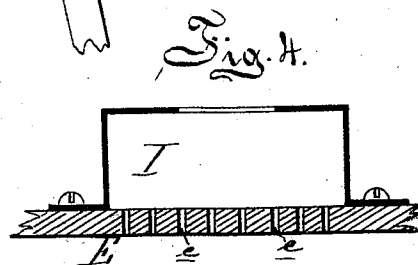
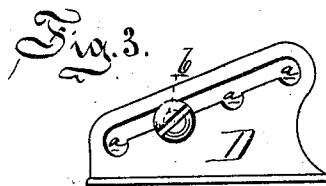
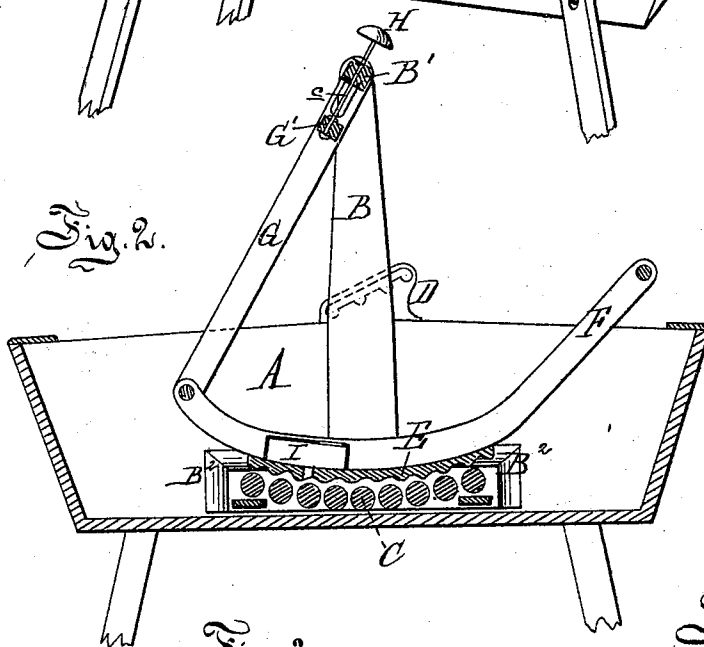
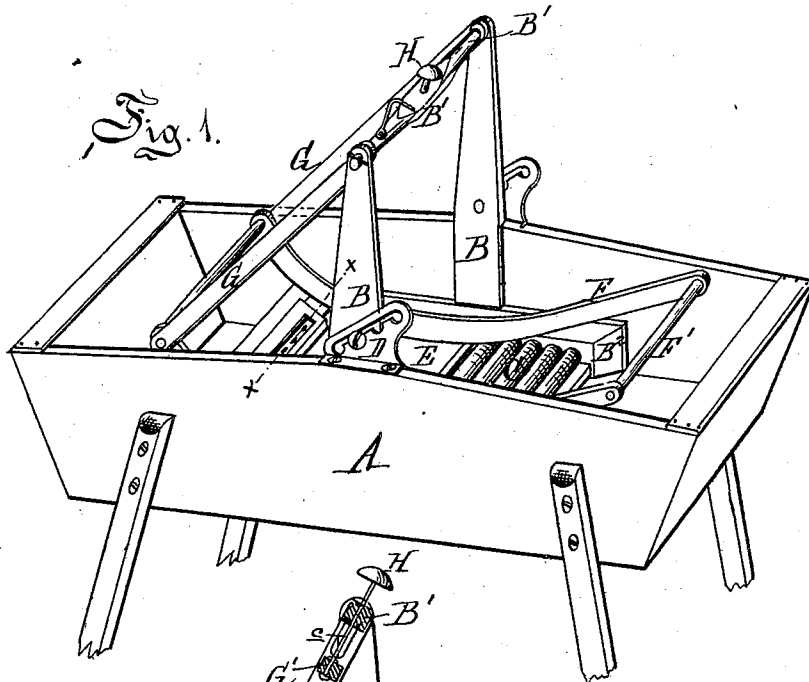


L. C. HALL.
WASHING-MACHINE.

No. 171,799.

Patented Jan. 4, 1876.



Attest
Edward Barthel.
Thos. S. Day

Inventor:
L. Fayette Hall
By Atty.
Thos. S. Day.

UNITED STATES PATENT OFFICE.

LAFAYETTE C. HALL, OF PLYMOUTH, MICHIGAN.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **171,799**, dated January 4, 1876; application filed November 9, 1875.

To all whom it may concern:

Be it known that I, LAFAYETTE C. HALL, of Plymouth, in the county of Wayne and State of Michigan, have invented an Improvement in Washing-Machines, of which the following is a specification:

The nature of my invention relates to an improvement in washing-machines of that class wherein a rubbing-board is suspended in a frame in such a manner as to be vibrated in contact with, or contiguous to, a concave of rollers journaled in the lower part of said frame, which is adjustably secured in a vat or tank.

The invention consists, first, in the means of adjusting the frame in the tub or tank; secondly, in the device for suspending the rubbing-board from the main frame, whereby it can be adjusted with relation to the concave of rollers; thirdly, in the combination of a soap-receptacle with the rubbing-board, whereby soap can be distributed directly upon the fabric being rubbed.

Figure 1 is a perspective view. Fig. 2 is a longitudinal vertical section. Fig. 3 is an elevation of one of the frame-elevating ratchets. Fig. 4 is a transverse section through the soap-box and rubbing-board at *x x*.

In the drawing, A represents a box, trough, or tank, for containing water and the fabrics to be cleansed. B B are the side standards of a frame that may be raised or lowered in the box, the said standards sliding in vertical grooves cut in the sides thereof. B¹ is a rock-shaft, journaled through the tops of said standards, at the foot of each of which is a horizontal bar, B², the ends of which are connected by transverse girts. C is a concave of rollers, whose ends are journaled in the bars B². D is a flanged plate, resting on each side of the box, with an inclined ratchet-slot, *a*, cut in it to receive a stud, *b*, projecting from each standard, whereby the said standards and their frame and attachments can be raised or lowered in the box as occasion may require. E is a segment-shaped rubbing-board, corrugated

on its under surface, and is secured to the lower edges of two wooden segments, F, connected at one end by a transverse handle, F'. The front ends of said segments are pivoted between the lower ends of two pendulums, G, each having a slot, *c*, at the upper end, through which the rock-shaft B¹ passes, and below which they are connected by a girt, G'. An adjusting-screw, H, is tapped through the middle of the rock-shaft B¹, and has the girt G' suspended from its lower end. By means of this screw the rubbing-board may be raised and lowered, to adjust it to the proper distance between its front end and the rollers, as the thickness of the fabric may require. I is a metallic soap-receptacle, secured to the front part of the rubbing-board, which is pierced with a row of small apertures, *e*, for the liquid soap or soap-suds to flow through, and be distributed directly upon the part of the fabric which is being rubbed.

I do not claim, broadly, the adjustability of the frame in the box, as such frames have been made adjustable heretofore; but

What I do claim as new is—

1. The flanged plates D, each having an inclined ratchet-slot, *a*, in combination with the studs *b* on the standards B, as and for the purpose set forth.

2. In a washing-machine, the slotted pendulum G, girt G', adjusting-screw H, rock-shaft B¹, and reciprocating rubbing-segments E, in combination with the standards B, adjustable vertically by means of the slotted plates D and studs *b*, substantially as described and shown.

3. In a washing-machine provided with the perforated reciprocating rubbing-segment E, the soap-receptacle I, adapted to reciprocate with said segments, substantially as described and shown.

LAFAYETTE C. HALL.

Witnesses:

CHAS. J. HUNT,
H. S. SPRAGUE.