J. H. HARRIS.

Washing-Machine.

No. 165,573. Patented July 13, 1875.

Fig 1

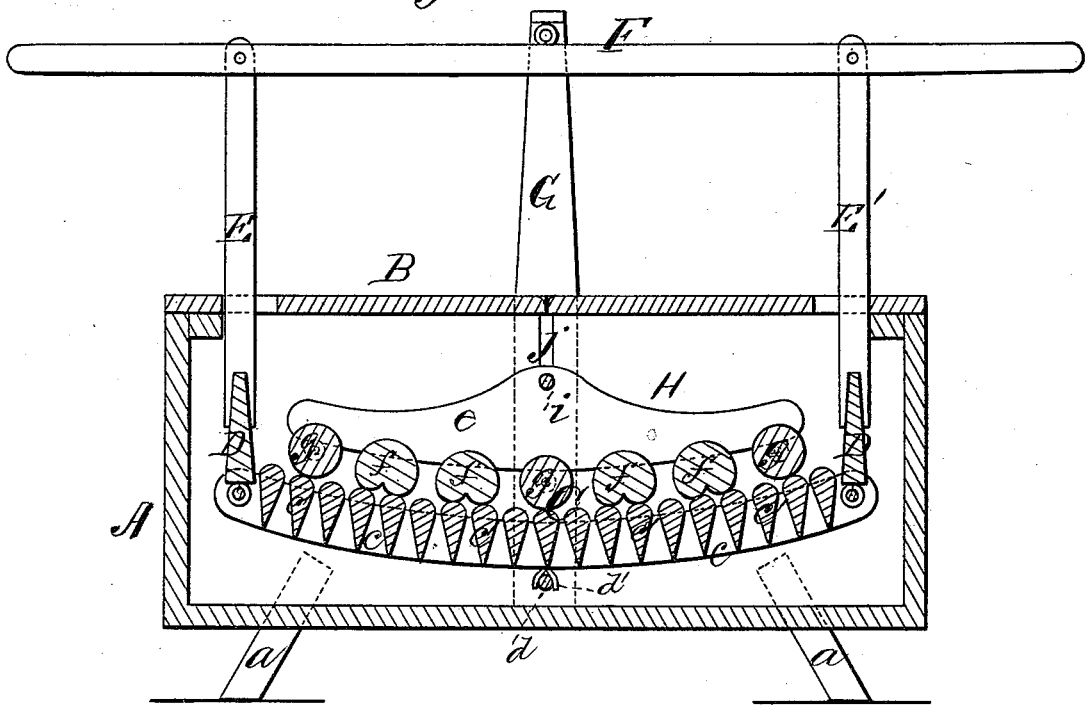


Fig 2

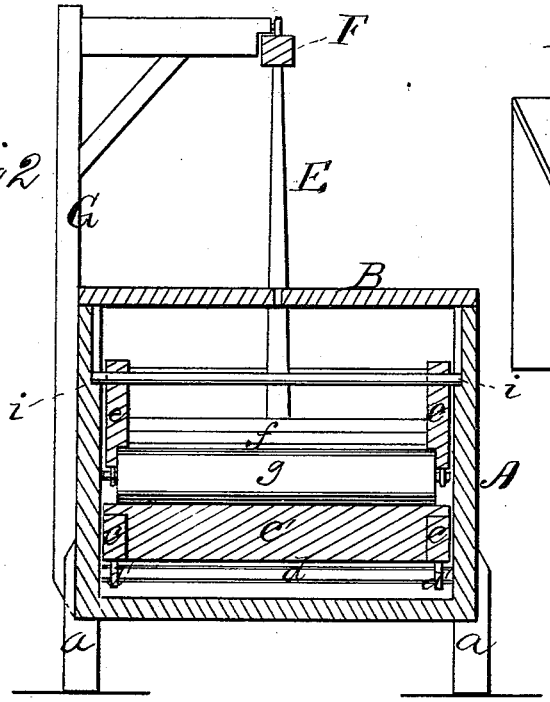
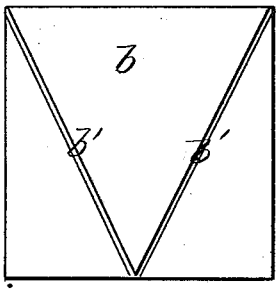


Fig 3



WITNESSES

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JOHN HENRY HARRIS, OF IOLA, KANSAS.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **165,573**, dated July 13, 1875; application filed April 10, 1875.

To all whom it may concern:

Be it known that I, JOHN H. HARRIS, of Iola, in the county of Allen and State of Kansas, 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 drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a longitudinal vertical section of my washing-machine; and Fig. 2 is a transverse vertical sectional view of the same. Fig. 3 is a detail view.

This invention has relation to improvements in washing-machines; and the nature of the invention consists mainly in an oscillating rubbing-bed, arranged within a wooden suds-box, combined with an oscillating rubber-block or frame arranged above and in conformity to the said bed, whereby a machine is produced, wherein soiled fabrics will, when they are placed between the said rubbing-bed and frame, be subjected to a very effective degree of friction and pressure by causing the said bed to be oscillated through suitable mechanism, as will be hereinafter more fully explained.

In the annexed drawings, A designates a preferably rectangular suds-box, which is mounted on legs *a*, and is provided with handles, by means of which it may be lifted from place to place. It has also a detachable lid or cover, B, made up of sections *b*, which are so constructed that their upper horizontal surfaces shall incline inward, whereby water thrown up thereon by a washing mechanism hereinafter explained will be directed inward, and will flow into an angular groove, *b'*, cut therein, as shown in Fig. 3, toward the center of the box, falling through a suitable aperture back into its interior, thus preventing the floors from being wet, and saving labor in drying them with a mop or swab. C represents a segmental frame, consisting of side bars *c*, and transverse wooden strips *c'* rigidly secured thereto, which is arranged in the said suds-box, and oscillates freely on a metallic rod, *d*, passing centrally and transversely through the said box, as shown in Fig. 1, and is held to its position, relative to the said bar, by means of a U-shaped plate, *d'*, rigidly secured to side bars *c*, and embracing the said rod. This frame has upon each of its ends a board, D, of suitable dimensions, the same being pivoted to the lower end of operating rods E E', and hinged to the said frame. Rods E E' are pivoted to an actuating lever, F, centrally pivoted to an overhanging standard, G, which is rigidly secured to the side of the suds-box, and when operated will impart a rocking or oscillating motion to the said bed or frame. H represents a rubbing-block or frame, consisting of end bars *e*, to which are rigidly secured ribs or strips *f*, and rollers *g*, which are journaled therein in any suitable manner. This frame is of such dimensions, in regard to the width of the box, as to be readily fitted therein, and is of such a length that when it is applied to its appointed place on frame C, between boards D, it shall in no manner interfere with the free oscillation of the said frame C. It is also adapted to conform to the movements of frame C, by being suspended by means of journals *i* in the sides of the suds-box, the said journals being received into bearing-plates *j*, which are inserted into vertical grooves cut in the side of the box.

My improved washing-machine is operated in the following manner, to wit: Rubbing-block or frame H is detached from the suds-box, and the soiled articles placed upon bed-frame C. The former is then replaced, and lever F properly actuated, when an oscillatory or rocking motion will be communicated to the two frames, and the clothing thoroughly rubbed by strips *c'* of the bed, and those, *f*, of the rubber H, while rollers *g* of the latter will express the soiled water from the clothing. In practice, rods E E' may be pivoted directly to the bed C, but I prefer to use the boards D, as they serve to keep the fabrics in place between the rubbing-frames, and effectually prevent the clothing from being entangled in or getting under the lower frame.

What I claim as new, and desire to secure by Letters Patent, is—

In a washing-machine, the oscillating rubbing-frame C, having transverse strips *c*, hinged boards D, at its ends, pivoted rods E E′, actuating-lever F, in combination with the oscillating rubber-block H, having journaled ribbed strip *f* and rollers *g*.

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

JOHN HENRY HARRIS.

Witnesses:
JAMES W. MCCLURE,
LONNIE NORTHRUP.