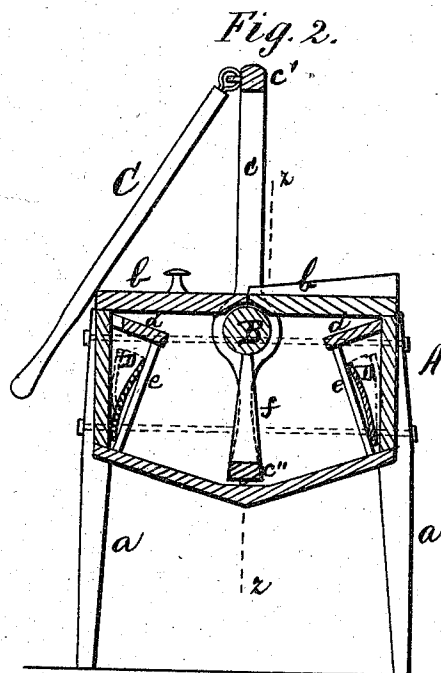
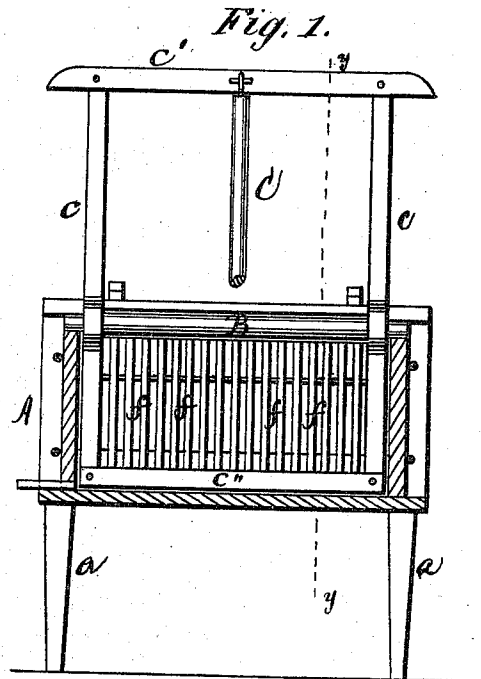


J. Q. A. SMITH.
Washing-Machines.

No. 142,523.

Patented September 2, 1873.



Witnesses.

J. A. Blair
Chas. H. Best

Inventor

John Q. A. Smith

UNITED STATES PATENT OFFICE.

JOHN Q. A. SMITH, OF LEE'S SUMMIT, MISSOURI.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **142,523**, dated September 2, 1873; application filed April 9, 1873.

To all whom it may concern:

Be it known that I, JOHN Q. A. SMITH, of Lee's Summit, Jackson county, Missouri, have invented certain new and useful Improvements in Washing-Machines; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and the letters of reference marked thereon making a part of this specification, in which—

Figure 1 represents a longitudinal section taken through line *z z* of Fig. 2, and Fig. 2 represents a cross-section taken through line *y y* of Fig. 1.

The nature of my invention consists in the construction and arrangement of the parts of a machine for washing clothes, as more fully hereinafter set forth.

A represents a rectangular box, whose bottom is curved, and which is supported upon feet *a a*, and provided with a lid or lids, *b b*. On each of the two sides of the interior is an inclined shelf, *d d*. From the outer ends of each of these shelves, and inclined toward the walls of the box, are a series of ribs, *e e*, thus forming within the box two racks, as shown in Fig. 2. Within each of these racks, and extending from one end of the box to the other, is a curved metal plate, D, which is hinged or pivoted to the wall of the box at its lower edge. These plates I term valves, the object of which is hereinafter set forth. *c c c'* represents a frame, one half of which is extended within, and the other half without, the box A. At the central portion of this frame is a shaft, B, having journals at its ends which rest in bearings formed on the top edges of the end pieces of the box at the center thereof. Projecting from the under part of this shaft, and secured to the lower bar, *c''*, of the frame, are a series of ribs, *f f*, which taper from top

to bottom, as shown in Fig. 2. This entire structure I term the beater, to be used as hereinafter explained. C represents an arm, which is linked to the top bar, *c'*, of the beater-frame, and is for the purpose of operating the same.

The clothes to be washed, and the water or suds, are placed within the box A between the racks *d e*. The operator, after closing the lid of the box, moves the arm C, which causes the beater to be forced forward and backward so as to press the clothes between the ribs *e* of the racks and the ribs *f* of the beater. As the beater is moved the water or suds is forced against the valves D in the racks. These valves being curved, as shown, the concaved sides next to the ribbing and the convex sides next to the walls of the box, cause the water or suds to flow over the clothes at the retreat of the beater; in other words, as the beater advances one valve is thrown back against the wall of the box, giving the entire space between the ribs and wall of the box for the water and suds to enter; then, as the beater recedes on the backward stroke, the valve drops forward or closes, causing the water or suds forced into said space to flow over the top of the valves, and thence upon the clothes, so that at each stroke of the beater the water is made to fall upon the clothes in the box.

Having described my invention, what I claim is—

The combination of the stationary racks *d e*, forming angular receptacles, the hinged and curved metallic plates or valves D D placed in said receptacles, and the rocking beater B *f c''*, all constructed and operated substantially as set forth.

JOHN Q. A. SMITH.

Attest:

J. A. BLAIR,
THOS. H. BEST.