J. C. SMITH.
Washing-Machine.

No. 197,803. Patented Dec. 4, 1877.

Fig. 1.

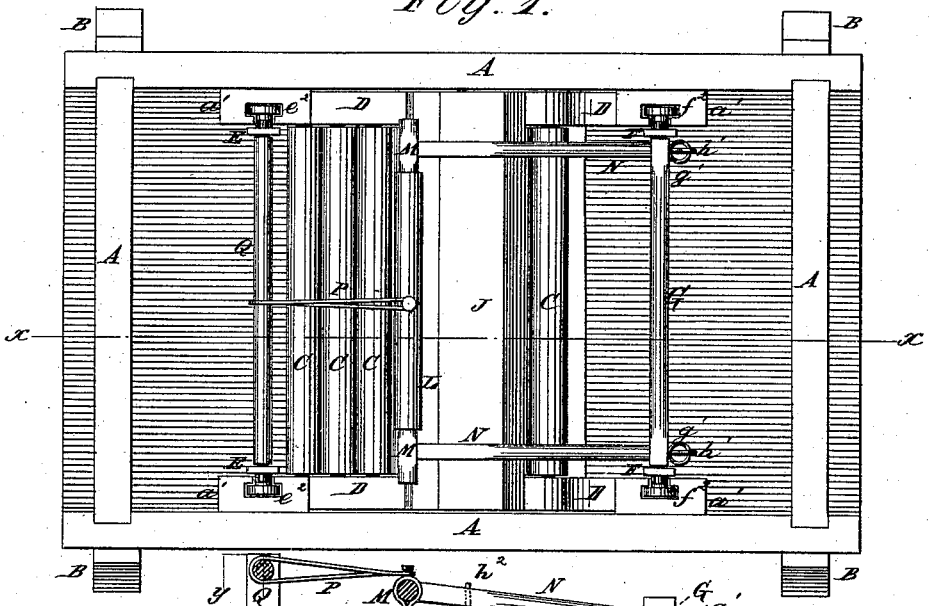


Fig. 2

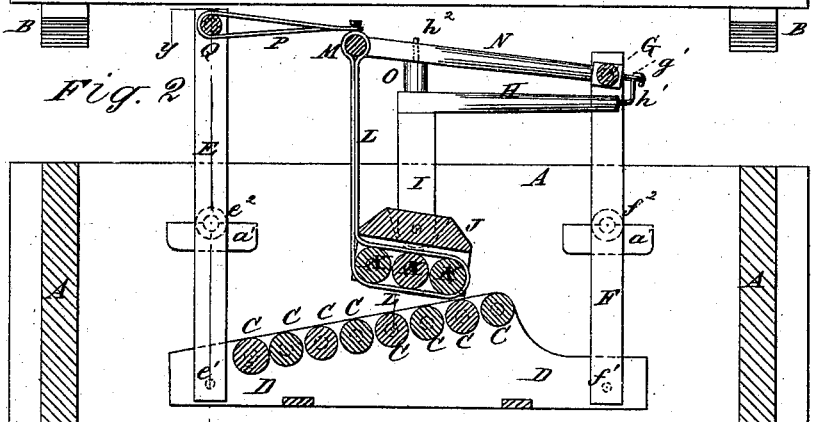
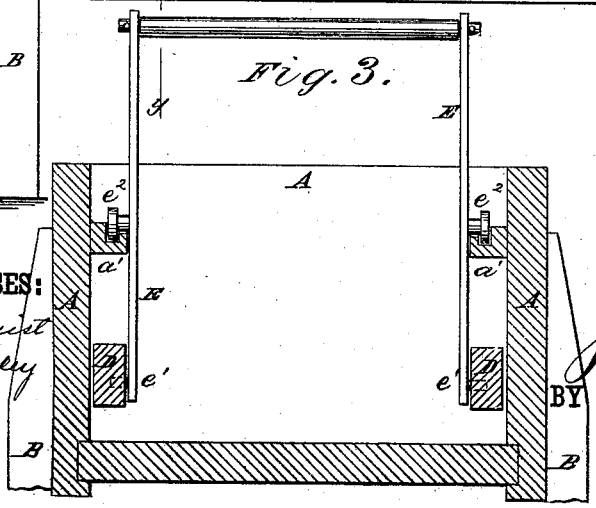


Fig. 3.



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UNITED STATES PATENT OFFICE.

JAMES CRAIG SMITH, OF ASHTON, ILLINOIS.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **197,803**, dated December 4, 1877; application filed September 10, 1877.

To all whom it may concern:

Be it known that I, JAMES CRAIG SMITH, of Ashton, in the county of Lee and State of Illinois, have invented a new and useful Improvement in Washing-Machines, of which the following is a specification:

In the accompanying drawings, forming part of this specification, Figure 1 is a top view of my improved machine; Fig. 2, a vertical longitudinal section of the same, taken through the line *x x*, Fig. 1; and Fig. 3 is a vertical cross-section of the same, taken through the line *y y*, Fig. 2.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved washing-machine which shall be so constructed that the washing may be done by rubbing similar to hand-rubbing, and which shall be simple in construction, convenient in use, and easily operated.

The invention consists in an improved washing-machine formed by the combination of the two rubbers, the two pairs of levers, the three cross-bars, the two pairs of side bars, the rubber blocks, the canvas, and the rubber or metal spring with each other and the suds-box, as hereinafter fully described.

A is the suds-box, which is made of rectangular form, and of any convenient size, and is provided with legs B, of such a length as to raise the machine to a convenient height. C D is the lower rubber, which is formed by pivoting a series of rollers, C, to the side bars of a frame, D, which side bars are tapered, as shown in Fig. 2, so that the said rollers C may form an inclined plane. E F are two pairs of levers, which have pivots e^1 f^1 formed upon or attached to the outer sides of their lower ends, to work in holes in the end parts of the side bars of the frame D.

To the outer sides of the middle parts of the levers E F are attached flanged pivots e^2 f^2, which work in grooved notches in the bearing-blocks *a'*, attached to the inner sides of the suds-box A, so that the lower rubber C D may be hung in such a way that it may be oscillated longitudinally as the levers E F are vibrated upon their pivots e^2 f^2.

To the upper ends of the forward levers F are attached the ends of a cross-bar, G, to which, near its ends, are attached eyes *g'*, to receive hooks h^1, attached to the forward ends of two side bars, H.

The rear ends of the side bars H are attached to the upper ends of two arms, I, to the lower ends of which is pivoted or hinged the block J, so that the said block may rock upon the ends of the said arms.

Upon the lower side of the ends of the block J are formed, or to them are attached, flanges, to which are pivoted the ends of three or more rollers, K, forming the upper rubber.

Around the rollers K is passed a strip of canvas, L, which passes up at the rear side of the block J, and its ends are attached to a cross-bar, M.

To the cross-bar M, near its ends, are attached the rear ends of two side bars, N, the forward ends of which are attached to the cross-bar G, near its ends.

To the upper side of the rear ends of the side bars H are attached pins h^2, which pass up through holes in the side bars N, and have rubber blocks O placed upon them, between the said side bars H and N.

To the middle part of the cross-bar M are attached the ends of a rubber or metal spring, P, the other end of which is attached to the middle part of the cross-bar Q.

The ends of the cross-bar Q are pivoted to the upper ends of the rear levers E, which are made longer than the forward levers F, as shown in Fig. 2.

The machine is operated by taking hold of one or the other of the cross-bars Q M G, and moving it back and forth, which causes the two rubbers to move back and forth upon each other, rubbing and pressing the clothes between them, and making them clean in a very short time, the said rubbers always moving in opposite directions.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

An improved washing-machine, formed by the combination of the two rubbers C D and J K, the two pairs of levers E and F, the three cross-bars Q M G, the two pairs of side bars H N, the rubber blocks O, the canvas L, and the rubber or metal spring P with each other and the suds-box A B, substantially as herein shown and described.

JAMES CRAIG SMITH.

Witnesses:
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