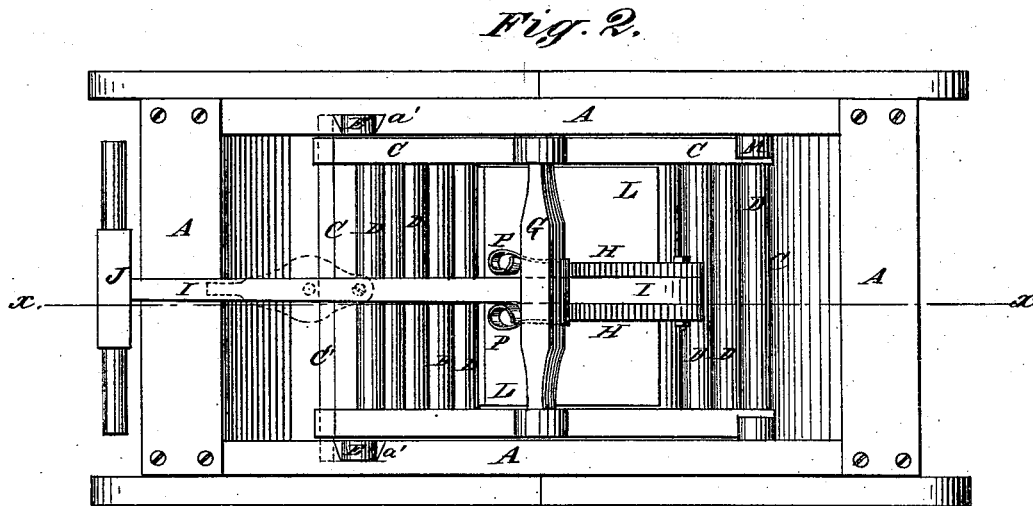
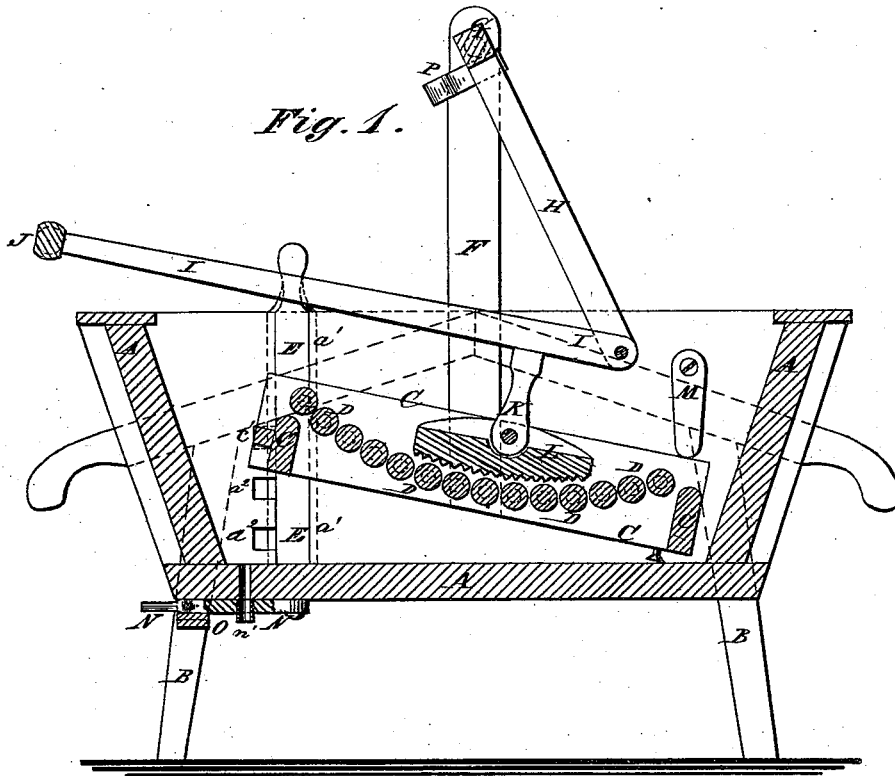


J. W. MODLIN.  
 WASHING-MACHINE.

No. 187,038.

Patented Feb. 6, 1877.



WITNESSES:

*H. Dydquist*  
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INVENTOR:

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BY

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ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JOHN W. MODLIN, OF ALBION, IOWA, ASSIGNOR TO HIMSELF AND SIMON C. GILLESPIE, OF SAME PLACE.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **187,038**, dated February 6, 1877; application filed November 25, 1876.

*To all whom it may concern:*

Be it known that I, JOHN W. MODLIN, of Albion, in the county of Marshall and State of Iowa, have invented a new and useful Improvement in Washing-Machine, of which the following is a specification:

Figure 1 is a vertical longitudinal section of my improved machine, taken through the line *x x*, Fig. 2. Fig. 2 is a top view of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved washing-machine, which shall be simple in construction, convenient in use, and effective in operation, and which shall be so constructed that the operating parts may be adjusted and detached as may be required.

The invention consists in the combination of the wash-board, formed of the frame and rollers, and provided with the cross-bar, the buttons, and the slides, with the suds-box, provided with the notched grooves in its sides; in the combination of the upwardly-projecting bars, the rock-shaft, the two parallel bars, the lever, the rigid arm, and the pivoted rubber with the adjustable wash-board and the suds-box; in the combination of the spring-holder with the rock-shaft, and the parallel bars for receiving and holding the rubber-lever.

A is the suds-box, which is made with a flat bottom, vertical sides, and inclined or flaring ends, and is supported by legs B, of such a length as to raise the machine to a convenient height. C is a frame of such a width as to fit into the suds-box A, and of a length a little less than the inside length of the bottom of said suds-box. To the side bars of the frame C are pivoted the ends of a series of rollers, D, which are placed side by side, and are arranged in the arc of a circle, so as to make the rubbing-surface concave. One end of the frame C rests upon the bottom of the suds-box A, or has short pins attached to it, which rest upon the said bottom. To the other end of the frame C is attached a cross-bar, *c'*, the ends of which project to enter vertical grooves *a'* in the sides

of the suds-box A. At the forward side of the lower part of the grooves *a'* are formed notches *a''*, to receive the ends of the cross-bar *c'*, and support the wash-board C D at any desired inclination. The ends of the cross-bar *c'* are locked in any of the notches *a''* in which they may be placed by the bars E, which are slid into the grooves *a'*, and pass down at the sides of the ends of the cross-bar *c'*, as shown in Fig. 1. To the middle parts of the side bars of the frame C are attached the lower ends of two bars, F, at a slight inclination, so that the said bars F may be nearly vertical when the wash-board C D is adjusted at a medium inclination. To the upper ends of the bars F are pivoted the ends of a roller or rock shaft, G, to the middle part of which, and at a little distance from each other, are attached the upper ends of two parallel bars, H. To and between the lower ends of the bars H is pivoted the end of the lever I, to the other end of which is attached a cross-bar, J, to serve as a handle for operating the machine. To the lever I, at a little distance from its inner end, is rigidly attached the end of an arm, K, the other end of which is rounded off, is inserted in a recess in the center of the back of the rubber L, and is pivoted to the keepers attached to said rubber.

This construction allows the rubber L to rock to accommodate itself to the clothes upon the wash-board C D. The face of the rubber L is grooved, to cause it to work properly upon the clothes. The rear end of the wash-board C D is held down by buttons M, pivoted to the sides of the suds-box A in such positions that they may be turned down upon the rear ends of the side bars of the frame C. To the rock-shaft G, or to the upper parts of the bars H, are attached two springs, P, to serve as holders for the lever I when turned up to raise the rubber L, to enable the clothes to be conveniently put in and taken out.

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

1. The cross-bar *c'*, attached to front end of roller-frame C, and resting in one of the notches *a''*, as and for the purpose set forth.
2. The bars E, arranged to slide in grooves

$a^1$  and lock the cross-bar  $c'$  in the notches  $a^2$ , as specified.

3. The combination of the spring-holder P with the rock-shaft G and parallel bars H, for receiving and holding the rubber-lever I, substantially as herein shown and described.

4. The combination of the wash-board formed of the frame C and rollers D, provided with

the cross-bar  $c'$ , the buttons M, and the slides E, with the suds-box A, provided with the notched grooves  $a^3$   $a^1$  in its sides, substantially as herein shown and described.

JOHN W. MODLIN.

Witnesses:

D. B. WAY,

G. WHEELER.