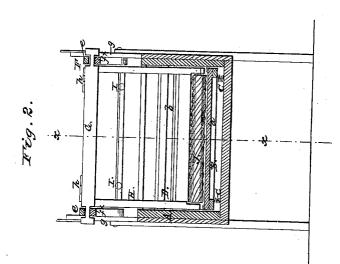
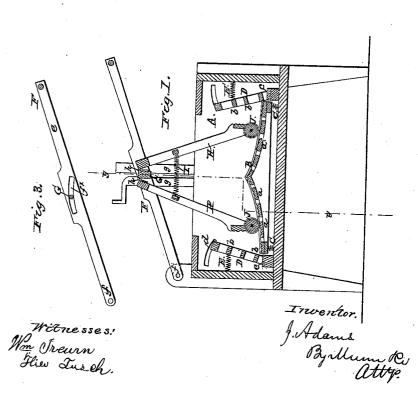
## I. Addinis; Washing Machine, Patented Jan.16, 1866.



N=52,108.



## UNITED STATES PATENT OFFICE.

JOSEPH ADAMS, OF JANESVILLE, WISCONSIN, ASSIGNOR TO HIMSELF AND NATHL. DEARBORN, OF SAME PLACE.

## WASHING-MACHINE.

Specification forming part of Letters Patent No. 52,108, dated January 16, 1866.

To all whom it may concern:

Beitknown that I, Joseph Adams, of Janesville, in the county of Rock and State of Wisconsin, have invented a new and useful Improvement in Clothes-Washing Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

Figure 1 is a side sectional view of my invention, taken in the line x x, Fig. 2; Fig. 2, a transverse vertical section of the same, taken in the line y y, Fig. 1, and Fig. 3 a detached view of one of the side pieces of the lever-frame.

Similar letters of reference indicate corresponding parts.

This invention relates to a new and improved clothes-washing machine of that class in which rollers are employed and a slotted bed.

The object of the invention is to obtain a more efficient machine than others of the same class as now manufactured, and one which may

be operated with less friction.

A represents a suds-box, which may be of rectangular form, and has placed within it a double concave slatted bed, B. (Shown clearly in Fig. 1.) This bed B rests on spiral springs C, as shown in Figs. 1 and 2. The slats a of the bed B have a transverse position in the suds-box A, and at each end of the latter there is a bearing-frame, D. These frames D are provided with horizontal parallel slats b, and they are fitted on pivots c at their lower ends, the upper ends of the frames, at each side, having a projection to fit in curved slots d in the sides of the suds-box. (See Fig. 1.) The frames D have spiral springs E bearing against their rear sides, which are also shown in Fig. 1.

F represents a lever-frame, composed of two side pieces, e e, which are secured by pivots f to the upper part of the suds-box, at one end of the same. These side pieces, e e, have each a curved slot, f\*, made in them, as shown in

Fig. 3, and these slots receive a cross-bar, G, the ends of which are allowed to slide or move freely in the slots. The ends of the bar G project beyond the side pieces, e e, are of flat form, and work between vertical guides g g at each side of the suds-box. The bar G has a pendent frame, H, attached to it, at each side, by hinges h, and said frames are connected by springs I, which have a tendency to draw them toward each other, and in the lower end of each frame a fluted roller, J, is fitted.

The suds-box is provided with the requisite quantity of suds, and the clothes are subjected to the requisite rubbing and friction on the bed B by operating the lever-frame F, the pressure of the rollers J on the clothes being proportionate to the strength of the springs I, the clothes being also subjected to pressure between the frames H and the bearing-frames D. In consequence of having the ends of the bar G fitted in curved slots  $f^*$  in the side pieces, e e, of the lever-frame, a direct downward pressure is obtained on the frames H, under the curvilinear movement of the lever-frame, and much friction avoided.

The rollers J at the lower ends of the frames H are fluted spirally, a plurality of flutes being used on each roller, so that the surfaces of the same will be entirely covered by the fluted projections, which will consequently have a quick pitch. This renders the fluted rollers very efficient. The bearing-frames D turn the clothes at the termination of each downward movement of the rollers J, when said rollers re-

cede from them.

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

The two pendent hinged frames H H, attached to bar G, and connected by springs I, to operate in combination with the double concave bed B, substantially as and for the purpose specified.

JOSEPH ADAMS.

Witnesses:

Joseph Baker, Chas. G. Williams.