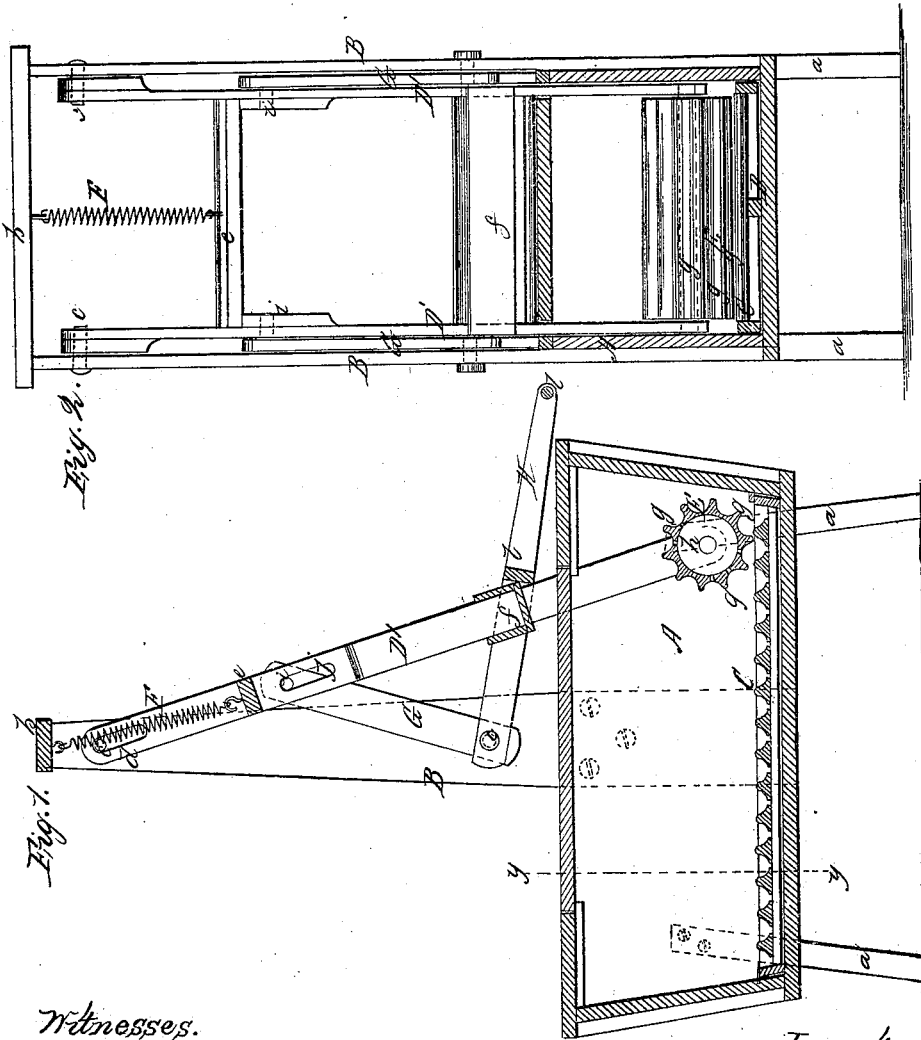


D. Dennison,

Washing Machine.

N^o 53,793

Patented Apr. 10, 1866.



Witnesses.

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UNITED STATES PATENT OFFICE.

DAVID DENNISON, OF ANNISQUAM, MASSACHUSETTS.

IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. 53,793, dated April 10, 1866.

To all whom it may concern:

Be it known that I, DAVID DENNISON, of Annisquam, in the county of Essex and State of Massachusetts, have invented a new and Improved Clothes-Washing Machine; 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, in which—

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.

Similar letters of reference indicate corresponding parts.

This invention relates to a new and improved clothes-washing machine of that class in which a fluted pressure-roller is employed in connection with a slatted bed.

The object of the invention is to obtain a machine of the class specified which will act uniformly upon the clothes, subject all parts of them to an equal pressure and friction, and cleanse them without injury.

A represents a suds-box supported at a suitable height by legs *a*, and having an upright, B, secured to each side of it, the upper ends of said uprights being connected by a cross-piece, *b*. In the bottom of this suds-box there is placed a slatted frame, C, the slats having a transverse position and placed at equal distances apart, spaces being allowed between them for the water or suds to pass through. This slatted frame C has a central longitudinal strip, D, which rests on the bottom of the suds-box and allows it to tilt or incline laterally, so as to conform to an unequal thickness of a layer of clothes.

D' D' represent two swinging arms, the upper ends of which are suspended on pins *c c* in the uprights B B, said pins passing through oblong slots *d d* in the swinging arms. (See Fig. 1.) These arms D' D' are connected by a cross-bar, *e*, and also by a box, *f*, and between the lower ends of these arms a fluted roller, E, is fitted on journals or a shaft.

The roller E is formed of slats *g*, secured to circular heads *h*, which form the ends of the roller, spaces being allowed between the slats for the water to pass through, as shown in Fig. 1.

To the cross-bar *e* of the arms D' D', and to the cross-piece *b* of the uprights B B, a spiral spring, F, is attached, which partially sustains the roller E, relieving the clothes on the slatted frame C of a portion of its weight.

To each of the swinging arms D' a bar, G, is attached by a pivot, *i*. These pivots *i* pass through oblong slots *j* in the upper parts of the arms D', and the lower ends of the arms are connected by pivots *k* to the uprights B B and to bars H, and these are connected by cross-pieces *l l*.

From this description it will be seen that by working the bars H up and down the roller E will be made to travel forward and backward over the whole length of the slatted frame C. The clothes are placed on this frame and are subjected to the requisite degree of pressure and friction by the roller E. In case a greater pressure is required the box *f* may be loaded with any material. This may be necessary in washing heavy clothes.

The slatted frame C and roller E allow the water to pass through them, and the suds will be forced through the texture of the clothes and the dirt effectually cleansed therefrom, while the tilting of the frame C laterally causes it to conform to any equality of the layer of clothes on the frame.

This machine, it is believed, conforms to or approaches in its operation nearer to the hand-rubbing process than any now in use. The clothes are not liable to be injured by excessive friction and rubbing, and it may be adapted, by graduating the pressure of the roller E, to washing either coarse or fine clothes.

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

1. The combination of the slatted frame C, pressure-roller E, bar D, swinging arms D' D', bars G H, spring F, and box *f*, constructed and arranged relatively to each other, and operating in the manner and for the purpose herein specified.

2. The arrangement of the swinging arms D' D', bars G H, spring F, box *f*, and roller E, in the manner and for the purpose herein specified.

DAVID DENNISON.

Witnesses:

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JOHN N. DAVIS.