H. Haskins,

Washing Machine,

No. 4,164. Patented Aug. 26, 1845.

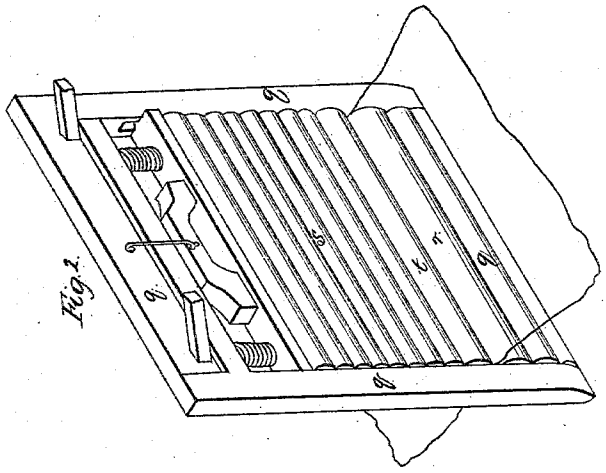


Fig. 1.

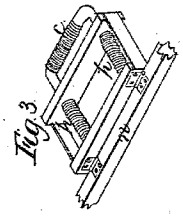


Fig. 3

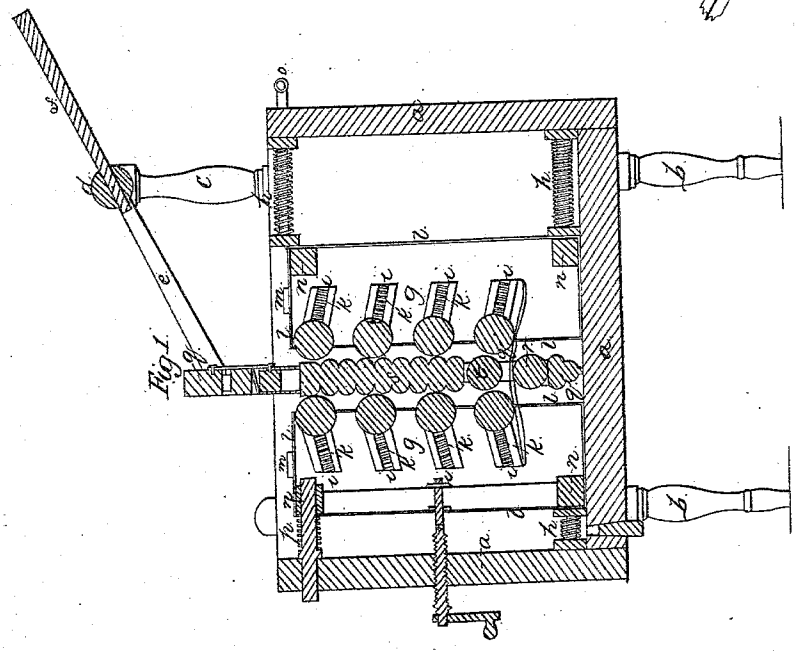


Fig. 2.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HORATIO HOSKINS, OF SCIPIO, NEW YORK.

WASHING-MACHINE.

Specification of Letters Patent No. 4,164, dated August 26, 1845.

To all whom it may concern:

Be it known that I, HORATIO HOSKINS, of Scipio, in the county of Cayuga and State of New York, have invented a new and useful Improvement in Washing-Machines with Parallel Series of Rollers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1, is a vertical section. Fig. 2, is a representation of washboard detached. Fig. 3 shows the handle and springs connected with the standards.

The nature of my invention consists in the combination and arrangement of springs and slits in which the series of rollers are placed inclining downward and outward from a point next the washboard and in adjusting the pressure of said springs and rollers on the article to be washed, and also, the manner of constructing the washboard.

The machine is composed of a tubical box or tub (*a*) supported on four legs, two of which (*b*) are shown in the section two upright posts (*c*) project up from one side which sustain a horizontal shaft or roller (*d*) from which the arms (*e*) which move the washboard up and down extend, and to the same roller is affixed the handle (*f*) by which it is moved in a similar way to those now in use. In each side of the box are 2 standards (*g g*) placed a little distance apart and pushed toward each other by spiral or other springs (*h*) at top and bottom. In each of the pieces are inclined mortises (*i i i*) the mortise inclining upward toward the center. These mortises may be lined with brass or zinc and in each the journal of a roller works, behind which there is a spiral spring (*k*) to force said rollers upward as clearly shown in Fig. 1. By this construction the washboard pushes the rollers directly back at right angle when it strikes them, without wedging. The standards are surrounded by a metal rim (*l*) and are prevented from rising by a wedge or key (*m*) put through the sides of the box and projecting over each of them. Bars (*n*) extend across from one standard to the other on the opposite side of the box parallel with the rollers forming them into a sort of frame the upper springs (*n*) that force forward the standard (*g*) on one side are connected with a handle (*o*) outside the box, which handle can be raised and the standards on that side brought back at the top when the clothes are put into or taken from the machine. This handle and springs are more clearly shown in Fig. 3. The opposite standards can be drawn back or thrust forward by means of a screw *p* so as to increase or diminish the pressure on the washboard at pleasure. The screw passes through the side of the box and affixed to the frame as clearly represented in Fig. 1. The washboard is a square frame, (see Fig. 2) (*q*) the bottom bar (*q'*) of which is fluted and brought to a blunt edge at the bottom as shown in section Fig. 1 above this there is a roller (*r*) inserted in the side pieces above which the sides are grooved on the inside and a fluted board (*s*) is made to slide up and down therein. This board has a roller (*t*) at its lower edge that can be brought in contact with roller (*r*) above named between the upper edge of the sliding board (*s*) and the upper bar of the frame (*q*) are springs (*u*) which serve to press down said board and cause the rollers (*r* and *t*) to press anything between them. A hook may be attached to the upper bar (*q*) that hooks into a staple in the board and holds it up as shown in the figure while the clothes are inserted between the rollers. It is then unhooked and the clothes are held between them by the springs, but the clothes can be drawn back and forth as they are washed so as to present different parts to the action of the machine. The utility of those rollers in the board will be clearly shown by the fact that it is necessary in washing a large garment to change the position of it 2 or 3 times while washing which can be done very readily without raising the slide, consequently it will require only about one-half of the time to wash a large garment that it will in the usual way which takes up at least one-half of the time in changing the position another advantage also is gained by the rollers. That is if any parts of the garment should catch it would be relieved by the action of the rollers before they were torn.

Having thus fully described my improvements, what I claim therein as my invention and for which I claim Letters Patent is—

1. The combination and arrangement of the springs, and the manner in which they are

applied to the sliding board and the rollers attached to the same, the use of which has heretofore been shown.

2. I claim the mode of arranging the springs (*h*) and handle (*o*) for the purpose of relieving the standards on one side as above made known, by coiling the springs around the arm that connects the handle with the standards so that as the handle is raised above the top of the box to draw back the standards the spring is relieved.

HORATIO HOSKINS.

Witnesses:
J. J. GREENOUGH,
J. H. GODDARD.