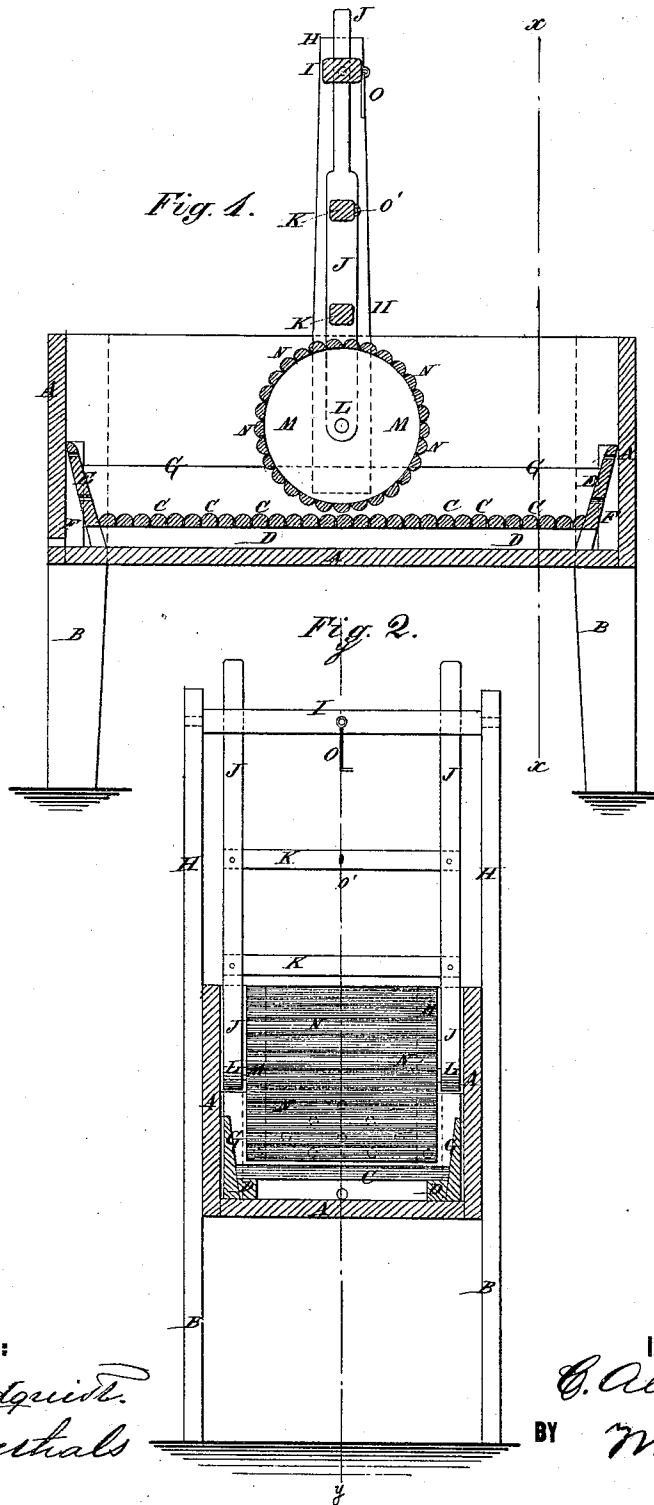


C. ALLEN.
 WASHING-MACHINE.

No. 181,812.

Patented Sept. 5, 1876.



WITNESSES:
H. Rydquist.
John Coethals

INVENTOR:
C. Allen
 BY *Munn & Co.*
 ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHESTER ALLEN, OF CORINTH, NEW YORK.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **181,812**, dated September 5, 1876; application filed July 22, 1876.

To all whom it may concern :

Be it known that I, CHESTER ALLEN, of Corinth, in the county of Saratoga and State of New York, have invented a new and Improved Clothes-Washing Machine, of which the following is a specification:

Figure 1 is a vertical longitudinal section of my improved machine, taken through the line *yy*, Fig. 2. Fig. 2 is a vertical cross-section of the same, taken through the line *xx*, Fig. 1.

The object of this invention is to furnish an improved machine for washing clothes, which shall be simple in construction, convenient in use, and effective in operation, washing the clothes quickly and thoroughly, and with very little labor to the operator.

The invention will first be described in connection with drawing, and then pointed out in the claim.

A represents the suds-box, which is rectangular in form, and may be of any convenient size. The suds-box A is supported upon legs B, of such a length as to raise it to a convenient height. The bed-rack or stationary rubber is formed by attaching the ends of cross-bars C to the upper sides of two side bars, D, which are laid upon the bottom of the box A, close to the sides of said box, thus forming a channel for the water beneath the said cross-bars C.

The upper sides of the cross-bars C are rounded off, and they are placed at such a distance apart as to allow the water to pass through them freely.

E are end boards, placed at the ends of the bed-rack C D, in an inclined position, with their upper edges resting against the ends of the box A. The end boards E rest against inclined blocks F, secured in the corners of the box A. The end boards E have numerous holes formed through them, for the passage of the water, and their lower edges are notched to correspond with the channel beneath the cross-bars C.

To the sides of the bed-rack C D are attached side boards G, to serve as guides to the cylinder, and to prevent the water from passing up and down at the sides of the said bed-rack.

To the middle parts of the side boards of the box A are attached two uprights, H, to the upper ends of which are pivoted the ends of a cross-bar, I. In the bar I, near its ends, are formed mortises, to receive the upper ends of two bars, J, the middle parts of which are connected by two cross-bars, K. In holes in the lower ends of the bars J revolve the ends of the shaft L, to which, close to the bars J, are attached two disks, M.

To the edges of the disks M are attached cross-bars N, the outer sides of which are rounded off, and which are placed at such a distance apart that the water may pass between them freely.

To the rack-bar I is pivoted a hook, O, to hook into an eye, *o'*, attached to the upper cross-bar K, to hold the cylinder M N suspended while putting in and taking out the clothes.

In using the machine, the cylinder M N is rolled back and forth upon the clothes spread upon the bed-rack C D, the bars J sliding up and down in the bar I, and the bar I rocking in its bearings in the uprights H. As the cylinder M N is rolled in either direction, the water is pushed before it, flows through the holes in the end boards E, passes down into the channel below the bed-rack C D, and rises through the spaces between the cross-bars C, before and behind the cylinder, raising the clothes from the said bed-rack, and moving them so that they will be operated upon each time in a different place, which, in connection with the action of the water, washes the clothes clean in a very short time.

The object of a space between bed and bottom of box is that the water, which passes through holes in the end pieces, may pass under the clothes that are on the rack, and raise them up, so that just before the roller the water is under, while six or eight inches from the roller it is above, the clothes. The movement of the roller against the clothes which have just risen before it forces the water through them. As the roller moves up to one of the end pieces, a part of the water returns through the opposite end, covering the clothes until the point is reached where they have risen just in advance of the roller.

The water above the clothes, together with their adhesion to bed, gives the proper resistance to the movement of roller. Hence,

What I claim as new is—

A washing-machine provided with a bed-rack, consisting of the cross-bars C, side bars D, inclined perforated end boards E, resting

on inclined corner blocks F, and side boards G, all constructed and arranged substantially as shown and described.

CHESTER ALLEN.

Witnesses:

WM. H. FREEMAN,
LOTON KENDALL.