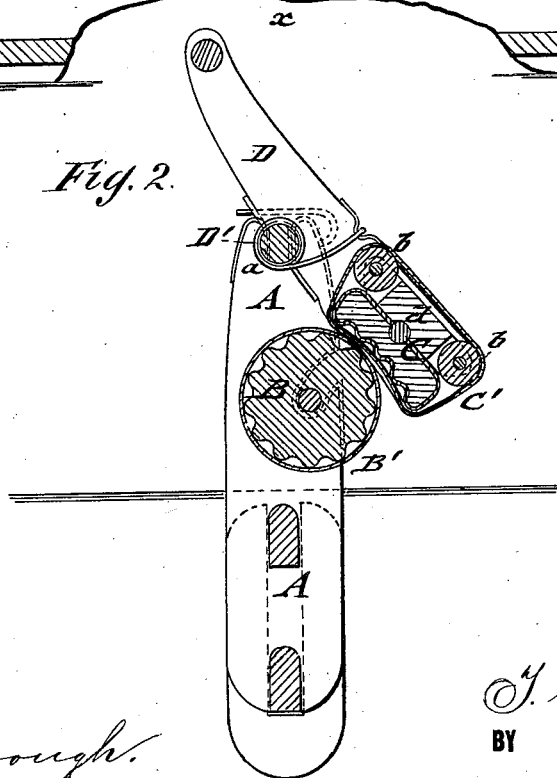
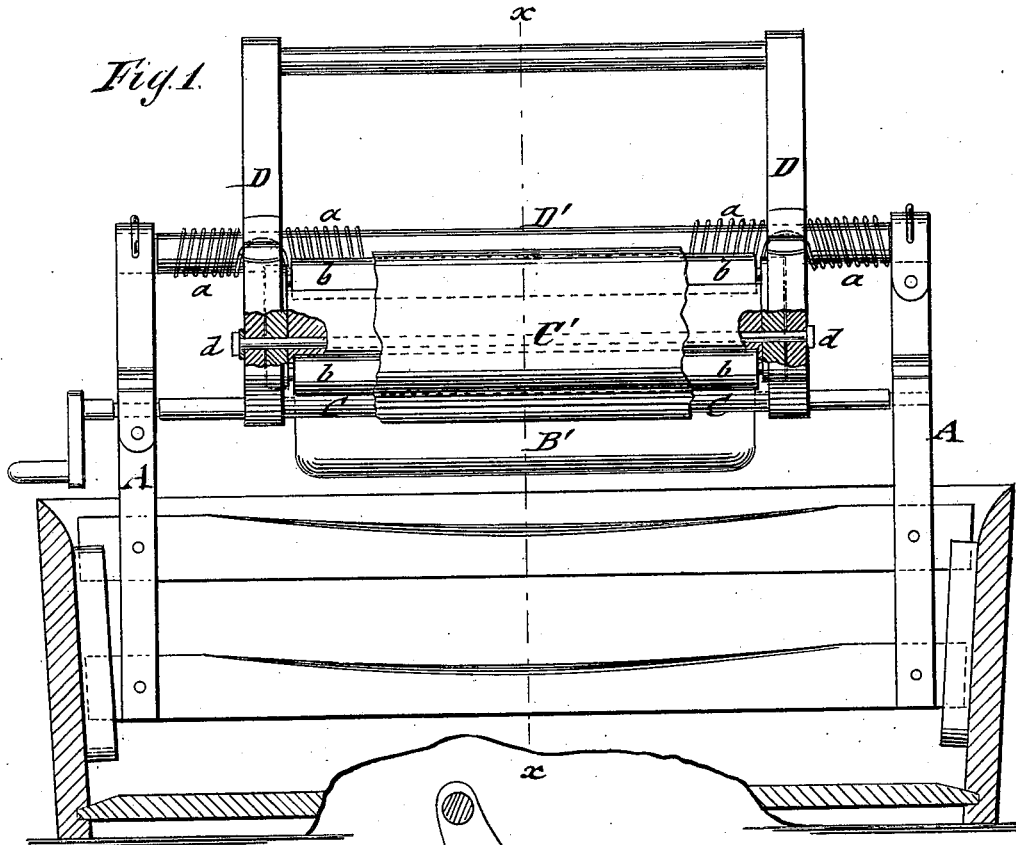


T. C. WELCH.
Washing-Machines.

No. 200,635.

Patented Feb. 26, 1878.



WITNESSES:

E. Wolff.
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THOMAS C. WELCH, OF CINCINNATI, ARKANSAS.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **200,635**, dated February 26, 1878; application filed May 5, 1877.

To all whom it may concern:

Be it known that I, THOMAS C. WELCH, of Cincinnati, in the county of Washington and State of Arkansas, have invented a new and Improved Washer, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a front view of my improved washer; and Fig. 2 is a vertical transverse section of the same on line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The invention relates to an improved machine for washing garments by pressing and rubbing the same against the face of a wash-board without friction or injury.

The invention consists of a revolving cloth-covered rubber, in connection with a wash-board set into a spring-acted lever-frame, the wash-board being covered by a band passing around the board and friction-rollers back of the same.

In the drawing, A represents a suitable supporting-frame by which the washing device is secured to seats or bearings of the wash tub or box. A corrugated roller, B, turns in bearings of the upright posts of frame A, being provided with a hand-crank, and so set into the frame as to be readily removed, if required.

The wash-board C is attached to the lower end of a swinging lever-frame, D, that turns on a fixed top shaft, D', of frame A, being attached to the same by spiral springs *a*, in such a manner that by taking out the roller B the frame of the wash-board may be turned on the shaft until the proper tension of the springs is obtained.

The roller or rubber is then replaced, and the machine is ready for use. The wash-board is then raised by pressing downward on the hand-bar at the upper ends of the levers or frame of the wash-board, and the garment introduced between the rubber and the wash-board. By releasing the hand-bar the face of the wash-board is brought in contact with the garment, which is held by the friction of the canvas or other covering, B', encircling the rubber, and by a band, C', encircling the wash-board. By revolving the rubber with the hand-crank backward and forward, the garment is caused to pass back and forth over the face of the wash-board.

The wash-board C is provided with a cor-

rugated-zinc covering, its face being of greater curvature than the convex surface of the roller, so that when the board is raised by the garment its face is nearly equidistant from the roller or rubber.

The band C' passes in front of the wash-board and over friction-rollers *b* at the back of the same, so as to follow the course of the roller, and compel thereby the garment to be rubbed without exerting a frictional and injurious influence thereon.

When the rubber is reciprocated back and forth, instead of being revolved, as heretofore described, the garment alternately dips into the water and passes over the wash-board, and any particular part of the garment may be introduced and washed at pleasure.

The garments may also be washed without the use of the band around the board, with no more injury than is produced by the common wash-board in use, though the same amount of pressure should not be used as with the band.

The band is applied to the board by removing the bolt *d* by which the wash-board is secured to its lever-frame, and by taking the board out of the sockets of the same.

The soap may be readily applied to the garment by soaping the band which encircles the wash-board and which, by its revolutions, conducts the soap to the garment.

The machine is of simple and durable construction, the zinc covering of the wash-board and the band revolving round the same being the only parts exposed to wear. It is readily operated, so as to expedite and facilitate the washing of garments.

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

1. The combination of a revolving roller or rubber, B, having covering-cloth B', with a swinging and spring-acted wash-board, C, having encircling-band C', substantially as specified.

2. The combination of the spring-acted lever-frame with a wash-board having friction-rollers and encircling-band, and with a fastening-bolt to remove band, if desired, substantially as specified.

THOMAS C. WELCH.

Witnesses:

R. W. REESE,
JOHN M. LACY.