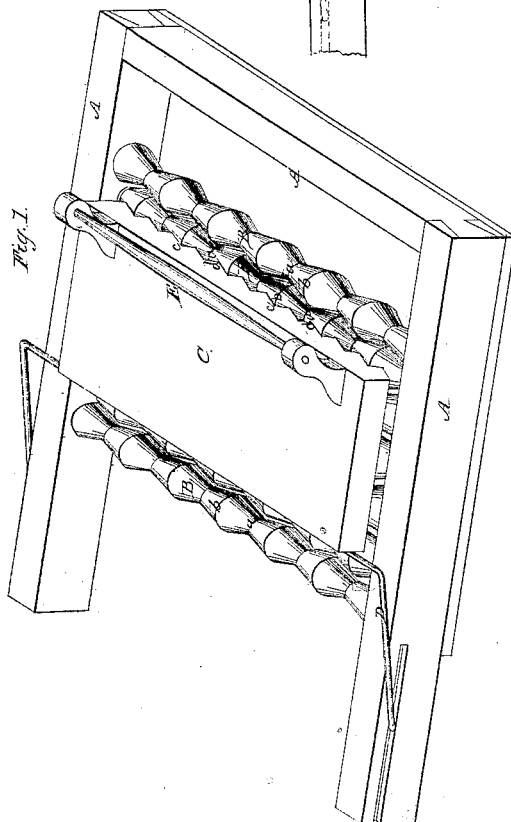
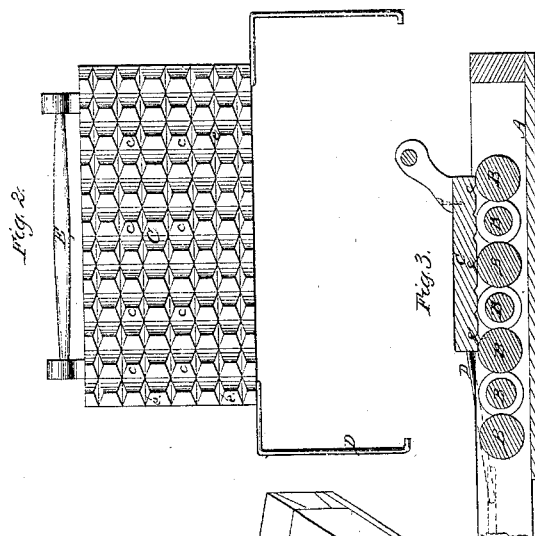


J. S. Lash,

Wash-Board,

N^o 49,635.

Patented Aug. 29, 1865.



Witnesses

*John D. Patton
J. W. Lash*

Inventor

*John S. Lash,
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UNITED STATES PATENT OFFICE.

JOHN S. LASH, OF PHILADELPHIA, PENNSYLVANIA.

WASH-BOARD.

Specification forming part of Letters Patent No. **49,635**, dated August 29, 1865.

To all whom it may concern:

Be it known that I, JOHN S. LASH, of the city of Philadelphia, in the State of Pennsylvania, have made certain new and useful Improvements in Wash-Boards for Washing Clothes; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a perspective view of the wash-board as ready for use. Fig. 2 represents a face view of the movable rubbing-board detached from its other portion. Fig. 3 represents a transverse longitudinal section through the wash-board.

Similar letters of reference, where they occur in the separate figures, denote like parts in all the drawings.

My invention consists in the construction and arrangement of the rolls in the under portion of the wash-board and the depressions and elevations in or on the face of the rubbing-board, so that the clothes, as they pass between the rubbing-surfaces, shall be acted upon by surfaces that have different motions, and thus receive a positive washing or rubbing operation.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

A represents the under frame, which may be made in any of the usual well-known ways. In this frame I arrange a series of rollers, B, so that they may freely turn upon their journals by the act of moving the clothes over them under pressure. The rollers B, as to surface, may have the form of a series of cones, united alternately by their bases and apices, as shown at *b a* respectively; or these projections and depressions, instead of being conical in form, may be of a bead, acorn, or ogee form; and the rollers are so arranged in the frame as that the elevated portions of one shall fit into the depressions of the next adjacent one, and vice versa, leaving space enough between for the water to freely pass through.

The rubbing-board C has cut upon its face a series of grooves, *c*, that will take the projecting portions *b* of the rollers, while its lands *d* will move along and over the depressions *a* thereof; or, in other words, the contour of the face of the wash-board C is similar to that of

the rolls in reverse, thus allowing the two surfaces to move in close contact and parallel to each other. There are also cross-grooves *e* in or on the face of the wash-board for carrying or moving the clothes along over the rolls, and preventing them from lying in one place, or for holding them against the rollers.

To the wash-board C are attached, at both of its sides, spring-arms D, the ends of which, as the board is reciprocated, move in grooves or slots *f* cut in the outside pieces of the under frame, A, and guide and direct said board in its movement. These arms may have elasticity enough to admit of their being taken out of their grooves when it is necessary to remove or detach the rubbing-board from the under portion; and instead of being bent, as shown, the wash board may be made long enough to be flush with the sides of the frame, and then straight arms may be used, and, if found advantageous, may be of wood instead of metal.

E is a rung or handle by which the rubbing-board is moved, and at the same time the necessary degree of pressure applied by the hand of the operator. The wash-board can be also raised up to place or remove the clothes or inspect the operation of washing, the arms D serving as pivots upon which it thus turns. If desirable, for finer clothes that might otherwise be damaged, the wash-board can be thrown back and the under portion used as a common wash-board is.

The surfaces of the rolls, being of different diameters, would have, of course, different velocities, but wash-board surfaces have always uniform velocities. Thus between the two surfaces the clothes receive a rubbing operation like hand-washing, the grooves *c* serving to move them along or to retain them, as the case may be.

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

In combination with a series of rollers of the form herein described and arranged in relation to each other, as set forth, a rubbing-board having longitudinal and transverse grooves in or on its face and acting with said rollers, as herein described and represented.

JOHN S. LASH.

Witnesses:

WILLIAM B. GREGG,
M. HOLCOMB.