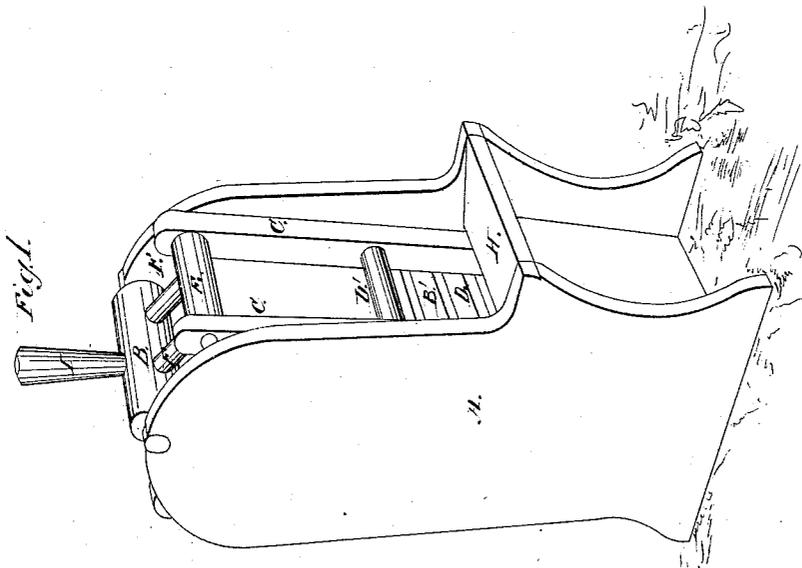
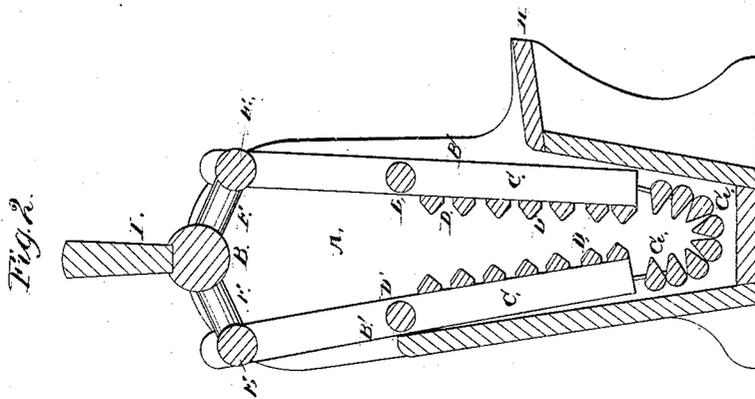


*J. Stengel,*  
*Washing Machine.*

*N<sup>o</sup> 62,571.*

*Patented Mar. 5, 1867.*



*witnesses,*  
*W. H. Burridge*  
*J. H. Burridge*

*inventor,*  
*Jost Stengel*

# United States Patent Office

JOSEPH STENGEL, OF CROTON, MICHIGAN.

Letters Patent No. 62,571, dated March 5, 1867.

## IMPROVED WASHING MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, J. STENGEL, of Croton, in the county of Newaygo, and State of Michigan, have invented certain new and useful improvements in Washing Machines; and I do hereby declare that the following is a full and complete description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which —

Figure 1 is a perspective view of the machine.

Figure 2 is a vertical transverse section.

Like letters of reference refer to like parts in the views.

This machine consists of the case A, fig. 1, in which is suspended from the shaft B a pair of wash-boards, B', and which are constructed in the following manner: C are strips of wood, across which are secured in any desirable way the rubbers D, which may be more or less in number, and of the shape in the drawing. D' is a brace, E a shaft, by the means of which the boards are suspended to the shaft B by the arms F; the position of these boards relatively to each other is shown in fig. 2. The lower ends of the wash-boards are connected to each other by a chain or string of movable rubbers G, which are in shape similar to those constituting the boards B'. This string of rubbers forms the bottom of the wash-boards, and by their dependent weight draws the lower ends of the boards together more or less, as the number upon the string may increase its length and weight. The shape of the case is such as to conform to the tapering or wedging character of the boards, thus produced by the weight of the attached movable rubbers, as shown in fig. 2.

The operation of this machine is as follows: The clothes to be washed are placed between the boards from the front H, which is a shelf for the accommodation of the washer. The necessary water and soap being thrown in, the boards are then operated by the handle I, by pushing it backward and forward, thereby producing a vibratory action of the shaft B; this in turn produces an alternating vertical action of the boards, between which are the clothes, thus rubbing from both sides and against each other at the same time. The movable rubbers, by their being adjustable, rise alternately with the boards, and by their circular action cause the clothes to turn between the wash-boards, and thus from time to time bringing the unrubbed parts of the clothes to the boards, until all have been fully rubbed, which can then be removed and finished off in a tub, or the wash-boards may be removed from the case and the washing completed in the same. It will be observed that as each board descends it is brought nearer to the opposite one; by this the clothes are subjected to a pressure or slight pounding at the same time they are being rubbed; hence by this double action of the machine the process of washing is easily and thoroughly accomplished. By shortening the chain or string of adjustable rubbers; by removing some of them, the boards are brought closer together, thereby increasing the force of the rubbing, it also reduces the size of the machine, and thus adjusting it to small washings or increasing it by the addition of others, as the case may be.

What I claim as my improvement, and desire to secure by Letters Patent, is—

1. The pendent wash-boards B', provided with alternate rubbers D and spaces, and hinged or pivoted to the shafts E, in combination with the adjustable rubbers G, and case A, arranged and operating conjointly as and for the purpose set forth.

2. The shafts B E and arms F, in combination with the side pieces C, rubbers D G, and case A, arranged and operating as and for the purpose set forth.

JOSEPH STENGEL.

Witnesses:

N. C. BURNEY,  
E. D. HORTON.