

UNITED STATES PATENT OFFICE.

W. T. ARMSTRONG, OF SANDWICH, ILLINOIS.

WASHING-MACHINE.

Specification of Letters Patent No. 21,867, dated October 26, 1858.

To all whom it may concern:

Be it known that I, WILLIAM T. ARMSTRONG, of Sandwich, in the county of De Kalb and State of Illinois, have invented
5 certain new and useful Improvements in Washing-Machines; and I do hereby declare that the same is described and represented in the following specification and drawings.

To enable others skilled in the art to make
10 and use my improvements I will proceed to describe their construction and operation referring to the drawings in which the same letters indicate like parts in each of the figures.

15 Figure 1, is an end elevation of a washing machine with my improvements. Fig. 2, is a section through the line *z, z*, of Fig. 1.

The nature of my invention and improvement in washing machines consists in making one or more inverted curves, in an arched or curved rubber, arranged to work in a vat or box with a curved bottom provided with ribs upon which the clothes to
20 be washed are rolled or rubbed by said rubbers; and when the clothes are opposite the inverted curve they are partially released, to allow them to absorb water, which is squeezed or pressed out by the arched portion of the rubber, carrying the dirt from
25 the clothes which has been loosened by the rubber.

In the accompanying drawings A, A, are the sides of a vat or box, and B, the curved
35 or semicircular bottom provided with ribs on the inside, as shown in the drawing, against which the clothes are rubbed to wash them. The sides A, A, are firmly fastened to the bottom B, so as to retain the water in
40 which the clothes are washed, and this box is mounted on four legs C, C, C, C, fastened to the sides by the rods D, D. A score is cut in each side as shown by dotted lines at E, for the journals of the rock-shaft F, which
45 journals are held in the scores by pins G, Fig. 2. This rock shaft is perforated so as to allow the working lever H, to traverse freely through it as it is vibrated to traverse the rubber I, which rubber consists of two
50 boards in the form shown at J, connected together by the rods K, K, and bar L, so as

to form a rubber of a proper width to work freely in the box, the end of the lever H, being fastened firmly in the center of the bar L to vibrate, traverse or work said rubber. In this rubber the rods from M, to N,
55 and from O, to P, are arranged in the same arch or curve parallel to the curve of the bottom B, so as to rub or roll the clothes to be washed on the bottom B, and the rods from N, to O, in this rubber are arranged
60 on an inverted arch, or curve opposite to the bottom B, so that when that portion of the rubber between N, and O, is over the clothes, they are partially or entirely released from
65 the pressure of the rubber, so as to allow them to absorb water and expand, which water so absorbed is pressed out again, when the portions of the rubber between M, and N, and O, and P, come over the clothes
70 again so that the clothes are squeezed to press out the water and released so as to absorb it again alternately, and thus worked very fast with a very little friction, and a very little labor, without any pressure
75 except the weight of the rubber. Besides the clothes are not likely to bind, catch or hang in any part of the machine, so as to be injured. I contemplate that the rubber may be made with several inverted curves in it
80 if preferred in that form.

I am aware that rubbers for washing machines have been made with alternate ribs and small smooth inverted curves; therefore I do not claim such rubbers, but
85 only claim a rubber for washing machines, when the inverted curve is ribbed as described and claimed in this specification.

What I claim as my invention and improvement in the above described washing
90 machine is,

Making one or more inverted ribbed curves N, O, in an arched or curved rubber substantially as described.

In testimony that the above is a true description of my improvements in washing
95 machines I have hereunto signed my name.

W. T. ARMSTRONG.

Witnesses:

I. DENNIS, Jr.,
J. F. CALLEUX.