

№ 3, 299,

UNITED STATES PATENT OFFICE.

JOSEPH C. RICH, OF PENFIELD, NEW YORK.

WASHING-MACHINE.

Specification of Letters Patent No. 3,299, dated October 12, 1843; Antedated April 3, 1843.

To all whom it may concern:

Be it known that I, JOSEPH C. RICH, of Penfield, county of Monroe, and State of New York, have invented a new and useful
5 Improvement in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, in
10 which—

Figure 1 is a perspective view. Fig. 2 is an end view. Fig. 3 is a top view—the lids being removed. Fig. 4 represents
15 the bottom board of the tub; Fig. 5, the beater with the arms to it; Fig. 6, the fly or balance wheel; Fig. 7, the crank shaft, and fly wheel. Fig. 8; the spring board and connecting rod attached. Fig. 9, the connecting rod or link. Fig. 10, the board
20 fastened to the top of the tub on the back side. Fig. 11, the loose board on the forward part of the tub. Fig. 12, the piece to hold the spring board in place. Fig.
25 13, the grooved piece of metal fastened to the arms of the beater to receive the ends of the spring board &c. Fig. 14, the block forming the box for the crank-end of the shaft to run in. Fig. 15, the wash board.
30 Fig. 16, the three cornered piece under the wash board.

To enable others to make and use my invention I will proceed to describe its construction and operation.

35 I construct a tub T of one and a fourth inch plank ten inches deep at the front side and eleven inches deep at the back side fifteen by twenty-four inches at the bottom t and twenty-one by twenty-four inches at
40 the top (or any other size suited to this machine) the ends standing perpendicular the sides flaring so as to form the tub into the above shape. This tub is to rest on a frame U as represented in Figs. 1, 2, and 3. I
45 construct a beater (letter B Figs. 3 and 5) with arms to it and hang it to upright pieces V as shown at Figs. 1 and 2 fastened to the sides of the tub so as to swing inside of it to and from the front side of the tub within
50 half an inch of the bottom. There is to be a spring board E Figs. 3 and 8, of sufficient length to slide into the grooved pieces I fastened on each side of the arms B² of the beater; this spring board should be only
55 two inches at the center tapered to half an inch at the ends. There is a connecting link

e attached to the center of the spring board E—the end of the connecting link is to be let into the center of the spring board about one-fourth of an inch and confined there
60 with straps of iron bent over the journals on the sides of it (as shown at E²). These straps of iron are fastened to the spring board with a screw passed through each end; the grooved pieces I may be cast of
65 iron. I construct a horizontal crank shaft about fifteen inches long attached to a fly or balance wheel as shown at letter D; this shaft is to be placed about three inches from the back of the tub in such manner that
70 the end of the crank will be in the center between the ends of the tub, and to be so formed as to receive the end of the connecting rod or link e on it, thus connecting the crank to the beater; the straight end of
75 the shaft reaches through the side of the tub far enough to hang the fly wheel. The fly wheel C should weigh about twenty-six pounds and should be about sixteen inches in diameter; the wheel, shaft, and connect-
80 ing rod may be made or cast of iron; the crank end of the shaft runs in a box J; the other end running in the hole where it is put through the side of the tub, the spring board is kept from flying out of the grooves
85 by the block or button H fastened to the arms of the beater. There is to be a handle L fastened to the wheel to turn it with. I construct a wash board K about ten inches
90 wide the length being equal to the length of the tub, and fasten it to the front of the inside of the tub. About three inches from the bottom I fasten a three cornered piece
95 m under the edge of the wash board; the crank to the shaft should be two and a half inches long; the connecting rod or link e should be about five inches long with a hole in the end to slide on the crank. When this machine is thus constructed it is ready for
100 use; the clothes to be washed are to be put in front of the beater with the usual quantity of soap and warm water sufficient to cover the bottom of the tub to the depth of about one inch; then turn the wheel
105 steadily from two to three minutes at the rate of about seventy revolutions a minute; then draw off the water and clean water and turn it again as above and the clothes will become perfectly clean excepting very
110 dirty shirt-collars and wristbands—these will require some rubbing on the wash board attached for that purpose; there should be

a sufficient quantity of clothes put in the machine at a time to cause the spring board, as the beater is pressed against them, to spring about one-fourth of an inch at each 5 revolution of the wheel; the spring board should be changed in to the different grooves as a large or a small quantity of clothes are to be washed at once in the machine. This machine is propelled with such force 10 in consequence of the crank shaft being attached simply by a connecting rod or link and spring board immediately to the beater, with the force of the heavy fly wheel to keep the motion steady, that clothes can be 15 washed clean in at least half the time and with half the labor usually required by any other process of washing, it is simple in its construction and operation and not liable to get out of repair and is kept in motion 20 with that ease that a child twelve years old will turn the wheel to do a large washing; it does not injure the clothes—the operation of washing them is such that the beater

presses the dirt out of them, and as the wheel is turned the clothes roll over in the 25 machine, so that every part receives the pressure of the beater alike, and the crank is so short, and the power is applied so near the bottom of the beater, that it requires but little exertion in turning the wheel to 30 give the requisite force to the beater upon the clothes. The stationary wash board is another great addition in this machine—when it is desired to rub any clothes it is 35 always ready and saves the necessity of taking the clothes from this tub to another.

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

The combination of the adjustable spring board E with the beater B and crank-shaft, 40 D in the manner and for the purpose set forth.

JOSEPH C. RICH.

Witnesses:

WM. P. ELLIOT,

J. J. ROANE.