

No. 759,254.

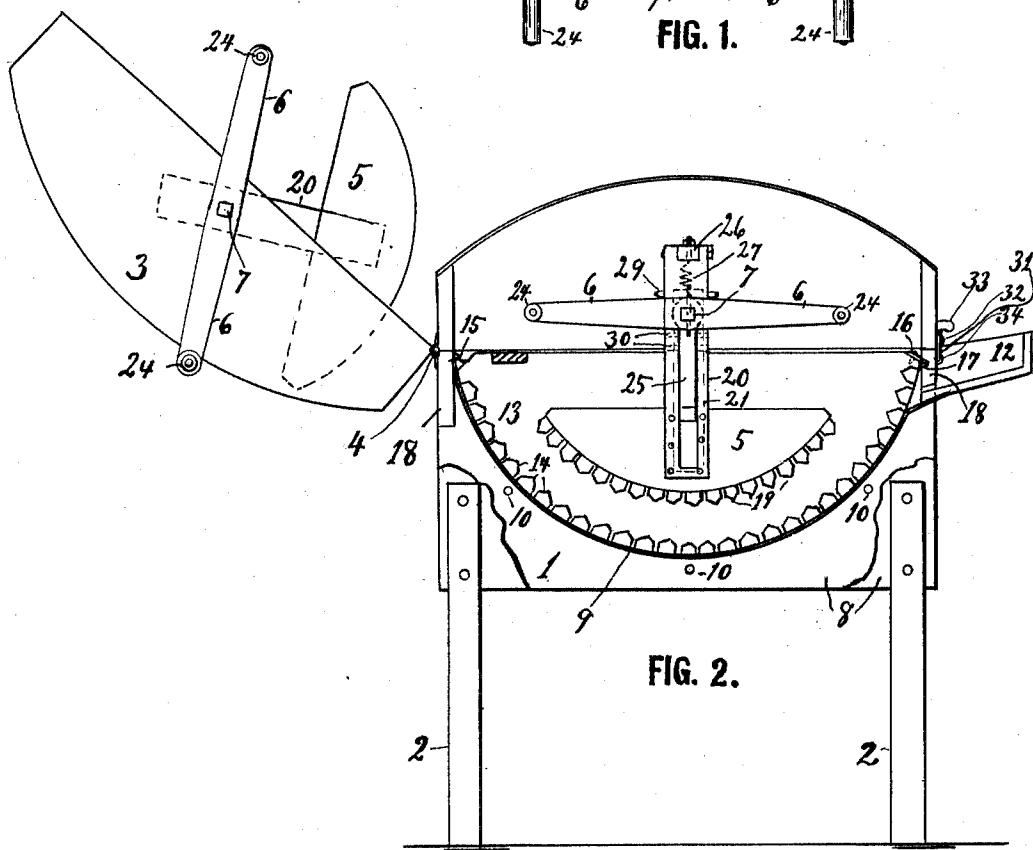
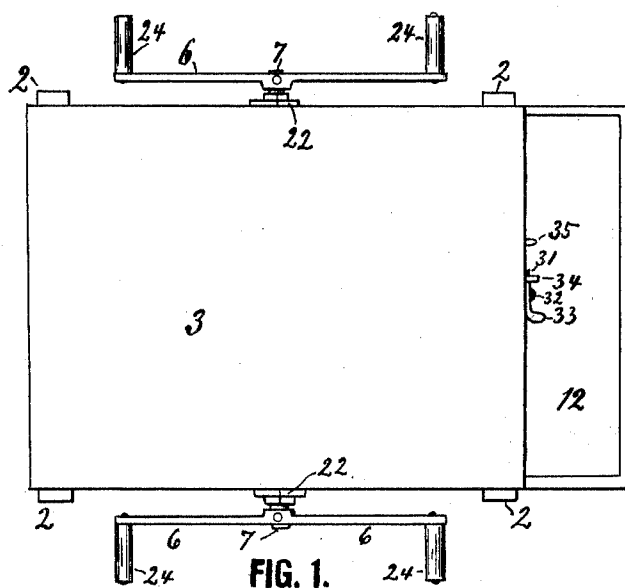
PATENTED MAY 10, 1904.

P. FARNQUIST.
WASHING MACHINE.

APPLICATION FILED JUNE 18, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES:

D. E. Carlson.
E. C. Carlson

INVENTOR.

Peter Farnquist.
BY his ATTORNEY.
A. M. Carlsten.

P. FARNQUIST.
WASHING MACHINE.
APPLICATION FILED JUNE 18, 1903.

NO MODEL.

2 SHEETS—SHEET 2.

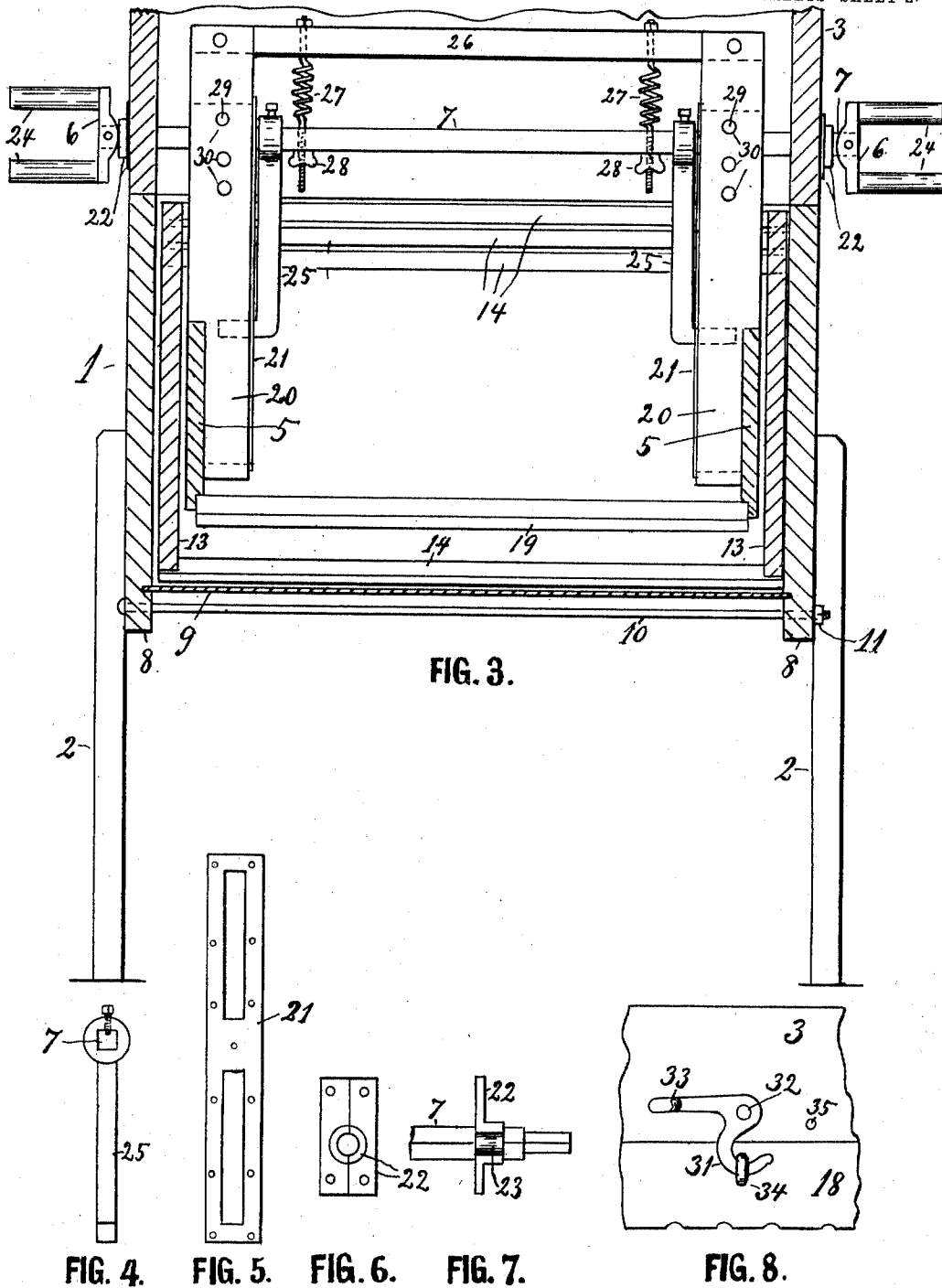


FIG. 4.

FIG. 5.

FIG. 6.

FIG. 7.

FIG. 8.

WITNESSES:

D. E. Carlsen
E. C. Carlsen.

INVENTOR.

Peter Farnquist.
BY *his ATTORNEY*
A. M. Carlsen.

UNITED STATES PATENT OFFICE.

PETER FARNQUIST, OF LITCHFIELD, MINNESOTA.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 759,254, dated May 10, 1904.

Application filed June 18, 1903. Serial No. 161,968. (No model.)

To all whom it may concern:

Be it known that I, PETER FARNQUIST, a citizen of the United States, residing at Litchfield, in the county of Meeker and State of Minnesota, have invented certain new and useful Improvements in Washing-Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in washing-machines; and the main objects of the invention are to provide a clothes-washing machine which is durable and easy to operate and easy to keep clean. These and other objects I attain by the novel construction and combination of parts illustrated in the accompanying drawings, in which—

Figure 1 is a top view of my washing-machine. Fig. 2 is a side elevation of the machine with the cover shown both in its open and closed position. In the latter position one side of the cover is removed, and likewise is removed one side of the upper rubber 5 and the lower rubber 13 14, and most of the side of the tub or box 8 is also broken away, leaving only the corners, to which the legs 2 are fastened. Fig. 3 has a vertical cross-section of the machine near its operating-shaft 7 with most of the rubbing-cleats omitted. Fig. 4 is a detail view of one of the rocker-arms by which the shaft operates the rocker. Fig. 5 is a detail view of one of the wearing-plates in which the rocker-arms and shaft operate. Fig. 6 is a detail view of one of the split bearings in which the operating-shaft is journaled. Fig. 7 shows a portion of the shaft in one-half of the bearing. Fig. 8 is a fragmentary view of the front end of the machine, showing how a weighted hook holds the cover securely locked.

Referring to the drawings by reference numerals, 1 designates the tub or box of the machine, which is mounted on legs 2 and provided with a cover 3, hinged to the box at 4, so that it may be swung out of the way, as shown to the left in Fig. 2, carrying with it the rubber 5, handle-bars 6, and shaft 7.

The box or tub is formed of the side boards 8, end boards 18, and a segmentally-curved sheet metallic bottom 9, slightly grooved into the side pieces, and the latter are drawn tightly against the edges of the sheet by the screw-threaded rods 10 and nuts 11. (Best shown in Fig. 3.) 12 is the usual projection of the tub serving as a soap-holder.

The lower rubber is formed of two segmental side boards 13 and the rubbing-cleats 14, securing said boards together. This rubber is placed loose in the tub and only held in position by two brackets 15, secured in one end of the tub and bearing upon the two rear corners of the rubber, and two latches 16, pivoted upon the front corners of the rubber and engaging in cavities 17 in the end boards 18 or any other suitable holding-point, so that by swinging said latches on their pivots the rubber may be removed, and thus greatly facilitate the cleansing and drying of same and of the tub, so that the bottom of the latter need not corrode in dirt and dampness, as is the case with the common machines heretofore used and in which the lower rubber is permanently fixed.

The upper rubber 5 consists of two segmental side boards and the cleats 19, secured to the segmental edges of the boards. From each board 5 projects upward a slotted arm 20, whose slots are protected at the edge by a metallic wearing plate or lining 21, secured upon the arm. This plate may have a single slot or two slots, as in Fig. 5.

In the sides of the cover 3 are journaled in split bearings 22 the round portions 23 of the preferably square operating-shaft 7, whose outer ends are each provided with an operating-lever 6, projecting horizontally away from each side of the shaft, and is provided with two handles 24, so that the operator may grasp one handle in each hand, and thus rock the shaft, while the weight of the hands balance one another, and the body is supported upward as much as it is pulled downward by pulling on the other handle. To make it still easier for the operator or operators, there may be one at each side of the machine and each of them operate a pair of handles, or where children are employed to assist in doing the washing

there may be one at each single handle, so that three or four of them may have a good chance to assist in the work.

Upon the shaft 7 is secured two rocker-arms 25, having L-shaped ends engaging in the lower part of the slots in the arm 20, while the upper part of each slot is guided on the shaft 7. The arms 20 are secured together at their upper ends by a horizontal bar 26, in which are secured the upper ends of two coiled springs 27, whose lower ends are passed through the shaft 7 and screw-threaded into thumb-nuts 28, by which tension may be given to the springs, so as to pull the upper rubber with more or less pressure down upon the clothes. The downward action of the springs may be regulated not only by said thumb-nuts, but also by inserting pins 29 in one of the several holes 30 in each of the arms 20 and let the pin rest upon the upper side of the operating-shaft.

As best shown in Fig. 8, the cover of the tub is firmly kept down by a hook 31, pivoted at 32 to the cover and having a weighted handle 33, holding the hook safely engaged in a staple 34 in the front board 18 of the tub. 35 is a peg in the cover, upon which the arm 33 rests when the hook is disengaged from the staple. This shaft 7 may be cylindrical; but it is preferable to use a square bar of iron and simply swage it or otherwise round it at the points where it is journaled in the plates 22 and then make said plates or bearings in

halves, which may be adjusted to the journal and secured upon the side pieces of the cover of the tub.

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

1. In a washing-machine of the class described, the combination with a rock-shaft, of a rubber having the slotted arms 20 embracing the shaft with their slots, the arms 25 secured on the shaft and engaging in the slots of the slotted arms, the bar 26 uniting the slotted arms above the rock-shaft and adjustable springs between the bar 26 and the rock-shaft.

2. In a washing-machine of the class described, the combination with a rock-shaft, of a rubber having the slotted arms 20 embracing the shaft with their slots, the arms 25 secured on the shaft and engaging in the slots of the slotted arms, the bar 26 uniting the slotted arms above the rock-shaft and adjustable springs between the bar 26 and the rock-shaft and the pins 29 and holes 30 in the arms 20 for said pins, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

PETER FARNQUIST.

Witnesses:

E. P. PETERSON,
A. E. HAWKINSON.