J. W. TAYLOR.

Washing-Machines.

No. 141,402. Patented July 29, 1873.

Fig. 1.

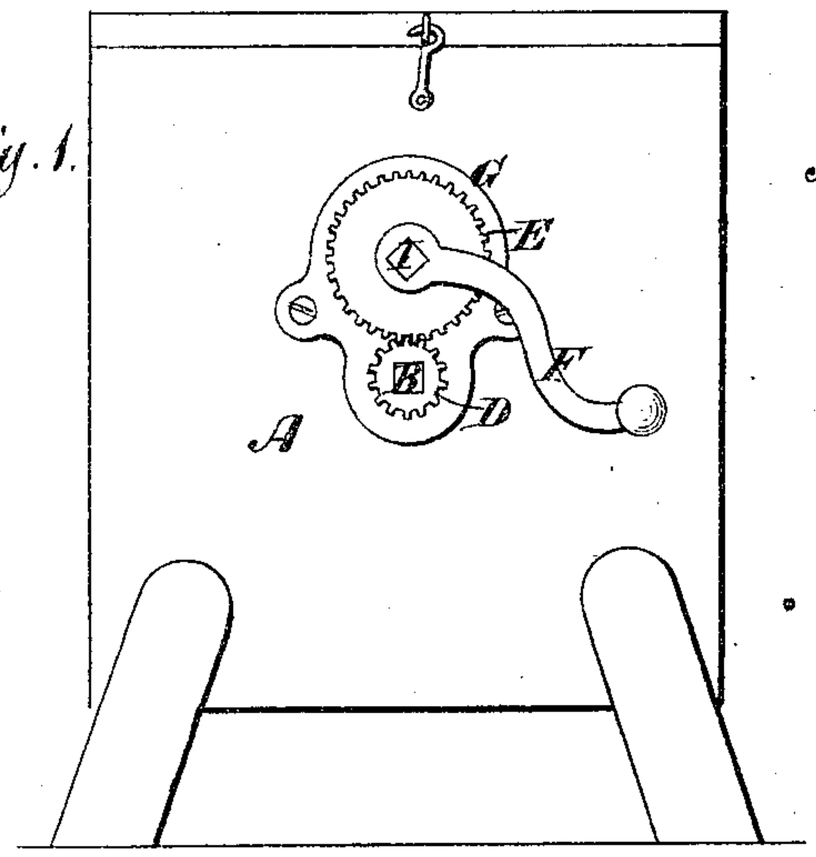


Fig. 2.

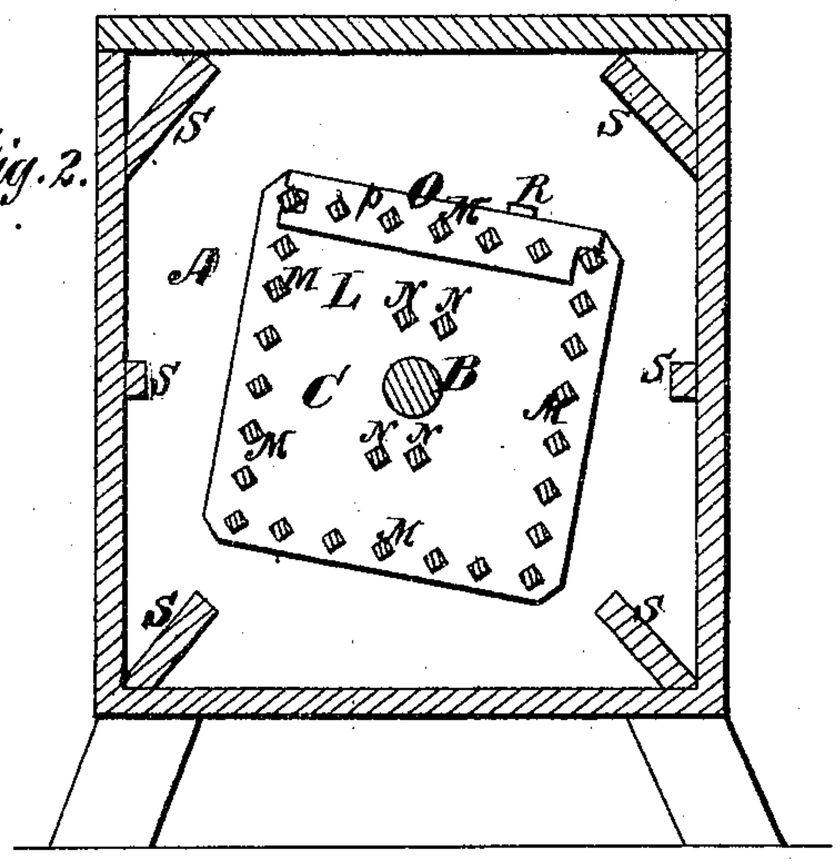


Fig. 3.

Fig. 4.

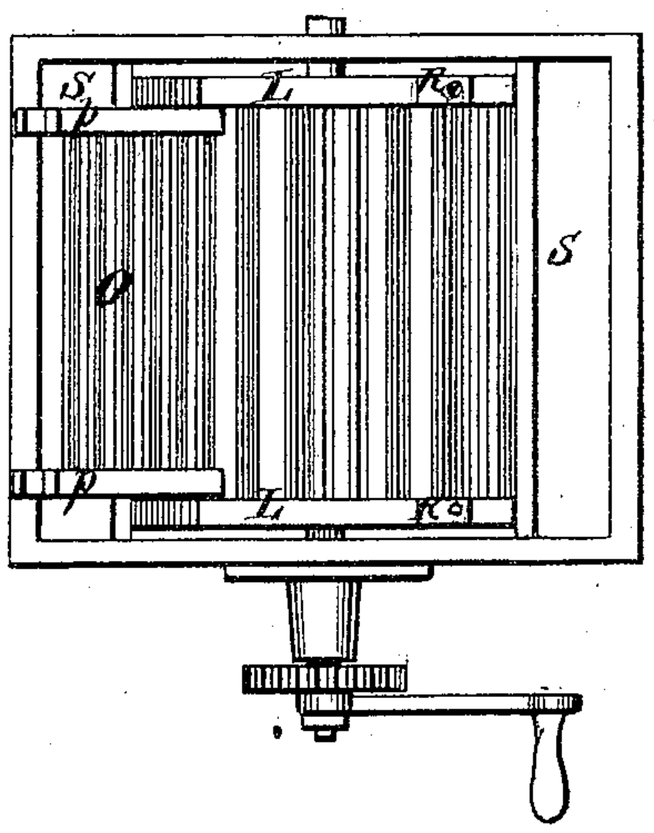
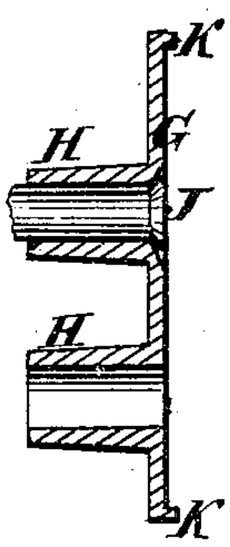


Fig. 5.



WITNESSES.

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JAMES W. TAYLOR, OF ASHLAND, VIRGINIA.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **141,402**, dated July 29, 1873; application filed June 13, 1873.

To all whom it may concern:

Be it known that I, JAMES W. TAYLOR, of Ashland, in the county of Hanover and State of Virginia, have invented certain new and useful Improvements in Washing-Machines; 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 forming part of this specification, in which—

Figure 1 is a front elevation of my improved washing-machine; Fig. 2, a vertical section taken transversely of the clothes-rack; Fig. 3, a plan view with the cover of the clothes-rack swung open; Fig. 4, a perspective view of the gearing and its supporting-bracket; and Fig. 5 is a central vertical section of the bracket.

Similar letters of reference in the accompanying drawings indicate the same parts.

The invention consists in a square or other shaped box, of the ordinary size and kind used for washers, through the center of which passes a shaft connected by pinions to the driving-shaft. Inside the box, and on the shaft, is arranged a square rack or frame, the ends of which are constructed of boards, and the four sides of square bars or slats, placed far enough apart to allow the water to pass freely between them into and out of the rack. One of the sides is made removable for the purpose of inserting and removing the clothes.

The clothes are hung on internal bars, slats, or cords provided for that purpose, and are thus kept from rolling up and from rubbing against the sides, so that the water can pass freely through and between the folds.

In the accompanying drawing, A represents the box, of suitable size, shape, and material; B, the shaft that passes through the center of it to receive the rack C. On one end of the shaft B, outside of the wash-box, is secured a pinion, D, which engages with the gear-wheel E above it, and to the latter is applied the power by a crank, F, or other means. G is the bracket, consisting of a flat plate, secured, by screws or other convenient means, to the front of the box A, and cast with two sockets or short tubes, H, one immediately over the other. The rack-shaft B passes through the lower socket to receive upon its outer end the pinion D, while the upper socket receives the short shaft I of the gear-wheel E, which shaft also carries the crank F. This short shaft is held within its socket by a beveled head, J, upon its inner end, working in a beveled recess at the inner end of the socket, as shown. By this construction the short shaft is provided with a firm and secure bearing, while the lower socket not only forms a similar bearing for the rack-shaft, but serves to hold the pinion D in line with the gear-wheel E The inner face of the bracket-plate is formed with a narrow flange, K, along its edge in order to hold such face away from the side of the tub, and prevent the enlarged head of the short shaft from being cramped by contact with the box. The ends of the rack C are formed of two end boards, L L, and the sides of bars or slats M M arranged parallel to each other at a point about equally distant from the shaft B and the slats M M. Each of the end pieces are bored to receive the bars or slats N N, upon which the clothes are hung when placed in the rack, as before described. Two on each side of the shaft seems to be the preferable number, but there may be more or less.

The clothes are hung upon these bars when put in the machine, and as the rack revolves they lap round such bars, forming a hollow flat square. The flat surfaces formed by the clothes are brought in contact with the water by the revolutions of the rack, each surface being alternately forced against and beneath the water at each revolution. In this manner the clothes are washed by contact with the water alone, or they may be loosely folded round the bars, and allowed to rub gently against the slats forming the sides of the rack. The inside of the folds are washed at the same time, as the water flows freely, or rather is forced by the revolutions, between the folds.

One side, O, of the rack is formed with side bars *p p*, fitted between the end boards. These side bars are recessed or notched at one end to articulate upon the top slat of one of the adjoining sides of the rack, and rabbeted at their opposite ends to rest against the top

slat of the opposite side of the rack. By this construction the side O can be opened for the insertion and removal of the clothes, and is locked down by the buttons R, as shown. S S are longitudinal side and corner bars, arranged within the wash-box to deflect the currents of water and throw the latter through the rack and clothes, as will be readily understood by reference to the drawings.

Having thus described my invention, what I claim is—

The combination of the rack C, corner-pieces S S, bracket G, and its gearing E D, as and for the purposes set forth.

JAMES W. TAYLOR.

Witnesses:

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