

(No Model.)

J. C. WILSON.  
WASHING MACHINE.

No. 264,014.

Patented Sept. 5, 1882.

Fig. 1.

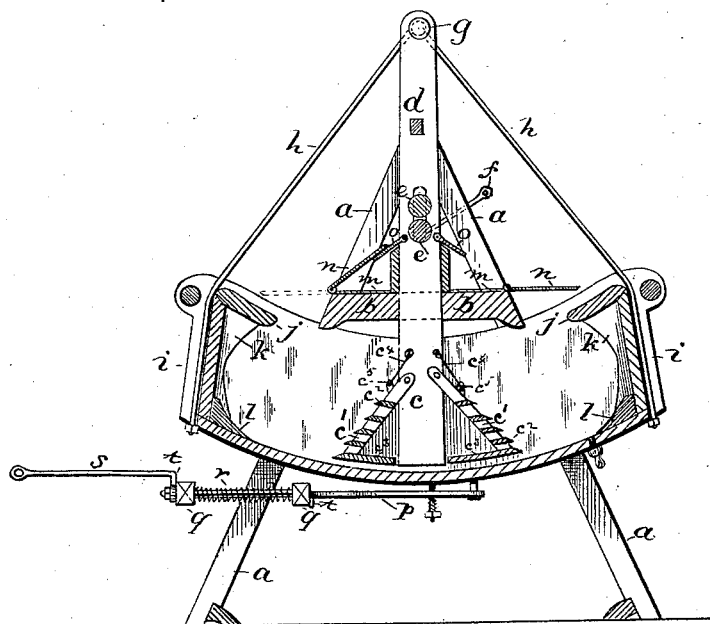


Fig. 2.

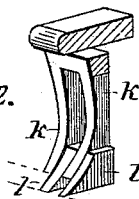
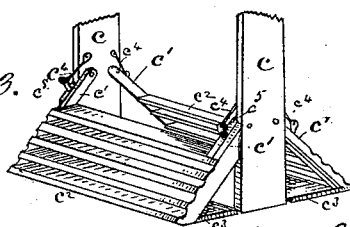


Fig. 3.



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# UNITED STATES PATENT OFFICE.

JOHN C. WILSON, OF WASHINGTON, PENNSYLVANIA.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 264,014, dated September 5, 1882.

Application filed March 29, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN C. WILSON, of Washington, in the county of Washington and State of Pennsylvania, have invented a new and useful Improvement in Washing-Machines; and I do hereby declare that the following is 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 vertical central longitudinal section of my improved washing-machine. Figs. 2 and 3 are detail views.

My invention relates to improvements in that class of washing-machines in which the box or tub oscillates and the rubber is stationary within the box; and it consists in the peculiar arrangement and construction of the parts, as hereinafter more fully set forth.

In the accompanying drawings, *a* represents the frame of my improved washing-machine, made in the form of two letters *A*, joined together near their upper ends by the board *b*, to the lower face of which is secured a stationary rubber, *c*, having inclined hinged corrugated sides *c'*, the stationary rubber *c* lying in the box in its middle and extending nearly to its bottom, leaving a space in the box on each side of the stationary rubber *c* to receive the clothes to be washed and a space under the bottom of the rubber for the flow of water. The hinged sides *c'* can be raised for cleaning, and secured, when down, by hooks *c''*, pivoted to the ends of the rubber and adapted to engage with eyes *c'''*, secured to the hinged sides *c'* of the rubber. By this construction the hinged sides *c'* can be held down in the operation of the machine, and, when desired, the hooks *c''* can be disengaged from their eyes and the hinged sides *c'* swung up for cleaning purposes.

*c<sup>2</sup> c<sup>2</sup>* represent a series of parallel slats mortised into the hinged sides *c'*, with spaces between the slats; and *c<sup>3</sup> c<sup>3</sup>* represent the bottom slats of the rubber, secured to the lower ends of the hinged side pieces, *c'*.

*d* represents a rectangular frame secured between the two *A* forms of frame of the washing-machine, resting on the top face of the board *b*, and carrying the adjustable wringing-rolls *e e*, operated by a crank, *f*, at its lower end, and a transverse rod, *g*, at its upper end

connecting the opposite arms of the frame *d*, and provided at its opposite ends with holes, through which pass the rods *h*, and thence through the ends of the box *i*, whereby the latter is suspended by the rods *h* on the frame, and is free to oscillate, the rubber being stationary and arranged within the box *i*, with a space for the clothes to be washed on each side of the stationary rubber. The box *i* is made in the form of an arc of a circle of large radius, and is provided at each opposite upper end with a transverse board, *j*, to prevent the escape of suds.

*k k* represent a series of upright concave slats, placed at equal distances apart, forming a curved rack at each end of the box *i* and extending across the ends of the box, so as to form an incline in each end of the box for the purpose of lifting the clothes off the bottom of the box.

*l l* represent a second series of angular and shorter slats, placed between the vertical concave slats *k*, near their lower ends, so as to form a more gradual incline for the clothes to move upon. This construction insures the lifting of the clothes from the bottom of the box and their turning over at every swing of the box.

*m m* represent right-angular pieces of sheet metal or other suitable material, each secured on opposite sides of the frame *d* to the upper face of the board *b* of the frame and to the lower end of the frame *d*. Each right-angular piece *m* has hinged to its front edge a leaf, *n*, and a leaf, *o*, is hinged between the lower ends of the frame *d* on each side of the wringing-rolls and slightly below the top of the lower wringing-roll.

It will be seen that the machine washes by squeezing the clothes introduced into the box at each end between the slats at the ends of the box and the stationary rubber, the box being suspended and oscillated and the clothes turned with each swing of the box, and while the operation of washing is going on the leaves *n* of the right-angular pieces *m* are opened to prevent the suds from splashing out of the box. When the washing is completed and it is desired to wring the clothes the leaves *o o* are thrown down to form a support for the leaves *n*, which are thrown over so as to rest upon them, and the leaves *n* thus perform the double

purpose of preventing the splashing of suds in washing the clothes and a guide in the wringing operation.

The nature of this machine, if operated by a crank or eccentric, will require a pitman that will accommodate itself to the different amounts of clothing that may be put into the box, so as to allow the box to swing far enough to let the crank revolve and pass its centers. To obviate this defect I have made an improvement in the pitman, which I make of the two forked parallel rods *p p*, pivoted to the bottom of the box *i*, as shown, and passing through the two parallel wooden blocks *q q*.

*r r* represent springs coiled around the rods *p p* between the blocks *q q*, and *s* represents a rod provided with an eye at its outer end, adapted to be secured to the crank and passing through the middle of the blocks *q q*, and provided with offsets *t t*, abutting against the outer ends of the wooden blocks *q q*, whereby the pitman will give in either direction, so that the crank can readily pass its center.

The above description of the spring-pitman forms no part of this invention, and I desire it to be understood that I reserve the right hereafter to make a separate application for the subject-matter of the same.

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

1. The combination, with the stationary rubber *c*, arranged in the box, of the suspended

swinging box *i*, provided with a series of concave racks, *k*, at its ends, and slats *l* between them, substantially as described, and for the purpose set forth.

2. The combination, with the double A frame *a*, board *b*, frame *d*, and suspending-rods *h*, of the right-angular sheet-metal pieces *m*, having leaves *n*, and swinging box *i*, having concave rack at its ends, with slats *l* between them, substantially as described, and for the purpose set forth.

3. The combination, with the frame *d*, carrying the wringing-rolls *e e* and hinged leaf-supports and guides *o o*, of the right-angular pieces *m*, having leaves *n*, and swinging suspended box *i*, whereby the leaves *n* perform the double function of guiding the clothes to be wrung and preventing the splashing of the suds, substantially as described.

4. The stationary rubber *c*, consisting of the vertical end pieces having hooks *c<sup>1</sup>*, pivoted thereto, and side pieces, *c'*, pivoted to the end pieces, and provided with the eyes *c<sup>2</sup>*, and parallel slats *c<sup>2</sup>*, and bottom slats, *c<sup>3</sup>*, pivoted in the side pieces, *c'*, substantially as described, and for the purposes set forth.

JOHN C. WILSON.

Witnesses:

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