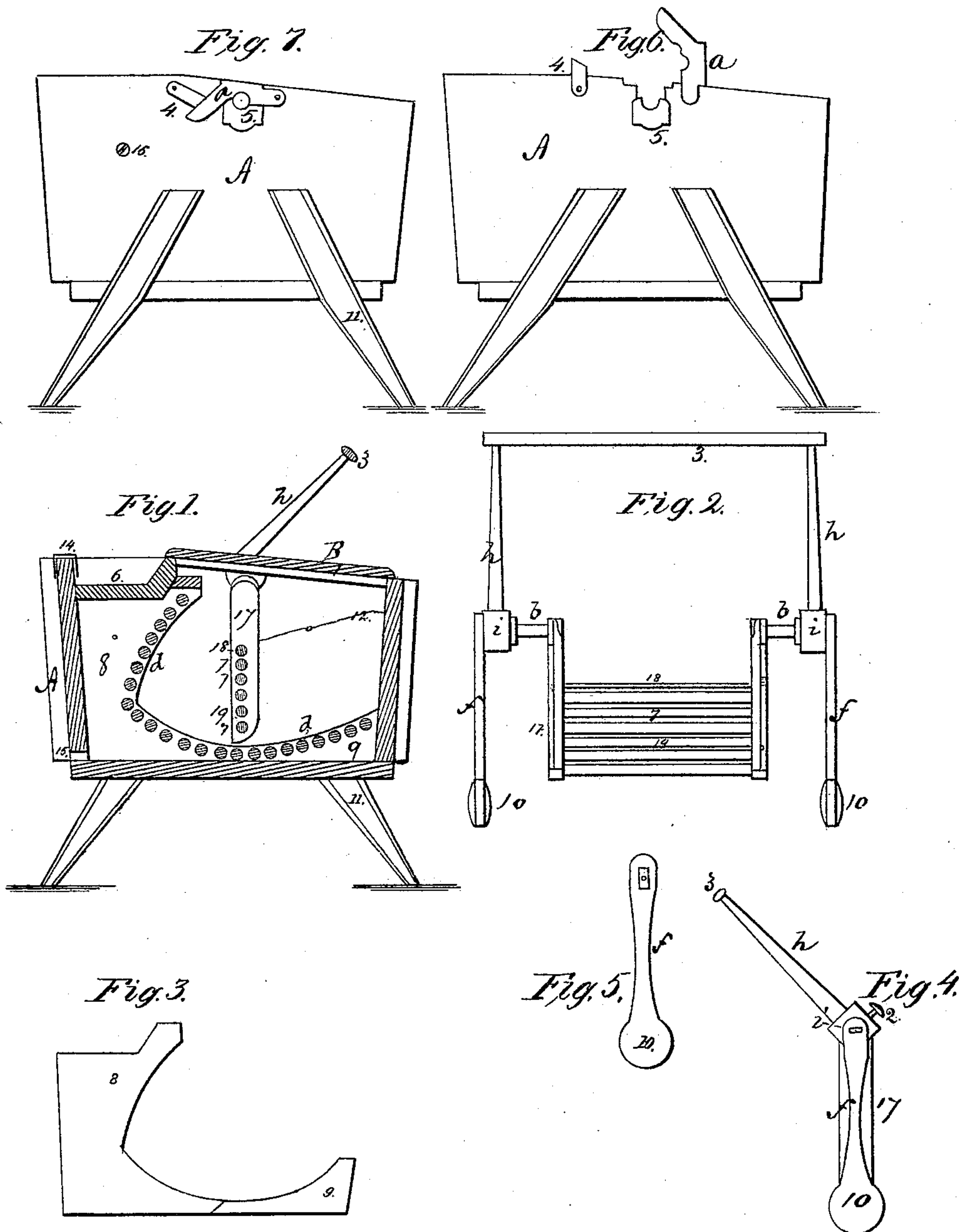


S. R. RUCKEL.
Washing-Machines.

No. 151,316.

Patented May 26, 1874.



Witnesses.

J. H. Kirkhead
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UNITED STATES PATENT OFFICE.

SAMUEL R. RUCKEL, OF WESTPORT, MISSOURI, ASSIGNOR OF ONE-HALF
HIS RIGHT TO ISAAC W. McDONALD.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 151,316, dated May 26, 1874; application filed
September 1, 1873.

To all whom it may concern:

Be it known that I, SAMUEL R. RUCKEL, of Westport, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Washing-Machine; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists in the construction and arrangement of a washing-machine, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which forms a part of this specification, and in which—

Figure 1 is a longitudinal vertical section of my machine. Fig. 2 is a front view of the washer with its handles and weights. Figs. 3, 4, and 5 are detached views of certain parts of the machine. Figs. 6 and 7 are side views of the box.

A represents the washing-box, made of any suitable dimensions and supported upon legs 11 11. At the top of the box A, at one end, is formed a water-box, *b*, to receive the water from the wringer and convey it back to the machine. The rear-end piece of the box has its upper edge covered by a metal plate, 14, to prevent the wood part of the box from being washed. The top of the box A is covered, between the water-box 6 and the opposite end of the machine, by a close lid, B. In the sides of the box, at or about the center, is made a vertical slot in each side, in the bottom of which is placed a half-box, 5, to receive the journals or spindles of the washer. These journals, when placed in half-boxes 5, are held down in place by means of pivoted caps *a*, which are constructed substantially as shown in Figs. 6 and 7, and pivoted to the outside of the box. When turned down, the caps *a* close the slots in the sides of the box, and are themselves locked by means of buttons 4.

The water in the box is drawn off, when de-

sired, through the hole 15 at the bottom, which hole is to be stopped by a plug or provided with a suitable faucet.

The washing is accomplished by means of a rocking or swinging washer operating against a stationary wash-board.

The wash-board is constructed of two side pieces, each formed in two parts, 8 and 9, and connected by means of stationary rounds or rollers *d d*. The side pieces 8 9 are made substantially in the form shown in Figs. 1 and 3, so that the rounds or rollers *d* will form a concave surface under the washer and then extend up, in slightly concave form, in front of the water-box 6, so as to allow the clothes to be pressed against it by the swinging washer.

By making the side pieces of the wash-board in sections, they can readily be removed, when desired; and when inserted in the box, they are held by means of screws 16 through the sides of the box.

The washer is constructed as follows: *b b* represent two short spindles or journals, to rest in the boxes 5, and which are provided at their inner ends with pendent arms 17 17. These arms are connected by means of two screw-rods, 18 and 19, and hold between them a series of rounds or rollers, 7 7. Upon the outer end of each spindle *b* is attached a socket, *i*, in which is fastened an arm, *h*, by means of a set-screw, 2, and the two arms *h h* are connected by means of a handle, 3. To the outside of the sockets *i i*, on the extreme ends of the spindles *b b*, are attached other pendent arms, *f f*, provided with weights 10 at their lower ends.

The wash-board and washer being placed in position in the box A, hot water and suds are poured in and the clothes placed in the box, between the washer and the board, after which the lid is closed. By now working the handle 3 up and down, the clothes are rubbed by the lower portion of the washer against a part of the wash-board, and also pressed or squeezed against the upper portion of the board, and thereby speedily and effectually cleansing them from all dirt.

The weighted arms *f f* act as a balance and render the operation easy, and not laborious.

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

1. In a washing-machine, the half-boxes 5, pivoted caps *a*, and buttons 4, arranged in and on the sides of the wash-box A, in combination with the journals of a swinging washer, substantially as and for the purposes herein set forth.

2. The within-described swinging washer,

consisting of the spindles *b b*, arms 17, screw-rods 18 19, rounds or rollers 7, sockets *i*, handle *h* 3, and weighted arms *f*, all constructed substantially as and for the purposes herein set forth.

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Witnesses:

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