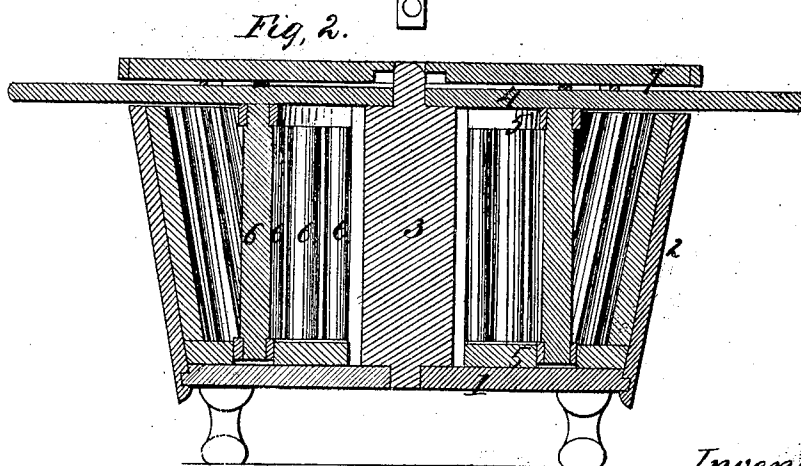
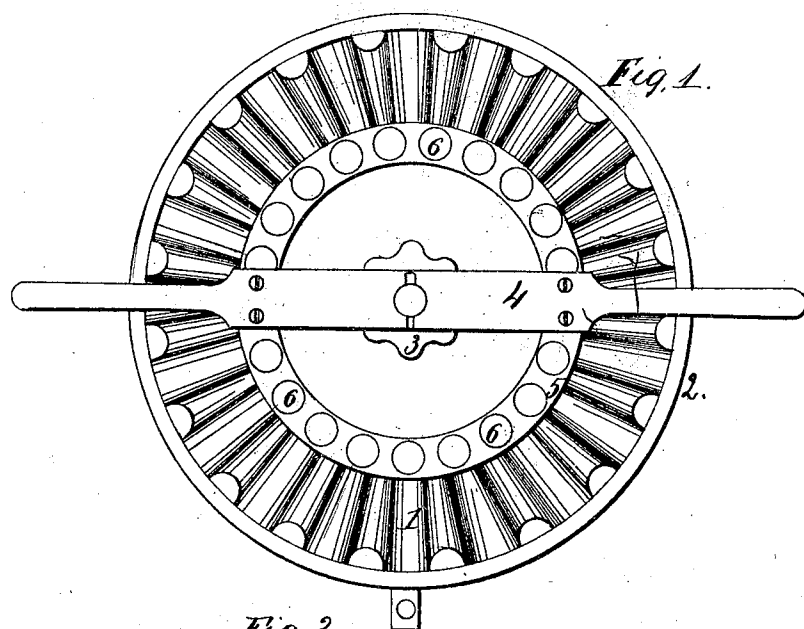


E. B. BOYCE.
WASHING MACHINE.

No. 34,667.

Patented Mar. 18, 1862.



Witnesses
H. James Weston
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Atty

UNITED STATES PATENT OFFICE.

ELLEN B. BOYCE, OF GREEN POINT, NEW YORK.

WASHING-MACHINE.

Specification of Letters Patent No. 34,667, dated March 18, 1862.

To all whom it may concern:

Be it known that I, ELLEN B. BOYCE, of Green Point, in the county of Kings and State of New York, have invented an Improvement in Washing-Machines, the construction and operation of which I have described in the following specification and illustrated in its accompanying drawing with sufficient clearness to enable competent and skilful workmen in the arts to which it pertains or is most nearly allied to make and use my invention.

My said invention consists in the arrangement hereinafter described of an annular rubber composed of cylindrical slats, or slats similar in form, between the corrugated or ribbed sides of a tub and a ribbed center piece, placed in the middle of the tub, said rubber being held in position by a journal at the top and grooves or equivalent guides at the bottom of the tub, the slats of the rubber being so constructed and arranged as to leave interstices between them substantially as set forth.

In the accompanying drawings Figure 1 is a plan of my improved machine. Fig. 2 is a sectional elevation showing the parts beyond the center.

1 is the bottom and 2 is the cylindrical or conical portion of the tub, both of which are corrugated or ribbed on their inner surfaces.

3 is a large center piece ribbed on its periphery and forming at its upper end an axis to support the lever 4, to which the rubber is attached and by which it is operated.

5, 5, are two rings in which the rounds or bars 6 are secured in a firm and substantial manner. A groove is formed in the bottom of the tub or in the corrugations which form its upper surface, to receive the lower ring 5, to prevent the improper vibration of the rubber.

7 is a cover which may be placed on the machine during the operation of washing. It has openings in the rim to allow the lever to vibrate, and stops are attached to the rim

which rest upon the tub to support the cover and prevent its resting on the lever. 50

In performing the operation of washing, the finer clothes and smaller pieces are placed between the rubber and the center piece while the larger pieces are placed outside the rubber, and the proper quantity of suds or water being supplied, a vibratory motion is given to the lever 4, by which not only a rubbing action upon the clothes is effected, but two converging eddies of the suds meeting in the rubber and circulating in the most available manner through the clothes, are produced. The positions of the garments or other articles to be washed will generally be such as to cause currents of water to pass and repass through the openings between the rounds 6, and act upon the clothes in contact with the rounds, thus producing a most beneficial effect. At points where the clothes are crowded against the rubber upon both sides of it they will meet between the rounds of the rubber and effect a rubbing action upon each other without danger of tearing them.

To accommodate this machine it may be desirable to have two rubbers of different diameters, either of which may be used as occasion may require. Or in some unusual cases it may be desirable for the time being to use both. The corrugated bottom of the tub also serves to rub and agitate the clothes and in connection with the other stationary corrugated or ribbed portions, and the rubber, aids materially in the cleansing process.

Having thus fully described my said invention, I claim— 85

The arrangement as described and in combination with each other of the corrugated or ribbed and grooved bottom 1, corrugated or ribbed sides 2, corrugated or ribbed center piece 3, lever 4, rings 5, 5, and rounds or slats 6, as set forth for the purpose specified.

ELLEN B. BOYCE.

Witnesses:

H. JAMES WESTON,
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