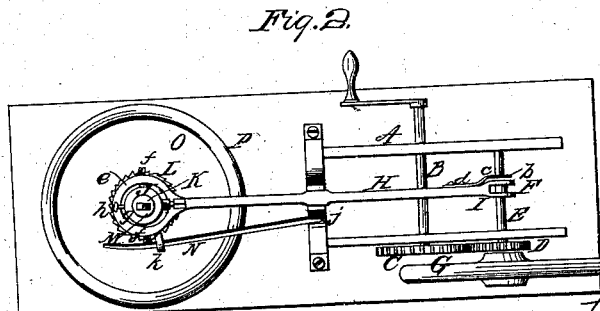
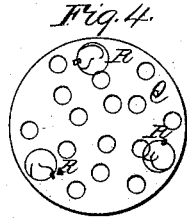
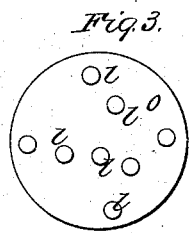
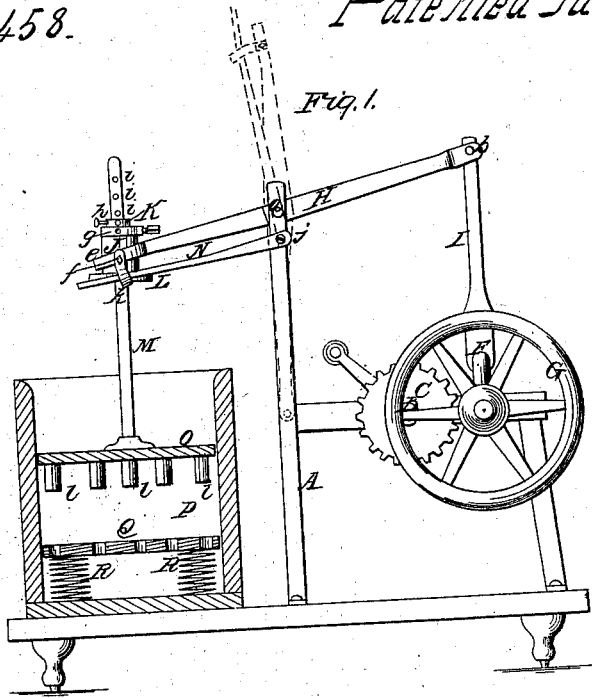


Le Roy S. Starrett,
Washing Machine.

N^o 48,458.

Patented June 27, 1865.



Witnesses:
Wm. Greun
C. L. Topliff.

Inventor:
LeRoy S. Starrett
per Munn & Co.
attorneys

UNITED STATES PATENT OFFICE.

LE ROY S. STARRETT, OF NEWBURYPORT, MASSACHUSETTS.

IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. 48,458, dated June 27, 1865.

To all whom it may concern:

Be it known that I, LE ROY S. STARRETT, of Newburyport, in the county of Essex and State of Massachusetts, have invented a new and Improved Clothes-Washing Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of my invention, partly in section; Fig. 2, a plan or top view of the same; Fig. 3, a detached under or face view of the plunger; Fig. 4, a detached plan or top view of the yielding perforated partition-plate in the suds-box.

Similar letters of reference indicate like parts.

This invention relates to a new and improved clothes-washing machine of that class in which an up-and-down plunger is employed; and it consists in a novel means for operating the plunger, whereby an up-and-down and also a rotary motion is communicated to the same; and the invention also consists in the employment or use of a perforated partition-plate in the suds-box, whereby the cleansing or washing operation is greatly facilitated.

A represents a framing, which may be constructed in any proper manner to support the working parts; and B is a driving-shaft placed transversely in the framing A, and having a toothed wheel, C, at one end of it, which gears into a pinion, D, on a shaft, E, the latter having a crank, F, and a fly-wheel, G.

H represents a walking-beam, the fulcrum *a* of which is in the upper parts of two standards of the framing A, which extend upward considerably higher than any other portion. One end of this beam H is connected by a rod, I, with the crank F, a pin, *b*, passing through the rod and beam and retained in position by a button, *c*, which turns on a pivot, *d*, so that it may be turned off from the head of pin *b* and the latter removed in order to disconnect the beam H from the rod I when necessary. The opposite end of beam H is formed or cast with an eye, *e*, in which a short tube, *f*, is fit-

ted and secured at opposite points by pivots *f*, the tube being allowed to work or swing freely on said pivots in a direction toward and from the shaft B.

Within the tube J there is fitted another tube, K, the latter being allowed to turn freely in the former and supported by a collar, *g*, which is secured to K above J and rests upon the latter. The lower end of the tube K has a ratchet-wheel, L, keyed upon it. The interior of the tube K is of rectangular form, through which a rectangular rod, M, passes, the latter being secured in K by a pin, *h*, the rod M having several pin-holes, *i*, made in it to admit of the rod being adjusted higher or lower, as may be desired.

N is a pawl, one end of which is attached by a pivot, *j*, to one end of the high standards of the framing A, said pawl passing through a guide, *k*, attached to the eye *e* of the walking-beam H.

To the lower end of the rod M a circular plunger, O, is attached, said plunger having pendent pins *l* at its under side, as shown in Figs. 1 and 3.

P is a suds-box, which may be of cylindrical form, and has a perforated partition or supplemental bottom, Q, within it, resting upon spiral springs R.

From the above description it will be seen that by turning the shaft B, which may be done by hand or other power, an oscillating motion will be given the beam H and a reciprocating or up-and-down movement given the plunger O, and also a rotating one, the latter movement being obtained through the medium of the ratchet-wheel L and pawl N, the latter being operated from the beam H.

The clothes to be washed are placed on the perforated partition or supplemental bottom Q, the pins *l* acting upon the clothes and being changed in position at every downward stroke in consequence of the rotation of the plunger. The partition or bottom Q yields to each downward pressure of the plunger and causes the suds to be forced through the texture of the clothes, insuring a thorough cleansing of the same, while the changing of the position of pins *l* relatively with the clothes insures all

parts of the latter being acted upon in the most thorough manner.

The plunger may be raised up out of the suds-box for the convenience of placing the clothes in the same and removing them therefrom by simply withdrawing the pin *b* and turning the beam *H* to a vertical position, as shown in red, Fig. 1.

I claim as new and desire to secure by Letters Patent—

The washing-machine herein described, consisting of the suds-box *P*, false bottom *Q*, springs *R*, plunger *O*, adjustable rod *M*, walking-beam *H*, crank *F*, pitman *I*, tubes *J K*, pawl *N*, and ratchet-wheel *L*, all arranged to operate as specified.

LE ROY S. STARRETT.

Witnesses:

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