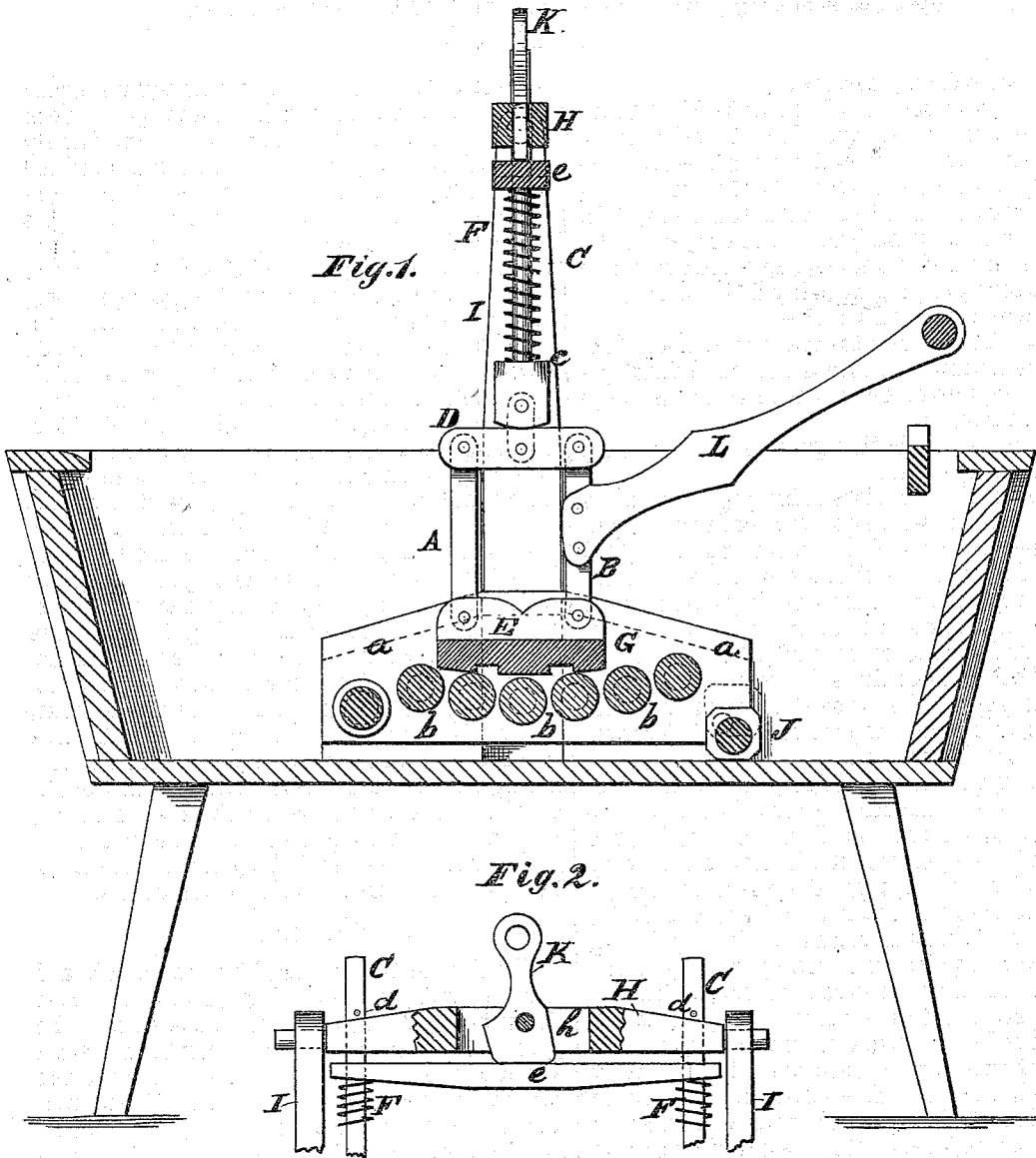


WILLIAM B. H. BEACH.

Improvement in Washing-Machines.

No. 127,298.

Patented May 28, 1872.



Witnesses
A. L. Penine.
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UNITED STATES PATENT OFFICE.

WILLIAM B. H. BEACH, OF NAPLES, NEW YORK.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 127,293, dated May 28, 1872.

To all whom it may concern:

Be it known that I, WILLIAM B. H. BEACH, of Naples, in the county of Ontario and State of New York, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a longitudinal vertical section. Fig. 2 is a view of devices detached for regulating the power or pressure of the springs upon the rubber.

Like letters in both figures of the drawing indicate like parts.

My invention consists of hinge-jointed arms connecting cross-bars and springs so arranged with the rubber and shaft having a pivotal connection with the standards of the machine as to permit the rubber to readily adjust itself to various thickness of clothes; also, of an eccentric roller, constructed and pivoted at either one or both ends of the sides of the standards, so as to adjust the wash-board at different heights, and thus adapt it to more or less water, as occasion may require.

A, B, and C are the hinge-jointed arms; D and E, the connecting cross-bars; F, the springs; G, the rubber; H, the shaft; I I, the standards supporting the latter, and having sides, *a*, for supporting the wash-board formed of rollers *b*; J, the eccentric roller; and K, the cam-lever or power-regulator for regulating the power or pressure of the springs upon the rubber. The hinge-jointed arms A B are hinged or pivoted at suitable distances apart to the cross-bars D and E, above and below, on each side of the machine, cross-bars E being rigidly attached, one at each end of the rubber. If preferable, the bottom ends of these arms may be pivoted to knee-plates fastened by screws to the rubber. The arms C are made round to receive the spiral springs F, their lower ends being left square to form shoulders *c* for the lower ends of the springs to rest upon, and hinged to cross-bars D in the center of each. Their upper ends are made to fit and work freely in holes of the shaft H, from which they are suspended and held by a pin, *d*, passed through them above the shaft, the ends of which latter have a pivotal connection with the

ends of the standards. A pressure-plate, *e*, with a hole in it at each end large enough to work freely on the arms, is arranged immediately under the shaft and over the upper ends of the springs to receive the pressure of the cam-lever K, which is pivoted in a slot, *h*, of the shaft, with its cam arranged to bear upon the plate, so that by pressing the lever down the plate will be caused to press the springs down, thus increasing their pressure upon the rubber. The ends of the eccentric roller J are made square and eccentrically pivoted to either one or both ends of the sides of the standards, so as to adjust the wash-board at different heights, and thus adapt it to more or less water by turning the roller up or down, as may be required, the box being provided with a groove on each side to receive and hold the standards in place, which are made to fit loosely in the grooves, so as to permit of their being freely moved up and down therein when adjusting the wash-board. Fig. 1 shows the wash-board when adjusted to the position desired, the roller being turned down. The dotted lines show its position before adjustment, the roller being turned up. I contemplate making the ends of the roller of an octagonal, hexagonal, or other similar shape that will accomplish the adjustment of the wash-board, substantially the same as above described.

The rubber is operated by the handle L attached at a suitable angle to the arms B.

Operation.

The clothes being placed on the wash-board and the rubber drawn back and forth over them by the handle L, it will be seen that the pivotal or hinge-joint connection of the arms and cross-bars with each other and with the rubber, in connection with the reciprocal motion of arms C in the holes of the shaft, permits the rubber to freely adjust itself to various thicknesses of clothes, the springs producing the requisite amount of pressure upon the rubber, which may be increased or diminished by pressing the lever up or down, as may be required.

As it is sometimes necessary to use more or less water in washing, the wash-board can be readily adjusted for this purpose by turning the roller up or down, as hereinbefore described.

Having thus fully described my invention,

what I claim therein as new, and desire to secure by Letters Patent, is—

1. The hinge-jointed arms A, B, and C, cross-bars D and E, springs F, in combination with the rubber G, and shaft H having a pivotal connection with standards I, substantially as set forth.

2. The combination of the hinge-jointed arms A, B, and C, cross-bars D and E, spiral springs F, rubber G, pressure-plate *e*, shaft H, cam-lever K, and standards I, all constructed to operate substantially as set forth.

3. The eccentric roller J, constructed and pivoted at either one or both ends of the sides of the standards, so as to adjust the wash-board at various heights, substantially as and for the purpose set forth.

As evidence that I claim the foregoing as my invention, I have hereunto set my hand and seal in the presence of two witnesses.

WM. B. H. BEACH. [L. S.]

Witnesses:

S. L. DEYO,

A. O. MORRIS.