

T. N. COCHRAN.
Washing-Machines.

No. 154,841.

Patented Sept. 8, 1874.

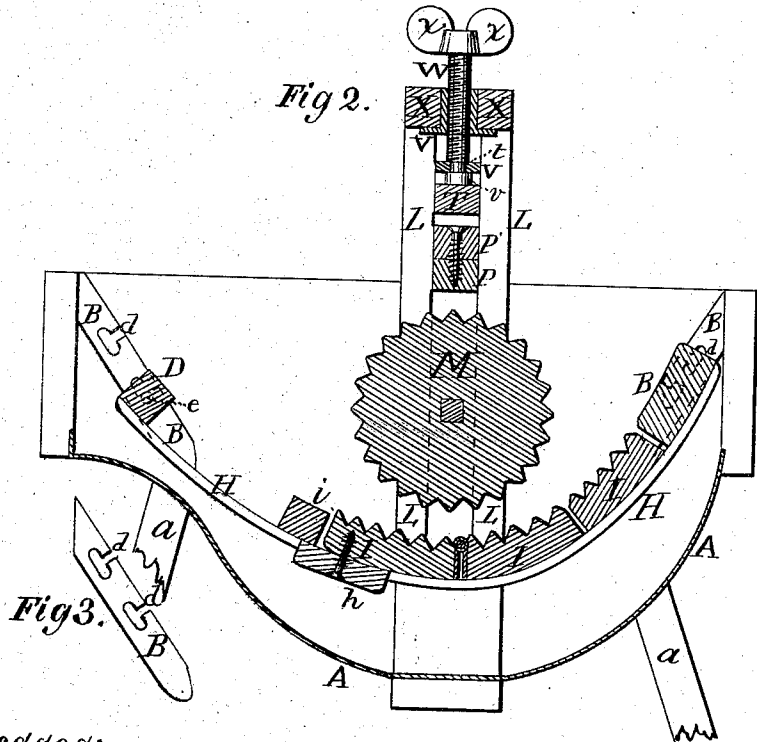
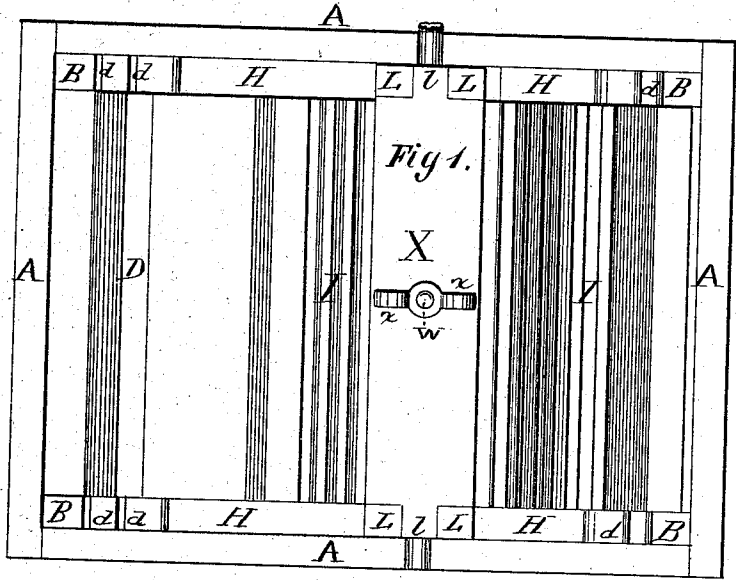


Fig. 3.

Witnesses:
C. Wilson
Jos. L. Friedman

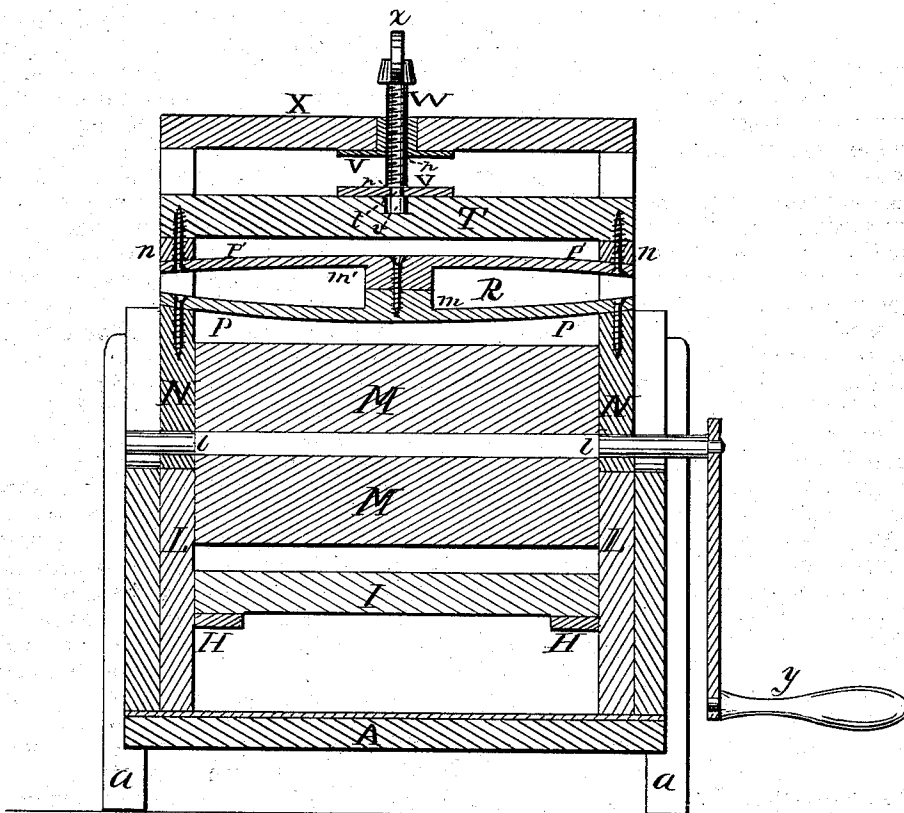
Inventor:
Thomas N. Cochran
by his attys
Cox & Cox

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Fig 4.



Witnesses:
C. E. Wilson
John E. Wildman

Inventor:
Thomas N. Cochran
by his attys.
Cox & Cox

UNITED STATES PATENT OFFICE.

THOMAS N. COCHRAN, OF CHILLICOTHE, MISSOURI.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 154,841, dated September 8, 1874; application filed May 6, 1874.

To all whom it may concern:

Be it known that I, THOMAS N. COCHRAN, of Chillicothe, Livingston county, Missouri, have invented certain new and useful Improvements in Washing-Machines, of which the following is a specification, reference being had to the accompanying drawings.

The invention relates to an improved washing-machine; and consists of a tub of proper dimensions, to the inside of which, at each corner, are secured cleats, provided with slots to receive axles on the ends of bars connected with elastic strips, conforming generally to the plane of, and properly elevated above, the bottom of the tub, and having a hinged wash-board in sections mounted upon their upper surfaces, all so arranged that by removing the axles from one slot to another the curve or pitch of the board may be changed.

In conjunction with the above is provided a corrugated roller operating in proper proximity to the wash-board, and adjustable vertically in slotted standards, its relation to and pressure upon the same being regulated by a set-screw operating a sliding beam, which acts upon a spring secured to the upper ends of the slides in which the axles of the roller are journaled.

The object of the invention is to provide a washing-machine having two yielding adjustable corrugated surfaces, for washing clothes and other analogous uses.

Figure 1 is a top or plan view of a device embodying the elements of the invention. Fig. 2 is a longitudinal vertical central section of same. Fig. 3 is a detached view of the cleat B. Fig. 4 is a vertical central transverse section of the invention.

A in the accompanying drawings is a tub, of the shape shown, and properly supported by the legs *a*, and supplied with a vent. To the inside corners of the tub are secured the cleats B, each of which is provided with the L-shaped slots *d*, the extremities of which extend above and below the mouths. The bar D is provided with the axles *e* at each end, which pass into the slots *d*. To the bars

D are secured the ends of the elastic straps H, which conform generally to the bottom of the tub, being elevated a proper distance above the same, and have fastened to their upper surfaces the sections of the hinged curved wash-board I, having corrugations upon its upper surface, the hinged portion being kept in place by a button, *h*, acting upon a slat, *i*, secured at each end to the strips H. On opposite sides of the inner sides of the tub, with their lower portions passing between the strips H, board I, and the sides of the tub, are secured the standards L, provided with the roller M, operating upon axles *l*, which have bearings in the slides N, moving vertically in the slots of the standards, the axles projecting through the same, and also through the sides of the tub A, which is provided with a vertical slot, to permit the elevation and depression of the roller-axles. To each of the upper ends of the slides N, and within the slots in the standards L, are secured the ends of the lower bow, P, of the spring R, which has a shoulder, *m*, at its center, coinciding with the shoulder *m'* on the upper bow, P', the two bows being fastened together by a bolt passing through the shoulders *m m'*. The ends of the bow P' are secured to the chocks *n* on the ends of the bar T, working also in the standard, recessed at the center of its upper surface, and having over the recess the plates V, provided at their centers with the coincident apertures *p*, which fit about the neck *t*, above the button *v* on the lower end of the screw W, which extends upward through a threaded aperture in the cross-bar X, connecting the upper ends of the standards L, and having a thumb-piece, *x*, on its upper end. One of the axles *l* is provided with a crank, *y*, by means of which the roller may be revolved.

The pitch or curve of the board I may be varied by removing the axles *e* from the slots *d*, and compressing or expanding the strips H, and inserting the axles in other of the slots *d*.

The relation of the roller M to the board I

is regulated by the movement of the set-screw W, and has a yielding pressure, owing to the arrangement of the spring R, a similar quality being given the board I through its peculiar structure and the elasticity of the strips H. The roller is placed nearer to or farther from the board I, according as the quantity of material to be washed is less or more.

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

The combination of the set-screw W, spring

R, and roller M with the adjustable board I, for the purposes specified.

In testimony that I claim the foregoing improvements in washing-machines, as above described, I have hereunto set my hand and seal this 20th day of April, 1874.

THOMAS N. COCHRAN. [L. S.]

Witnesses:

JOHN P. FRIEST,
T. A. EVERHART.