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JOHN H. SCHMIDT.

Improvement in Washing Machines.

No. 119,244. Patented Sep. 26, 1871.

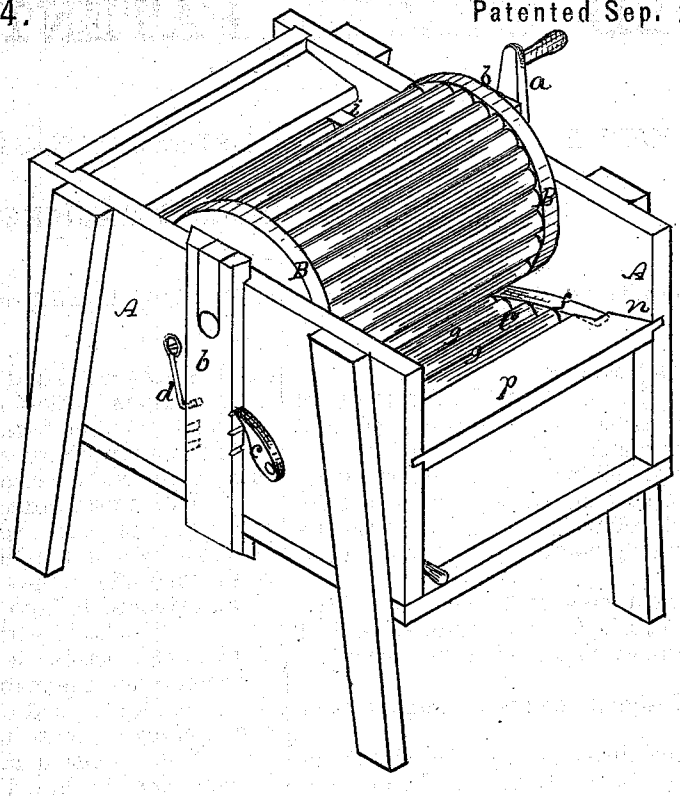


Fig. 2.

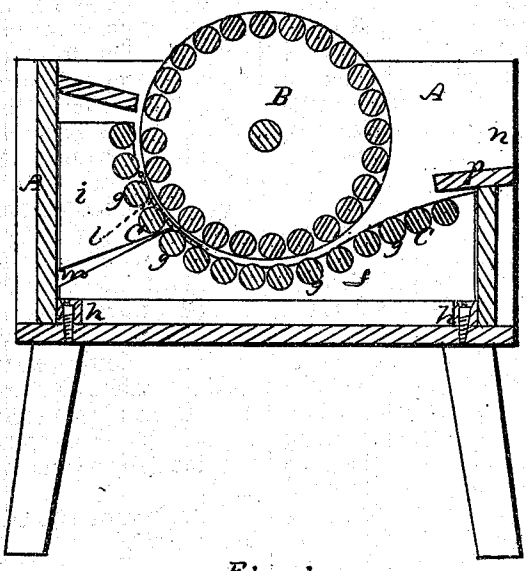
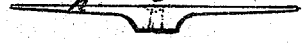


Fig. 3.



Witnesses,
D. J. Brown
J. L. Lyons

John H. Schmidt,
By his attorney,
D. J. Brown

UNITED STATES PATENT OFFICE.

JOHN H. SCHMIDT, OF STOCKERTOWN, PENNSYLVANIA.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 119,244, dated September 26, 1871.

To all whom it may concern:

Be it known that I, JOHN H. SCHMIDT, of Stockertown, in the county of Northampton and State of Pennsylvania, have invented an Improved Washing-Machine; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing making part of this specification—

Figure 1 being a view in perspective of the washing-machine; Fig. 2, a longitudinal vertical section of the same; Fig. 3, view of a part detached.

Like letters designate corresponding parts in all of the figures.

My invention belongs to a class of washing-machines composed of a revolving cylinder or drum having rounds, preferably, or corrugations around its periphery, and turning in a nearly-concentric concave of rounds or corrugations.

Let A represent the tub or box forming the water-reservoir, in which the working parts are mounted; B, the revolving cylinder or drum, turned by a crank, *a*, or other means; and C, the concave. The cylinder-shaft is mounted in bearings *b b*, which have an adjustable movement up and down in grooves or ways of the sides of the tub or box, and are held at various heights by notches and a detent, *c*, or by holes and a hook, *d*, Fig. 1, by which the distance of the cylinder from the concave below is adjusted.

My invention consists in the special features of construction and arrangement, as follows: In order to give the proper elasticity and yielding movement to the concave C it is composed of two side pieces, *f f*, in which the transverse rounds *g g* are secured, and these side pieces slide freely up and down inside of the tub or box just inside of the sides thereof, and rest at their ends upon the elastic ends of two double springs, *h h*, which, respectively, extend across the ends of the box or tub and rest on the bottom thereof. These springs are double, being fastened at the middle to the bottom of the box, so that both ends spring freely and separately and balance the weight of the two sides of the concave thereon. Thus the concave rests at each end upon an elastic yielding support, giving it every capability of adaptation to the various thicknesses of clothes between it and the cylinder, and by very simple means. The springs are preferably made of wood. At the back of the machine the concave extends upward nearly to the top of the box, or as high as the center of the revolving cylinder. This upward extension *i* of the concave is in a separate part, and is jointed to the main concave by a spring-joint at the inner surface, as shown in Fig. 2, the springs *l* forming the joint being attached to both parts of the concave side pieces. The back part of the extension is cut away at the bottom, leaving sufficient space *m* between it and the main concave below to allow the extension to yield backward and downward, and thereby separate from the revolving cylinder. This extension may be allowed to spring forward close to the cylinder, so that it squeezes the water from the clothes as they ascend between it and the cylinder; and when the clothes are washed and rinsed they may be run through the machine, the water having been drawn off, and this extension will serve as a wringer. The springs *l l* may be made of steel, and any other construction or arrangement thereof may be employed. The front end of the tub or box A is open at the top, as at *n*, down to a line lower than the center of the cylinder, leaving enough at the lower part closed to hold the required quantity of water. A shelf or table, *p*, is located at the bottom of the opening *n*, extending inward over the end of the concave, to rest the clothes upon and to prevent the slopping out of the water. It is inclined inward a little to conduct back into the tub or box all water that may spatter or drain upon it.

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

The combination and arrangement of the concave C, elastic extension *i*, springs *h h*, and opening *n* in the front of the tub or box, constructed substantially as and for the purposes herein specified.

Specification signed by me this 8th day of October, 1870.

JOHN H. SCHMIDT.

Witnesses:

JACOB H. BECK,

JOSEPH SCHMIDT.