T. J. McWANE.

Washing-Machine.

No. 162,296. Patented April 20, 1875.

Fig. 1.

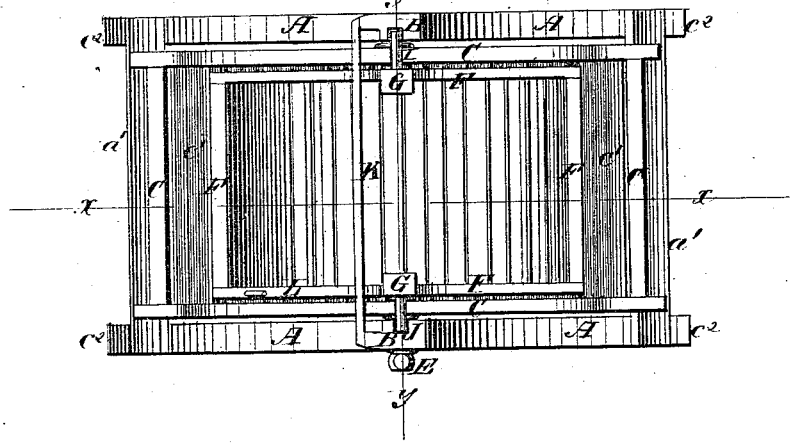


Fig. 2.

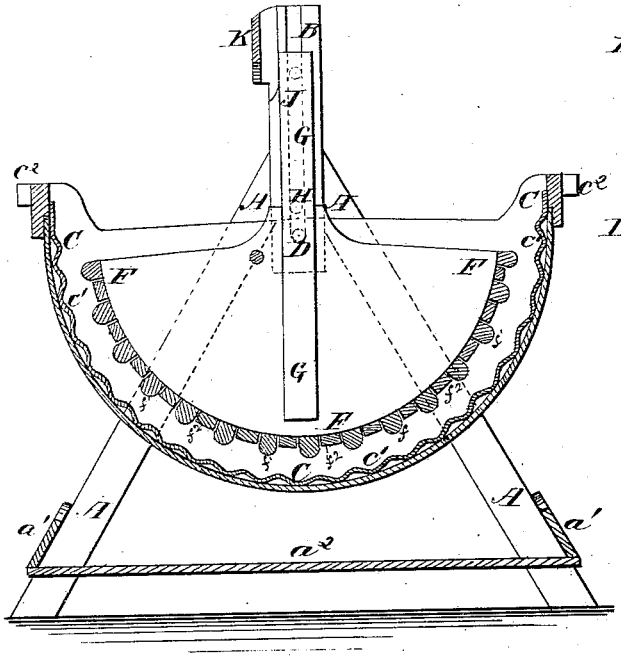
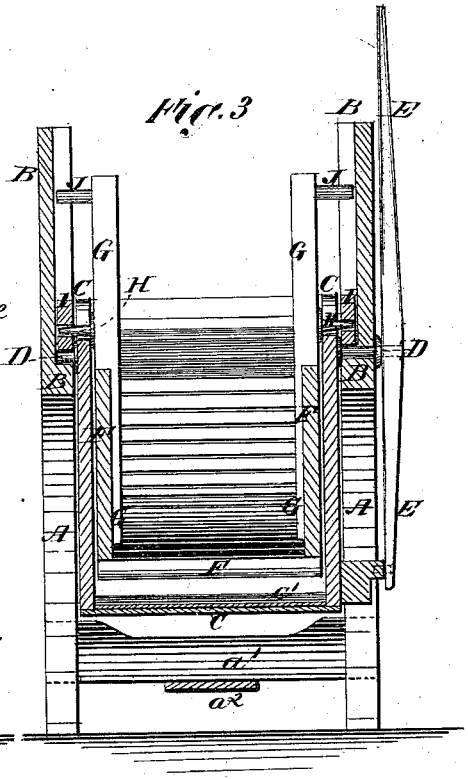


Fig. 3.



WITNESSES:

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THOMAS J. McWANE, OF VERSAILLES, ILLINOIS.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **162,296**, dated April 20, 1875; application filed February 5, 1875.

To all whom it may concern:

Be it known that I, THOMAS J. McWANE, of Versailles, in the county of Brown and State of Illinois, have invented a new and useful Improvement in Washing-Machine, of which the following is a specification:

Figure 1 is a top view of my improved washing-machine. Fig. 2 is a vertical section of the same, taken through the line *x x*, Fig. 1. Fig. 3 is a vertical section of the same, taken through the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved washing-machine, simple in construction, convenient in use, easily operated, and effective in operation, washing the clothes quickly and thoroughly, and without injuring them, whatever may be the quantity or quality of said clothes.

Washing-machines have been heretofore constructed of a semi-cylindrical suds-box and rubber arranged to vibrate simultaneously and in opposite directions. In my invention the suds-box is hung on trunnions and vibrated by means of a vertical lever attached to its side. The rubber does not vibrate, but is made vertically adjustable, to adapt it to rise and fall according to the thickness of the clothes which may be interposed between it and the suds-box at any time during the operation of the machine. It is also removable or detachable, as hereinafter described.

A are two pairs of inclined posts, the upper ends of each pair of which are attached to the opposite sides of the lower parts of an upright, B. The lower ends of the corresponding posts A are connected by two cross-bars, a^1, which cross-bars are connected by a longitudinal bar or board, a^2. By this construction a firm and stable frame is produced, having a wide base to support the machine securely, and a contracted upper part, to be out of the way when the machine is being operated. C is a semi-cylindrical box, which is made a little larger than a half-cylinder, and to the sides of which, in the centers of the circles of which said sides or parts, are rigidly attached pivots D, which work in bearings in the lower parts of the uprights B of the frame A B. One of the pivots D projects through the upright B, and to its outer end is attached a lever, E, the lower end of which is rigidly connected with the lower part of the side of the suds-box C. The upper end of the lever E projects into such a position that it may be conveniently reached and operated, while the operator stands in an erect position. The curved bottom c^1 of the suds-box C is corrugated with sharp or V-shaped corrugations, as shown in Fig. 2. The suds-box C may be provided with a smooth outer bottom, if desired. F is the inner box or rubber, which is made semi-cylindrical in form, and of such a size that when their axes are in the same line a narrow space may be left between the curved bottoms of the two semi-cylinders, as shown in Fig. 2. To the inner surfaces of the sides of the rubber F are attached two uprights, G, to which, about in line with the axis of the rubber, are attached two pins or pivots, H, which enter holes or recesses in blocks I, that slide up and down in vertical grooves in the inner sides of the uprights B. To the upper parts of the uprights G are attached pins J, which enter the grooves of the uprights B, to prevent the rubber F from oscillating, while allowing it to move up and down freely to adjust itself to the thickness of the clothes being operated upon. The convex surface of the rubber F is formed by alternating thick cross-strips f^1 and thin strips f^2, sufficient space being left between them to allow the water to pass through freely.

In using the machine, the rubber F is raised and turned to one side. The clothes are then arranged upon the corrugated bottom of the suds-box C, and the rubber F is swung down and lowered upon them. The suds-box C is then oscillated by means of the lever E or handle c^2.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

In a washing-machine, the combination of the semi-cylindrical vibrating suds-box C, suspended on trunnions or pivots D, and having the hand-lever E attached to its sides, and the removable vertically-adjustable rubber F, having arms G provided with guide-pins H and the vertical open-grooved extensions B of the frame A, all arranged as shown and described, to operate as specified.

THOMAS J. McWANE.

Witnesses:

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