T. A. IRICK.

Washing-Machine.

No. 165,675. Patented July 20, 1875.

Fig. 1.

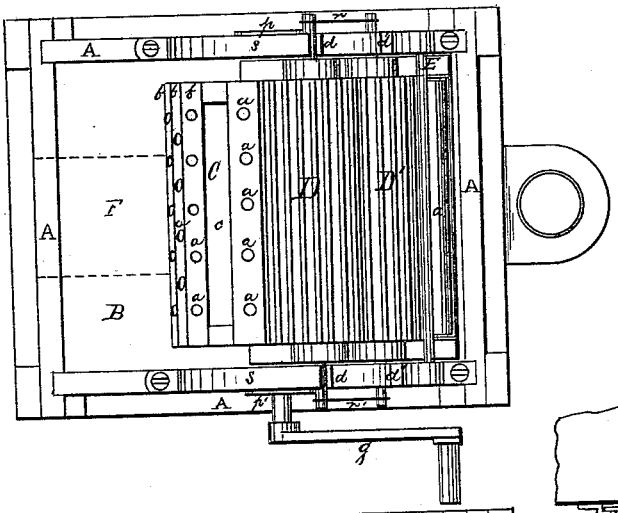


Fig. 4.

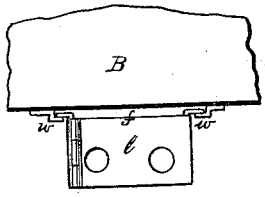


Fig. 2.

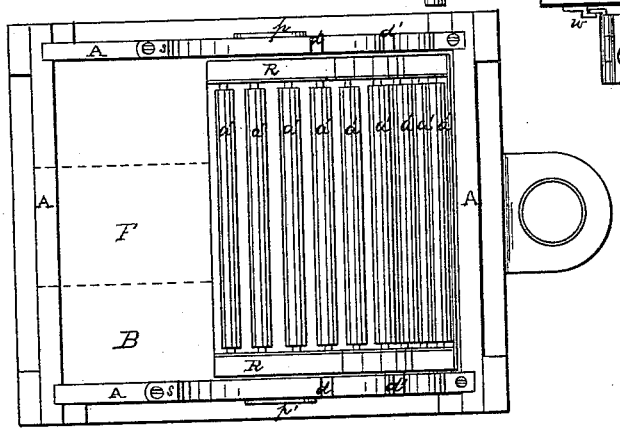
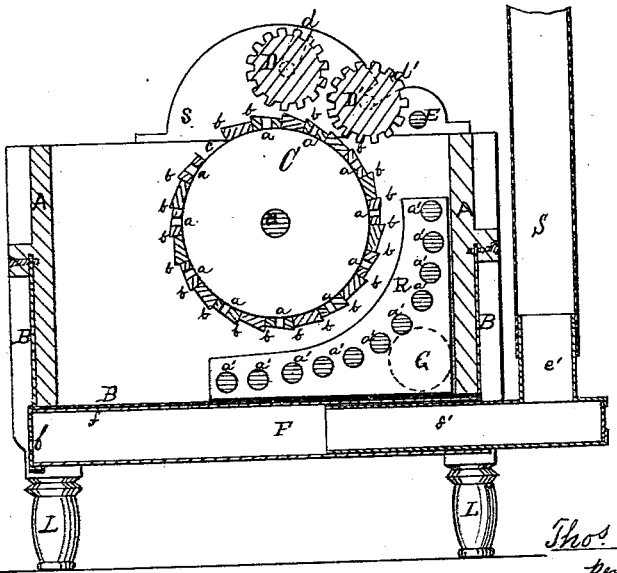


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

THOMAS A. IRICK, OF HUMANSVILLE, MISSOURI.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **165,675**, dated July 20, 1875; application filed February 27, 1875.

To all whom it may concern:

Be it known that I, THOMAS A. IRICK, of Humansville, county of Polk, State of Missouri, have invented an Improved Washing-Machine, of which the following is a specification, reference being had to the accompanying drawings forming part of the same.

My invention consists in the combination, in a washing-machine, of the parts and devices hereinafter particularly described, whereby fabrics may be rapidly and conveniently cleansed.

Figure 1 is a plan view of a washing-machine embodying my invention, showing the position of all the parts. Fig. 2 is a similar view of the same, with some of the parts removed. Fig. 3 is a central sectional view of the same, showing all the parts. Fig. 4 is a detached view of the front of the machine, showing the arrangement of the heater upon the metallic bottom.

A A is the wooden frame, jointed together, as shown, and resting upon legs L, and forms the walls of the tank or boiler of the machine. B is the metallic bottom of the tank or boiler, secured upon the frame by being turned up against the outside of the frame, and fastened by wooden cleats and screws, as shown. C is a hollow cylinder, made preferably of wood, and by means of beveled slots, as shown, formed with the ratchet or tooth-like projections *b* extending longitudinally across its outer surface, and having the perforations *a* and the longitudinal opening *c*, and is revolved upon its axle *e*, which has bearings in the frame, and the metal plates *p* and *p'* secured upon the outside of the frame by means of the crank *g*, as shown. R is a movable rack, of the form shown in the drawings, in which are arranged the rollers *a'* in loose bearings, and which rests upon the metallic bottom B within the walls of the tank or boiler, as shown, and is provided with the metallic air-cylinder G, as shown. D and D are fluted rollers, and adjusted in the slotted bearings *d* and *d'* in the detachable rack *s*, secured upon the top of the frame, and are held in place, without impeding their play, in their slotted bearings by the hooked rods *r* and *r'*. E is a bar or rod extending across the top of the frame as a brace, between the sides of the rack *s*, a little behind the roller D'. F is the heater or furnace, made preferably of iron, and composed of the two parts *f* and *f'*, the forward part, *f*, to which is hung the door *l*, being adjusted under the metallic part B, in the sliding ways *w*, and the rear bottom *f'* fitting closely into the open rear end of the part *f*, as shown, the smoke-stack S being adjusted upon the elbow *e'*, formed on the rear part *f'*.

The operation of my machine is as follows: The tank or boiler of the machine should be filled nearly full of water, and by means of a fire in the heater F, the water should be raised to and maintained in a boiling condition. The fabrics to be cleansed should, after being well soaped, then be placed upon the revolving cylinder C, having their ends passed sufficiently far through the opening *c* to retain them in the place upon the cylinder during its revolutions.

Now, it is evident that, upon cylinder C, with the fabrics wound upon it, being rapidly revolved, the fabrics will be passed between the prominences on the cylinder and those on the fluted rollers D and D', and between the cylinder and the several rollers *a'*, in the movable rack R, which will be buoyed up in the water against the cylinder C by means of the air-chamber G, receiving thus a continuous friction similar to the rubbing by hand upon a wash-board in the ordinary method of washing clothes, and that the boiling water will be caused to circulate freely through the fabrics by means of the perforations *a* in the cylinder, and the fabrics thus speedily and conveniently washed and cleansed.

It is also evident that the rack R, being movable on the bottom B, and the fluted rollers D and D' working in the slotted bearings *d* and *d'*, all liability of tearing or otherwise injuring the fabrics by harsh friction or pressure upon them is avoided.

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

1. The combination, in a washing-machine, of the perforated ribbed cylinder C, and the rack R, carrying the rollers *a'*, and provided with the air cylinder or float G, as described.

2. The combination, in a washing-machine, of the perforated ribbed cylinder C, the rack R, carrying the rollers *a*, and provided with the air cylinder or float G, and the fluted rollers D and D′, when the said rollers are arranged vertically above the said cylinder C, and operate to press upon said cylinder by the force of their own weight only, as described.

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Witnesses:
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