J. A. Fletcher,

Washing Machine.

No. 107,604. Patented Sept. 20. 1870.

Fig. 1.

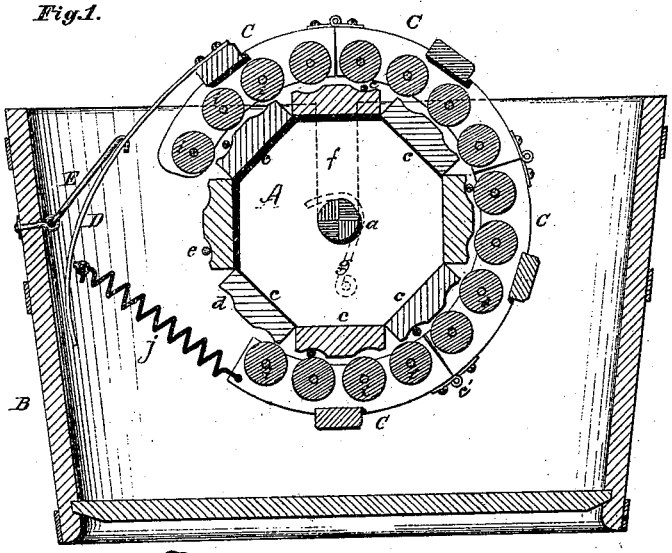
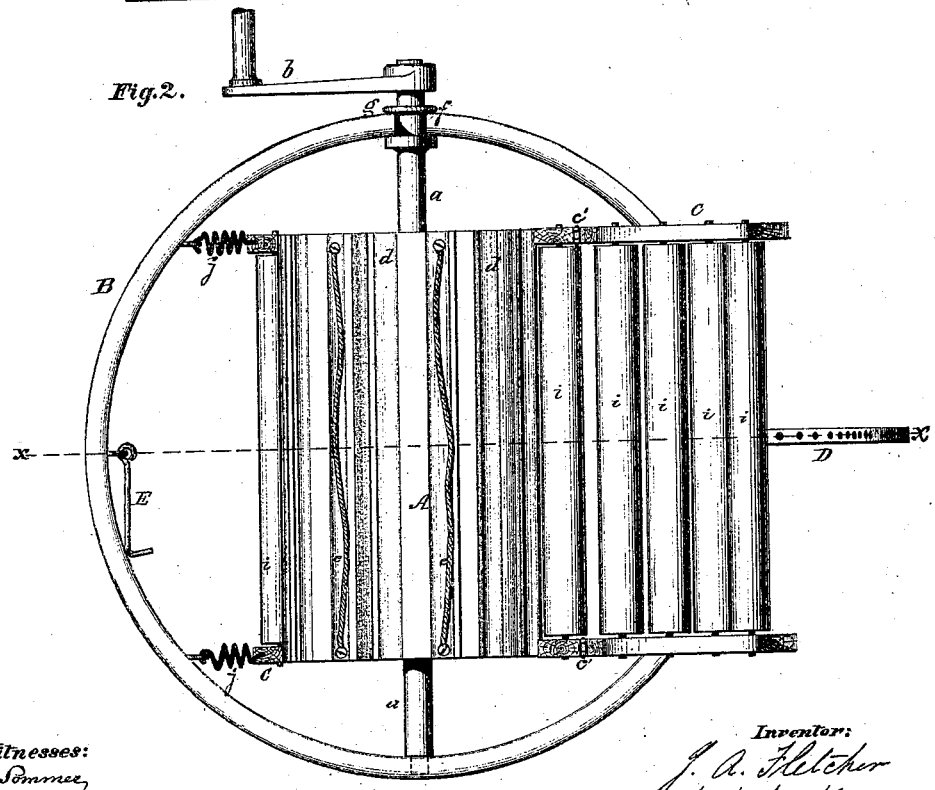


Fig. 2.



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United States Patent Office.

JOSEPH A. FLETCHER, OF EYOTA, MINNESOTA.

Letters Patent No. 107,604, *dated September* 20, 1870.

IMPROVEMENT IN WASHING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOSEPH A. FLETCHER, of Eyota, in the county of Olmsted and State of Minnesota, have invented certain Improvements in Washing-Machines, of which the following is a specification, reference being had to the accompanying drawing.

My invention consists in a novel manner of constructing and arranging certain mechanical devices so as to form a washing-machine, as hereinafter described.

Figure 1 is a vertical cross-section of my machine, taken on the line *x x* of fig. 2, and

Figure 2 is a top plan of the machine, opened to receive the fabrics to be washed.

In constructing my machine I first provide a suitable shaft, *a*, having a crank, *b*, secured to one end, and on this shaft I mount a polygonal drum or body, A, consisting of two heads, connected by bars or slats *c*, attached to their peripheries.

These bars or slats *c* I form with longitudinal grooves or corrugations, *d*, on their outer surfaces, as shown in figs. 1 and 2, and also secure lengthwise of the bars, cords *e e*.

The shaft *a* and its drum I mount in a circular tub or body, B, by inserting one end of the shaft in a hole made for the purpose, and then dropping the opposite end, which carries the crank into a slot, *f*, as shown in figs. 1 and 2, the shaft being held down in place by a hook, *g*, on the tub, as shown in both figures.

I next construct several small curved frames C, each containing a number of rolls, *i*, of a length approximating that of the body A, and then hinge the frames together, as shown at *c' c'*.

The flexible series or belt of frames thus formed I place over and around the drum or body A, as shown in fig. 1, supporting them against the drum by spiral springs *j*, connecting them to the side of the tub.

The upper edge or end of the flexible frame I provide with a long curved metal spring or strap, D, having a number of holes in it, as shown in fig. 2.

To the side of the tub I secure a hook, E, which may be hooked into any one of the series of holes in the spring E, and thus the frames C drawn against, and the rollers caused to bear with any desired pressure upon the drum or body A, as shown in fig. 1.

When articles are to be washed, the tub is filled to the proper height with water, the spring D released, and the frame turned back, as shown in fig. 2, and the articles then passed or inserted under the strings *e*; the frame is then closed, and the crank operated.

As the drum revolves, the fabrics are carried with it, and are thus thoroughly rubbed between the corrugated ribs and the rolls, and being also passed through and saturated with the water or suds at each revolution of the body.

A machine of this construction is cheap and simple, is easily operated by women or children, and cleanses the clothes quickly and thoroughly, without danger of tearing, or otherwise injuring them.

Having thus described my invention,

What I claim is—

A washing-machine, consisting of the tub A, drum B, with grooved longitudinal slats on its surface, frame C, made of hinged sections, having rollers mounted therein, springs *j*, metallic strap D, and hook E, when constructed and arranged substantially as herein described.

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