

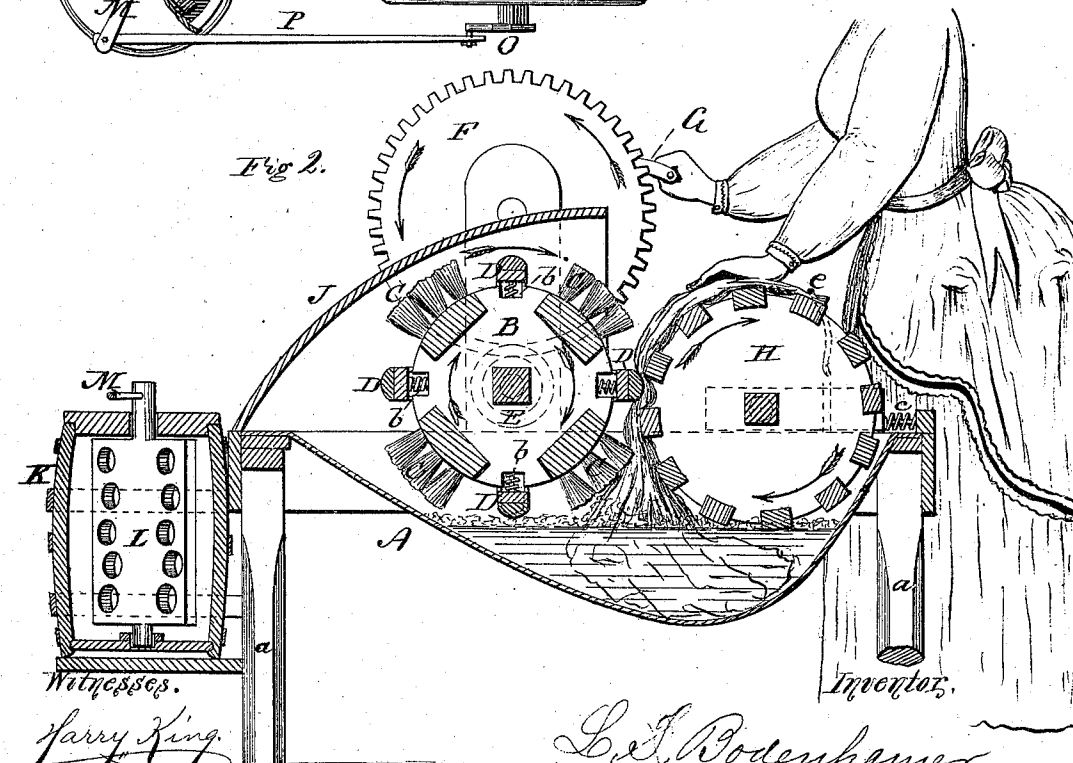
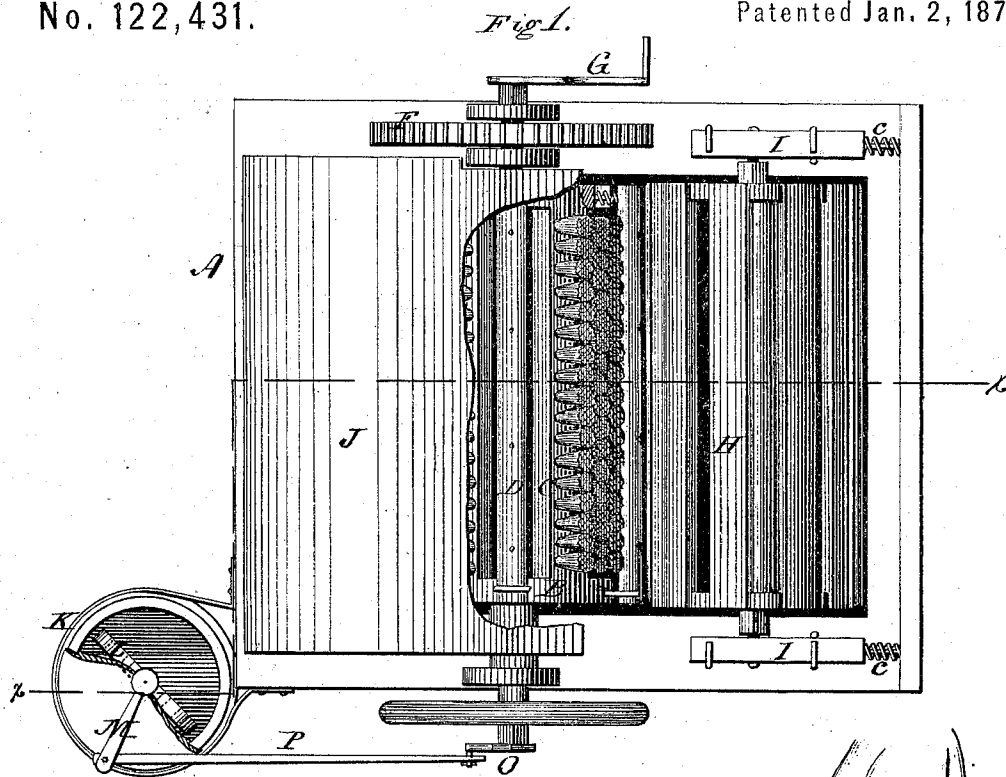
(91.)

L. I. BODENHAMER.

Improvement in Washing Machines.

No. 122,431.

Patented Jan. 2, 1872.



Witnesses.

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UNITED STATES PATENT OFFICE.

LEVI ISAAC BODENHAMER, OF RUFFIN, NORTH CAROLINA.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 122,431, dated January 2, 1872.

SPECIFICATION.

To all whom it may concern:

Be it known that I, LEVI ISAAC BODENHAMER, of Ruffin, in the county of Rockingham and State of North Carolina, have invented certain improvements in Washing-Machines, of which the following is a specification, reference being had to the accompanying drawing.

My invention relates to machines for household use; and the invention consists in a washing-machine of novel construction, all as hereinafter described.

Figure 1 is a top-plan view of my washer, and Fig. 2 is a longitudinal vertical section through the same on the line *xx* of Fig. 1.

In proceeding to construct my washer, I first make a large box or body, A, with a curved bottom, as shown in Fig. 2, and mount said box on suitable legs *a*. Across the inside of the body A I mount a large horizontal drum, B, provided with a series of longitudinal brushes, C, at equal distances apart, and with a series of pads or rubbers, D, arranged lengthwise between the brushes, as shown. The pads or rubbers consist merely of bars having elastic faces of rubber or similar material, and having their ends supported upon spiral springs *b* so that they can yield under pressure. On one of the journals of the drum B I secure a pinion, E, and between two uprights, provided for the purpose, I mount a large wheel, F, gearing into said pinion, as shown in Fig. 2, and to the journal of the wheel F I secure a hand-crank, G, by which to turn the same and operate the drum. By the side of and parallel with drum B I mount a second drum, H, which has its journals mounted in sliding bars I, which are forced inward by spiral springs *c* bearing against their ends, so as to keep the face of the drum in contact with drum B, as shown in both figures. The adjustable or movable drum H is for the purpose of holding and supporting the articles to be washed, while the brushes and pads of drum B act upon them. It con-

sists of two circular heads connected by rigid slats or bars, between which narrow spaces are left, as shown, and for the purpose of holding the articles in place upon it, it is provided with wire clips *e*, as shown in both figures. Over the drum B I place a concave shield or covering, J, to prevent water from being thrown out into the room by the drum when it is in rapid motion.

In using the washer the body A is filled to a suitable height with hot soap-suds, and one or more articles secured to the drum H by means of the clips *e*, and the crank G turned so as to give the drum B a rapid rotary motion toward the drum H. The drum H is turned by placing the hand thereon, so as to dip the article into the suds, and then turned slowly backward again, so as to raise the articles and allow the brushes and pads of the drum B to act thereon, the article being dipped into the suds and then raised again at short intervals. As the drum H is turned the different portions of the articles are brought successively under the action of the brushes and pads which thus cleanse the entire surface of the articles. The bars carrying the pads or rubber being mounted on the spiral springs, as described, yield or give when seams or thick portions of the articles are brought under them, so that there is no danger of the finest fabrics being torn or injured, while at the same time the supporting drum H is forced up by the springs *c* with sufficient pressure to insure the removal of all dirt by the brushes and pads.

Having thus described my invention, what I claim is—

The cylinder B, provided with the brushes C and yielding beaters D, in combination with the drum H, mounted in adjustable bearings I, all constructed and arranged to operate substantially as described.

LEVI ISAAC BODENHAMER.

Witnesses:

JOSEPH C. ALLISON,
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