G. W. EDMONDSON.

WASHING-MACHINE.

No. 171,783. Patented Jan. 4, 1876.

FIG. 1.

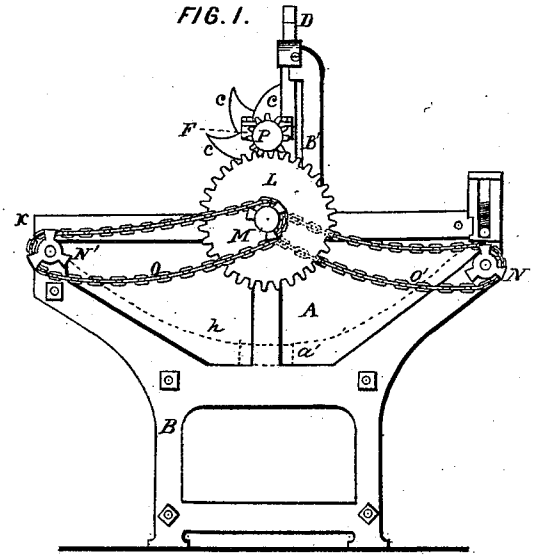


FIG. 2.

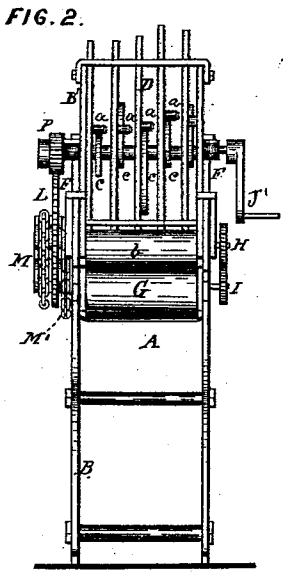


FIG. 3.

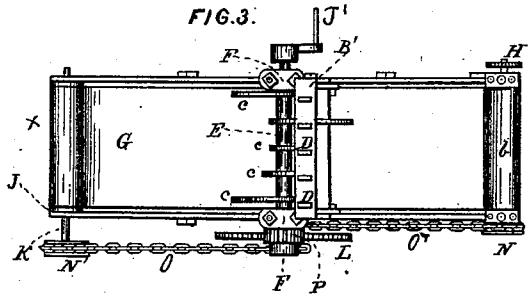
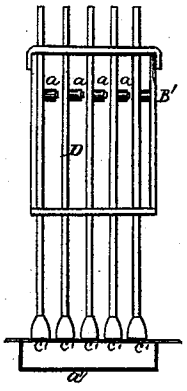


FIG. 4.



WITNESSES.

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UNITED STATES PATENT OFFICE.

GEORGE W. EDMONDSON, OF PLYMOUTH, OHIO.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **171,783**, dated January 4, 1876; application filed September 18, 1875.

To all whom it may concern:

Be it known that I, GEORGE W. EDMONDSON, of Plymouth, in the county of Richland and State of Ohio, have invented a certain new and Improved Washing-Machine, of which the following is a full, clear, and complete description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side elevation of the machine. Fig. 2 is an end elevation. Fig. 3 is a plan view. Fig. 4 is a detached section.

Like letters of reference refer to like parts in the several views.

The nature of this invention relates to a washing-machine, whereby said machine is rendered more efficient and easily manipulated. The construction of the machine and the application thereto of the improvements are substantially as follows:

A represents an oblong square wash box or tub, mounted on a frame, B. On the edge of the sides of the wash-box is secured a frame, B′, in which is arranged a series of vertical stamps, D, a detached view of which is shown in Fig. 4, wherein it will be seen that on the side of each of the stems of the stamps is secured a friction-roller, *a*. The stamps referred to are operated by cams *c*, Fig. 1, secured to the shaft E, Fig. 3, having its bearings in the standards F, attached to the edge of the wash-box. The arrangement of the cams in respect to the stems of the stamps is such as to bring them under the friction-rollers, upon which the edges of the cams run for lifting the stamps, as will be seen in Fig. 2. G is an endless apron. Said apron runs lengthwise across the wash-box near the bottom, as indicated by the dotted line *h*, Fig. 1, and passing, at one end of the box, between a pair of rollers, of which *b* is the upper one, the lower one being covered by the apron, therefore not seen. The two rollers are made to engage each other by the gearing H I. The apron, at the opposite end of the wash-box, runs over a roller, J, of which K is the shaft. Said rollers are operated by a cog-wheel, L, to the sides of which are secured sprocket-wheels M M′, one on each side of the wheel, as will be seen in Figs. 1 and 2. Corresponding sprocket-wheels N N′ are secured to the shafts of the lower rollers, around which the apron runs, as shown in Figs. 1 and 3. The sprocket-wheels N′ and M are connected to each other by an endless chain, O, and the sprocket-wheel N, by an endless chain, O′, is connected to the sprocket-wheel M′ on the inner side of the cog-wheel L. By means of the chains the apron-rollers are revolved for carrying the apron. The upper roller *b*, at the same time, is actuated by the pinions H I. The wheel L is revolved by a pinion, P, on the end of the cam-shaft, as will be seen in Fig. 2.

The practical operation of the machine is as follows: A certain amount of soap and water or other washing-fluid is thrown into the wash-box. The clothes to be washed are fed into the machine from the end *x* by laying them upon the apron over the single roller J. The handle J′, on being turned, revolves the apron, which carries down the clothes to the stamps, and as they are drawn down other articles are placed thereon, so that they may overlap each other to several pieces in thickness, more or less, as the quality or thickness of the articles may be. By continuing the operation of the crank the clothes are carried under the stamps, whereby the washing process is effected by the stamps falling upon them alternately while passing under them to a pair of rollers referred to, of which *b* is the upper one; the lower one, being covered by the apron, is not seen. Said rollers squeeze out the water from the clothes, which then drop into a basket at the end of the machine. This stamping of the clothes loosens the dirt therein, and it is washed out by the dashing of the water occasioned by the action of the stamps.

In the event the dirt has not been thoroughly removed by passing once through the machine, they are to be passed through again, and thus secure wholly the removal of the dirt from the clothes, which are now to be completed in a rinsing of clear water. Underneath the apron, immediately under the stamps, is a cushion of rubber, (indicated by the dotted lines *a′*, Fig. 1, also shown in the detached view Fig. 4,) and upon which cushion the stamps strike when falling upon the clothes.

It will be obvious that by the application of the friction-rollers *a* to the stamps the action of the cams thereon for lifting them is attend-

ed with but little frictional resistance; hence the machine will run much easier than were the cams to run upon rigid projections or studs. Also, in consequence of the elevated frame C, the stamps are held in a secure vertical position for being actuated by the cams, thereby obtaining ease, freedom, and correctness of action to them, and a completeness of purpose. The capacity of this machine for larger work, as bed-quilts, carpets, &c., may be increased by the addition thereto of more stamps, or by an enlargement of the entire machine.

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

The combination of the friction-rollers *a*, stamps D, frame B′, cams *c*, and wash box or tub A, the endless band, and elastic cushion *a′*, arranged and operating in the manner substantially as described, and for the purpose set forth.

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Witnesses:

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