J. ARNOLD.

Washing-Machine.

No. 204,518. Patented June 4, 1878.

Fig. 3.

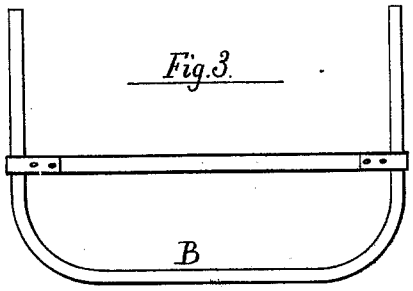


Fig. 1.

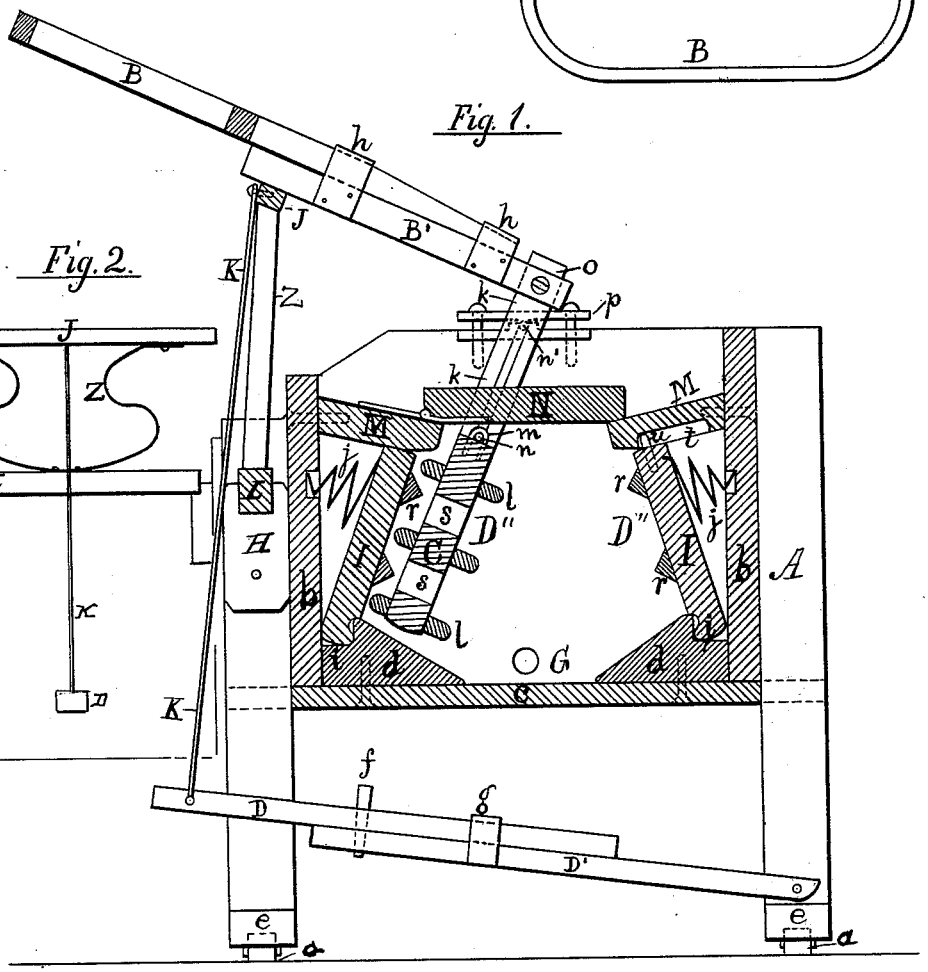
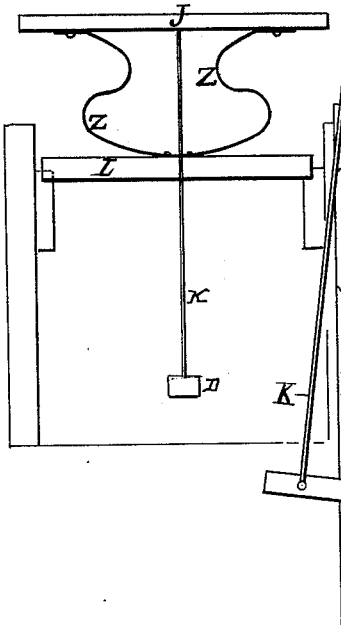


Fig. 2.



Attest:

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UNITED STATES PATENT OFFICE.

JOHN ARNOLD, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **204,518**, dated June 4, 1878; application filed January 25, 1878.

To all whom it may concern:

Be it known that I, JOHN ARNOLD, of the city of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My improvement relates to a new arrangement of the pressing and rubbing boards in washing-machines, and is fully shown in the drawings annexed, Figure 1 being a transverse section of the machine near the middle; Fig. 2, a detail front view; and Fig. 3, a plan of the handle.

A A are posts, to which a box, *b b c*, is secured at a convenient height to enable a handle, B, to be attached to the pressing-board C over the top, and a treadle, D D′, to be arranged below on one of the cleats *e e*, beneath the posts. These cleats render the machine easily moved in connection with rollers *a* secured under them. Both treadle and handle are made in two parts, the former to be lengthened, when desired, by changing pin *f* and sliding D out through the staple *g*.

The handle B is shaped like a **U**, and its free ends are inserted in staples *h* on bars B′, so that it may be withdrawn when the machine needs to be rolled through a door or passage. The bottom of the box *c* is provided at each side with an angular strip or block, *d d*, designed to throw the mass of clothing or linen toward the middle of the space D″ D″ when free from the action of the presser C.

A board, which I call a "rocking rubbing-board" or "rocker," I, has a lower edge rib fitted into a rabbet, *i*, in the top of end block *d*, and is pressed forward by a spiral spring, *j*, attached to the back of the rocker and pressing against the side of the box *b*.

The presser C is suspended by straps *k*, one of which is pivoted by a wire, *n′*, at each end of the box, resting in bearings *p*, secured to the top edge of the box. The straps *k* are made of cast metal, channeled out where the presser C is fitted into them to fit a tongue at each end of the presser, and provided at the top end, just above the pivot *n′*, with a socket, O, into which the bars B′ of the handle are secured. When the handle B is reciprocated the straps *k* are vibrated, and the presser C moved back and forth in the space D″ D″.

The presser is furnished with longitudinal strips *l* on each side, which fit approximately between strips *r r* attached to the faces of the rockers I I, and is also perforated with rows of holes *s s* between strips *l l*, for passing the suds freely from one side to the other of space D″ D″ when the presser is moved.

A cap-board, M, covers each of the rockers I, a recess, *t*, in the under side of the board M receiving a pin or staple, *u*, inserted in the top of the rocker, and preventing its projecting too far forward into the space D″ D″. A lid, N, is hinged to one of the caps M, and closes the open part of the box, so as to retain the heat and steam while washing.

The operation of the machine is as follows: The lid N is opened, and the space D″ D″ partially filled with soiled linen on each side of the presser C. The water and soap being supplied, the lid is closed, leaving a narrow slot at each end for straps *k*, and the presser worked back and forth in the box. In this operation the treadle or handle, or both, can be employed, the weight of both being counterbalanced by a spring, Z, acting on a cross-bar, J, secured to the ends of the arms B′ and pressing them constantly upward. The treadle is connected with bar J by a cord or wire, K, and is sustained by the same spring. The spring is supported by a beam, L, resting in open mortises formed in blocks H nailed to the posts A. This arrangement greatly relieves the operator, who can use both treadle and handle B without feeling their weight. The linen is alternately pushed against its opposed rocker I, and pressed to expel the suds and dirt, and then dropped upon the angular block *d*, when it rolls down to the bottom of the box, being turned over in the operation enough to subject all parts of the mass to repeated pressure and cleansing.

Having thus described my invention, I claim—

I. The combination of the ribbed spring-

rockers, vibrating with their lower ends in recesses *i* at the upper ends of the blocks *d*, having inclined faces, and the ribbed and perforated presser C, swinging between the two rockers and over the inclined faces, as and for the purpose set forth.

2. The presser C, vibrating between spring-rockers I, and provided with a lateral handle, B, in combination with the extensible treadle D and intermediate spring Z, beam L, cross-bar, bearings, and cord, as set forth.

In testimony that I claim the foregoing as my own I hereto affix my signature in presence of two witnesses.

JOHN ARNOLD.

Witnesses:
OLIVER DRAKE,
P. J. INSLEE.