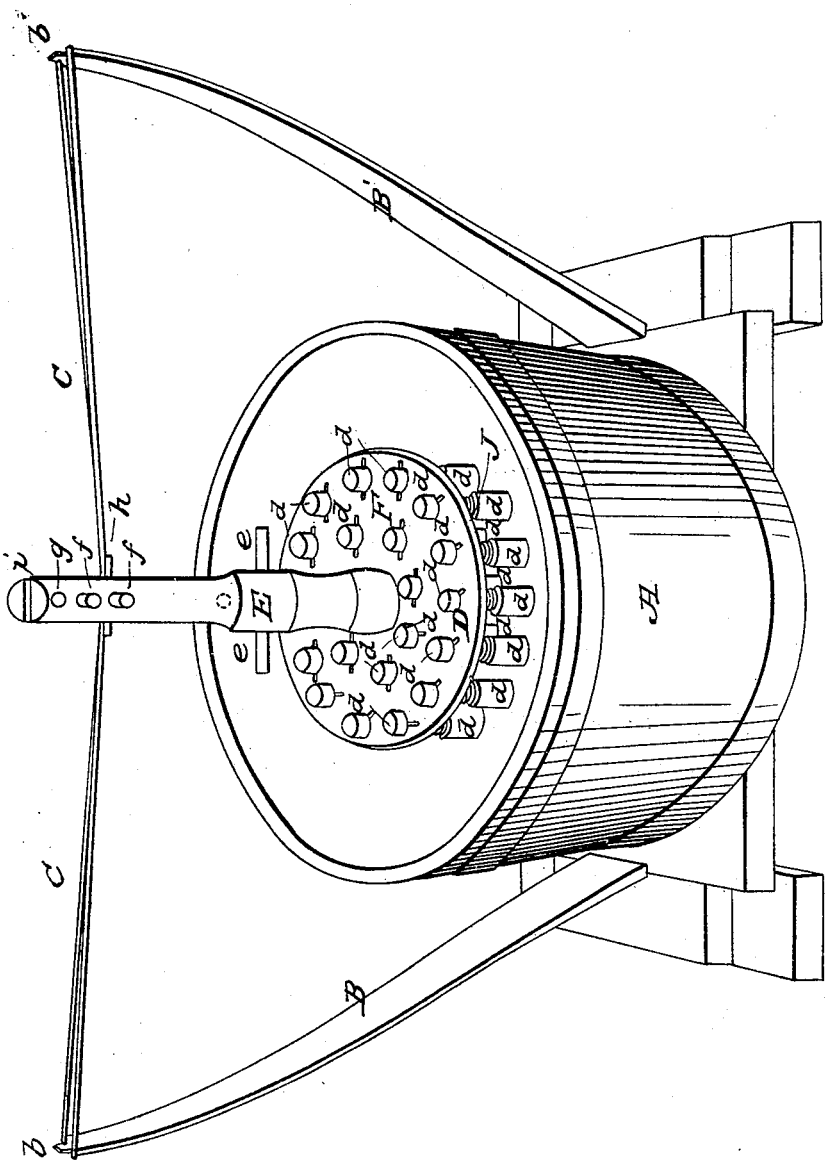
J. JOHNSON.

Washing Machine.

No. 13,356. Patented July 31, 1855.



UNITED STATES PATENT OFFICE.

JOSEE JOHNSON, OF WASHINGTON, DISTRICT OF COLUMBIA.

WASHING-MACHINE.

Specification of Letters Patent No. 13,356, dated July 31, 1855.

To all whom it may concern:

Be it known that I, JOSEE JOHNSON, of the city of Washington, in the District of Columbia, have invented a new and Improved Mode of Constructing Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view showing all the parts described.

Similar characters indicate the parts referred to.

The nature of my invention consists in a new and improved mode of constructing washing-machines. I suspend a pounder, (constructed in a peculiar manner, which will be hereinafter described) upon a cord each end of which is secured to an upright elliptic spring as will be described. The pounder is composed of a disk perforated with a suitable number of holes, through which one end of a corresponding number of pestles are inserted. The lower extremity of said pestles are larger than the upper thereby admitting a shoulder being formed about midway of the pestle. Around the smaller part of the pestle (resting upon said shoulder and operating against the under side of the disk), I place a spiral spring for the purpose of allowing the pestles in the pounder to accommodate themselves to the uneven surface of the clothes in the tub.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A represents the tub which is placed upon a platform, said platform being formed of four pieces as seen in the drawing. B B′ are upright elliptic springs the lower end of which are slipped into mortises formed in the platform for that purpose. The springs B, B′ are not secured stationarily to the platform but are merely slipped into the mortises and can be easily removed by slipping off the cord C which passes around and draws the tops of said springs toward each other, thereby relieving them so that they can be easily drawn out. The object of securing the lower end of the said springs in the platform in such a manner as to admit of their being easily removed is twofold, 1st, so that after the springs have become a little curved, or sprung by being used in one position they may be taken out and turned around, thus subjecting them to a reverse action, by which action they are straightened consequently their elasticity is never impaired by use; 2nd, so that it may be easily taken apart and packed snugly away when not in use. The tub is temporarily secured upon the platform in any convenient manner and may be taken off and used for other purposes aside from washing if desired.

C is a cord by which the pounder is suspended. Said cord passes around the upper extremity of springs B B′ in the manner as seen at *b b′*. Said springs B B′ are drawn toward each other by means of cord C until said cord is strained sufficiently tight to accomplish the desired result.

D, is the pounder which is composed of a disk F, pestles *d* and spiral springs J. It will be seen by examining the drawing that the pestles *d* are provided with a shoulder which is formed by making the lower extremity larger than the upper. It will also be seen by examining the drawing that upon said shoulder, (coiled around the smaller part of the pestles) rests a spiral spring as seen at J and further that the upper ends of the pestles, pass through the disk F and are secured by means of a pin as clearly shown in the drawing. Springs J rest upon the shoulders of the pestles and also act against the under side of the disk. E is the shaft of the pounder the upper end of which is provided with a slot *i* for the purpose of admitting cord C; it is also provided with pins *f*, *f′*, the use of which is to secure cord C in slot *i*, *h* is a key or wedge which acts in conjunction with pins *f*, *f′*, for the purpose of securing the shaft E at the proper point on cord C. *g*, is a hole passing through the shaft for the purpose of enabling the operator to adjust the pounder at a proper elevation to suit the quantity of clothes to be washed. *e* is a handle which passes through shaft E and by means of which the machine is operated.

The operation of my machine is as follows: The clothes, together with the proper quantity of water, being put into the tub, the operator by taking hold of the handle *e*, gives the pounder an up and down motion which is greatly facilitated by the elastic cooperation of springs B B′. Spiral springs J allow pestles *d* to accommodate themselves to the uneven surface of the clothes, and prevent them from breaking or injuring but-

tons or other trimmings. By supplying the tub with the proper quantity of water to float the clothes and operating the pestle upon them in the center of the tub the action of the displaced water will carry the clothes from the outside to the center, thus presenting to the action of the pounder a continuous fresh surface of clothes.

The advantages of my arrangement for washing are as follows: By using springs B B′ I have a convenient portable machine, which could not be the case were the same amount of elasticity to be obtained by the use of a single spring from the fact that it would be necessary to make a single spring of much greater length than is required when two are used and this being the case it would be necessary to secure the spring to a separate fixture, or else to attach a frame to the machine of far too great dimensions for convenience or easy portability, and further by using two springs, we have the advantage of a perfectly perpendicular reciprocation of the pounder and also of a steady and regular motion which cannot be obtained by the use of one spring, as one spring having one end secured stationary, and the other moving up and down must necessarily describe an arc which would give an unsteady motion to the pounder. Besides it will be seen that by the use of two springs arranged as described the bow and arrow principle is substantially embraced which is (in the opinion of petitioner) far superior in point of elasticity and utility, when applied in the manner as here presented, to any single spring arrangement now known. Another very essential advantage of my machine over others now in use is that it will wash clothes perfectly clean in an incredibly short time and never has been known in any instance to injure in the slightest degree the most delicate of wearing apparel although it has been tested repeatedly.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is—

The arrangement and combination of disk D, pestles *d* and spiral springs J or their equivalents which form the pounder as described and set forth.

JOSEE JOHNSON.

Witnesses:
CHS. P. WARMALL,
ALEX. LAMMOND, Jr.