J. A. EBERLY.

Washing-Machine.

No. 162,359. Patented April 20, 1875.

Fig. 1.

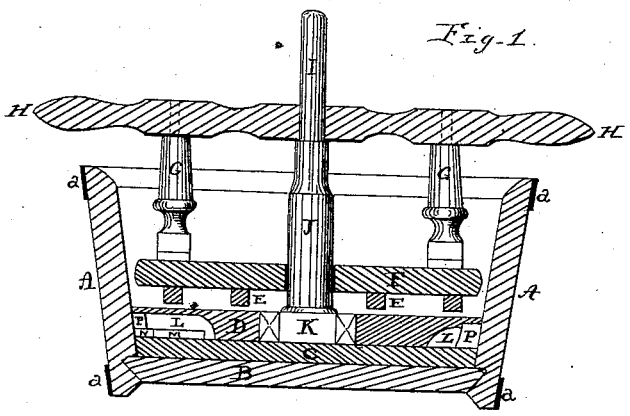


Fig. 2.

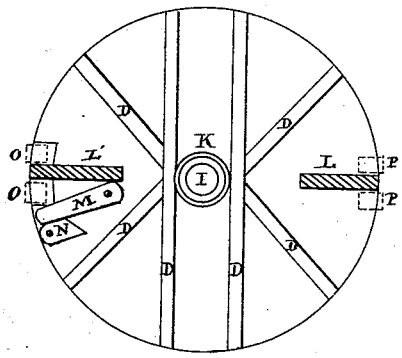
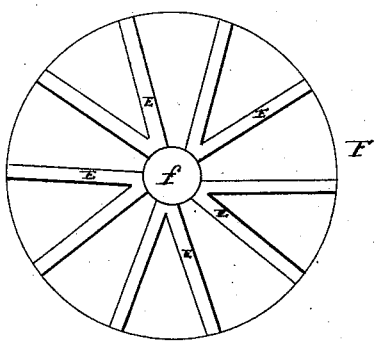


Fig. 3.



WITNESSES.

Cyrus Ream

Michael H. Shirk

INVENTOR.

J. A. Eberly

UNITED STATES PATENT OFFICE.

JOHN A. EBERLY, OF REAMSTOWN, ASSIGNOR OF ONE-HALF HIS RIGHT TO MARTIN SHIRLEY, OF HINKLETOWN, PENNSYLVANIA.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **162,359**, dated April 20, 1875; application filed November 4, 1874.

To all whom it may concern:

Be it known that I, JOHN A. EBERLY, of Reamstown, in the county of Lancaster and State of Pennsylvania, have invented certain Improvements in Washing-Machines, of which the following is a specification:

This invention relates to a certain class of washing-machines, which have a central shaft with a disk attached, either connected with the bottom of the tub or separate; as also a cross-handle, mounted on a movable disk, both disks being provided with slats or rubbers.

The novelty and utility of the improvement consists in the arrangement of the rubbers on the several disks, and mode of connecting to an ordinary wash-tub.

The accompanying drawing illustrates the construction and arrangement of the machine, in which—

Figure 1 is a vertical section of all the parts in place within an ordinary washing-tub. Fig. 2 shows the stationary disk, rubbers, and locking device; Fig. 3, the under side of the movable disk, with its V-shaped radial rubbers.

An ordinary tub, A, is provided with a pair of blocks, P P, on opposite sides, separated to receive the ends of the slats or tongues L L on the disk C, to hold the disk in place. This disk is also notched out on each side of the tongue L′, so as to allow the said notches O to slip over the lugs or blocks P, and allow the periphery of the disk C to fit up to the inside of the tub. The one lug P, being shorter, allows the latch M to be turned under, (being held by a pivot-pin, *m*,) being placed along the lower side of the tongue L′. There is also a turn-button, N, which turns against the latch M, and holds it firmly in place. By first inserting the tongue L opposite the locking device, this brings the lugs P on that side, to hold the disk thrust under them, when the notches on the other side will allow the disk to be put in place and locked. This lower or stationary disk C, Fig. 2, has two parallel rubbers, D′, across the diameter on each side of the base K of the central shaft J I, and at right angles to the tongues L′ L. From the center of said parallel rubbers D′ a pair of V-shaped radial rubbers, D, extend to the outer edge of the disk, with the holding and locking device above mentioned. The turning-disk F has two posts, G, connected to a central cross-arm, H, with handled or prolonged ends, by which motion is imparted to the disk F, which, like said handle H, is perforated to receive the shaft J, forming the central pivot, as in other machines of this class.

Fig. 3 shows the arrangement of the five pair of V-shaped radial rubbers around the central opening *f* for the shaft J, with its collar at the base of I, on which the handle arm rests.

The operation is simple, and does not differ, so far as rotating the disk back and forth, from other machines.

All the change required to be made in an ordinary wash-tub is the attachment of the two pair of lugs or blocks of wood P P below, on the inner side.

The improvement, as already stated, for making this machine more efficient is found, upon actual trial, to consist in the arrangement of the rubbers.

I am aware that patents so long ago as 1856 show the general construction, but differ substantially in the arrangement of the rubbers; hence I confine myself to said arrangement and the locking device, in combination with the lugs on an ordinary tub. In other words,

What I claim is—

The disk F, having V-shaped radiating rubbers, and the disk C, provided with notches O O, in combination with the lugs P, tongues L L′, latch M, and turn-button N, all substantially as and for the purpose described.

J. A. EBERLY.

Witnesses:

CYRUS REAM,

MICHAEL H. SHIRK.