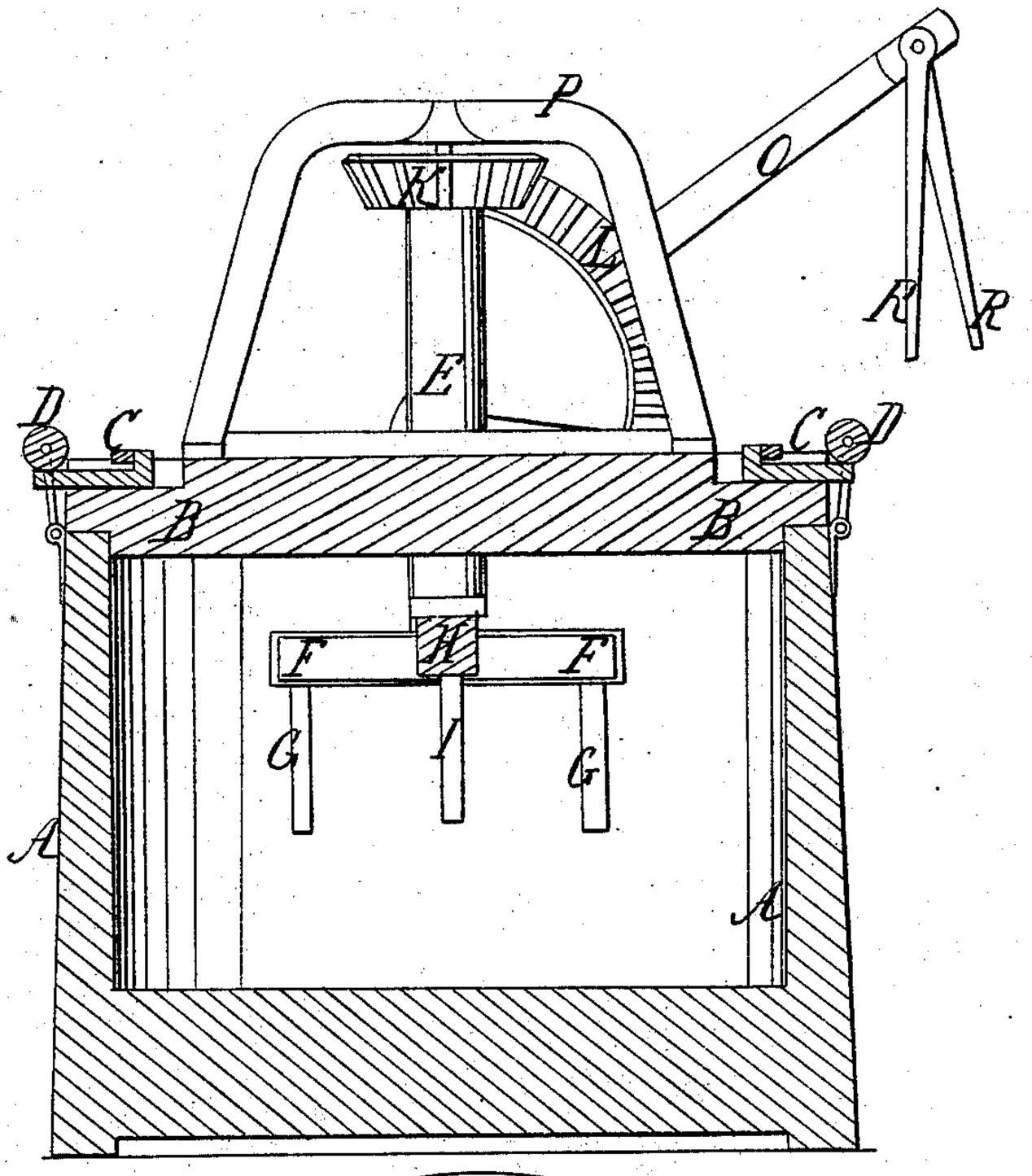
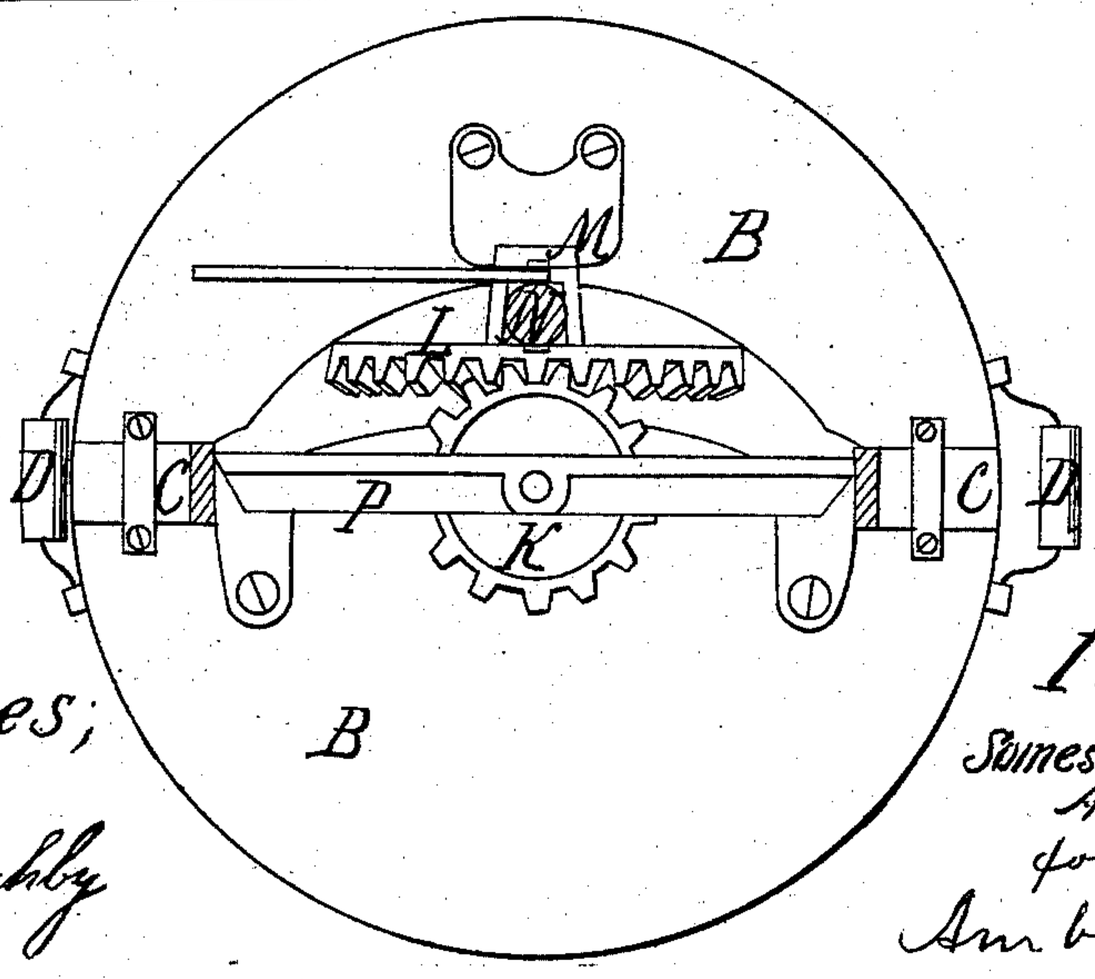
A. Edson,

Washing Machine,

No. 36,771. Patented Oct. 28, 1862





Witnesses;
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UNITED STATES PATENT OFFICE.

AMBLER EDSON, OF CAMBRIDGE, ILLINOIS.

IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. **36,771**, dated October 28, 1862.

To all whom it may concern:

Be it known that I, AMBLER EDSON, of Cambridge, Henry county, State of Illinois, have invented a new and Improved Washing-Machine; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in washing clothes by giving them a reciprocating rotary motion in the water, which motion is produced by a number of pins projecting downward into the tub, so as to rest upon the clothes at unequal distances from the center of the tub.

This machine is operated by a segment, the cogs of which mesh into a pinion on a shaft, to the lower end of which is fastened the device for operating on the clothes.

Figure 1 is a vertical section of my improved washing-machine. Fig. 2 is a plan view of the same.

In Fig. 1, A A is the wash-tub.

B B is the lid or covering, which is fastened to the tub by forcing the slides C C, which are on the lid, into the handles or ears D D, which are on the tub.

E is a shaft, which passes through the lid B B, and has attached to its lower end the stirrer or device for moving the clothes in the tub. The stirrer consists of two arms crossing each other at right angles, each having two or more pins projecting downward to rest upon the clothes. It is an advantage to arrange the pins at different distances from the center of the shaft by which they are turned.

F F represent one arm, with its pins G G. The other arm is seen at H, which is an end view of it. The pin I (seen in the end view) hides the pin in the other end of the arm.

K is a pinion on the upper end of the shaft E, the cogs of which mesh into the cogs of the segment L, so that when the segment is moved either way the shaft E is turned, and thus gives motion to the stirrer in the tub. The segment (represented at L is) peculiarly constructed.

The stirrup M and socket N (seen in Fig. 2) on the reverse side from the cogs are both designed to receive and hold the lever O. It is by means of this lever that motion is imparted to the machine.

The segment L and pinion K are both beveled, as seen in the drawings, and are so arranged together that the pinion cannot drop downward out of gear, because the upper edge of the cogs on the pinion will strike the lower edge of the cogs on the segment before they slip entirely past each other. This device or arrangement is necessary to keep the cogs in gear and to hold the shaft E suspended in its proper position.

When clothes are put into the tub under the stirrer, the weight of the shaft E and all attached to it rests on the clothes, and when a large quantity of clothes are put into the tub the tendency is to raise the shaft upward, and would throw the pinion out of gear if it were not held in place by the frame P, which passes over it, and serves as a journal-box and guard at the same time.

R R represent two arms pivoted near the outer end of the lever O, and are designed to enable two small children to operate the machine by standing one on each side of it, while they apply the necessary force to the arms, which are so arranged as to be conveniently held in the hand while the force is applied.

I will now describe the operation of my improved washing-machine. The clothes to be washed are put into the tub A A, with water enough to allow them to move freely. Then the lid B B, to which all the moving parts of the machine are attached, is placed on the tub, and is fastened there by forcing the slides C C, which are on the lid, into the handles D D, which are on the tub. This places the stirrer or washer on the top of the clothes in the tub. When force is applied to the lever O, either directly or by means of the arms R R, so as to move the segment L, motion will thereby be given through the pinion K to the shaft E, on the lower end of which the stirrer is fastened. As the motion given to the segment is reciprocating, the motion imparted therefrom to the stirrer or washer will be a reciprocating rotary motion, which carries the clothes rapidly through the water and against the bottom and side of the tub in the same reciprocating rotary manner. The rubbing of the clothes on the bottom and side of the tub, as well as the sudden change

of the course of the clothes moving in the water, cleanses them in a very short time.

Having thus fully described and represented my invention, I claim—

The slides C C, the handles D D, the pivoted arms R R, the lever O, the stirrer F F, G G, H, and I, in combination with the beveled pinion K and the beveled segment L, as represented, and for the purpose specified.

In witness that I claim the foregoing I have set my hand in the presence of two witnesses.

AMBLER EDSON.

Witnesses.
W. L. DALRYMPLE,
S. D. ALFRED, Jr.