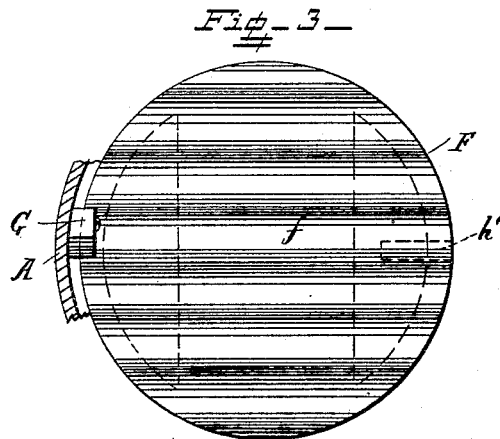
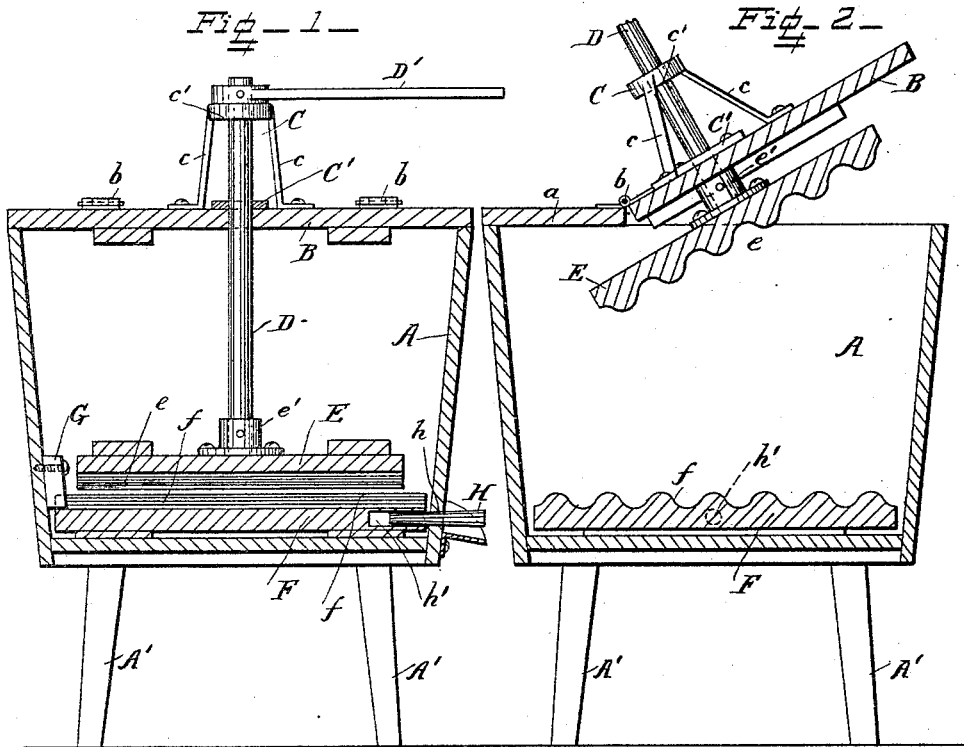


(No Model.)

T. WALDRON.  
WASHING MACHINE.

No. 454,509.

Patented June 23, 1891.



WITNESSES  
Walter Allen  
J. H. Weston

INVENTOR  
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# UNITED STATES PATENT OFFICE.

THOMAS WALDRON, OF NEVADA, MISSOURI.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 454,509, dated June 23, 1891.

Application filed March 26, 1891. Serial No. 386,509. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS WALDRON, a citizen of the United States, residing at Nevada, in the county of Vernon and State of Missouri, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to washing-machines; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a vertical section through the washing-machine. Fig. 2 is also a vertical section, but taken at right angles to the view shown in Fig. 1, and showing the upper wash-board raised and the lid partly open. Fig. 3 is a detail plan view of the lower wash-board.

A is the wash-tub, supported on legs A', and *a* is the segmental stationary portion of the lid secured to the top of the tub.

B is the hinged lid attached to the stationary portion *a* by the hinges *b* and covering the remaining portion of the top of the tub.

C is a bracket provided with legs *c*, secured to the lid B, and C' is a plate secured to the said lid under the bearing *c'* of the bracket.

D is a vertical shaft journaled in the bearing *c'* and plate C', and D' is a handle secured to the upper end of the said shaft and resting upon the bearing *c'*.

E is the upper wash-board, provided with a fluted surface *e*, and *e'* is a socket for securing the wash-board E to the lower end of the shaft D inside the tub.

F is the lower wash-board, provided with the fluted surface *f* and dropped loosely into the bottom of the tub.

G is a projecting stop secured to one side of the tub near the bottom. The edge of the wash-board F is slid under this stop, so that the stop comes between two of the flutes and partly prevents the wash-board from revolving.

H is a plug which passes through the drain-

hole *h* in the side of the tub and projects into a hole *h'* in the edge of the wash-board. This plug wholly prevents the wash-board from revolving and insures the proper locking of the wash-board, as the tub cannot be filled with water until after the drain-hole has been closed by inserting the plug into the holes *h* and *h'*.

The clothes are placed between the two wash-boards and are washed by oscillating the upper wash-board by means of the handle. The contact of the handle with the bearing prevents the two wash-boards from ever touching each other, so that their surfaces will not become worn away. The upper wash-board rises to adapt itself to the thickness of the clothes between the two wash-boards.

The lid of the machine is opened by first raising the upper wash-board until the socket *e'* comes against the lower side of the lid B, and then turning the said lid on its hinges, as shown in Fig. 2. The upper wash-board will then pass through the open space at the top of the tub, and will leave room enough to remove the lower wash-board when the bottom of the tub requires to be cleaned. The upper wash-board always remains connected to the hinged lid, so that it cannot become lost or misplaced.

The whole machine is very simple and efficient, and is very cheaply constructed.

What I claim is—

In a washing-machine, the combination, with the tub provided with a drain-hole, of a fluted wash-board in the bottom of the tub, a stop projecting from the side of the tub between the flutes of the wash-board, and a plug adapted to close the said drain-hole and enter a hole in the edge of the said wash-board, whereby the wash-board may be prevented from revolving, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS WALDRON.

Witnesses:

A. P. WOOLERY,  
JOHN T. BIRDSEYE.