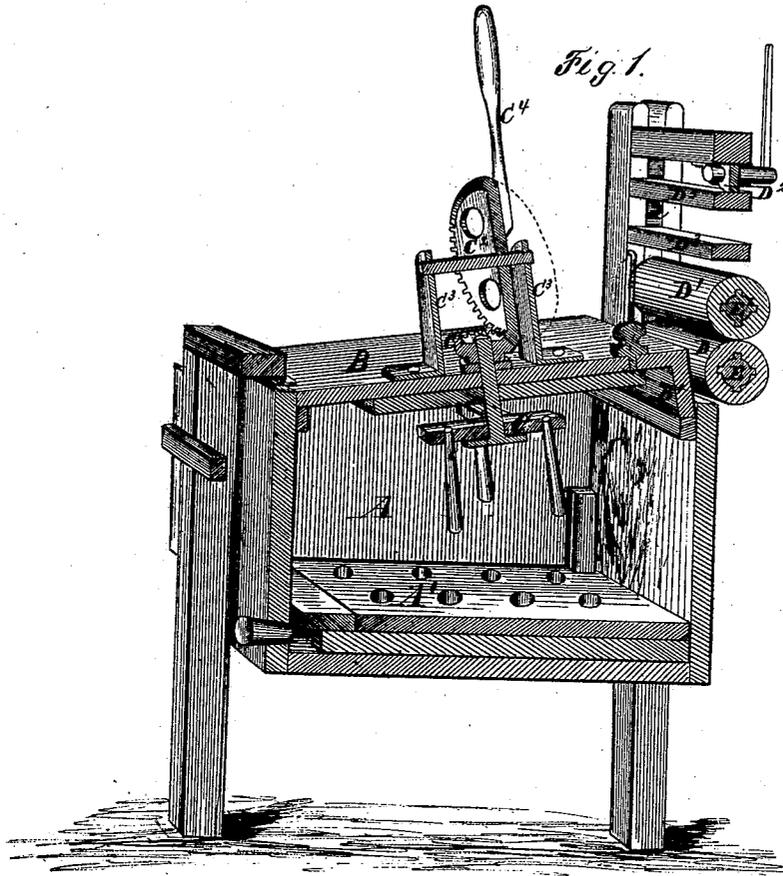


*L. H. Whitney,*

*Washing Machine.*

*No. 109697.*

*Patented Nov. 29. 1870*



*Witnesses.*

*A. N. Mygatt*  
*C. C. Jones*

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# United States Patent Office.

LEVI H. WHITNEY, OF WASHINGTON, DISTRICT OF COLUMBIA.

Letters Patent No. 109,697, dated November 29, 1870; antedated November 19, 1870.

## IMPROVEMENT IN WASHING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

I, LEVI H. WHITNEY, of Washington, in the District of Columbia, have invented certain Improvements in Washing-Machines, of which the following is a specification, reference being had to the annexed drawing making part thereof, and in which—

Figure 1 is a sectional perspective.

This invention relates to a washing-machine; and the improvements consist in making the lid of the suds-box inclined, so that the agitator, which has its bearings in such lid, is caused to assume an inclined position, and so that when vibrated its arms move in a diagonal plane with reference to the bottom of the suds-box.

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

In the annexed drawing—

A represents the suds-box, and

A', the false perforated bottom therein, resting upon cleats secured to the bottom of the box, which may be mounted upon legs to raise it to a convenient height.

B represents the lid, which, being flush with the top of the box at its rear end, where it is hinged thereto, is made to rise a considerable distance above the top of the suds-box at its forward end, by a downwardly-projecting flange, B', at that end, and inclined flanges at its sides, such flanges resting upon cleats around the upper and inner sides of the box when the lid is closed down.

This inclined position of the lid throws the agitator C, and the mechanism by which the latter is operated, into a correspondingly-inclined position, as all these parts are arranged vertically to the plane of such lid.

The agitator is secured to a shaft projecting through

the lid into the suds-box, said shaft covering at its upper end a bevel pinion, C', which is vibrated by a segmental bevel-wheel, C<sup>2</sup>, arranged upon a shaft having its bearings in standards, C<sup>3</sup>, erected upon the lid. The wheel C<sup>2</sup> is vibrated by a handle, C<sup>4</sup>, thereon.

The effect of this inclined position of the agitator will be that its arms move in a diagonal plane with reference to the bottom of the suds-box, so as to pick up the clothes resting upon the bottom and carry them forward and upward through the body of the water in the box, thus cleansing such clothes more rapidly and thoroughly than can be done by agitators the arms of which move in a horizontal plane. It is also found that a machine thus arranged works much more easily than the old style.

D D' represent the two rubber rollers of a wringer, mounted in slotted standards erected upon the forward end of the suds-box.

The rollers are held in contact by an eccentric, D<sup>2</sup>, acting upon sliding bars, D<sup>3</sup> D<sup>3</sup>, which in turn act upon the caps of the upper roller's journals.

The bars D<sup>3</sup> D<sup>3</sup> are separated by rubber or other springs, d, so that the lower one may yield sufficiently to let buttons, &c., pass freely through the rollers.

What I claim, and desire to secure by Letters Patent, is—

A suds-box of a washing-machine, having an inclined lid, in which the agitator has its bearings, so that the arms of such agitator move in a diagonal plane, substantially as and for the purpose set forth.

L. H. WHITNEY.

Witnesses:

EDM. F. BROWN,  
H. N. MYGATT.