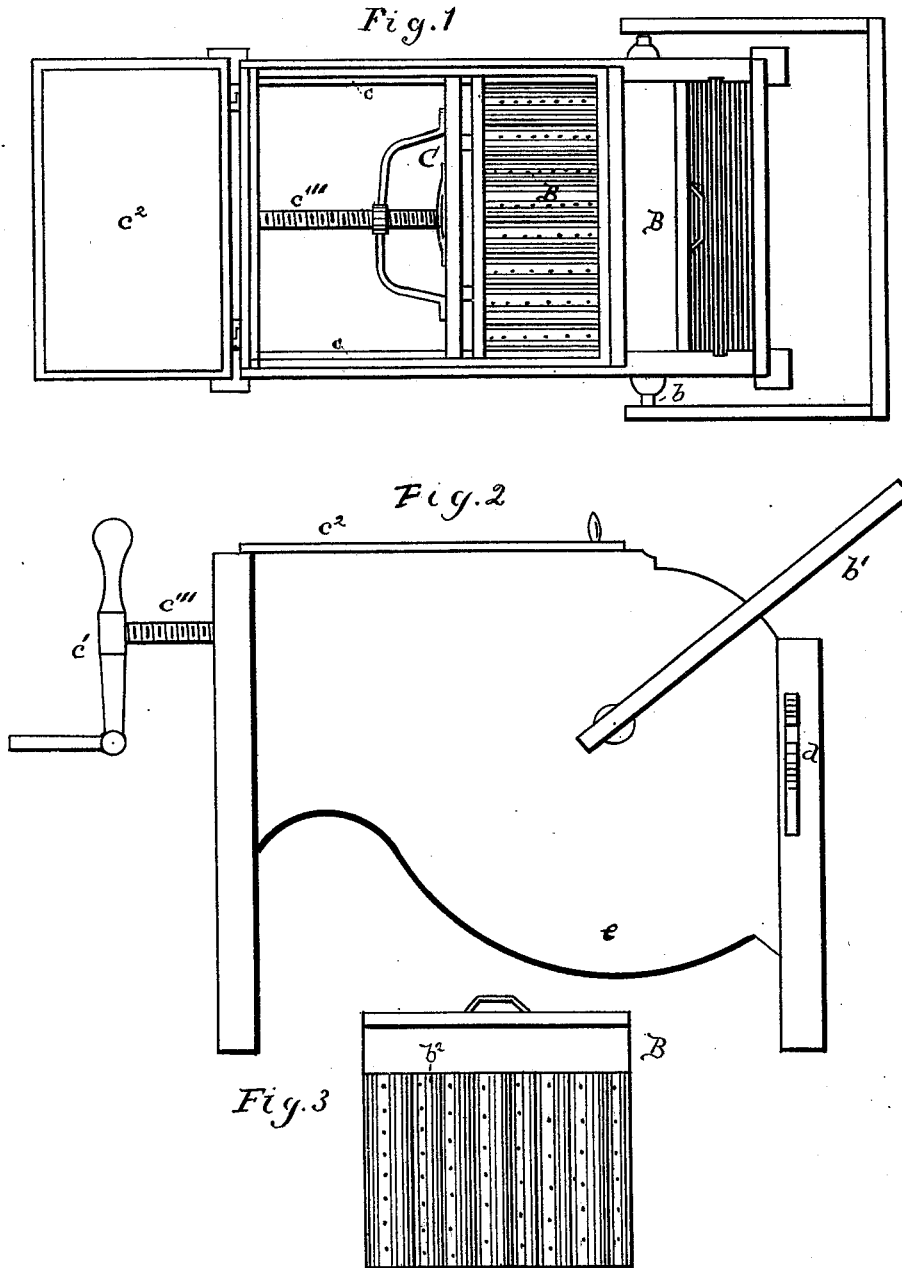


R. AUSTIN.
Washing-Machine.

No. 214,346.

Patented April 15, 1879.



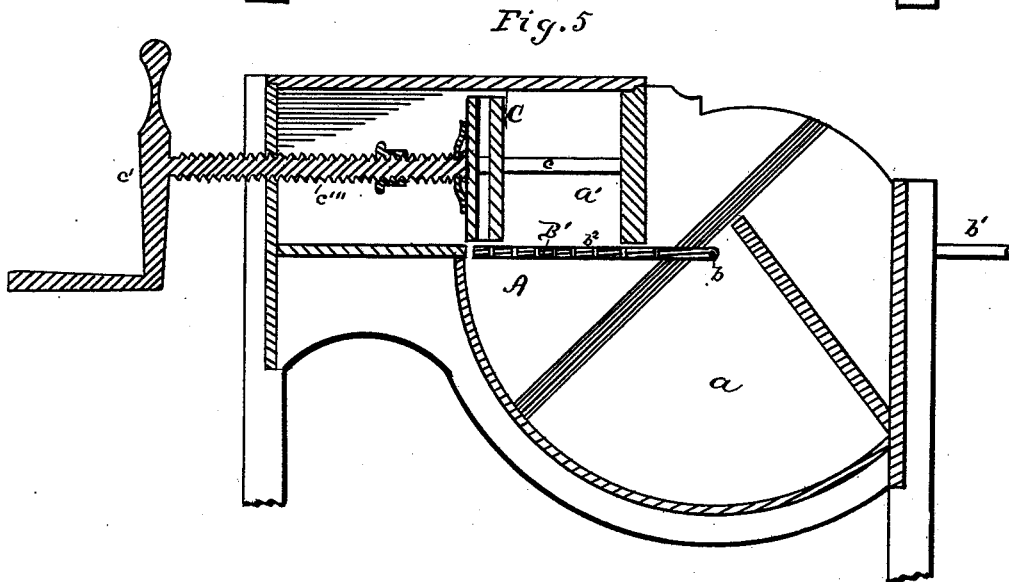
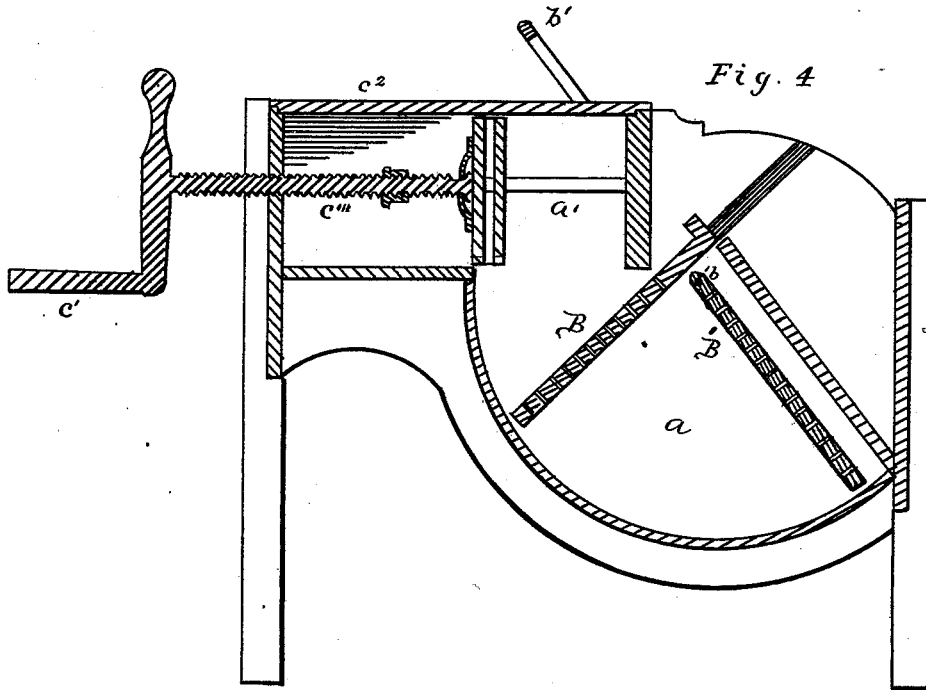
WITNESSES
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INVENTOR
Russell Austin
By Myer & Co.
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UNITED STATES PATENT OFFICE.

RUSSELL AUSTIN, OF CAMDEN, NEW JERSEY.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **214,346**, dated April 15, 1879; application filed February 12, 1879.

To all whom it may concern:

Be it known that I, RUSSELL AUSTIN, of Camden, in the county of Camden and State of New Jersey, have invented certain new and useful Improvements in Combined Washing, Wringing, and Rinsing Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is a top or plan view of a washing-machine embodying my improvement. Fig. 2 is a side elevation of the same. Fig. 3 illustrates the sliding board B, hereinafter referred to. Fig. 4 is a longitudinal section taken on a plane through the center of the machine, and illustrates the board B in position and the machine ready for the operation of washing clothes. Fig. 5 is a like sectional view, but with the board B removed and the board B' in an elevated horizontal position, the machine, in this instance, being ready for wringing the clothes.

Corresponding parts in the several figures are denoted by like letters.

This invention appertains to certain improvements in washing-machines, and is adapted to enable the washing, the squeezing or wringing, and the rinsing of the articles to be cleansed, all in one machine, in the most effectual and expeditious manner; and it consists, essentially, in a novel arrangement of compartments for the wash-boards and a wringer, and certain means whereby one of the wash-boards is adapted to be secured in an elevated position, so as to constitute a temporary bottom for a portion of the compartment, which serves for wringing purposes, all as hereinafter more fully described, and pointed out in the claims.

In the accompanying drawings, A refers to a receptacle, divided into two compartments, *a a'*. The compartment *a*, which receives the articles to be cleansed or washed, is provided with a curved or inclined bottom, with its inner end reaching up about midway of the bottom of the compartment *a'*, from which point

a' the bottom of the latter is left open, as clearly seen in the sectional figures. The object of this will be seen in connection with the lifting of the washed articles into the chamber or compartment *a'* by one of the wash-boards, which will be presently set forth.

B B' are the wash-boards, covered with any suitable metal—one adjusted in grooves in the inner sides of the washing compartment or chamber at about an angle of forty-five degrees, and the other hung, by means of a shaft, *b*, in the sides of the said chamber or compartment, to which shaft is attached a lever or handle, *b'*, adapted to be operated by the hand; or, instead of the hand-lever *b'*, the wash-board B' may be provided with means for operating it by the foot, or it may be provided with means for its operation by the joint power of the hands and feet. These boards are provided with perforations throughout their surfaces, as shown, the object of which is to provide for the escape of the dirty water from the articles as the boards are brought forcibly into contact with the articles while washing the same. The said boards are further provided with ribs *b²*, to aid the washing of the articles, the ribs upon one board fitting between those upon the other when the two come together.

C is a follower, disposed within the compartment or chamber *a'*, with its ends held in position by the guide-rails *c*, and serving as a squeezer or wringer. The follower or squeezer C is worked by a lever and screw, *c' c''*, or by any other suitable means or power. This chamber is provided, also, with a cover or lid, *c²*, to prevent the escape of steam, and to prevent the water from splashing out of the receptacle while washing.

It will be seen that the grasping of the articles while the same are being washed is not necessary in the operation of this machine, and that they are thoroughly and quickly cleansed with the outlay of strength and time required in the use of the hands alone greatly lessened.

The operation is as follows: The articles are introduced into the chamber *a* through the open bottom of the chamber *a'*, the board B having been first removed, after which the said board is replaced, and the hand-lever *b'* grasped and moved up and down, by which

the articles will be struck by the board B' and forced against the board B, after the manner of squeezing or pounding the articles, but not rubbing them, which is greatly objectionable, owing to the wearing of the same and the liability to detach the buttons. After this the board B is again removed, when, by pressing downward upon the hand-lever *b*¹, the board B' will serve to lift the washed articles up through the opening in the bottom of the chamber or compartment *a'* into said chamber, in which elevated position the said board B', with its articles, will be temporarily held by bringing its operating-lever *b*¹ into engagement with a spring-catch, *d*, affixed to the side of the receptacle A, and the said articles be presented to the action of the follower or squeezer C. The articles having been squeezed or relieved of the adhering particles of water, and the dirty water allowed to pass from the receptacle through the spigot or faucet *e*, adjusted in the side of the receptacle, near its bottom, the lever *b*¹ is disengaged from its catch *d*, when the board B', with its load of articles, can be again lowered into the receptacle, to be rinsed, thus effecting the washing, the squeezing, and the rinsing of the ar-

ticles, all in one machine, in the most expeditious and effectual manner.

Having thus fully described my invention, I claim and desire to secure by Letters Patent—

1. A washing-machine divided into the two communicating compartments *a* and *a'*, the compartment *a* having its curved bottom extending upward to about midway of the bottom of compartment *a'*, and a swinging wash-board, B', being suspended within said compartment *a*, and adapted to close communication between both compartments while in an elevated position, substantially as shown and set forth.

2. A washing-machine provided with the communicating compartments *a* and *a'*, the follower C, swinging wash-board B', and removable board B, substantially as shown and described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

RUSSELL AUSTIN.

Witnesses:

J. F. BOARDMAN,
JAMES M. CASSADY.