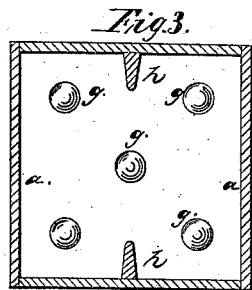
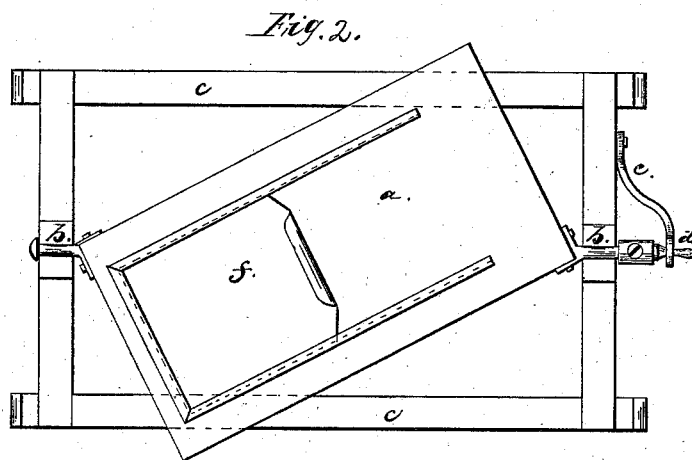
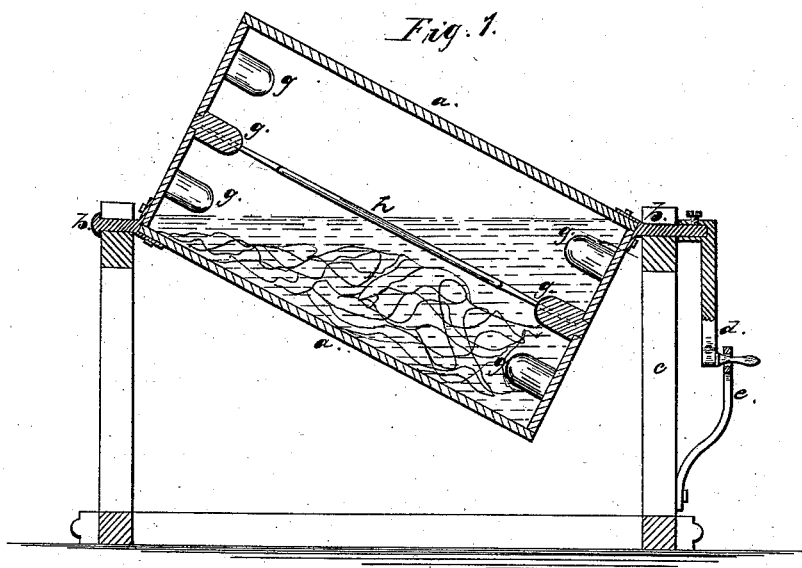


*B. F. Miller,*  
*Washing Machine,*  
*N<sup>o</sup> 54,578.* *Patented May 8, 1866.*



*Witnesses:*  
*Chas. H. Miller*  
*Chas. H. Miller*

*Inventor:*  
*B. F. Miller.*

# UNITED STATES PATENT OFFICE.

BENJAMIN F. MILLER, OF NEW YORK, N. Y.

## IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. 54,578, dated May 8, 1866.

*To all whom it may concern:*

Be it known that I, BENJAMIN F. MILLER, of the city and State of New York, have invented and made a certain new and useful Improvement in Washing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is a vertical longitudinal section of my improved machine. Fig. 2 is a plan of the same, and Fig. 3 is a cross-section of the receptacle for the clothes.

Similar marks of reference denote the same parts.

Washing-machines have been formed of a square or polygonal box supported upon axles or journals at opposite corners or angles; but the clothes were liable to become matted together and only the outside portions be properly washed.

The nature of my said invention consists in combining with a rectangular or prismatic box a series of fingers projecting from the insides at the ends and ribs along the inside of the box, so that the clothes shall be separated, kept apart, and changed in position, while the water and suds are caused to flow back and forth through the clothes in consequence of the peculiar shape of the box and the revolving motion given to it, whereby the washing is effected thoroughly and with but little labor and no injury to the clothes.

In the drawings, *a* represents a rectangular or prismatic box mounted upon the axles or journals *b b*, that are received in notched bearings or boxes in the frame *c* or other suitable support.

*d* is a crank by which the machine is turned, and *e* is a hook that can be hooked over the crank to hold it and the machine in place while

the clothes are being put in or taken out of said machine.

On one side of the box *a* is a cover, *f*, set in slides lined with india-rubber or formed in any other manner that will insure the cover being water-tight when closed.

Within the box *a* are fingers *g g*, projecting from the ends, and flanges or ribs *h h*, running along the sides of said box *a*.

The fingers *g g* hold the clothes some little distance from the ends in order that the water or suds may flow more freely through and around them than would be possible if the clothes came directly into contact with the box, and these fingers partially detain the clothes as they become wrapped around them, thereby causing the motion of the water to separate the clothes. The flanges *h h* cause a separation of the clothes, because as they come around under the clothes they lift or draw out the lower ones, raising them up, spreading them by the action of the water as it runs off the flange, and then the clothes thus raised slide off into the water and come upon the top of the mass of clothes, thus keeping the clothes as much loose and free as possible and insuring the equal presentation of each piece to the washing operation.

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

1. The fingers *g*, in combination with the box *a*, mounted as set forth, for the purposes and substantially as specified.

2. In combination with the box *a*, mounted as specified, the flanges *h*, for the purposes and as set forth.

In witness whereof I have hereunto set my signature this 6th day of March, A. D. 1866.

Witnesses:

B. F. MILLER.

GEO. D. WALKER,

CHAS. H. SMITH.