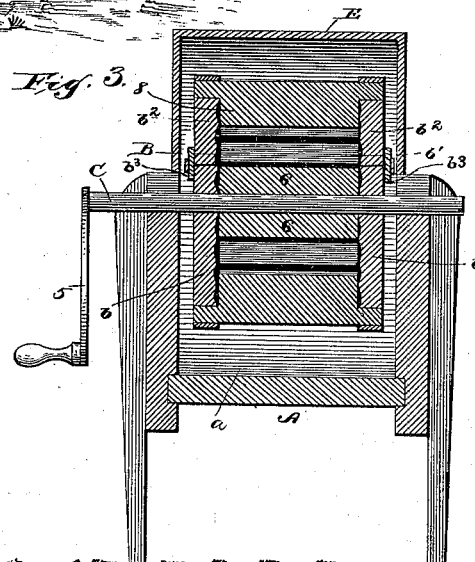
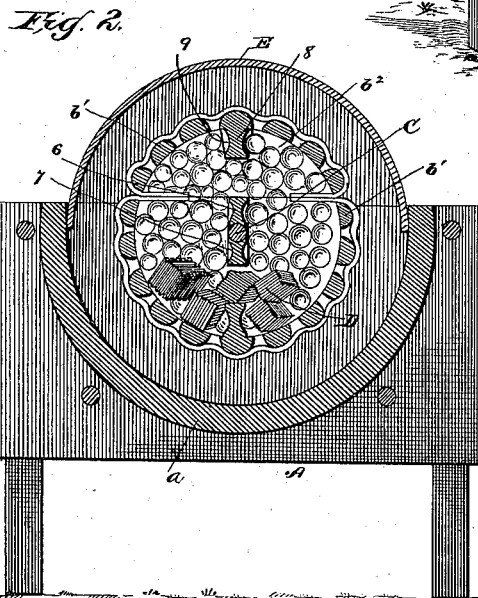
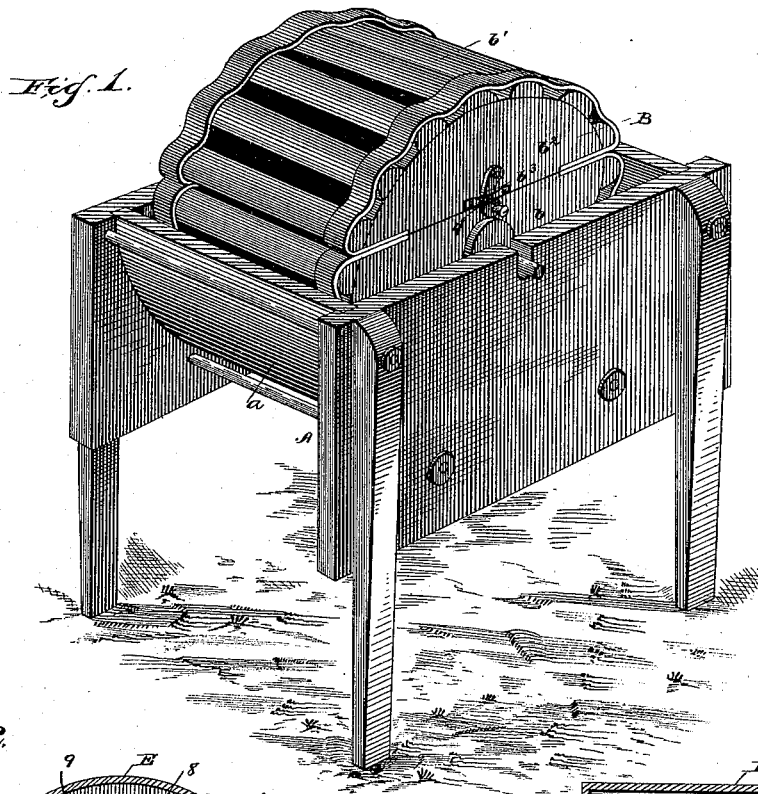


(No Model.)

J. H. ALLEN.  
WASHING MACHINE.

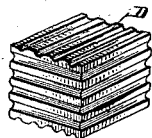
No. 383,683.

Patented May 29, 1888.



WITNESSES.

Edwin L. Yewell.  
John Enders Jr.



*Fig. 4.*

INVENTOR,  
John H. Allen.  
By *Ames & Co.*  
Attorneys.

# UNITED STATES PATENT OFFICE.

JOHN HERMAN ALLEN, OF KEYSER, WEST VIRGINIA.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 383,683, dated May 29, 1888.

Application filed December 5, 1887. Serial No. 257,037. (No model.)

### *To all whom it may concern:*

Be it known that I, JOHN HERMAN ALLEN, a citizen of the United States of America, residing at Keyser, in the county of Mineral and State of West Virginia, have invented certain new and useful Improvements in Washing-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention pertains to certain new and useful improvements in washing-machines, having for its object the provision of simple and efficient means for thoroughly washing or cleansing the clothes or articles of wear in a short space of time; and the invention consists in the detail construction, combination, and arrangement of the parts, substantially as hereinafter fully set forth, and particularly pointed out in the claims.

20 In the accompanying drawings, Figure 1 is a view in perspective of my invention with the cover removed. Fig. 2 is a longitudinal sectional view. Fig. 3 is a cross sectional view, and Fig. 4 is a detail.

25 Referring to the drawings, A represents an ordinary box or tub having a semicircular bottom, *a*, as shown.

B is the revolving cylinder or receptacle, composed of two ends or heads, *b b*, connected by cross-bars *b'*, between each two of which is an opening or space, as shown. This cylinder or receptacle B has a removable section, *b''*, which is firmly held in position by hooks *b'''* on both sides thereof engaging studs on the ends or heads *b* of the main portion of said cylinder or receptacle, said hooks being preferably held tightly against the sides of the cylinder or receptacle by spring-plates 4, secured to the removable section.

40 The operating-shaft C of the cylinder or drum is passed through apertures in the ends thereof, and rests in suitable openings in the sides of the box or tub A, the end of said shaft being provided with an ordinary crank-handle, 5. This shaft C is provided with two agitating-paddles or transverse wings, 6, in the surfaces of which are promiscuously-formed circular detents or recesses 7, as shown. In the cylinder or receptacle B and the removable section *b''* are also secured two or more inwardly-projecting deflecting-bars, 8, the surfaces of which are also provided with circular detents or recesses 9. The inner opposite sur-

faces of the ends or heads *b* of the cylinder or receptacle are also provided with these circular detents or recesses, as shown. 55

D are small cubes provided with grooved or ribbed surfaces, as shown, any number of said cubes in practice being placed within the said cylinder or receptacle. 60

E is the top or cover, designed to encompass the projecting portion of the cylinder or receptacle, as shown. From what has been said it will be seen that by removing the section *b''* the cylinder or receptacle can be supplied with the clothes or other articles to be washed, and also with the desired number of cubes D, the box or tub A being provided with the desired quantity of water. 65

By turning the operating-shaft C the cylinder or receptacle will be caused to revolve, producing the agitation of the contents thereof; and by reason of the striking of the cubes against the said clothes, and the striking of the latter against the recessed agitating-paddles, the deflecting-bars 8, and the ends or heads of the cylinder or receptacle, the clothes are thereby thoroughly cleansed or washed. 70

By reason of the circular detents or recesses formed in the agitating-paddles, the deflectors, and the ends or heads of the cylinder, together with the grooved cubes, the clothes are quickly and thoroughly cleansed. 75

I claim as my invention—

1. As an improvement in washing-machines of the class herein described, the revolving cylinder or receptacle having a removable section and deflectors, the ends or heads of said cylinder or receptacle and the sides of the deflectors being provided with circular detents or recesses and the cubes, substantially as shown and described. 80

2. The combination, with the box or tub, of the cylinder or receptacle, the operating-shaft, the agitating-paddles, the deflectors, and the grooved cubes, the said paddles and deflectors and the ends or heads of the cylinder or receptacle being provided with circular detents or recesses, substantially as shown, and for the purpose stated. 85

In testimony whereof I affix my signature in presence of two witnesses. 90

JOHN HERMAN ALLEN.

Witnesses:

J. G. THALAKER,  
W. A. LILLER.