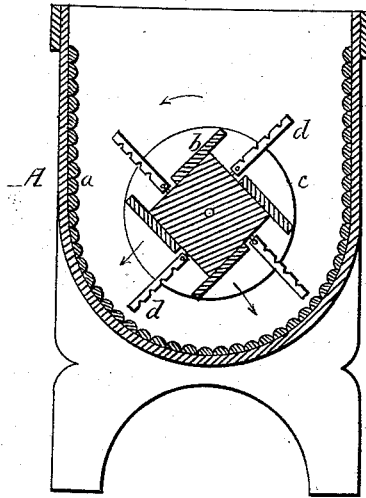
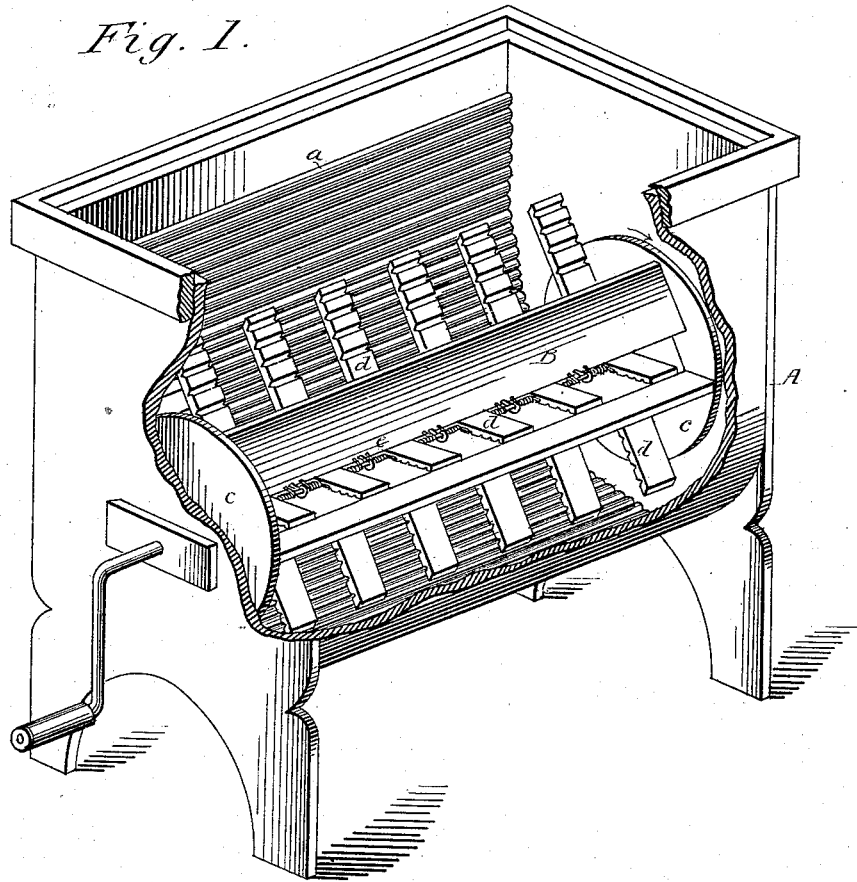


C. F. SHEPPARD.  
Washing-Machine.

No. 217,554.

Patented July 15, 1879.

*Fig. 1.*



*Fig. 2.*

*Attest:*

*Laynes M. Watson  
C. A. Rodney*

*Inventor.*

*Charles F. Sheppard*

# UNITED STATES PATENT OFFICE.

CHARLES F. SHEPPARD, OF WILMINGTON, DELAWARE.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **217,554**, dated July 15, 1879; application filed January 16, 1878.

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

Be it known that I, CHAS. F. SHEPPARD, of Wilmington, in the county of New Castle and State of Delaware, have invented a new and useful Improvement in Washing-Machines for Family or Laundry Purposes, which improvement is fully set forth in the following specification and accompanying drawings.

My invention is a washing-machine constructed, as fully described hereinafter, so as to effectually cleanse different articles of clothing without danger of tearing or unduly abrading the same.

In the drawings forming part of this specification, Figure 1 is a perspective view of my machine, a portion being cut away to show the interior; and Fig. 2, a transverse section.

A is a tank having parallel sides and a rounded bottom, and a series of longitudinal internal ribs, *a*. B is a rectangular shaft, to the sides of which are secured, permanently, plates, which project so as to form flanges *b*, extending between disks *c* on the shaft adjacent to the ends of the tank. Near the center of each side of the shaft is hung a series of blades, *d*, arranged to swing freely and combined with springs *e*, which tend to maintain them in the position shown in Fig. 1, the faces of said blades being recessed or ribbed, if desired.

The tank being partially filled with suds and the clothing introduced, a rotary motion in the direction of the arrow is imparted to the shaft,

when the clothing will be carried therewith against the ribs *a*, and out of the water and over the shaft, being thereby spread and opened, and again against the ribs *a*, while the blades *b* will force the water outward and through the clothing. These combined actions will rapidly subject every portion of the clothing to a rubbing action, will carry it rapidly through the water, and at the same time force the latter through the clothing, thereby extracting and carrying off the dirt.

Inasmuch as the blades *d* will yield, they will press the clothing against the ribs *a* without jamming or tearing the same, and will accommodate their pressure to the extent and character of the articles acted upon. They will also spring upward on emerging from the water, and throw the clothing forward, so as to open the same.

The disks *c* prevent the clothing from being rubbed against the end of the tank.

I claim—

1. The combination of the tank A, having internal ribs, *a*, and longitudinal revolving shaft B, carrying at each side a series of spring-blades, *d*, substantially as specified.

2. The combination of the ribbed tank A, shaft B, spring-blades *d* and stationary blades *b*, and disks *c*, substantially as set forth.

CHARLES F. SHEPPARD.

Witnesses:

JAMES M. WATSON,  
C. A. RODNEY.