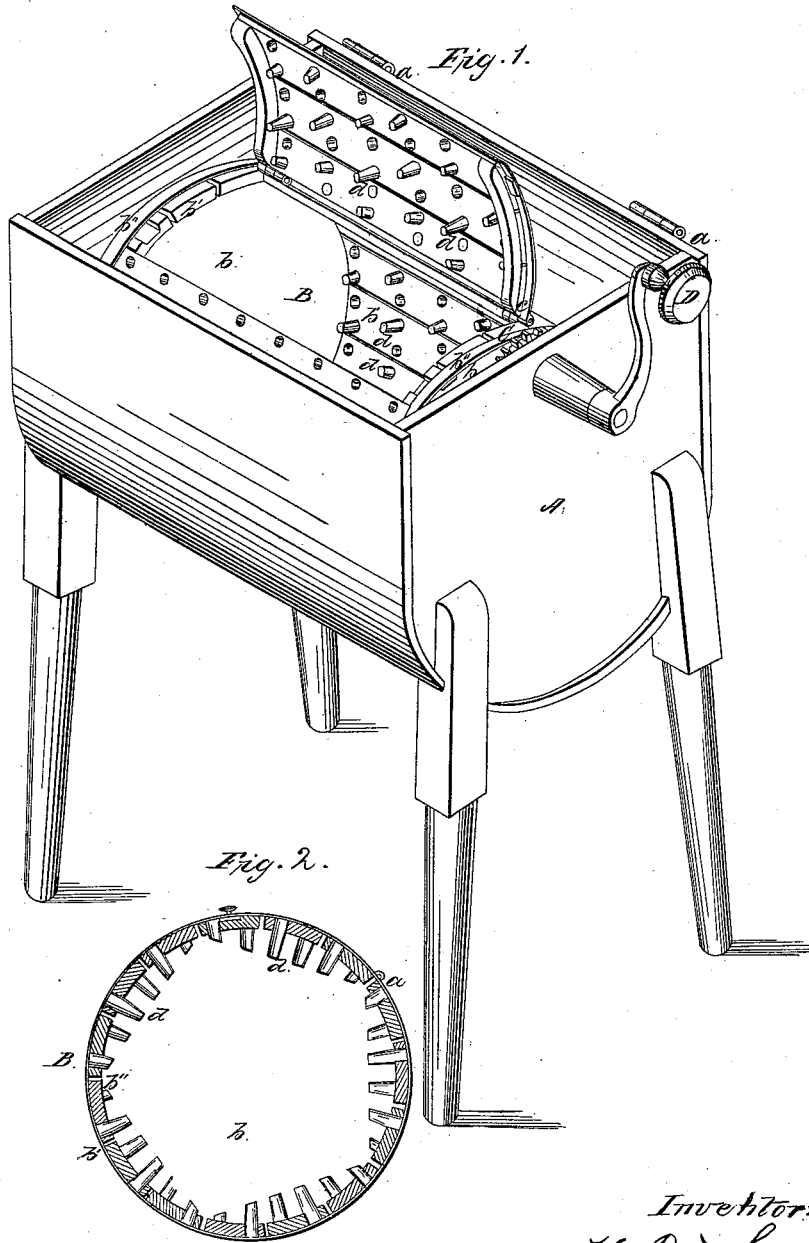


*H. E. Smith,*  
*Washing Machine,*  
*N<sup>o</sup> 50,638.* *Patented Oct. 24, 1865.*



*Witnesses:*  
*James H. Layman*  
*Charles Ward*

*Inventor:*  
*H. E. Smith*  
*By Knight Bros*  
*attys*

# UNITED STATES PATENT OFFICE.

HAMILTON E. SMITH, OF CINCINNATI, OHIO.

## WASHING-MACHINE.

Specification forming part of Letters Patent No. 50,638, dated October 24, 1865.

*To all whom it may concern:*

Be it known that I, HAMILTON E. SMITH, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Improvement in Washing-Machines; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

My invention relates to the class of washing-machines which comprise a perforated cylinder revolving within a suitable tub or other receptacle; and my improvement consists in arming the concavity of such cylinder with a series of pegs which project into the interior of the cylinder with such varying lengths as for their faces to present collectively a polygonal shape, so as to act, when the cylinder is rotated, as beaters on the material under operation and at the same time permit a free passage of the suds and water.

In the accompanying drawings, Figure 1 is a perspective view of a washing-machine embodying my improvements, the cover of the machine being removed and the lid of the revolving cylinder raised to show the construction of the interior. Fig. 2 is a cross-section of the revolving cylinder, exhibiting the figure described by the face of the pegs.

A is the frame or tub, hinged at *a* to receive a suitable cover.

B is the revolving cylinder or beater constructed, substantially as shown, with heads *b*, staves *b'*, and hoops *b''*, the number of staves being so regulated that they may be subdivided to correspond with the sides of a polygonal figure, one of the subdivisions being hinged at *c* to allow of the insertion or removal of the clothing.

The cylinder may be operated through gearing C by handle D.

The staves *b'* are perforated, as shown in both figures, part of the number of perforations being reserved as ventages for the water when in agitation, the remaining apertures being filled by inwardly-projecting pegs *d*, the pegs and holes alternating, as shown. The pegs are so varied in length that the faces or tips of all the pegs in one subdivision of the cylinder may be in the same plane, each subdivision being a side of a regular polygon. The pegs being at different distances from the center of cylinder B, the face of each subdivision of the cylinder, when in rotation, acts as a beater, the ends of the pegs imitating the action of the human knuckles, while the intervening spaces allow passage for the water and suds, as do the interstices of a woman's fingers.

I claim herein as new and of my invention—

The washing-cylinder provided with alternate perforations and inwardly-projecting pegs whose extremities form collectively a regular polygon, for the purposes set forth.

In testimony of which invention I hereunto set my hand.

HAMILTON E. SMITH.

Witnesses:

GEO. H. KNIGHT,  
JAMES H. LAYMAN.