

E. Tharn,
Washing Machine,
N^o 20,101. *Patented Apr. 27, 1858.*

Fig. 1.

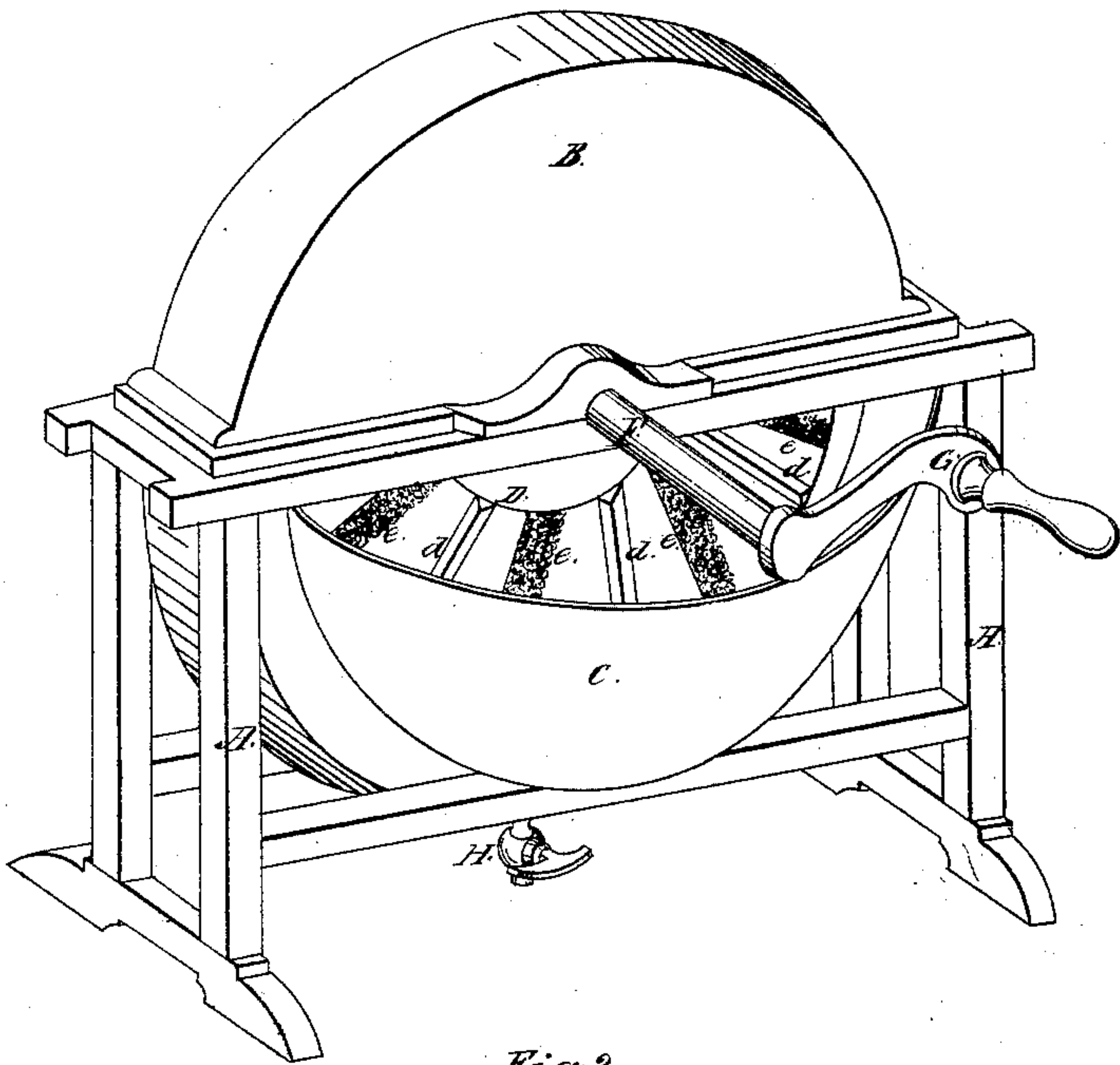
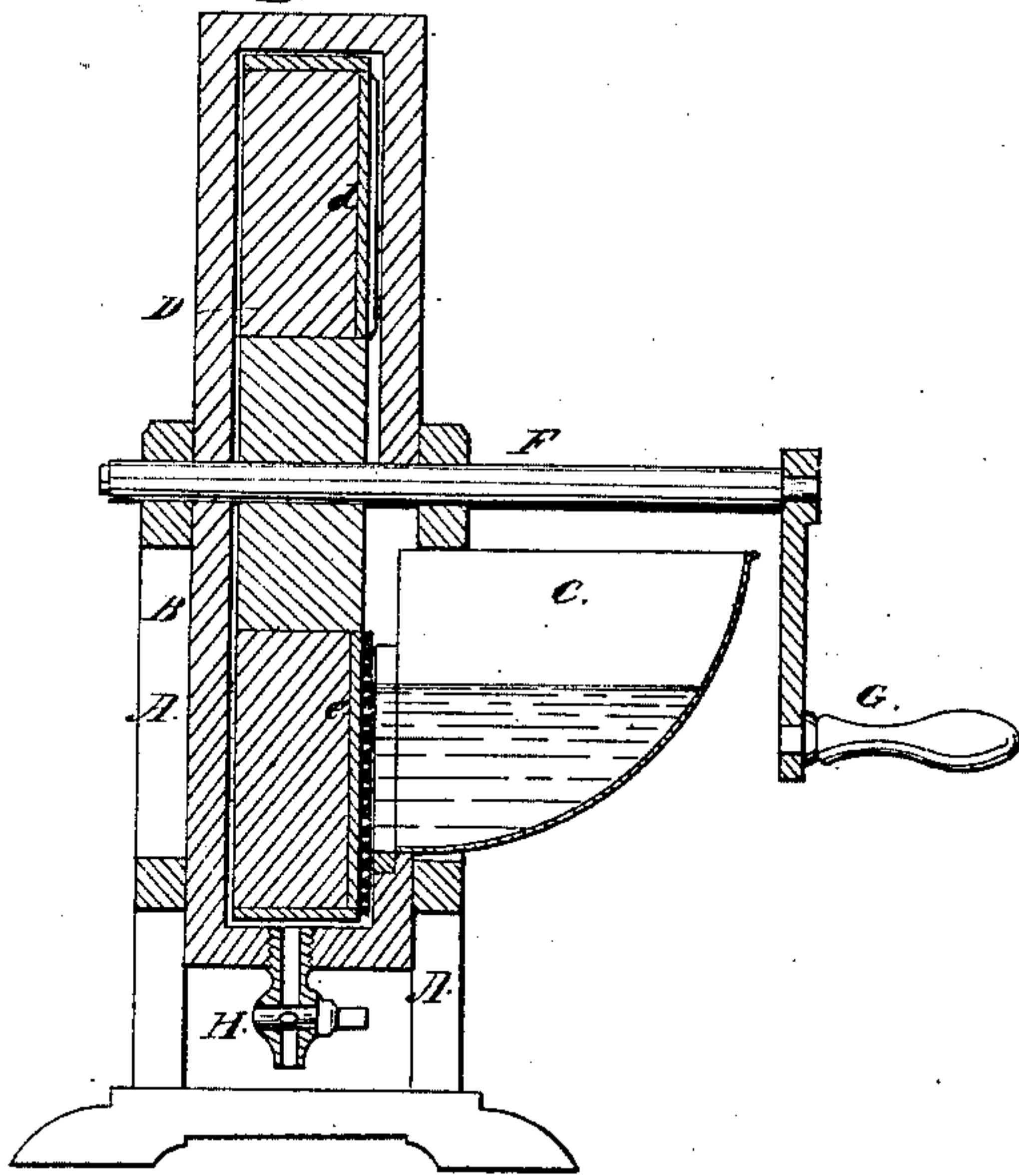


Fig. 2.
B.



UNITED STATES PATENT OFFICE.

E. THARP, OF CINCINNATI, OHIO.

WASHING-MACHINE.

Specification of Letters Patent No. 20,101, dated April 27, 1858.

To all whom it may concern:

Be it known that I, EDMUND THARP, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Improvement in Washing-Machines; and I hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawing, making part of this specification.

My invention consists in the combination of a trough of quarter spherical form with a vertical rotating disk, by means of which a gyratory motion is imparted to the materials to be washed and all parts are successively subjected to compression and rubbing.

In the accompanying drawings Figure 1 is a perspective view from the front of the machine. Fig. 2 is a vertical axial section.

A frame or base A supports a cylindrical box or drum B, of very short axis in comparison to its diameter and having its heads in a vertical position. This drum is closed on all sides excepting a semicircular opening at the lower portion of one of its heads, fitted to which opening is a quarter spherical trough or half bowl C.

D, is a vertical disk journaled concentrically within and nearly filling the drum B. The face of the disk D, next the trough C, is armed with suitable protuberances such as ribs *d*, and brushes *e*. In the present illustration the shaft F, of the disk D extends forward over the trough C, and is provided with a crank G by means of which the disk is rotated.

H, is a discharge cock for drawing off the water.

The operation is as follows: The trough C, being supplied to about half its height with water and articles to be washed the

operator applying one hand to the crank G, rotates the disk D, causing the protuberances thereon to act on the adjacent portions of the clothing and while so doing to impart a slow gyratory or vortical motion to the contents, chiefly in a horizontal direction, so as to constantly present different parts to the action of the disk. It is also found that the described construction and action of the disk and trough operate to compress successive portions of the clothes into the bottom of the trough and temporarily expel the water from their interstices after the manner of pulling. For some description of clothing the unemployed hand may be used with advantage in occasionally manipulating the contents so as to expedite the operation on parts which most require it, an action which is rendered extremely easy by the form, presentation and position of the trough C, relatively to the operator. The water projected by the centrifugal action of the disk, is caught and returned by the drum B.

In large establishments the disk may be rotated by power and several machines may be operated by a single attendant.

I claim as new and of my invention herein—

The arrangement and combination substantially as set forth of the vertical rotating disk D, and quarter spherical trough C, for the purpose explained.

In testimony of which invention I hereunto set my hand.

EDMUND THARP.

Attest:

GEO. H. KNIGHT,
C. STEEMER.