R. J. PUMPHREY.

CLOTHES-POUNDERS.

No. 181,474. Patented Aug. 22, 1876.

Fig. 1.

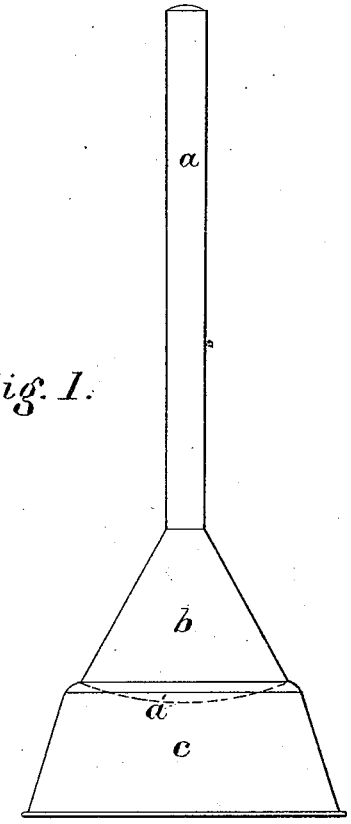
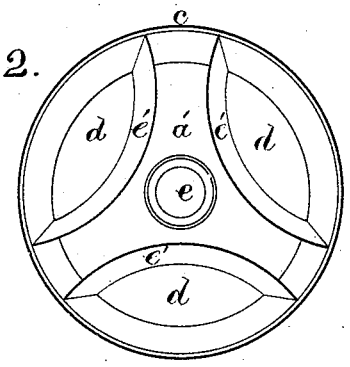



Fig. 2.




Attest.

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# UNITED STATES PATENT OFFICE.

REZIN J. PUMPHREY, OF KNOX COUNTY, OHIO.

## IMPROVEMENT IN CLOTHES-POUNDERS.

Specification forming part of Letters Patent No. **181,474**, dated August 22, 1876; application filed June 29, 1876.

*To all whom it may concern:*

Be it known that I, REZIN J. PUMPHREY, of Knox county, in the State of Ohio, have invented certain Improvements in Clothes-Washers, of which the following is a specification:

My invention relates to that class of clothes-washers operated by hand-pressure. It is constructed entirely of metal, including the handle, the object being to prevent all liability to shrinkage and looseness of the latter, which allows the water to enter the socket, causing rust and rot as well as displacement.

A part of my improvement consists in constructing the interior with lens or lune shaped compartments; also, of forming the diaphragm with a rounded or curved depression, so as to combine, with greater strength, less liability of the partitions becoming detached in operating it.

Figure 1 is a side elevation of my improved clothes-washer. Fig. 2 is an interior view of the base part *c*.

The washer in its general form is conical, though the frustum which forms the base *c* is intended to be proportionately a trifle larger than the cone *b* which surmounts it.

*a* is the handle, which is of sheet metal, the same as the parts *b* and *c*. As the frustum or base *c* is a single piece of metal (in its shell part) pressed into shape, it is first formed up, and the cone *b* and handle *a* soldered to it. Its bottom part *a'* is depressed inward, so as to form a curved diaphragm, the object being to strengthen the joints where the curved partitions *e'* are soldered to it, as in a straight or plane bottom (or diaphragm) these are liable to break loose from it, while this is obviated by giving the diaphragm the form of an inverted arch in its cross-section, as shown by the dotted line in Fig. 1. The partitions *e'* are slightly flared, like the opposite sides of the compartments *d d d* formed by the inside of shell *c*, thus proportionately reducing the size of the compartments as they recede toward diaphragm *a'*. Space is left between the three compartments *d d d* to allow the suds to be forced in around the central tube *e* in operating the washer. The edges of all the division-pieces are on the same plane as the edge of *c*.

My washer is not designed to be used as a pounder, but is operated by repeated hand-pressure upon the whole surface of the clothes when immersed (or partially so) in the suds, the latter being forced through them by the pressure of the washer, thus removing the dirt.

The handle of my washer, in the full size, is only about two feet long, is made in one piece, and is soldered securely to it, so as to entirely exclude the water. It is moreover lighter and stronger than the wooden handle, which, besides the disadvantages named, is frequently broken off down in the socket and must be bored out, or the washer unsoldered to remove the broken end.

I claim—

The improved clothes-washer herein described, as an article of manufacture, consisting of the frustum *c*, with its curved diaphragm *a'* divided into lens or lune shaped compartments *d d d*, which lessen in size as they recede toward diaphragm *a'* by the proportionate inclination of the partitions *e'*, the cone *b*, and the metal handle *a*, the whole arranged substantially as and for the purpose hereinbefore set forth.

REZIN J. PUMPHREY.

Attest:

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PORTER D. KASSON.