

M. G. EVANS & G. W. LOGAN.
CLOTHES WASHER.
APPLICATION FILED MAR. 18, 1911.

1,016,820.

Patented Feb. 6, 1912.

Fig. 1.

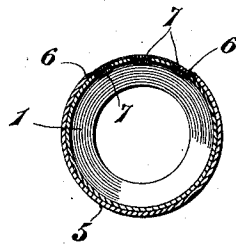
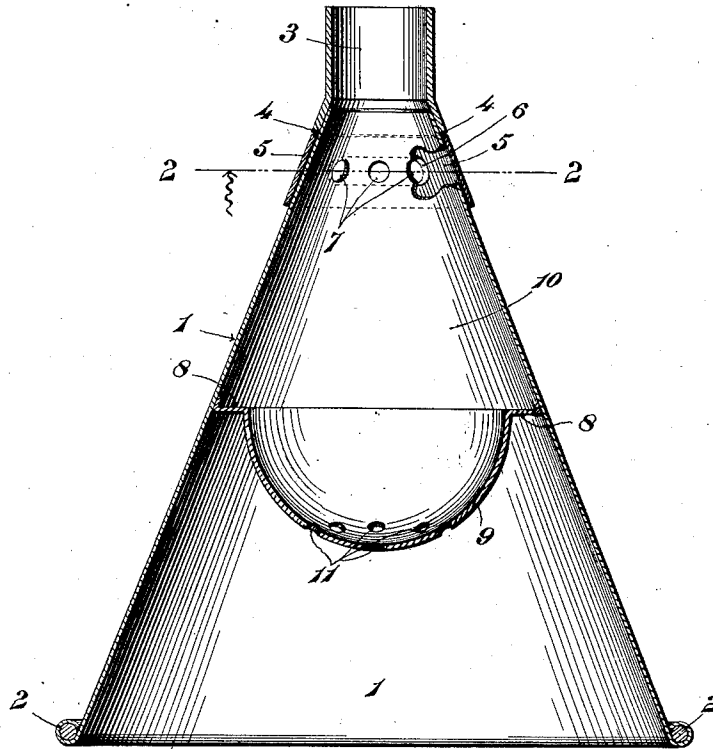


Fig. 2.

Witnesses

Harry King
James A. Koebe

Inventors
Mark G. Evans and
George W. Logan

By *Victor J. Evans*
Attorney

UNITED STATES PATENT OFFICE.

MARK G. EVANS AND GEORGE W. LOGAN, OF DENVER, COLORADO.

CLOTHES-WASHER.

1,016,820.

Specification of Letters Patent.

Patented Feb. 6, 1912.

Application filed March 18, 1911. Serial No. 615,389.

To all whom it may concern:

Be it known that we, MARK G. EVANS and GEORGE W. LOGAN, citizens of the United States, residing at Denver, in the county of Denver and State of Colorado, have invented new and useful Improvements in Clothes-Washers, of which the following is a specification.

This invention relates to clothes washers or pounders, and has for an object to provide a pounder including a suction cup adapted to be manually operated in a suitable clothes receptacle, such as a boiler, tub or the like, and to be brought into effective contact with the clothes, the said cup embodying means for opening communication between the cup and the external air and to provide means for regulating the amount of air admitted to the cup when the device is in operation so that the impact on the downward stroke of the cup or the suction on the upward stroke of the cup can be regulated in accordance with the work upon which the device is used.

In the drawing, forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views:—Figure 1 is a vertical section through our improved washing device. Fig. 2 is a horizontal section on the line 2—2 of Fig. 1.

Our improved washing device preferably comprises a substantially conical seamless cup 1 made of copper, zinc or any suitable well known material which may be found most desirable for the purpose intended. The large lower open end of the cup is formed to provide a peripheral reinforcing bead 2. The upper small end of the cup has secured thereto a socket member 3. This socket member is provided with an upper vertical portion which is of the same transverse diameter throughout, being adapted to be fitted to any suitable well known form of handle, (not shown). The socket member 3 forms a stop shoulder 4 and beneath the shoulder and embracing the apex or small end of the cup 1 is a regulating or controlling valve in form of a sleeve 5. This sleeve has formed therein a relatively long opening 6 which may be moved into coincidence with one or all of the intake openings 7 in the small end of the cup. The flared construction of the sleeve 5 prevents movement of the sleeve in a downward direction on the cup and the upward movement of the sleeve

is limited through the provision of the stop shoulder 4. The lower flared portion of the socket member 3 by embracing the small end of the cup reinforces the walls of the cup at this end and prevents the cup from splitting under the driving action of the handle into the socket member. The said socket member is preferably formed from a seamless body, but any suitable well known obvious means may be resorted to in the construction of the device.

The diaphragm 8 which is located interiorly of the cup preferably intermediate of the ends thereof is formed at its center with a relatively large depending substantially semi-spherical crown 9. The crown is of such a construction that the surface thereof which is exposed to contact with the clothes is curved throughout so as to prevent the clothes from adhering to the washer when the latter is in operation and it also eliminates the possibility of injury to the fabrics.

Considering the work to which our improved washer is adapted it is desirable as hereinbefore described to provide means whereby the impact on the downward stroke of the washer as well as the suction on the upper stroke of the same can be controlled to provide means for regulating the intake or discharge of the air to and from the washer. If the device is to be used for washing heavy coarse fabrics the valve 5 can be operated so as to entirely close the perforations 7, thereby cutting off the upper chamber 10 of the washer from the outside atmosphere when the washer is in perfect contact with the fabrics. This operation is of course governed best by the one using the device, but with the exercise of care the washer may be used with great success without injury whatsoever to the materials to be operated on. The crown 9 of the diaphragm is perforated, as at 11.

We claim:—

A pneumatic clothes washer comprising a vertically disposed conical vessel open at one end, a perforated diaphragm positioned within the vessel intermediate the ends thereof, the upper portion of the said vessel immediately adjacent its end being provided with a series of transversely arranged openings with respect to the longitudinal alinement of the vessel, a conical valve revolvably mounted upon the vessel, said valve being formed to provide a transversely ar-

ranged elongated opening therein adapted
to be moved in coincidence with one or all
of the said openings in the vessel, a handle
engaging member mounted on the upper
5 end of the vessel, the lower portion of the
said member forming a stop adapted to hold
the valve against displacement from the ves-
sel.

In testimony whereof we affix our signa-
tures in presence of two witnesses.

MARK G. EVANS.
GEORGE W. LOGAN.

Witnesses:

J. E. CORBETT,
CHAS. BARKER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
