

E. C. CADY & J. W. WOLFE

WASHING-MACHINE.

No. 193,480.

Patented July 24, 1877.

Fig: 1.

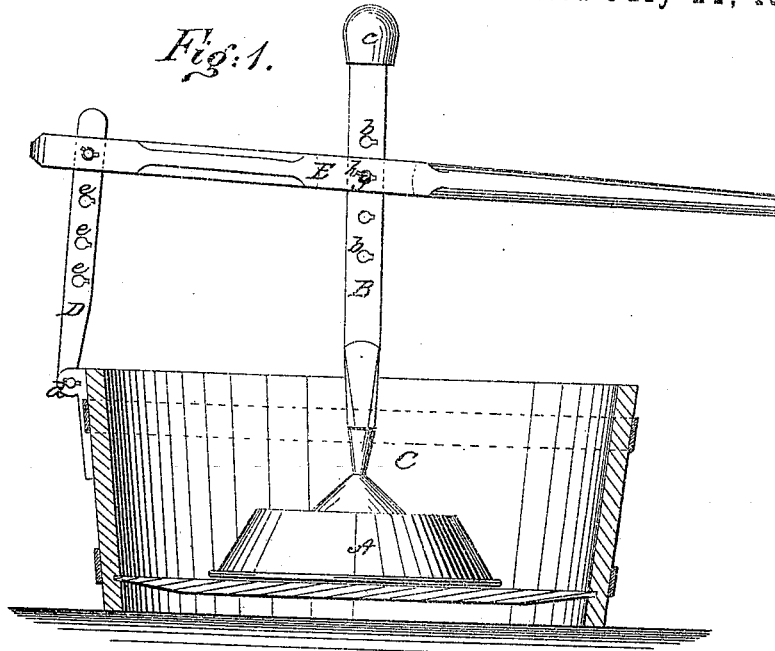


Fig: 2.

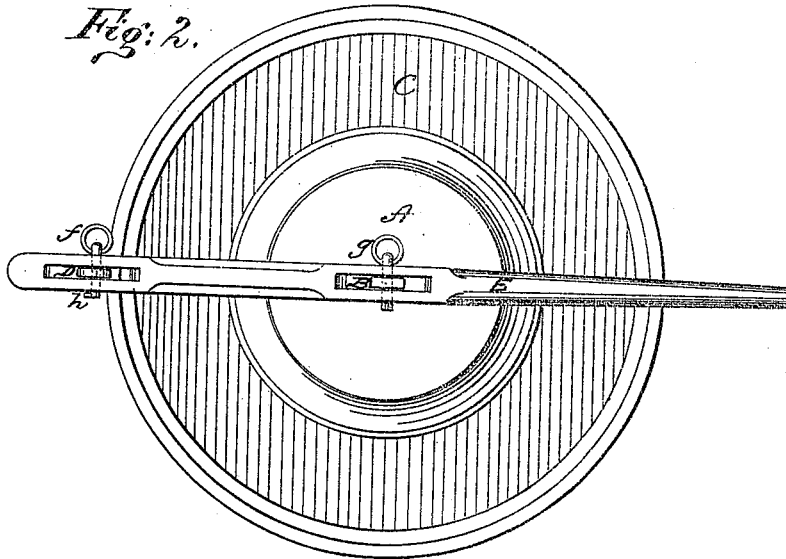
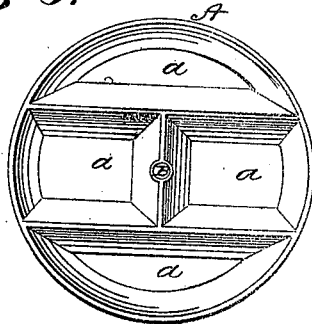


Fig: 3.



Witnesses:  
*Chas. Nide*  
*H. L. Matternberg*

*Ephraim C. Cady &*  
*James H. Wolfe*  
Inventors:  
per  
*Wm. H. ...*  
*city*

# UNITED STATES PATENT OFFICE.

EPHRAIM C. CADY AND JAMES W. WOLFE, OF JOHNSTOWN, OHIO.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 193,480, dated July 24, 1877; application filed May 28, 1877.

*To all whom it may concern :*

Be it known that we, EPHRAIM C. CADY and JAMES W. WOLFE, of Johnstown, in the county of Licking and State of Ohio, have invented a new and Improved Clothes-Washer; and that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making part of this specification.

This invention is in the nature of an improvement in clothes-washers; and the invention consists in a clothes-washer for washing clothes, constructed with a presser or pounder in the form of an inverted pan, its inner surface having formed within it a series of cells. Secured to the upper surface of this presser or pounder is a vertical shaft, into which are formed a series of perforations, and on the top of which is fitted a removable counter-weight, in combination with a wash-tub, to one side of which is hinged a fulcrum with adjusting perforations, to which is pivoted an operating-lever, which is also pivoted to the vertical shaft of the presser or pounder.

In the accompanying sheet of drawings, Figure 1 is a side view of our improved clothes-washer. Fig. 2 is a plan or top view of same, and Fig. 3 an under side view of the pounder or presser.

Similar letters of reference indicate like parts in the several figures.

The purpose of this invention is to produce a machine for washing clothes that shall be simple in its manipulation, and without much trouble adjusted to any ordinary wash-tub.

To this end we construct a device, A, which may be of any desired size and material, and which is of the form of an inverted pan, the inner surface of which is divided into a series of cells, *a*. Centrally, and to the upper and outer surface of this presser or pounder is fixed a vertical shaft, B, with perforations *b* formed in it, and its upper end is provided with an adjustable counter-weight, *c*.

To the side of an ordinary washing-tub, C, may be secured in any desirable manner, by clamps or otherwise, a device, *d*, to which is

pivoted a fulcrum, D, with a series of perforations, *e*, formed therein. Secured at one of its ends to this fulcrum D, by a key, *f*, is an operating-lever, E, through a slot in which passes the vertical shaft of the presser B, the operating-lever being connected to the vertical shaft by a key, *g*.

Now, our washing device, constructed as we have described it, is operated by placing the soap and water in the tub C, the clothes being placed therein, and the operating-lever E worked up and down, as in pumping, and at the same time moved so as to come in contact with the entire surface of the clothes within the tub. This motion causes the presser A with its divisions, which form the cells *a*, to compress the surface of the clothes, forcing the soap and water through the fabrics repeatedly, and in this way freeing them from dirt.

The extent of the throw or motion of the presser may be regulated by adjusting the end of the operating-lever to different heights on the fulcrum D, by means of the perforations *e* therein, and also to different heights on the vertical shaft B, by means of its perforations, the adjustment being facilitated by the keys *f* and *g*, which keys are provided with a ward, *h*, at their end, so that when they pass through the perforations in the operating-lever, and also in the fulcrum and vertical shaft, they may be turned slightly, so as to bring the ward *h* out of coincidence with its corresponding perforation. In this way the keys will maintain their position without working loose.

To insure the presser A coming in contact with the clothes, with its under surface parallel at all times with the bottom of the tub, a counter-weight, *c*, is fitted to the upper end of the vertical shaft B, which, acting as a counterpoise, maintains the vertical position of the shaft under every possible position of the operating-lever. This counter-weight is removable, so as to admit of the vertical shaft B passing into the slot formed in the operating-lever E for that purpose.

Having now described our invention, what we claim as new, and desire to secure by Letters Patent, is—

A clothes-washer, consisting of a hollow inverted presser, the inner surface of which is divided into cells by partitions, and its upper surface having a vertical shaft affixed thereto, which shaft has perforations for the purposes of adjustment, and a removable counter-weight fitted to its upper end, in combination with an operating-lever and fulcrum, the fulcrum also having adjusting perfora-

tions, and being hinged to the side of the tub, substantially as and for the purpose described.

EPHRAIM C. CADY.  
JAMES W. WOLFE.

Witnesses:

D. K. TROWBRIDGE,  
E. A. BELL.