W. T. ROBERTSON.

CLOTHES-POUNDERS.

No. 190,370. Patented May 1, 1877.

Fig. 1.

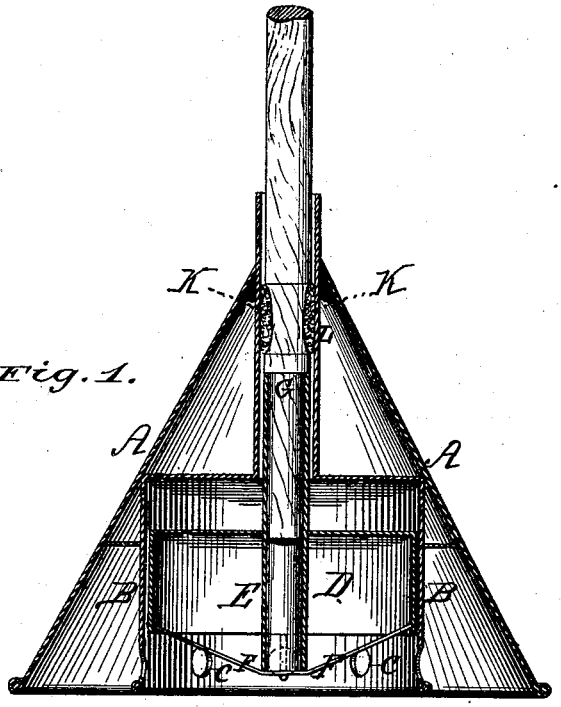


Fig. 2.

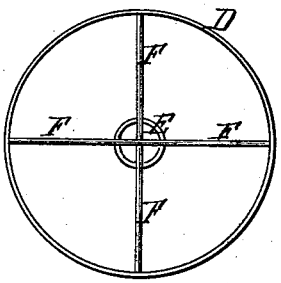
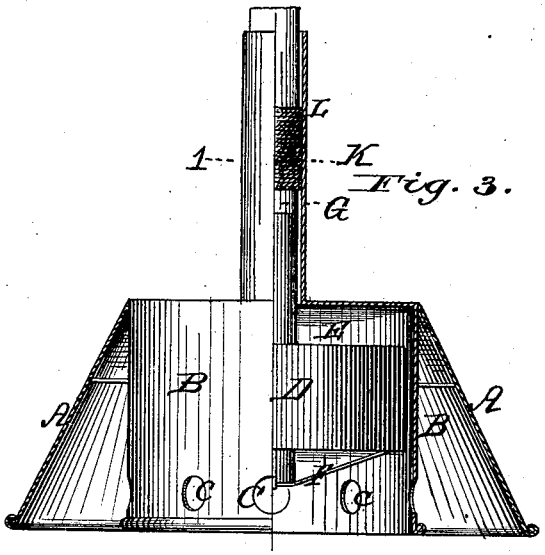


Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM T. ROBERTSON, OF ASHEVILLE, NORTH CAROLINA.

IMPROVEMENT IN CLOTHES-POUNDERS.

Specification forming part of Letters Patent No. **190,370**, dated May 1, 1877; application filed March 28, 1877.

To all whom it may concern:

Be it known that I, WILLIAM T. ROBERTSON, of Asheville, in the county of Buncombe and State of North Carolina, have invented certain new and useful Improvements in Clothes-Washers, of which the following is a specification:

This invention relates to certain improvements in that class of apparatus known as "clothes-washers," its object being to provide for more efficiently pounding and beating the clothes while in the water, and at the same time, with each stroke of the plunger, to force a current of air and water through the clothes, materially facilitating the cleansing operation.

My invention consists of a conical outer shell, containing within it a cylindrical shell, perforated near its lower edge, and provided with a reciprocating plunger, secured to a handle passing out of the top of the casing, said handle being suitably packed to prevent the escape of air. The said handle is secured in a vertical tube passing down through the center of the plunger, and extending some distance below its lower edge, and a series of wires are extended from the extremity of said tube to the lower edge of said plunger, forming with said lower edge the beating-surface of the plunger.

In the accompanying drawings, Figure 1 represents a longitudinal vertical section of a clothes-washer constructed according to my invention; Fig. 2, a detached plan view of the plunger, and Fig. 3 a sectional view of a modification.

In the drawing, the letter A represents the outer shell of my apparatus, consisting of a cone of sheet metal; and B, the inner casing, consisting of a sheet-metal cylinder, its upper end being secured about midway between the apex and base of the outer shell, its lower end being flush with the base of said outer shell, and provided with a series of apertures, C, for the purpose of admitting water and air above the clothes when the plunger is retracted, in order to prevent the clothes sticking to the plunger by the pressure of the atmosphere on the return movement of the plunger.

D represents the plunger, which consists of a sheet-metal cylinder, open at its lower end and closed at its upper end, except at the center, through which extends a tube, E, terminating some distance below the lower edge of said plunger, and provided with wires F, extending radially to the lower edge of the plunger.

The upper end of said tube terminates at a suitable distance above the top of the plunger, and is filled with a handle, G, which extends through a tube, I, extending from the top of the inner casing of the apparatus up through the apex of the outer casing.

The said handle is suitably packed, as shown at K, with rubber or any description of fabric, a wire, L, being secured to the handle above and below the packing to prevent it from being shifted.

In the modification shown in Fig. 3 of the drawing, the outer shell is represented as a truncated cone, from the top of which extends a tube, through which the packed handle extends and works.

The operation of my improved apparatus is as follows: The base of the apparatus is placed upon the clothes in a tub, with water, soap, or other cleansing agents, and a reciprocating motion is given to the plunger by means of its handle. At each fall of the plunger the clothes will receive a violent blow, which tends to press out the water and impurities in the clothes, and at the same time, owing to the compression of the air in the inner shell, to force a current of air and water through the material, materially facilitating the operation and effectually cleansing the clothes.

By means of the annular air-space between the inner and outer shells, and the exhaustion of the air at the rising of the plunger, the clothes will be kept closely to the base of the apparatus, and held in position without the employment of springs for the purpose, as heretofore.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

In combination with outer shell, consisting of a cone or a truncated cone, the inner cylindrical shell and reciprocating plunger, provided at its bottom with radial wires, substantially as and for the purposes set forth.

WILLIAM T. ROBERTSON.

Attest:

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