

W. D. MIDDLETON
Clothes-Pounder.

No. 214,942.

Patented April 29, 1879.

Fig. 1

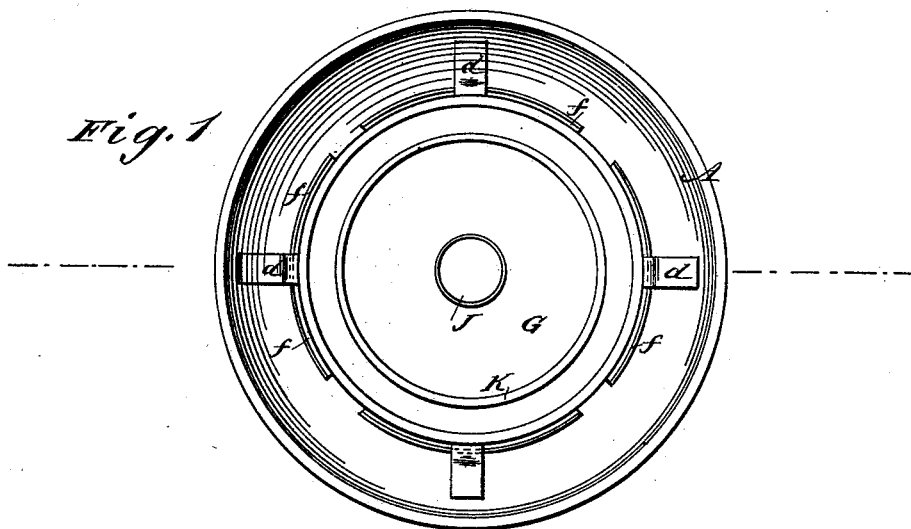
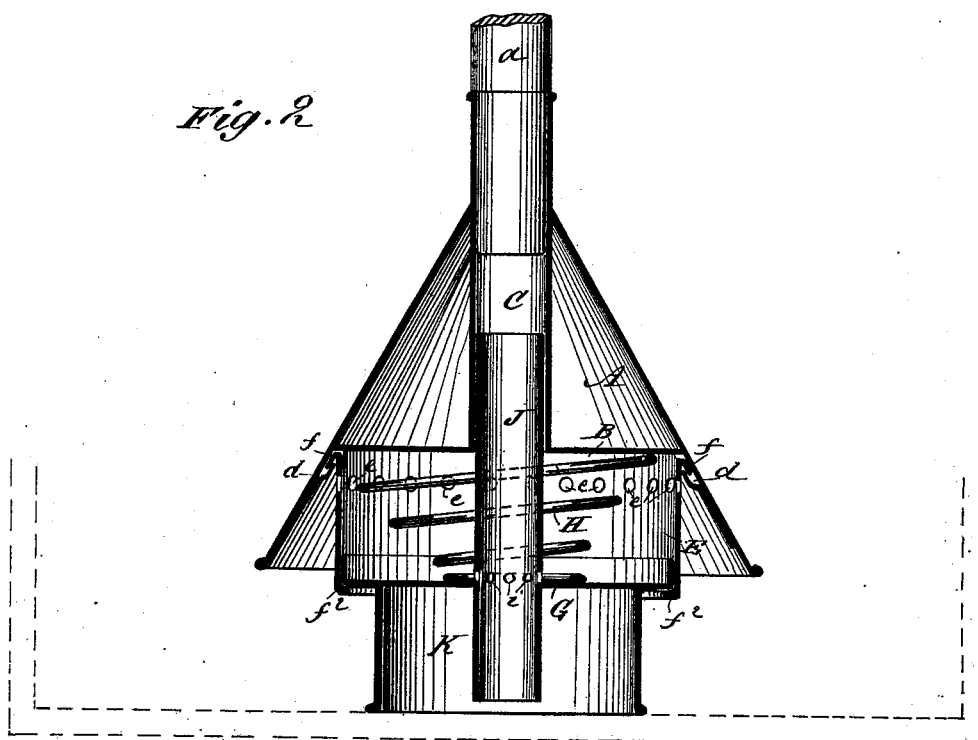


Fig. 2



WITNESSES:

C. Neveux
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UNITED STATES PATENT OFFICE.

WILLIAM D. MIDDLETON, OF ELKHART, INDIANA.

IMPROVEMENT IN CLOTHES-POUNDERS.

Specification forming part of Letters Patent No. **214,942**, dated April 29, 1879; application filed December 12, 1878.

To all whom it may concern:

Be it known that I, WILLIAM DOWNING MIDDLETON, of Elkhart, in the county of Elkhart and State of Indiana, have invented a new and useful Improvement in Washing-Machines, of which the following is a specification.

My invention relates to that class of devices for cleansing clothes in which a concave dasher is used to force air through the fabric in order to extract the dirt.

My invention consists in the combination, with a conical dasher, of a perforated cylinder, a piston or follower, and a spring, and in certain novel details of construction and arrangement, whereby greater facility is afforded for forcing the air through the clothes and through the water containing them, and thereby cleansing the clothes.

The accompanying drawings represent a device embodying my improvements, Figure 1 being a bottom view, and Fig. 2 a longitudinal vertical section.

Similar letters of reference indicate corresponding parts.

A represents a conical dasher, made of tin or other suitable metal. B is a partition on the inside of the cone, about midway of its height. From the center of this partition a tube, C, rises vertically, and extends beyond the apex of the cone, where it serves as a socket for the reception of a handle, *a*. On the interior of the cone, below the partition B, a number of lugs, *d*, are attached.

E is a cylinder arranged in the cone below the partition B, with its upper edge lying close to the partition and its lower edge extending down even with or slightly below the rim of the cone. In the upper portion of the periphery of the cylinder E are a number of perforations, *e*, for the purpose hereinafter described.

The cylinder E is provided with a mutilated flange, *f*, for engagement with the lugs *d*, so that the cylinder may be readily connected and disconnected when desired, like the lamp of an ordinary lantern.

G represents a piston or follower, working in the cylinder E. It is held in place upward

by an internal flange, *f*², on the cylinder, and downward by a spiral spring, H, bearing against its upper surface and the lower surface of the partition B.

The piston is provided with a central stem, J, which is hollow, and provided with perforations *i*, for the purpose hereinafter described. The stem J extends up into the tube C sufficiently far to guide the piston in its up-and-down movement, as hereinafter described.

To the lower side of the piston G is attached a cylindrical cup or rim, K, the lower edge of which is wired or turned outward, so as not to cut or injure the clothes.

The clothes being in the tub or other vessel, and covered with water, the apparatus is held by the handle *a* in an upright position, with the rim or cup K resting on the clothes. As the handle is pressed downward the follower G is pressed upward and forces the air out of the cylinder E through the perforations *e* and *i*. When pressure is removed from the handle or the apparatus is raised the spring H presses down the follower G, and allows water to rush in through the perforations *e* and *i* into the cylinder E, and on again pressing downward the water is forced outward again through the perforations. In this manner a reciprocating stream or current of water is kept up through the clothes, and the dirt is thoroughly loosened and extracted therefrom.

I am aware that a perforated cylinder, lugs, and flanges, for connection and disconnection, a piston and spring, or a cup on the lower part of cylinder, are severally old; but

What I claim as new is—

The combination, in a clothes-pounder, of the conical dasher A, having partition B and interior lugs, *d*, the tube C, extending above the cone, the interior cylinder, E, having perforations *e* and notched flange *f*, and the flanged spring-retracted piston G, having perforated stem J and cup K, as and for the purpose specified.

WILLIAM DOWNING MIDDLETON.

Witnesses:

ELTON M. ALCORN,
F. W. MILLER.