T PATTERSON.

Washing-Machine.

No. 160,706. Patented March 9, 1875.

FIG. 1.

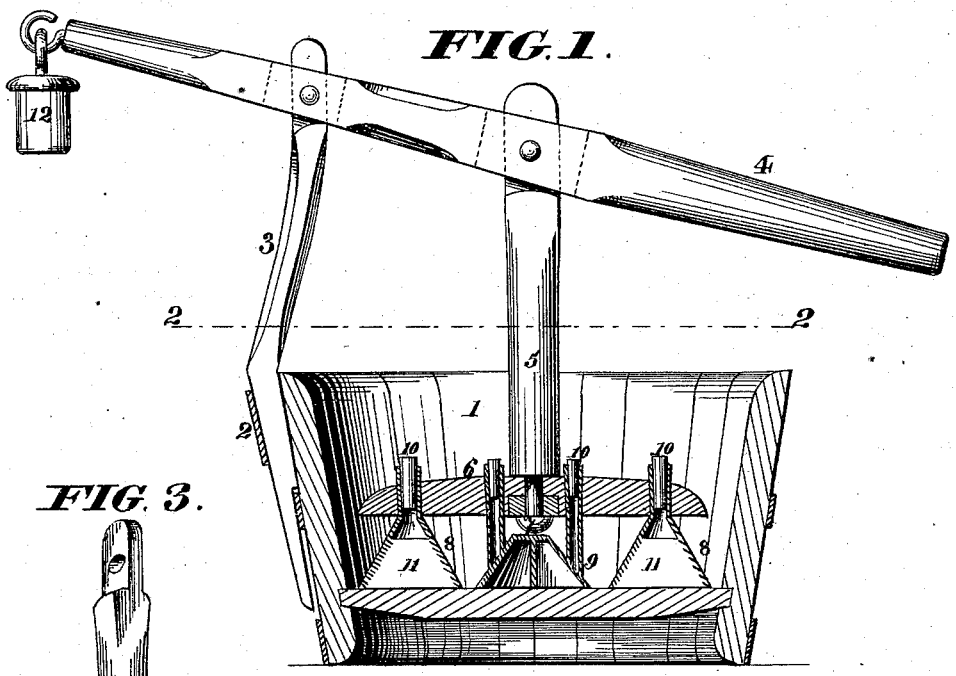


FIG. 3.

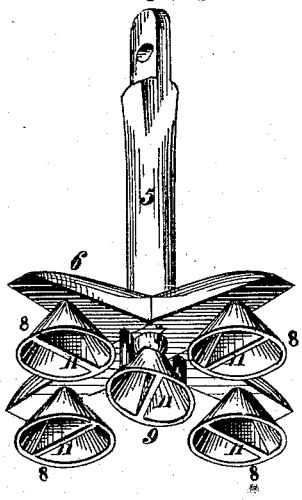
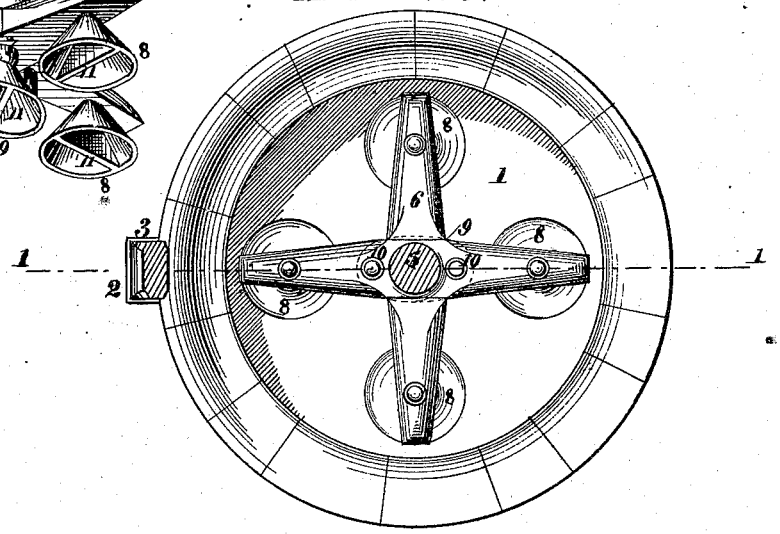


FIG. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

THOMAS PATTERSON, OF PRINCETON, ILLINOIS, ASSIGNOR TO HIMSELF AND ENOS C. MATSON, OF SAME PLACE.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **160,706**, dated March 9, 1875; application filed August 28, 1874.

To all whom it may concern:

Be it known that I, THOMAS PATTERSON, of Princeton, in the county of Bureau and State of Illinois, have invented an Improved Pneumatic Clothes-Washer, of which the following is a specification:

This invention relates to washing attachments for ordinary wash-tubs, and to that form of clothes-washers in which the dirt is expelled by pounding the clothes and simultaneously forcing air through the same.

The present invention consists in a swiveled pounder furnished with a number of dirt-expellers, constructed of funnel shape, air-tight, and with cross-bars, as hereinafter specified. This construction insures the forcible compression and expulsion of the air which is carried down at different points by the expellers, while the rims of the expellers, with the cross-bars, form superior pounding-surfaces, and the latter preclude any obstruction of the operation by keeping the clothes out of the cavities of the expellers. The automatic rotation of the pounder serves, at the same time, to distribute the effect on the clothes.

In the accompanying drawing, Figure 1 is a vertical section of this improved clothes-washer applied to a wash-tub. Fig. 2 is a plan view of the same, partly in horizontal section, on the line 2 2, Fig. 1, and showing, by dotted line 1 1, the plane of Fig. 1. Fig. 3 is a perspective view of the pounder and its stem detached.

An ordinary wash-tub, 1, is adapted to receive this attachment by means of one or more staples, 2, attached, by screws or nails, to one side of the tub. These receive the tapering lower end of a post or standard, 3, to the upper end of which a horizontal hand-lever, 4, is hinged or pivoted, extending forward across the tub to a convenient point for the hand of the operator. The hand-lever 4 is attached above the center of the tub, by a hinge-joint, to the vertical stem 5 of a pounder or pounding-head, 6. The latter is, by preference, cruciform, and is swiveled to the lower end of its stem 5 by means of a central screw, 7, so as to rotate freely in a horizontal direction. Dirt-expellers 8 9 in the shape of inverted funnels are attached to the lower face of the pounding-head 6, to form its effective surface. Five of these are employed, by preference, and they are constructed of sheet metal, with hollow stems passing through the wood of the pounding-head, and secured therein by means of expanding-plugs 10, applied within the upper ends of the stems, as clearly illustrated in Fig. 1. The expellers 8, at the extremities of the arms of the pounding-head, are made circular, with a single stem on each. A central expeller, 9, is made of oval shape, with two stems to attach the same beneath the swiveling-screw 7. The dirt expellers are provided, further, with transverse bars or partitions 11, to prevent the clothes from being pressed into the cavities of the expellers, which are designed to be filled with air above the surface of the water, and to carry the same down, so that it shall pass into and through the clothes during the pounding-stroke.

The swiveling of the pounding-head causes the expellers to strike the clothes at different points, and thus obviates any necessity for shifting the clothes within the tub, and facilitates and expedites the washing operation.

Instead of being formed of sheet metal, the dirt-expellers may, if preferred, be made of any other suitable material, as of wood or earthenware; or any suitable sheet metal—such as tin, copper, or brass—may be employed.

The rear end of the hand-lever 4 is extended behind the standard 3, and a weight, 12, is attached to its extremity to counterbalance or partly counterbalance the weight of the pounder and its stem, so as to facilitate lifting the same. The weight is lifted during the effective stroke without appreciable increase of exertion.

To facilitate introducing and removing the clothes the pounder is adapted to be readily lifted and retained out of the tub.

When the wash is completed the attachment may be separated and stowed away in a small space, with its parts folded together.

I am aware that a clothes-pounder has been made with a single funnel-shaped head, in combination with an open tubular stem, and that a clothes-washing attachment to an ordinary tub is not broadly new. The broad idea of employing a number of small striking-

points on the face of a pounder, and the process of washing herein described, broadly considered, are also disclaimed.

The following is claimed as new, namely:

The swiveled pounding-head 6, carrying a number of dirt-expellers, 8 9, the latter being constructed of funnel shape, air-tight, and with cross-bars 11, as herein shown and described, for the purposes set forth.

THOMAS PATTERSON.

Witnesses:

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