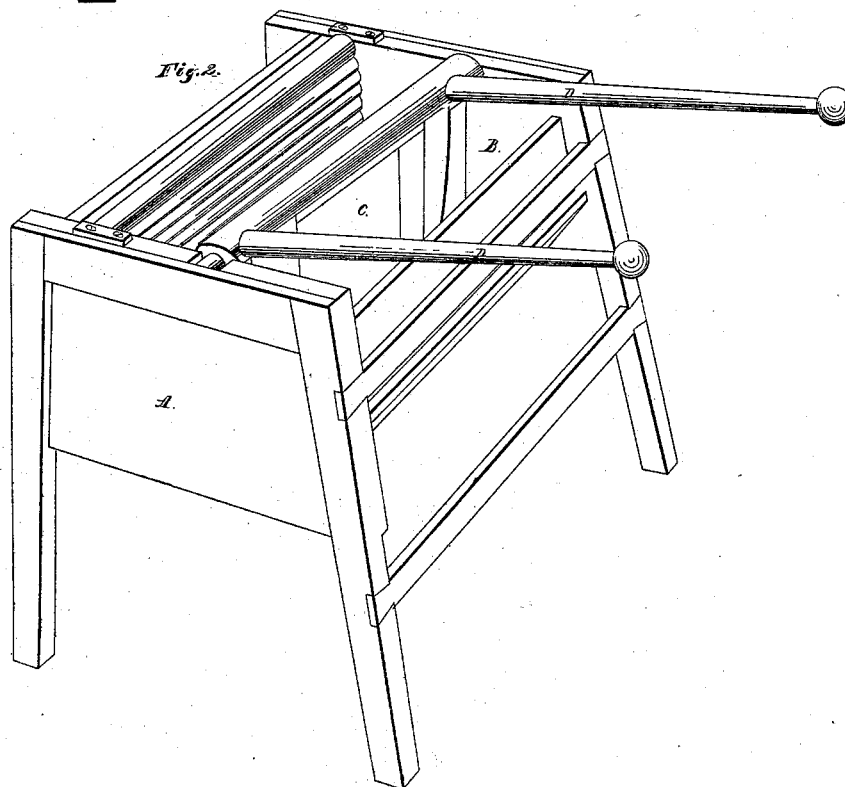
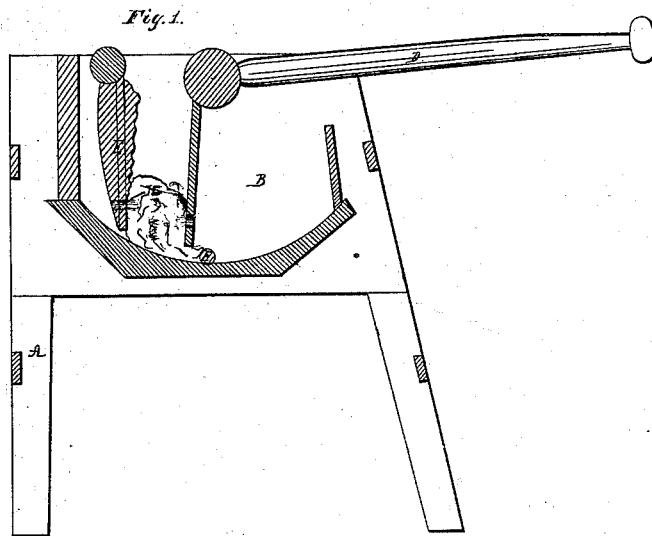


E. Luken's,
Washing Machine,
N^o 3,472. *Patented Mar. 9, 1844.*



UNITED STATES PATENT OFFICE.

EPHRAIM LUKENS, OF BALTIMORE, MARYLAND.

WASHING-MACHINE.

Specification of Letters Patent No. 3,472, dated March 9, 1844.

To all whom it may concern:

Be it known that I, EPHRAIM LUKENS, of the city of Baltimore and State of Maryland, have invented a new and useful Improvement in Washing-Machines, which is described as follows, reference being had to the annexed drawings of the same making part of this specification, of which—

Figure 1 is vertical longitudinal section.

10 The nature of this invention and improvement consists in suspending a perforated swing-board between the ordinary vibrating presser and the back of the wash-tub against which the clothes are pressed and through which the water passes to the space behind it, which water, when the presser is withdrawn or carried to the front of the tub, by its gravity rushes under its lower edge and through the apertures in the swing board 20 strikes against the clothes, turns them over, and again percolates through them, the motion of the said swing board when the press board is withdrawn also assisting in turning the clothes over in the water in the tub.

25 To enable others to make and use the said improved washing machine I will proceed to describe its construction and operation.

30 The frame A, wash tub B, vibrating press board C, handles D are made, or may be made, in the manner of those of washing machines long in common use, and therefore need not a particular description.

35 The swing board E which constitutes the improvement is made and arranged in the following manner: Two arms are inserted into a roller having a gudgeon at each end. On the back of these arms are secured thin flat boards—or a single board of sufficient width. A row of perforations or holes H 40 are made in this board near the lower edge thereof for the water to pass through. The gudgeons of said roller are then placed in cavities or boxes in the upper edges of the sides of the wash tub between the back and 45 middle thereof, the swing board hanging in a vertical position in the water in the tub. A fluted board made thick on the upper edge and thin on its lower edge is secured to the face of the swing board next the 50 press board and above the row of holes in

the swing board for preventing the clothes rising or slipping upward during the pressing operation.

Operation: The clothes to be cleansed, with a sufficient quantity of warm water and soap, are put into the wash tub B between the vibrating press board C and the additional swing board E. The operator lays hold of the lever D or levers and moves them downward which causes the press board to press the clothes against the swing board E which recedes toward the back of the tub till arrested by the concave bottom thereof, while the water is forced through the apertures H in the swing board to the space between it and the back of the wash tub. The operator then suddenly raises the levers which causes the press board instantly to leave the swing board, and carry with it a portion of the water leaving a trough or space in the tub of water into which the clothes roll over, changing their position followed by the swing board which thus assumes an inclined position from a vertical line, at the same time throwing the clothes off from it and turning them over, the turning of the clothes being accelerated by the weight of the streams of water running through the apertures in the swing board and under its lower edge. The levers are again depressed and elevated which produces a repetition of the before described action on the clothes, and in this manner the operation is repeated as often as may be required until the clothes be cleansed. The perforations in the swing board allow the water to be pressed through them into the space behind said board and when the press board is withdrawn from the swing board and the clothes roll or fall over into the cavity or trough caused thereby the water rushes through the apertures in the swing board in streams and acts on other portions of the clothes thus presented to the action of the water while a similar action is performed on the opposite sides of the clothes by the water rushing through the apertures in the press board, thereby performing double the washing operation of any other machine known.

F is a plug, which, when drawn, opens an aperture in the side of the tub for the discharge of the water.

The material, size, and proportion of the machine may be varied to suit the views of the constructor.

What I claim as my invention and which I desire to secure by Letters Patent is—

Combining a perforated swing board with

a vibrating pressing board of machines for 10 washing clothes, whether in the manner here described, or in any other mode or way which is substantially the same and wherein analogous results are produced.

EPHRAIM LUKENS.

Witnesses:

WILLIAM P. ELLIOT,

WM. I. HYDE.