

S. A. Mort,
Washing Machine,
No. 45,167, Patented Nov. 22, 1864.

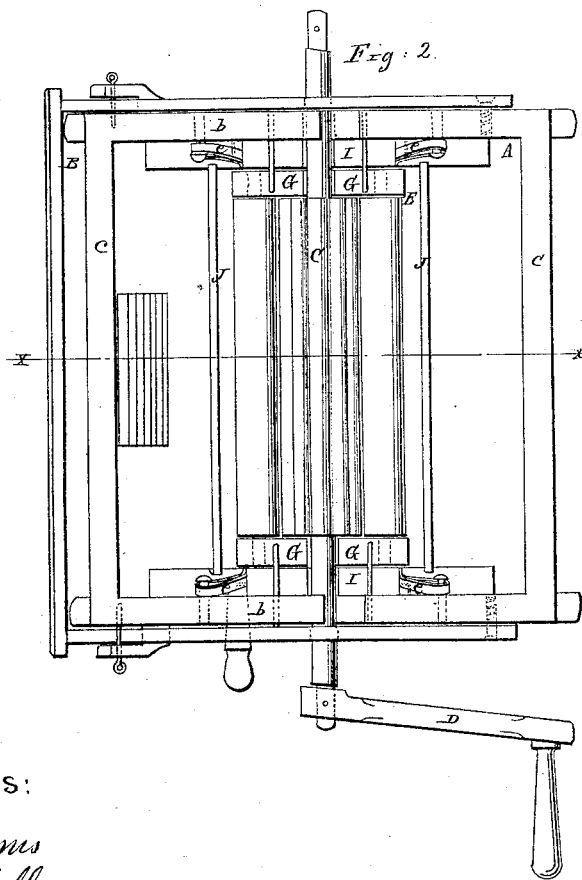
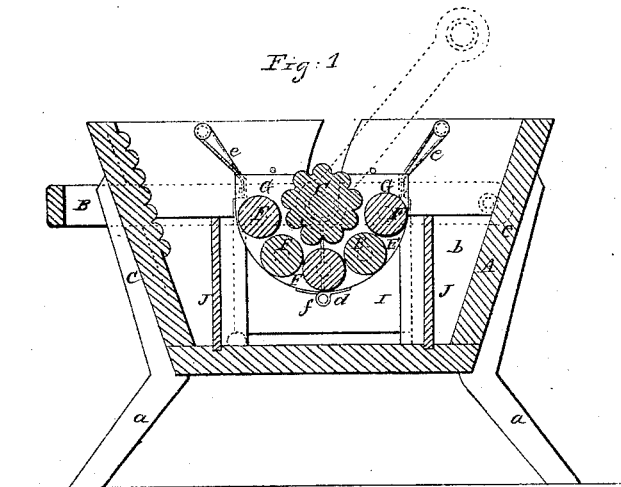


Fig. 4.

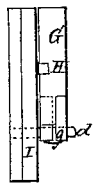
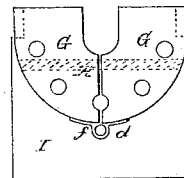


Fig. 3.



Witnesses:

Henry Monis
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UNITED STATES PATENT OFFICE.

S. A. MORT, OF DAYTON, OHIO.

IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. 45,167, dated November 22, 1864.

To all whom it may concern :

Be it known that I, S. A. MORT, of Dayton, in the county of Montgomery and State of Ohio, have invented a new and Improved Clothes-Washing Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side sectional view of my invention taken in the line *x x*, Fig. 2; Fig. 2, a plan or top view of the same; Fig. 3, a detached view of one of the end pieces, in which the rollers of the concave are fitted; Fig. 4, an edge or end view of the same.

Similar letters of reference indicate like parts.

This invention relates to a new and improved clothes-washing machine of that class in which a concave of rollers is used in connection with a fluted cylinder.

The object of the invention is to obtain a clothes-washing machine of the class specified which will perform its work in a thorough manner, and possess advantages over those of a similar kind hitherto constructed, as will be hereinafter set forth.

A represents the suds-box of the machine, which is supported at a suitable height by legs *a*, and has vertical ends *b* and inclined sides *c c*.

B is a square or rectangular frame, secured at one end by screws *e* to the ends *b* of the suds-box. This frame B has a fluted cylinder, C, fitted within it, and to one of the shafts of this cylinder a crank, D, is secured, for the purpose of turning the former. This crank may be fitted on either end of the cylinder-shaft, or both ends of said shaft may be provided with a crank, so that two persons may turn the cylinder if required.

E represents a concave, formed of rollers F, the journals of which are fitted in curved segments G G, two at each end, connected by a hinge or joint, *d*, at their lower parts, as shown in Fig. 3. Each pair of segments constitutes a semicircle, and they are connected by a spring, H, of india-rubber or other suitable material. These segments G G (each pair) are connected to vertical slides I I,

which are fitted between suitable guides attached to the inner surfaces of the ends of the suds box A, and these sides are connected at their upper parts by springs *e* to the ends of the suds-box. The segments G are connected to the slides I by the pintles *f* of the hinges or joints *d* of the segments.

The suds-box A is provided with two partitions, J J, which inclose the concave E, the upper ends of said partitions being nearly on a level with the upper parts of the end rollers, F, of the concave. (See Fig. 1.)

The operation is as follows: The suds box A is supplied with a requisite quantity of suds, and the frame B being turned over the box A, the fluted cylinder C fits within the concave E. The clothes to be washed are passed between the cylinder C and concave E, and the cylinder C is turned first in one direction and then in the other, and the clothes thereby subjected to the necessary rubbing and friction, the concave, in consequence of its rollers being fitted in the segments G, connected by springs H, being allowed to yield laterally, while the slides I admit of a vertical downward movement or yielding of the concave. By this arrangement all undue friction on the clothes is avoided, and they cannot be injured during the process of washing, while the pressure of the cylinder C on the clothes may be graduated as desired by pressing more or less hard in a downward direction on the outer part of the frame B.

The space between the partitions J J contains the suds, which act upon the clothes between the cylinder C and concave E, and it soon becomes foul, while the suds at the outer sides of said partitions will be clean, and may be used for rubbing portions of clothes clean on a hand-board, K, at one side of the suds box.

I am aware that a fluted cylinder and a concave of rollers have been previously used for the purpose herein set forth, and I do not claim, broadly, such device; but,

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The fitting of the journals of the rollers F of the concave in segments G, connected at their lower parts by a hinge or joints, *d*, provided with springs H, and attached to slides I,

which have springs *e* attached to them, in combination with the fluted cylinder C, placed in an adjustable frame, B, all being arranged to operate in the manner substantially as and for the purpose herein set forth.

2. In combination with the above, the partitions J J, placed within the suds-box, and

arranged relatively with the concave E, substantially as and for the purpose herein set forth.

S. A. MORT.

Witnesses:

AUGUSTUS KUHN,

ADAM PRITZ.