J. K. Boyce,

Washing Machine,

No. 40,903. Patented Dec. 15, 1863.

Fig. 1.

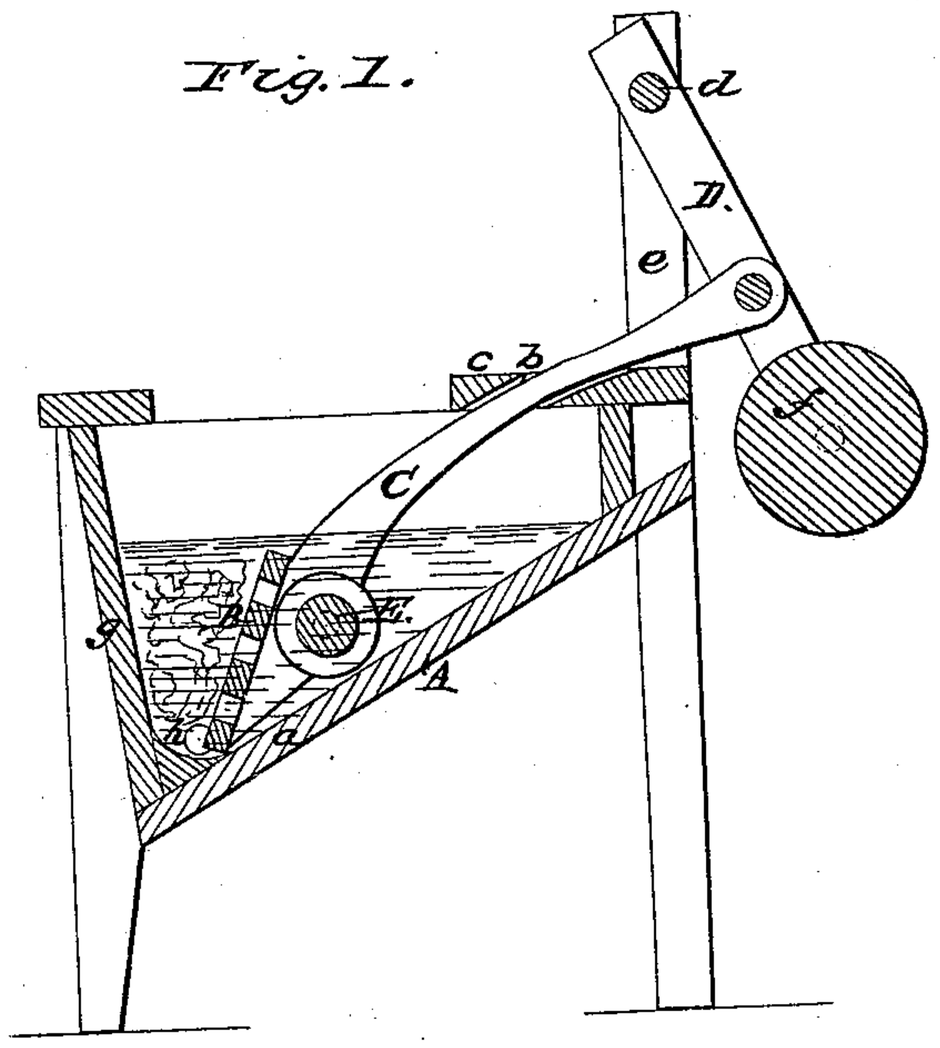
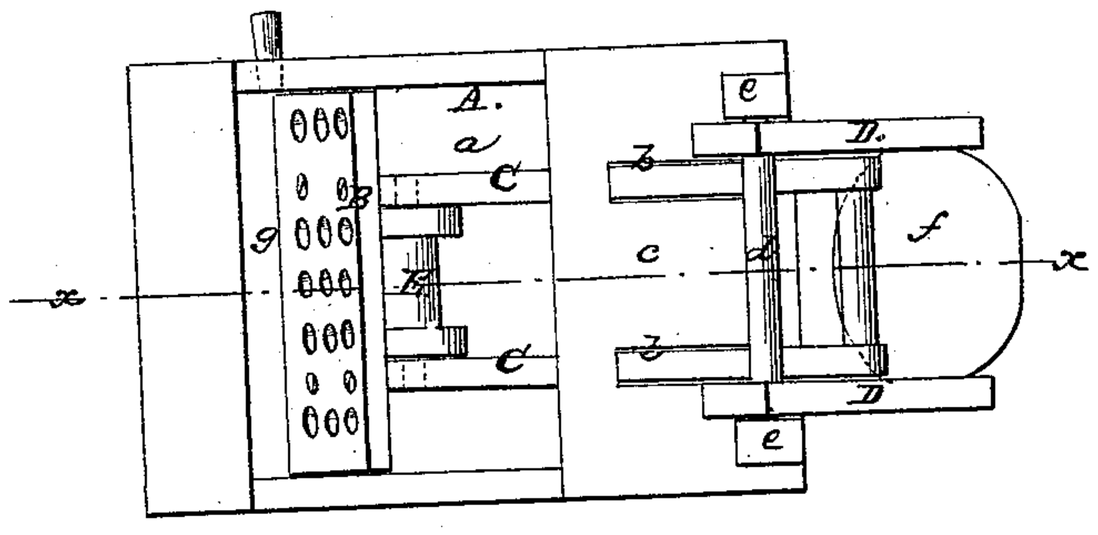


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

I. K. BOYCE, OF NAPOLEON, OHIO.

IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. **40,903**, dated December 15, 1863.

To all whom it may concern:

Be it known that I, I. K. Boyce, of Napoleon, in the county of Henry and State of Ohio, have invented a new and improved Washing-Machine; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a longitudinal vertical section of my invention, the plane of section being indicated by the line *x x*, Fig. 2. Fig. 2 is a plan or top view of the same.

Similar letters of reference in both views indicate corresponding parts.

This invention relates to an improvement in that class of washing-machines in which the clothes are exposed to the action of a reciprocating presser by placing them between said presser and the end of the box or tub.

The nature of my improvement and its peculiar advantages will be readily understood from the following description.

A represents a box or tub, made of wood or any other suitable material, and provided with an inclined bottom, *a*, sloping down from the rear toward the front end of the box, as clearly shown in Fig. 1 of the drawings. This bottom supports the presser B, which consists of an inclined perforated piece of board, to which a reciprocating motion is imparted by means of two curved rods, C, which connect with the pendulum-arms D.

In order to facilitate the motion of the rods C and presser B over the inclined bottom of the box, a friction-roller, E, is placed under the front ends of the rods, and said rods are curved and extend out through slots *b* in the top *c* of the box, so that the operator is protected against the splashing of the water. If the connecting-rods extend out through the end of the box, the water from the interior of the box is liable to pass out and come in contact with the operator. The pendulum-arms D have their bearings on a rod, *d*, passing through the upper ends of standards *e*, which rise above the upper edge of the box and which may form a continuation of the legs of said box. A weight, *f*, attached to the lower ends of the said arms, facilitates their motion. The front end, *g*, of the box A is inclined outward in a direction opposite to that in which the presser is inclined, as will be readily seen by a glance at Fig. 1, and the corner *h*, between the bottom and front end, is rounded.

In order to put this machine in operation the box is partially filled with water or soapsuds, and the clothes are placed between the presser and the inclined front end of the box, and by working the arms D a reciprocating motion is imparted to the presser. As the presser approaches the inclined front end of the box, the clothes are compressed in the V-shaped space formed between said presser and front end, and partly by the form of this space and partly by the action of the rounded corner *h*, the clothes are turned over, and over, and thereby the washing is considerably facilitated. By this arrangement I obtain a great advantage over similar machines in which the presser and the front end of the box are both vertical or parallel to each other. The clothes on being compressed between these parallel surfaces have no chance to turn over, and they always retain the same relative position toward each other and toward the pressing surfaces. It is obvious that in this case the dirt cannot be expelled with the same facility as it can when the clothes continue to turn over and to expose different portions to the action of the pressing-surfaces.

What I claim as new, and desire to secure by Letters Patent, is—

The inwardly-inclined presser board B, attached to curved rods C, which extend through slots in the top of the box A, and are operated by pendulum-arms D, in combination with the outwardly-inclined end *g* and curved corner *h* of said box, all constructed and operating in the manner and for the purpose herein shown and described.

I. K. BOYCE.

Witnesses:
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