J. Heinlein,

Washing Machine,

No. 48,683, Patented July 11, 1865.

Fig. 2

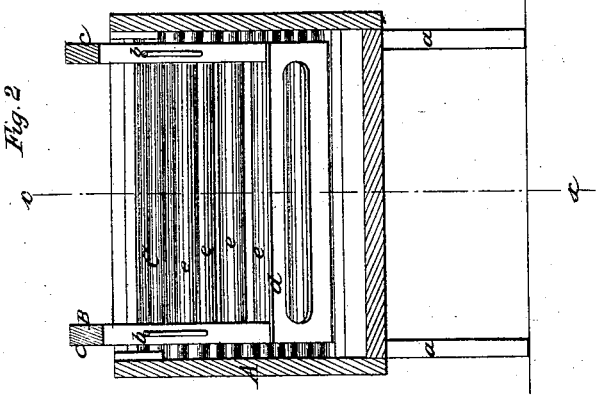
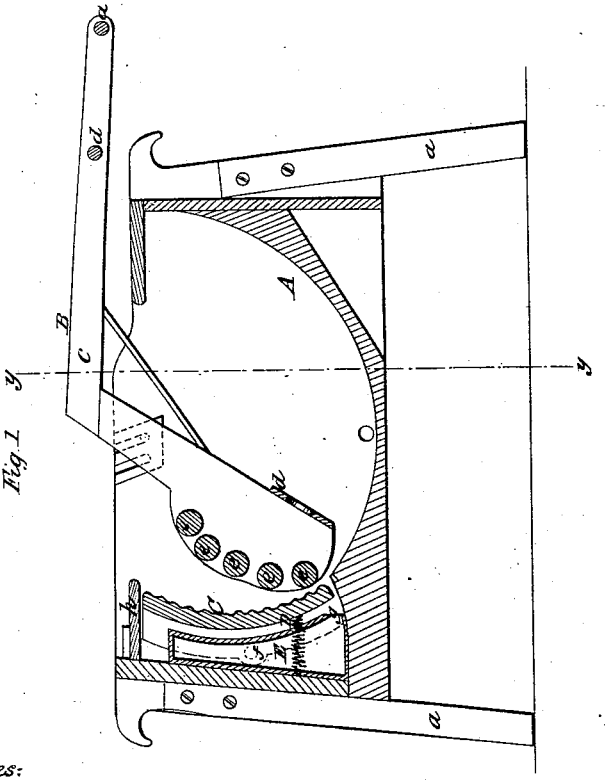


Fig. 1



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UNITED STATES PATENT OFFICE.

JOHN HEINLEIN, OF GALENA, ILLINOIS.

WASHING-MACHINE.

Specification forming part of Letters Patent No. **48,683**, dated July 11, 1865.

To all whom it may concern:

Be it known that I, JOHN HEINLEIN, of Galena, in the county of Jo Daviess and State of Illinois, 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 those 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 transverse vertical section of the same, taken in the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts.

This invention relates to a new and improved clothes-washing machine of that class in which a swinging pressure-roller frame is employed in connection with an elastic wash-board.

The invention consists in a novel construction and arrangement of the parts above specified in connection with an air-chamber, as hereinafter fully shown and described, whereby the clothes are acted upon in the most efficient manner both as regards the pressure and friction to which the clothes are subjected, as well as to the turning of the clothes in the suds-box, in order that the whole mass may be properly acted upon.

A represents a suds-box, supported at a suitable height by legs *a*, or any proper framing. This suds-box has a concave interior, as shown in Fig. 1; and B is a lever-frame which works on pivots *b b*, and is composed of two side pieces, *c c*, connected by cross-bars *d d*, the side pieces being formed of two bars attached to each other, so as to form an obtuse angle, as shown in Fig. 1. In the lower part of this lever-frame there are fitted a series of rollers, *e*, which are parallel with each other and arranged so as to form in the aggregate a convex surface, as shown clearly in Fig. 1, said rollers extending entirely across the suds-box.

C represents a wash-board, which is of concave form at its face side and works on pivots *f*. The face or concave side of this wash-board is fluted or grooved horizontally, and it has springs D bearing against its inner surface below the pivots *f f*, as shown in Fig. 1. There is a space between the wash-board and the end of the suds-box, in which space an air-chamber, E, is placed. This air-chamber may be constructed of sheet metal, and it has an opening, *g*, at its lower end, extending entirely across it, said opening being directly behind the lower end of the wash-board, as shown in Fig. 1.

The clothes to be washed are placed in the suds-box between the rollers *e* and the wash-board C, the suds-box being supplied with a requisite quantity of suds. The wash-board under the pressure yields or moves backward at its lower end, and forward at its upper end, so as to subject the whole mass of clothes to an equal pressure, and when the lower end of the wash-board moves backward water will be forced through the opening *g* into the air-chamber E and the air above the water compressed therein. On the return or backward movement of the rollers *e* the compressed air in E will force the water out through the opening *g*, so as to cause it to impinge against the clothes with sufficient force to turn the latter, and thereby insure the whole mass of clothes being properly acted upon, the clothes being turned with certainty at each backward movement of the rollers *e*.

Above the wash-board there is a shelf, *h*, which may be removed when the wash-board is to be taken out.

By this means the clothes will be subjected to a requisite degree of pressure, and an efficient pressure between the rollers and wash-board by operating the lower frame, B, and the clothes turned so that all parts of the mass or quantity between the rollers and wash-board will be acted upon.

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

1. The air-chamber E, arranged relatively with the wash-board C to operate in connection therewith, substantially as and for the purpose specified.

2. The combination of the swinging rollers *e*, wash-board C, and air-chamber E, all arranged and combined to operate in the manner, as and for the purpose set forth.

JOHN HEINLEIN.

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