X 7085

E. Fisk

Washing Machine,

Patented May 25, 1832.

Fig. 3

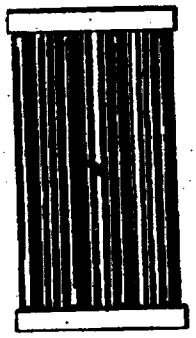


Fig. 2

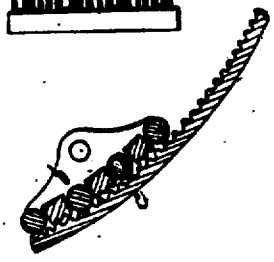
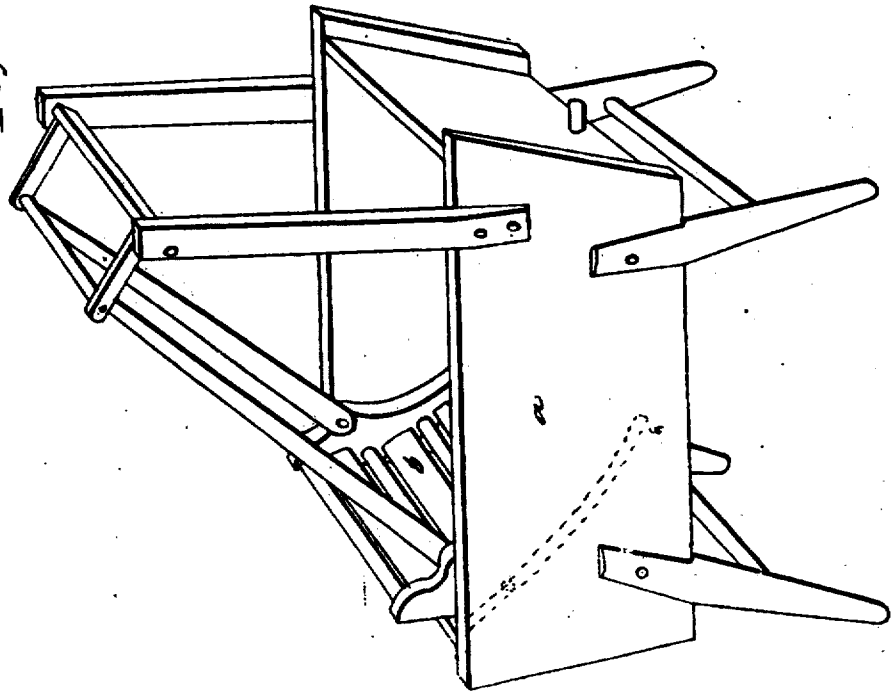


Fig. 1.



N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

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38.

Ezra Fisk.

Letters Patent Dated May 25 1832.

The schedule referred to in these Letters Patent, and making part of the same containing a description in the words of the said Ezra Fisk himself, of his improvement in the Washing Machine

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To all to whom these presents shall come:

Be it known that I Ezra Fisk of Fayette in the County of Kennebec, and State of Maine, have invented a new and useful improvement in the washing machine, and that the following is a full and exact description of the construction and operation of the said machine, reference being had to the annexed drawing.

This machine is constructed to work in an oblong square box or tub, which admits of various sizes. But for ordinary use in private families, the tub may be about thirty inches in length, eighteen inches in width and twelve inches in depth; and in this tub is placed a grated apron which consists of two side pieces of some suitable kind of hard wood board, nineteen inches in length, two inches in width, and one inch in thickness.

These pieces are placed in the sides of the tub with the concave edges upwards one end of each resting on the bottom of the tub - the other ends elevated about nine inches, and reclining against the front end of the tub, in which position they are covered with a board of some suitable kind of hard wood which extends across the whole width of the tub, and covers the whole length of the side pieces excepting about three inches at

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the elevated ends. The upper surface of the board is fluted or reeded like a common wash board.

To prevent the apron from sliding on the bottom of the tub, small sticks are attached to the sides of the tub and the bottom. The ended board of the apron is confined to the side pieces by suitable metal screws. A rubber is constructed to operate on the apron, consisting of two side pieces about nine inches in length three inches in width & three fourths of an inch in thickness. These pieces are placed in the apron about fourteen inches asunder. The lower edges being convex so as to correspond to the curve of the apron, and the upper edges curved, or bowed, so as to reduce the width to two inches at the ends. The side pieces of the rubber thus described, are connected by several pieces of board, say three or four in number one inch in width and three fourths of an inch in thickness, with suitable tenons on the ends that are inserted in corresponding mortises made in the side pieces so as to leave a space of one inch between them, the underside of the pieces being reeded.

The reeded surfaces of these pieces form a bow with the convex edges of the side pieces, and the vacant spaces between them are occupied by rollers that are seven eighths of an inch diameter, with small pudgeons of iron or other hard metallic substance inserted in the ends and the pudgeons made round preparatory, one fourth of an inch diameter, made in the side pieces so that the rollers project one fourth of an inch below the reeded surface of the intervening pieces, one roller is also placed at each end of the side pieces. Circular perforations three fourths of an inch diameter are made thro the

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side pieces of the rubber, at the centre (as respects the length) about one inch below the upper edges.

The rubber thus constructed, is suspended by a kind of frame work that is supported by two posts which may be two inches in width and one inch in thickness. These posts are attached to the outer sides of the tub, about seven inches from the rear end, extending in a vertical position, twenty two inches above the tub; and the posts are confined in their position by sinking the lower ends in dovetail form into the sides of the tub, or they may be confined by any other suitable kind of fastening.

The upper ends of the posts are connected by a cross piece of wood which may be either square or round, about one inch and a half through, with gudgeons made on the ends, fitted to work in round perforations, three fourths of an inch diameter, made thro the posts, one inch below the upper ends. Two perforations which may be either round or square, are made thro the above described cross piece, about two inches from the posts and in those perforations are inserted the ends of two pieces of wood that extend in the rear about seven inches, the outer end ends being about inch and a half deep and three fourths of an inch thick, and thro these, about an inch from the rear ends, are made horizontally, round perforations, three fourths of an inch diameter and these ends are connected by a cross piece that may be either square or round, about an inch and one fourth through, with gudgeons on the end fitted to work in the last

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mentioned perforations. These round perforations three fourths of an inch diameter, or square mortices equivalent, are made thro the last described cross piece, one inch and a half from the shank end of the gudgeons, and in these perforations, or mortices are inserted suitable tenons made on the ends of two pieces which extend from the last described cross piece down to the rubber as it is at rest on the apron. These pieces measure twenty six inches in length, three fourths of an inch in thickness, and two inches in width at the lower end. But the width diminishes to an inch and one fourth at the upper ends, the width of the pieces corresponding to the length of the rib.

Round perforations one inch diameter, are made thro the pieces last described, about an inch from the lower ends, and the ends being placed within the side pieces of the rubber are connected therewith by a roller that is one inch and one fourth through with gudgeons in the ends fitted to work in the perforations last mentioned. The gudgeons pass also thro the side pieces in the perforations made at the centre as before described.

The gudgeons must work easily in the pieces by which the rubber is suspended, but they are confined in the pieces of the rubber by being pinned thro.

The machine, thus constructed, may be worked on any suitable frame fitted to sustain it, or it may be worked on a common work bench or any other convenient convenience.

To operate the machine, the cloth must be prepared for working as in the usual way, and the ink absorbed

with a sufficient quantity of warm water and soap. One large piece or several smaller pieces may be placed on the apron, duly spread on the needed surface, and the rubber applied with a rugged or gentle motion as occasion may require.

The body under operation is held by means of a bracket, or fixing, inserted in the rear end of the tub near the bottom.

Although specific dimensions are stated in the foregoing specification of the machine, yet the size and proportion of the several parts may be varied to larger or smaller at pleasure, but so as not to vary the general principles of the machine.

The specific, new, and useful improvements comprised in the machine herein before described, and claimed by me, as being the first inventor thereof, are the following:

1st The Rubber, as combining and presenting a surface of rollers intermixed with plated or reeded pieces and in its application and use, producing a gentle operation on the clothes, which is in a medium between a squeeze and rub, thereby, producing the effect of cleansing, expeditiously and perfectly without marring the clothes by too heavy friction.

2d The particular mode of suspending the rubber, being without the aid or resistance of weights or springs.

3d The general manner of combining the parts as being new, possessing in a high degree the advantages of regularity, and ease, not liable to get out of order, and in the operation resembling very

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nearly the common mode of working, consequently requiring but little practice to become acquainted with the mode of using the machine advantageously.

In testimony that the above is a true specification of my Lord improvement as above stated, I have hereunto set my hand & seal the twenty first day of February in the year of our Lord, eighteen hundred and thirty two

Witness Ezra Fisk.
Sam C. Blake
Francis V. Fiske

(Received and Recorded 2 August 2nd 1832)

Examined by Al. 1841. Ezo Fisk

1770 words)