7084X

E. Fisk

Washing Machine,

Patented May 25, 1832.

Fig: 3

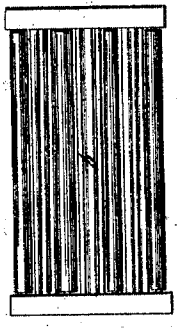


Fig: 2

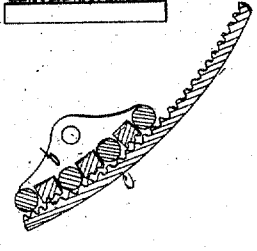
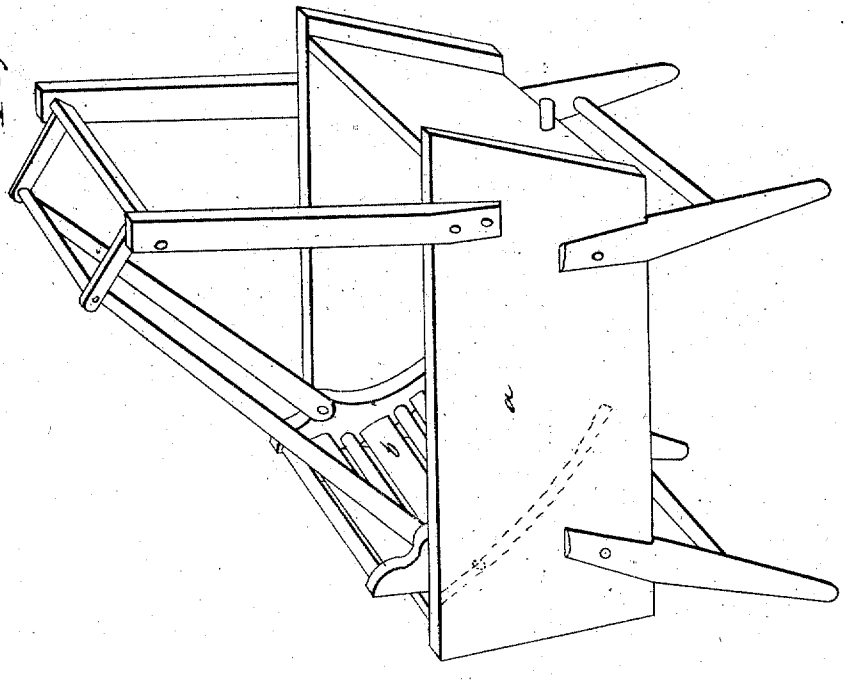


Fig: 1.



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Ezra Fisk.

Sewing Machine. May 25 1852.

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 Hemming Machine.

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 hemming machine, and that the following is a full and exact description of the construction and operation of the said machine, as invented or improved by me.

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 curved 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 setting in 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 secured with a board of some suitable kind of hard wood which extends across the whole width of the tub, and across the whole length of the side pieces excepting about three inches at

the edges and. The supplementary of the board is planed or reeded like a common wash board.

To prevent the apron from sliding on the bottom of the box, small cleats are attached to the sides of the box at the bottom. The reeded board of the apron is confined to the side pieces by suitable machinery. A rubber is constructed to operate on the apron, consisting of two side pieces about nine inches in length by three fourths of an inch in thickness. These pieces are placed on the apron about fourteen inches asunder, the same edges being convex so as to correspond to the curve of the apron, and the upper edges curved, or beaded, 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, seven inches 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 level with the convex edges of the side pieces, and the vacant spaces between them are occupied by pulleys that are seven eighths of an inch diameter, with small gudgeons of iron or other hard material inserted in the ends, and the gudgeons work in round perforations, one fourth of an inch in diameter, made in the side pieces so that the pulleys project one fourth of an inch below the reeded surfaces of the intervening pieces, and the pulleys work in cast iron by the side pieces, bringing the projection three fourths of an inch diameter, made to the

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side pieces of the rubber, at the centre, to reject the
bag with, about one inch below the upper edge.

The rubber shoe consists of a sole surrounded by a
kind of frame work that is supported by two feet
which may be two inches in width and one inch
in thickness. The feet are attached to the outside
of the sole, about seven inches from the rear end,
extending in a vertical direction, twenty two inches
above the sole, and the feet are confined in
their position by driving the same nails in, that
secure the sole to the lower ends of the feet, as may be
employed by any other suitable kind of fastening.

The upper ends of the feet are connected by a cross
piece of board in which may be either three or more
short mortises and a body through, with projections
made on the ends, fitted to work in round perfo-
rations, three fourths of an inch diameter, made
thro the feet, 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 feet and in these
perforations are inserted the ends of two pieces
of wood that extend in the rear about seven inches,
the outer ends being shaped in oval and a half deep
and three fourths of an inch thick, and thro these,
about an inch from the inner ends, are made hor-
izontally, round perforations, three fourths
of an inch diameter and these ends are connec-
ted by a cross piece that may be either square or
round, about an inch and one fourth thick,
with projections on the ends fitted to work in the

mentioned perforations. Three round perforations three fourths of an inch diameter, or square mortises equivalent, are made thro' the last double cross piece, one inch and a half from the short end of the gudgeon, and in these perforations, or mortises are inserted suitable bands made on the ends of two pieces which extend from the last double cross piece down to the rubber as it is at rest in 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 bar.

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 on 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 bank knock or any other convenient contrivance.

If I prefer the machine the cloths must be prepared for working on it in the following manner the gelatinized

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with a sufficient quantity of water until enough. One large piece of flannel smaller than may be folded into the apron, but spread on the said surface, and the rubber applied with a suffused gentle motion of rotation as regards the figure.

The dirt and the stain will be drawn off by means of a flannel, or fabric, inserted in the seam of the fold near the bottom.

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

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

1st The Rubber, or combining and presenting a surface of rubber intermitted with fluted or corded pieces, and in its use to operate, producing a gentle agitation on the cloth, which is as a medium between a squeeze and rub thereby producing the effect of cleaning, speedily and safely without moving the cloth by its heavy friction.

2d The peculiar mode of suspending the rubber, heavy without the aid or assistance of springs or springs.

3d The general manner of combining the parts as being new, forming in a light style to work for by hand, and one not liable to get out of order, and in the general manner of using my

many the common mode of working, and requiring very little practice to become acquainted with the mode of using the machine advantageously.

In testimony that the above is a true specification of my said 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

Witnesses
Saml. Blake
Francis A. Fisk

Ezra Fisk.

(Received and Recorded 2 mar. 1841 Eze Fisk)

Dan'j nash Clk. 1841. 1770 words