

(No Model.)

L. H. MERRIMAN.
WASHING MACHINE.

No. 418,040.

Patented Dec. 24, 1889.

Fig. 1.

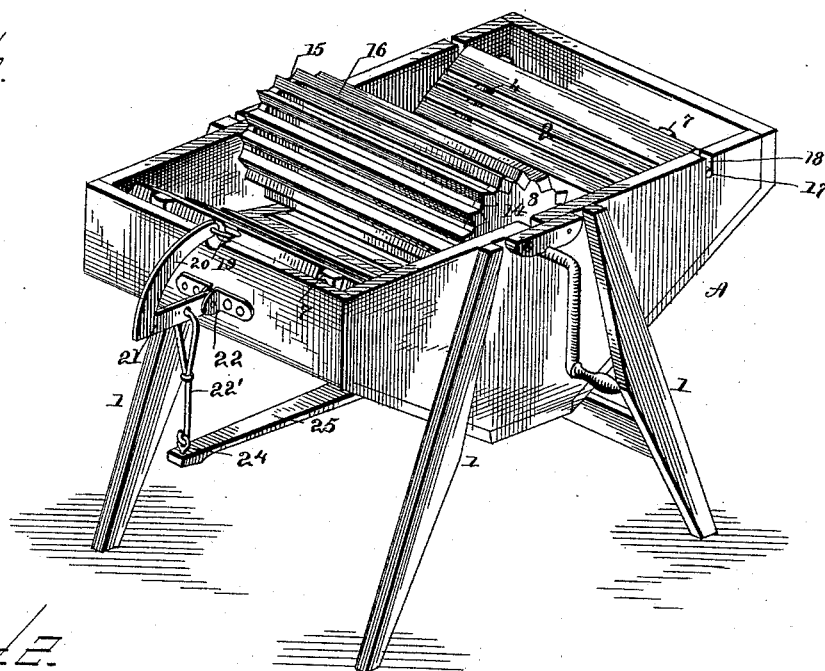


Fig. 2.

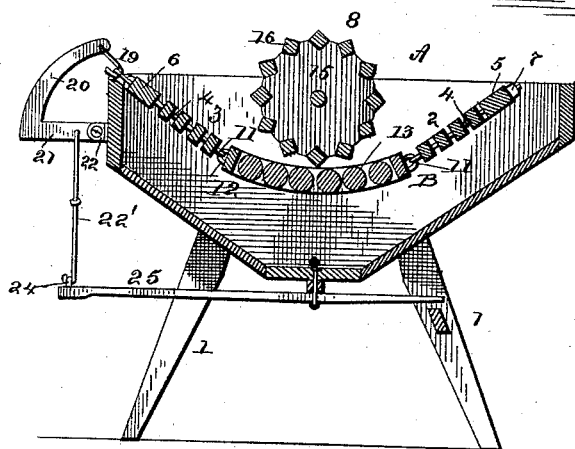
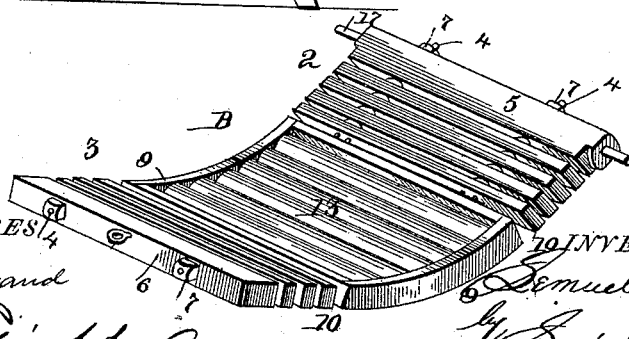


Fig. 3.



WITNESSES

F. L. Curand

A. M. Elliott

INVENTOR

L. H. Merriman

By Louis Rogers & Co

Attorneys

UNITED STATES PATENT OFFICE.

LEMUEL H. MERRIMAN, OF CARLINVILLE, ILLINOIS, ASSIGNOR OF ONE-HALF
TO JOHN W. HAWKINS, OF SAME PLACE.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 418,040, dated December 24, 1889.

Application filed April 10, 1889. Serial No. 306,678. (No model.)

To all whom it may concern:

Be it known that I, LEMUEL H. MERRIMAN, a citizen of the United States, and a resident of Carlville, in the county of Macoupin and State of Illinois, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to washing-machines.

The object is to produce a washing-machine the wash-board of which will adjust itself to the varying thicknesses of the clothes placed upon the same, so that a uniform pressure will be exerted, thereby preventing tearing or the rubbing of certain portions of the clothes more than others; furthermore, to produce a washing-machine which shall be simple of construction, efficient and durable in use, and which may be constructed at but a slight expense.

With these objects in view the invention consists, broadly, in a washing-machine provided with a spring-actuated wash-board, the said wash-board being made in sections, one section being provided with rollers which are situated beneath the scrubber and are operated by the reciprocating motion imparted to the clothes when the said scrubber is operated, whereby the clothes will be prevented from being torn by coming in contact with the scrubber, and the other sections being composed of slats placed at such a distance apart that when the clothes are run upon them the water will be allowed to run into the tub.

Furthermore, the invention consists in the combination, with the wash-board, of a spring-actuated arm connected with the same and designed to hold the wash-board in contact with the scrubber, and also to allow the said wash-board to be pressed down when the clothes pass under the scrubber; and, finally, the invention consists in the various novel details of construction, as will be hereinafter fully set forth.

In the accompanying drawings, Figure 1 is

a perspective view of the device. Fig. 2 is a longitudinal sectional view; and Fig. 3 is a detail view of the wash-board, showing its peculiar construction.

Referring to the drawings, A designates the tub for containing the water used in washing the clothes, the same being mounted upon suitable legs 1, and made of any suitable material, but preferably in this instance of wood.

B designates the wash-board, consisting of two end sections 2 and 3, the slats composing the same being secured upon rods 4, which pass through cross-pieces 5 and 6 at each end, and are secured in place therein by means of nuts 7. The center section, or that which is under the scrubber 8, consists of a frame provided with curved end pieces 9, which nearly conform to the periphery of the scrubber, and straight side pieces 10, to which the end sections are pivoted by means of the hooked end 11 of the rods 4, which engage screw-eyes 12, secured to the center portion. Within this frame are mounted a number of rollers 13, upon which the clothes to be washed are rubbed, and are revolved by the pressure of the clothes upon the same when the scrubber is operated.

The scrubber 8, as will be seen, consists of two end pieces 14 and 15, upon which are secured in any suitable manner a number of ribs 16, which form the scrubbers. The end piece 5 of the scrubbing-board is provided with two pivots or bearings 17, which rest in recesses 18, formed in the side and near the end of the tub, and the other end piece 6 is provided with a screw-eye engaged by a hook 19 upon a curved arm 20, carrying on its lower end an inwardly-projecting straight arm 21, pivoted to a standard 22, secured to the end of the tub. At a point near the said standard the straight arm is provided with a perforation, which is engaged by the upper end of a rod 22', the lower end of the said rod engaging a screw-eye 24, secured in one end of a spring 25, the opposite end of the same being rigidly secured to the under side of the tub. This spring may be made either of metal or of wood; but for practical purposes it has been found that wood will answer the purpose as well as metal.

Having now described the different parts

of my device, I will proceed to show its manner of operation. The clothes are first laid upon the wash-board and the scrubber is revolved until the clothes are brought directly under the rollers on the wash-board. The handle of the scrubber is then rotated until the clothes are washed, when by turning the handle a complete revolution the clothes will be discharged at the end of the tub, from which point they may be removed.

It will readily be seen that by constructing the wash-board in the manner described—that is, in sections pivoted together, and by means of the spring under the tub and connecting with the wash-board by the curved arm—a uniform pressure will at all times be exerted upon the clothes, so that one point will not be rubbed harder than another point, which would tend to tear or mutilate the clothes; that the wash-board herein described is exceedingly simple of construction, and that it may be constructed at but a slight expense.

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

1. The combination of a casing or receptacle, a cylindrical scrubber having its periphery formed of a series of slats, and a wash-board consisting of the end sections composed of a series of slats at suitable distances apart and secured by bolts, and the central section consisting of a frame provided with curved end pieces and straight side pieces, to which the end sections are pivoted, and having

mounted therein a series of rollers, substantially as set forth.

2. The combination, with the arm pivoted to a standard on the end of the wash-tub and carrying at its upper end a hook for engaging a screw-eye secured to the end piece of the wash-board, of a rod engaging the lower part of the said arm, and a spring secured to the under side of the wash-tub, whereby the wash-board will always be kept in its proper position with relation to the scrubber, substantially as described.

3. In a washing-machine, the combination of the wash-board, one end of which is provided with bearings engaging recesses formed in the side of the tub and the other end being engaged by an arm secured to a standard on the end of the tub, a spring secured to the under side of the tub and carrying a rod engaging the arm for operating the wash-board, and a scrubber mounted in suitable bearings in the wash-tub and directly over the rollers in the wash-board, whereby when the said scrubber is rotated the rollers will be caused to revolve and thereby prevent mutilation of the clothes, substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses:

LEMUEL H. MERRIMAN.

Witnesses:

LUCAS PEIFFENBERGER,
BENGAMEN EDEN.