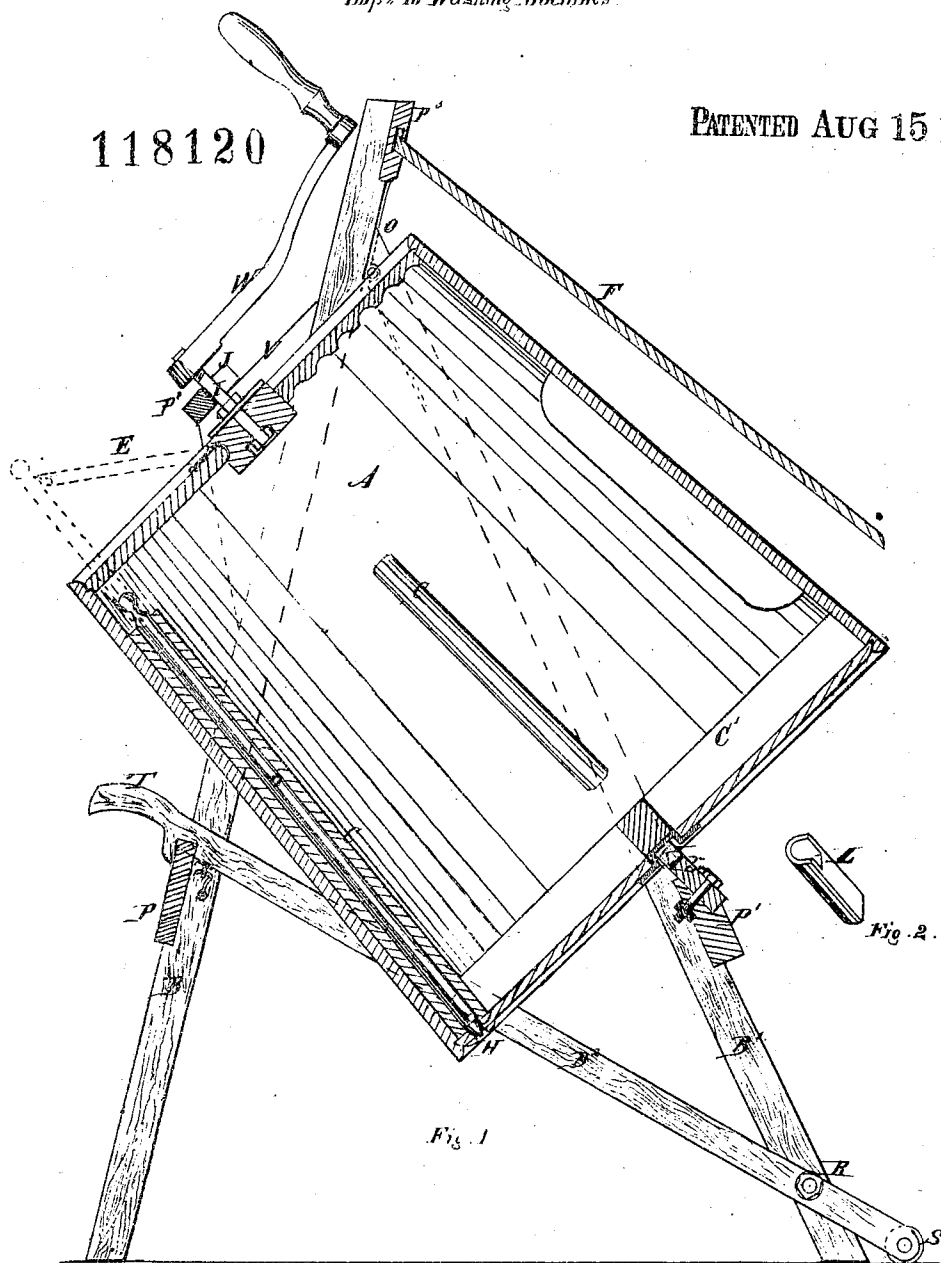


ROBERT E. FERGUSON

Imp^l in Washing Machines

PATENTED AUG 15 1871

118120



Witnesses:
F. F. Warner.
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UNITED STATES PATENT OFFICE.

ROBERT E. FERGUSON, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 118,120, dated August 15, 1871.

To all whom it may concern:

Be it known that I, ROBERT E. FERGUSON, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Washing-Machines, of which following is a specification, reference being had to the accompanying drawing, in which—

Figure 1 represents a vertical central section of my machine, and Fig. 2 a detached view of the box or socket supporting the tub at its bottom.

My invention relates to that class of washing-machines that revolves on an axis and does the washing by violent agitation caused by the contents of the tub dashing against cleats or beaters rigidly attached to the interior of the tub. The first part of my invention consists in hanging the cylindrical tub or vessel A in a frame in an oblique position, so that the contents of the tub will rest partly on the bottom and partly on the side of the tub and be agitated by the beaters on both. The second part of my invention consists in the folding frame B for holding the tub when in use, but which can be folded for transportation or to be put aside when not in use. The third part of my invention consists of the board F, attached to the frame at its top and extending down over the tub so that the clothes, as they pass through a wringer attached to the frame over the tub, will slide down on the board into a basket or other suitable receptacle and be kept from falling on the tub A.

To enable those skilled in the art to understand how to make and use my invention, I will describe the same with particularity.

A is an ordinary cylindrical tight tub, made of staves, sufficiently strong for washing clothes. C are cleats or beaters firmly attached to the inside of the staves of the tub, and C' are cleats or beaters attached to the inside of the bottom of the tub, as shown. One of the beaters, C, is made hollow, and a long plug, D, extends through it to the hole H through the bottom of the tub. There are openings at the bottom of that beater to allow of the water escaping through the hole H when the plug is withdrawn. E is a cover, hinged to the head of the tub by rubber hinges *a* in such manner that the hinges serve as springs to hold the cover closed, and the edges of the cover are so made and attached as to be nearly water-tight when closed, or as nearly so as possible. When the plug D is raised, as shown in dotted lines, the cover holds it raised, and all the water runs

through the hole H from the tub. B, B¹, and B² is a triangular frame, one-half of which is shown in the drawing, there being two pieces of each kind, and they are held together by the cross-pieces P, P¹, P², and P³ firmly bolted thereto. V are ledges firmly secured to the pieces B, and to which the cross-piece P² is attached to make the bearing for the spindle I on an incline, as shown. W is an ordinary handle-crank for revolving the tub. I is a crank-spindle firmly attached to the center of the head of the tub, and it has a bearing in the cross-piece P², as shown. There may be a thick cross-piece, J, across the head of the tub to make a strong attachment for the spindle I. K is a spindle attached to the center of the bottom of the tub, as shown, and it rests in an open socket, L, which is securely fastened to the cross-piece P¹. This socket or half-socket is made open on one side so that the spindle can be readily removed therefrom, and it being on an incline, with the open side up, as shown, it holds oil for lubrication, and, also, the spindle is not liable to be accidentally displaced therefrom. B¹ is hinged to B at O, and the braces B² are attached to B¹ by pivot-bolts R, and are hooked over the cross-piece P and secured there by a button or hook, as shown. The tub A can be lifted from the frame, and then, by turning the button or unhooking the hook that secures the braces B² to the cross-piece P, the whole frame can be folded up compactly, by B² turning on the bolts R and B¹ swinging on the hinges O. S S are rollers in the end of the braces. B² and T are handles. By raising the machine it is thrown upon the rollers S, and may be rolled about as desired. F is a board attached to the top of the frame, and extending down over the top of the tub, so that, as the clothes pass through a wringer attached to the cross-piece P, they will drop upon the board F and be carried into a basket without being soiled. This board may be readily removed and placed aside with the wringer and kept clean. It will be readily seen that the water and clothes will rest partly on the side and partly on the bottom of the tub, on account of its being hung in an inclined position, and as the tub is revolved by turning the crank U the contents of the tub will be carried partly up by the cleats or beaters and then fall back, and a great agitation produced.

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

1. The tub A, provided with inside cleats or

beaters, and hung in the hinged frame so as to be revolved therein with its axis of revolution inclined, substantially as and for the purposes described.

2. The folding frame, in combination with the inclined beater-tub, substantially as described, for the purpose specified.

3. In combination with the tub, the hollow chute or beater C, the plug D, and cover E, substantially as described, for the purpose specified.

4. The adjustable frame of the machine, consisting essentially of the upright portion B, hinged portion B¹, pivoted arms B², and bearing-pieces J P¹, as herein shown and described, for the purposes specified.

ROBT. E. FERGUSON.

Witnesses:

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