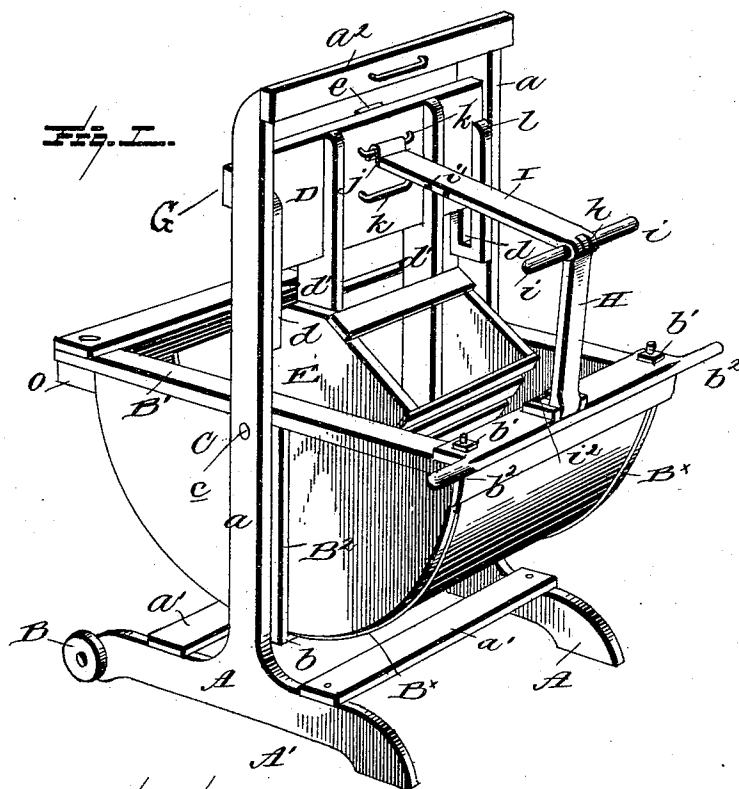


(No Model.)

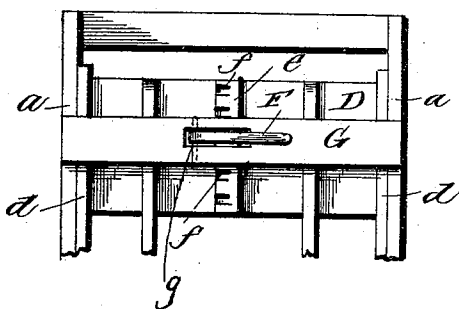
E. F. CHAPMAN.
WASHING MACHINE.

No. 473,140.

Patented Apr. 19, 1892.



III. E.



Witnesses

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UNITED STATES PATENT OFFICE.

EUGENE F. CHAPMAN, OF KEYTESVILLE, MISSOURI.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 473,140, dated April 19, 1892.

Application filed April 1, 1891. Serial No. 337,199. (No model.)

To all whom it may concern:

Be it known that I, EUGENE F. CHAPMAN, a citizen of the United States, residing at Keytesville, in the county of Chariton, State of Missouri, have invented certain new and useful Improvements in Washing-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain new and useful improvements in washing-machines; and it has for its objects, among others, to provide ready means for regulating the pressure upon the clothes being operated upon, and
15 also to provide a construction whereby the washer may be operated by a person standing up or sitting down.

Other objects and advantages of the invention will hereinafter appear, and the novel
20 features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part
25 of this specification, and in which—

Figure 1 is a perspective view of my improved machine. Fig. 2 is a back view of the slide which carries the rubber, showing the cam-latch for holding it in its adjusted position.
30

Like letters of reference indicate like parts in both views where they occur.

Referring now to the details of the drawings by letter, A designates a suitable support, which in the present instance is shown
35 as being composed of the uprights *a*, having suitable bases *A'*, connected by cross-pieces *a'* to brace them, and the uprights are connected at their upper ends by the cross-piece *a*², as
40 seen in Fig. 1. Rollers B may be provided, if desired, journaled upon suitable axes held to the bases, as shown in Fig. 1, so that the device as a whole may be readily moved from place to place when occasion may require.

45 C is the tub, semicircular in form and provided with a rubbing-surface of any known or approved construction, being preferably provided with a galvanized-iron outer covering. At the top of the tub I provide a surrounding wooden frame B' and brace it by
50 the end uprights B², which are secured to the

ends of the tub and are connected by a cross-piece *b*, that extends under the bottom of the tub. The front and rear bars of the surrounding frame are connected and strengthened and braced by the wire bands B³, which
55 extend under the tub at the ends and have one end secured in the rear bar and the front ends screw-threaded and passed upward through the front bar and receive the nuts
60 *b'*, by which they may be tightened to provide for shrinkage and to keep the parts tight. The ends of the front cross-bar are extended and formed into handles *b*², by which the tub
65 may be rocked on its pivot, the said tub being pivoted on trunnions or pivots *c*, held in the uprights of the support, as seen in Fig. 1.

Upon the inner faces of the uprights of the support A are provided guides *d*. In these guides is arranged to slide vertically the
70 plate or board D, to which is attached the uprights *d'*. These uprights carry the rubber E, which may be of any of the known or approved forms of construction, having slatted bottom and of a shape conforming to that
75 of the tub. Upon the rear face of this plate or board D is a vertical bar *e*, which is provided with a plurality of transverse notches *f*, as seen in Fig. 2, with which is designed to engage the cam-latch F, which is pivoted at
80 *g* in a slot in the cross-bar G, secured to the rear faces of the uprights of the support A, as seen in Fig. 2. The plate D slides in the guides therefor and is held in its adjusted
85 position by the engagement of the latch with the desired notch, the adjustment being provided for the purpose of regulating the pressure of the rubber upon the clothes in the tub.

Pivotaly connected with the front bar of the frame of the tub is a vertical bar H, the
90 upper end of which is pivoted on a pin or bar *h*, the ends of which form handles *i*, and on this same pin is pivoted the bar I, the other end of which is hooked, as shown at *j*, and designed to engage a loop or staple *k* on the
95 board or plate D, as shown in Fig. 1. I provide more than one of these loops or staples, so that the hooked end of the bar I may be engaged with either one of them, according to the vertical position of the rubber.

100 The operation will be readily understood, and a description thereof is not deemed nec-

essary. The rubber remains stationary while the tub is oscillated or rocked on its pivots through the medium of the handles.

5 The front vertical bars of the guides are beveled or tapered, as seen at *l*, so that the rubber may be removed or inserted by lifting it to its highest position and then tilting it forward.

10 The device as a whole is simple, strongly built, and in practice has proved most efficient for the purpose for which it is intended.

The back end of the tub should be weighted, as shown at *O*, to balance it.

15 The bar *I* is provided upon its under side with a plurality of notches *i'*, which are designed to engage a bolt *i*² on the front cross-bar of the tub, as seen in Fig. 1, so as to increase the leverage, whereby it may be operated by a child or by a person in a sitting
20 position.

What I claim as new is—

1. The combination, with the pivoted tub and the vertically-adjustable rubber, of the

adjustable pivotal connections between the tub and a portion of the rubber, as set forth. 25

2. The combination, with the vertically-adjustable rubber provided with notched bar, of the tub and the pivotal connections between the tub and a portion of the rubber, and the pivoted latch adapted to engage the
30 said notched bar, substantially as specified.

3. The combination, with the support provided with guides, of the board adjustable in said guides and carrying the rubber, the pivoted tub, the staples on the said board, and
35 the adjustable pivotal connections between the tub and a portion of the rubber and comprising a pivot formed into handles, substantially as specified.

In testimony whereof I affix my signature in
40 presence of two witnesses.

EUGENE F. CHAPMAN.

Attest:

H. B. RICHARDSON,
JOHN T. ELLICOTT.