

(No Model.)

Z. T. CHAMBERS.
WASHING MACHINE.

No. 479,488.

Patented July 26, 1892.

Fig. 1.

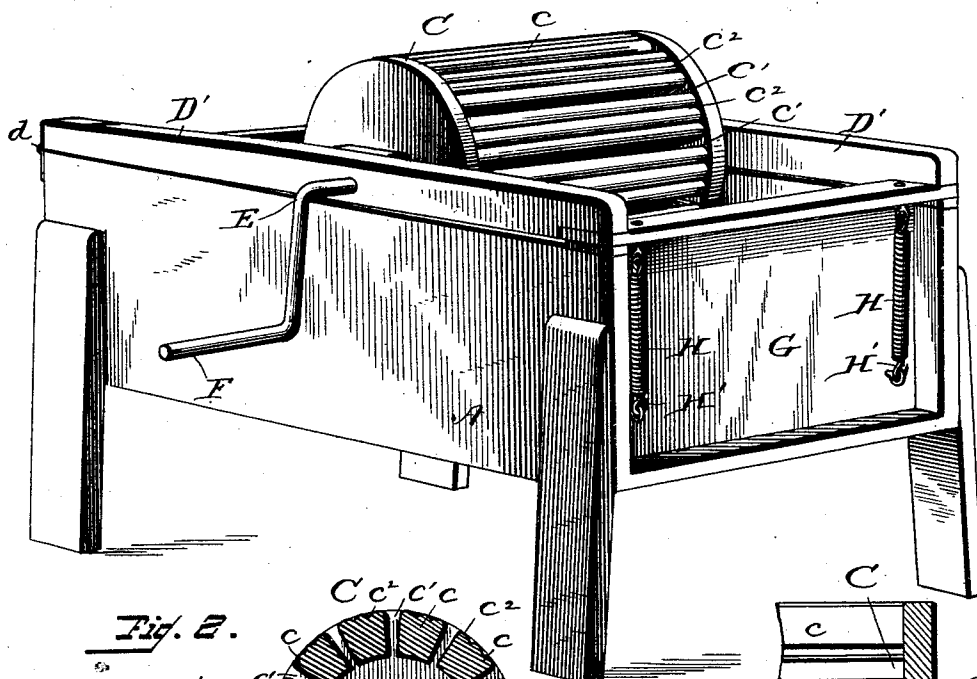


Fig. 2.

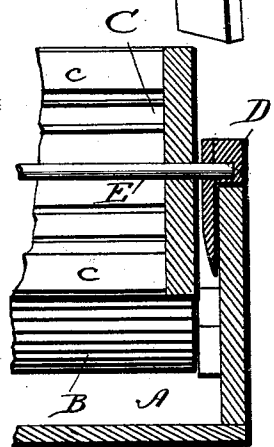
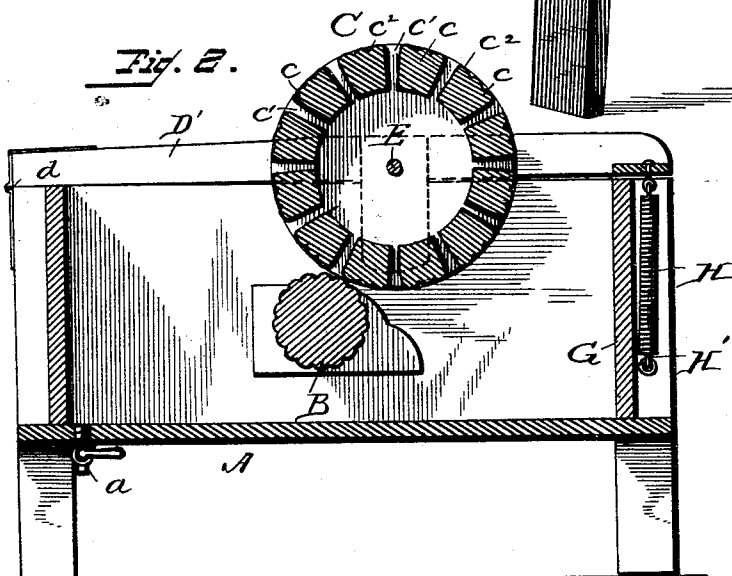


Fig. 3.

Witnesses

A. L. Hough

Inventor
Zachariah T. Chambers
By his Attorney
Franklin

UNITED STATES PATENT OFFICE.

ZACHARIAH T. CHAMBERS, OF CALIFORNIA, MISSOURI.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 479,488, dated July 26, 1892.

Application filed February 26, 1892. Serial No. 422,869. (No model.)

To all whom it may concern:

Be it known that I, ZACHARIAH T. CHAMBERS, a citizen of the United States, residing at California, in the county of Moniteau and State of Missouri, have invented certain new and useful Improvements in Washing-Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in washing-machines, and it relates more particularly to that class of washing-machines in which the washing is performed by passing the clothes between rollers held to their work by spring-power.

The object of the invention is to generally improve upon the construction and to render more efficient in operation this class of washing-machines.

Another and more immediate object of the present invention consists in journaling the main roller in the upper section of the machine, which section is hinged at one of its ends to the body of the washer and at its other end is provided with a series of spiral springs, which springs serve to detachably connect the upper section with the body portion of the washer and at the same time serve to regulate the pressure between the rollers.

Other objects and advantages of the invention will hereinafter appear.

To these ends and to such others as the invention may pertain, the same consists in the peculiar construction and in the novel combination, arrangement, and adaptation of parts all as more fully hereinafter described, shown in the accompanying drawings, and then specifically defined in the appended claim.

The invention is fully illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification like letters of reference indicating the same parts throughout the several views, and in which drawings—

Figure 1 is a perspective view of a washing-machine embodying my improvements.

Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is an enlarged detail in section, which will be more particularly hereinafter referred to.

Reference now being had to the details of the drawings by letter, A designates the body portion of the machine, which is preferably rectangular in form, open at the top, and provided at one of its ends with outlet *a*.

B is a corrugated roller which extends transversely across the machine near its bottom, at substantially the longitudinal center of the body portion of the machine.

C is a cylinder the periphery of which is composed of a series of slats *c c*, having between the slats open spaces *c'*, and the said slats are each provided with corrugations *c''*, which extend longitudinally of the slats and are adapted to mesh with the corrugations upon the face of the roller B.

The cylinder C, it will be observed, is journaled at its ends within the side bars *D'* of the frame D, a short distance to one side of the longitudinal center of the said frame D, so that the face of the cylinder is brought into contact with the roller B at one side instead of directly above the roller. The shaft E of the roller or cylinder C is extended through the side bar of the frame D and is bent to form an operating crank or handle F.

The frame D, it will be observed, is at one of its ends hinged to the body portion of the washer, as shown at *d*. The sides and bottom of the body portion of the washer at the end opposite to that at which the frame D is hinged are extended for a short distance beyond the end G, and secured at their lower ends to the said end G of the machine by means of hooks *H'* are spiral springs H, the opposite or upper ends of which springs are attached to the under face of the overlapping end strip *D''* of the frame D. It will thus be seen that the hinged section D, in which the cylinder is journaled, may be at any time readily raised by detaching the hooks *H'*, thus permitting the said frame, with its cylinder, to be raised from the washer. The springs H, seated, as described, within the recess at the end of the body portion of the machine, will be out of the way and not likely to interfere with or catch upon adjacent objects, and

the said springs will serve to at all times insure the necessary pressure between the cylinder and roller.

5 In operation the clothing is placed within the body portion of the machine and the hinged frame D secured in place by means of the hooks H'. By causing the cylinder to rotate first on one and then in the opposite direction the clothing will be carried back-
10 ward and forward between the cylinder and roller and will be thoroughly cleaned.

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

15 The herein-described washing-machine, the same comprising, in combination, the body portion of the machine, the corrugated roller journaled therein at substantially the longi-

tudinal center of the body portion near its bottom, the frame D', hinged at one of its ends to the body portion, the cylinder C, journaled in said frame and having corrugated periphery and radial openings provided with an operating-crank, and the spiral springs H, secured at their upper ends to the under side of the end strip of the frame and at their lower ends having hooks, as described, whereby the said springs may be detachably connected with the body portion of the machine, substantially as described. 20 25 30

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

ZACHARIAH T. CHAMBERS.

Witnesses:

FRANK B. LYON,
L. D. SPRAGUE.