No. 695,552. Patented Mar. 18, 1902.

J. E. HAUSFELD & J. R. CARTER.

WASHING MACHINE.

(Application filed Apr. 9, 1901.)

(No Model.) 2 Sheets—Sheet 1.

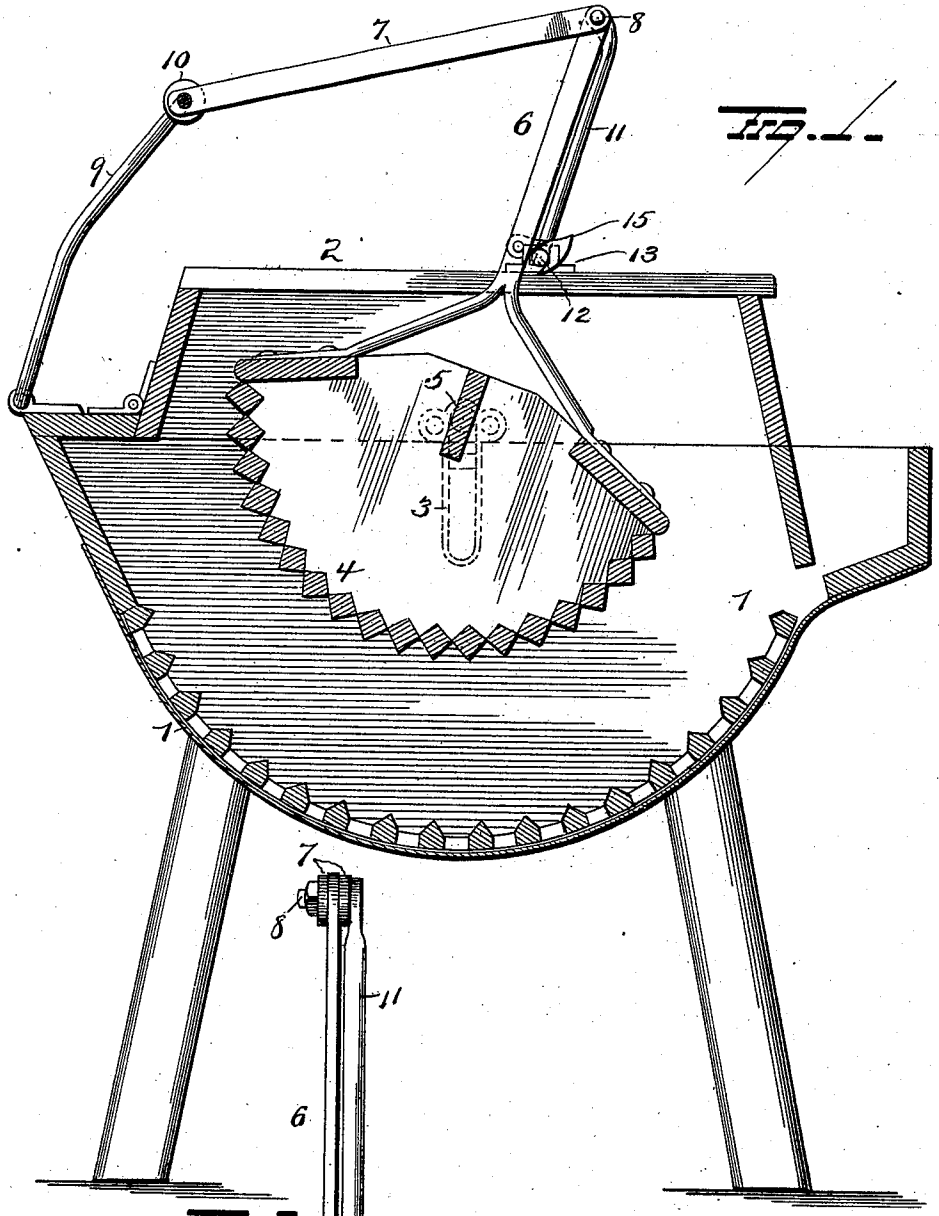


Fig. 1.

Fig. 3.

Fig. 4.

WITNESSES

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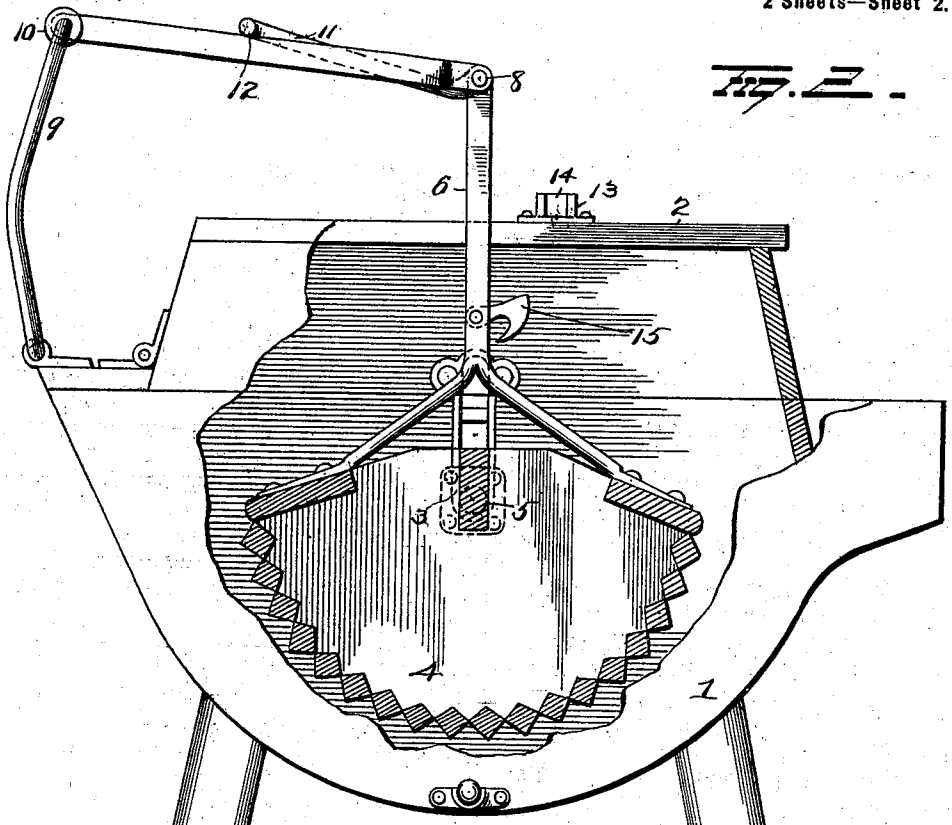


FIG. 2.

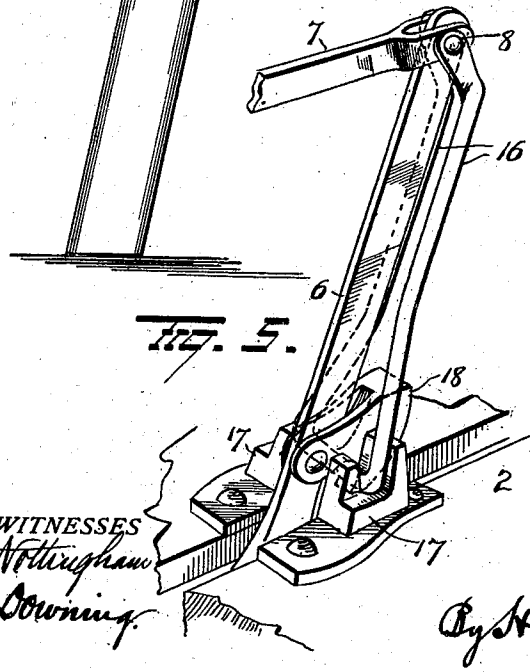


FIG. 5.

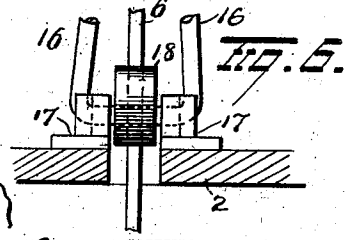


FIG. 6.

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UNITED STATES PATENT OFFICE.

JOSEPH E. HAUSFELD, OF CINCINNATI, OHIO, AND JOHN R. CARTER, OF AUGUSTA, KENTUCKY, ASSIGNORS TO ERNST H. HUENEFELD, OF CINCINNATI, OHIO.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 695,552, dated March 18, 1902.

Application filed April 9, 1901. Serial No. 55,057. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH E. HAUSFELD, of Cincinnati, in the county of Hamilton and State of Ohio, and JOHN R. CARTER, of Augusta, in the county of Bracken and State of Kentucky, have invented certain new and useful Improvements in Washing-Machines; and we do hereby 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.

Our invention relates to an improvement in washing-machines, the object of the invention being to provide improved means for raising the upper rubber and supporting it in the cover.

A further object is to provide an improved washing-machine in which the upper rubber is normally supported in the body, but which can be raised and locked in the cover.

A further object is to provide a washing-machine with improved means for locking the upper rubber to the machine-cover, so as to remove the said rubber from the body when the cover is opened.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figures 1 and 2 are views in section, illustrating our improvements. Figs. 3 and 4 are detail views, and Figs. 5 and 6 are views of a modified form of our invention.

1 represents the body of the machine, the bottom of which is semicircular and forms the lower stationary rubber. To the body 1 a box-cover 2 is hinged at one end, as shown.

The body 1 and cover 2 are provided internally and centrally between their ends with elongated and alined bearings 3 3^a for pintles 5 on the upper rubber 4, said bearings being preferably of metal, secured in the body and cover by any well-known means.

The rubber 4 has secured thereto a forked upright or lever 6, which latter projects up through an elongated slot in the cover and is pivotally attached at its upper end in the bifurcated end of a pitman 7 by a pin or bolt 8, the other end of said pitman being pivotally connected to a swinging frame or bar 9 on the end of body 1 and having handholds 10 thereon to be grasped by the operator and moved backward and forward to reciprocate the rubber 4, which latter when in its operative position is supported by the pintles 5 in the bottom of the bearings 3 in the body 1.

A hook-shaped lifting-bar 11 is pivotally supported at its upper end on the pin or bolt 8 and is bent at its lower end outward and then inward to form a lug or arm 12, projecting at right angles to the main portion of bar 11.

A block or casting 13 is secured on the cover 2 on one side of the slot therein and to one side of the vertical plane of the bearings 3 and provided with a notch or recess 14 to receive the lug or arm 12, (where it joins the bar 11,) and a dog or hook 15, having a beveled outer end, is pivotally connected to one side of lever 6 the proper distance from its upper end for a purpose which will now be explained.

When it is desired to raise the cover 2 for the purpose of removing clothes from the washer or for any other purpose, it is necessary to also remove the rubber, and with our improvements this is accomplished by inserting the lug or arm 12 on bar 11 into the notch or recess 14 in block 13, when a forward push or pull on the frame 9 will move the pitman 7 forward, and the free end of bar 11, being fulcrumed in the block 13, will raise the forward end of the pitman and the lever 6, thus drawing the rubber 4 up into the cover 2, the pintles 5 on the same moving up into the bearings 3^a in the cover. When the rubber is in its highest position, the beveled end of dog or hook 15 will engage arm or lug 12, ride over the same, and fall into locked position thereon, thus preventing the lever 6 from being moved and thereby locking the rubber in the cover and permitting it to be removed when the cover is swung back.

Instead of constructing our improvements as above explained, we might make the same as shown in Figs. 5 and 6. In this form of our invention the lifting-bar 16 is made in the form of a bail, widest at its free end and pivotally connected to the upper end of le-

ver 6 and the forward end of pitman 7 by the pin 8. Notched blocks or castings 17 are secured to the cover on opposite sides of the slot therein to receive the free end of the bail, and a dog or catch 18 is pivoted to the lever 6 and adapted to ride over and lock onto the bail when forced forward by the frame 9, as above explained in connection with the preferred form of our invention. When the machine is in operation washing clothes, the bent bar or bail, as the case may be, is swung back and supported on the pitman 7 and does not interfere in the slightest with operation of the machine. This lifting-bar and the block or blocks to receive the same may be made in various ways to perform the function of lifting the rubber into the cover. The bar may be connected at the juncture of the pitman and lever, as shown; or may be connected between the ends of either the pitman or lever and perform practically the same functions as the particular constructions described, and hence we do not limit ourselves to the precise details set forth, but consider ourselves at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of our invention.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a washing-machine, the combination with a body and a cover therefor, of a rubber, operating mechanism for the rubber and lifting means attached to and operated by the operating mechanism.

2. In a washing-machine, the combination with a body and a cover therefor, of a rubber, operating mechanism for the rubber, a lifting-bar carried and operated by the operating mechanism to raise the rubber into the cover and means also carried by said operating mechanism for locking the rubber in its raised position.

3. In a washing-machine, the combination with a body and a cover therefor having alined elongated bearings, of a rubber, pintles on opposite sides of the rubber mounted in said bearings, operating mechanism for reciprocating the rubber, and a bar carried and operated by the operating mechanism to raise the rubber so as to hold the pintles thereon in the bearings in the cover.

4. In a washing-machine, the combination with a body and a cover therefor, of a rubber mounted to reciprocate in the body, a lever secured to the rubber and projecting through the cover, a pitman for moving the lever, a lifting-bar pivotally attached to the lever and operated thereby and means on the cover for temporarily fulcruming the free end of the bar to raise the rubber when the pitman is forced forward.

5. In a washing-machine, the combination with a body and a cover therefor, of a rubber mounted to reciprocate in the body, a lever secured to the rubber and projecting through the cover, means for swinging the lever, a lifting-bar pivotally connected with the lever, a notched block to receive and fulcrum the bar, and a dog or hook pivotally connected to the lever and adapted to automatically lock the lever to the free end of the bar when the rubber is in its highest position.

6. In a washing-machine, the combination with a body and a cover therefor having alined elongated bearings, of a rubber supported by pintles in said bearings, a lever secured to the rubber and projecting up through a slot in the cover, operating mechanism connected with and adapted to move the lever backward and forward, a lifting-bar pivotally connected with the lever, a notched block secured on the cover to one side of the slot therein, an arm or lug on the bar projecting at right angles thereto and adapted to seat in said notched block, and a dog or hook carried by the lever and adapted to automatically lock the lever to the lug or arm on the lifting-bar when the rubber is raised by the lifting-bar into the cover.

7. In a washing-machine, the combination with a rubber and operating mechanism for reciprocating the rubber, of means coöperating with the operating mechanism of the rubber to lift the rubber, and a device carried by said operating mechanism and adapted to engage the lifting means for automatically locking the rubber in its raised position.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

JOSEPH E. HAUSFELD.
JOHN R. CARTER.

Witnesses:
CHARLES E. PFAU,
CARRIE R. HEUER.