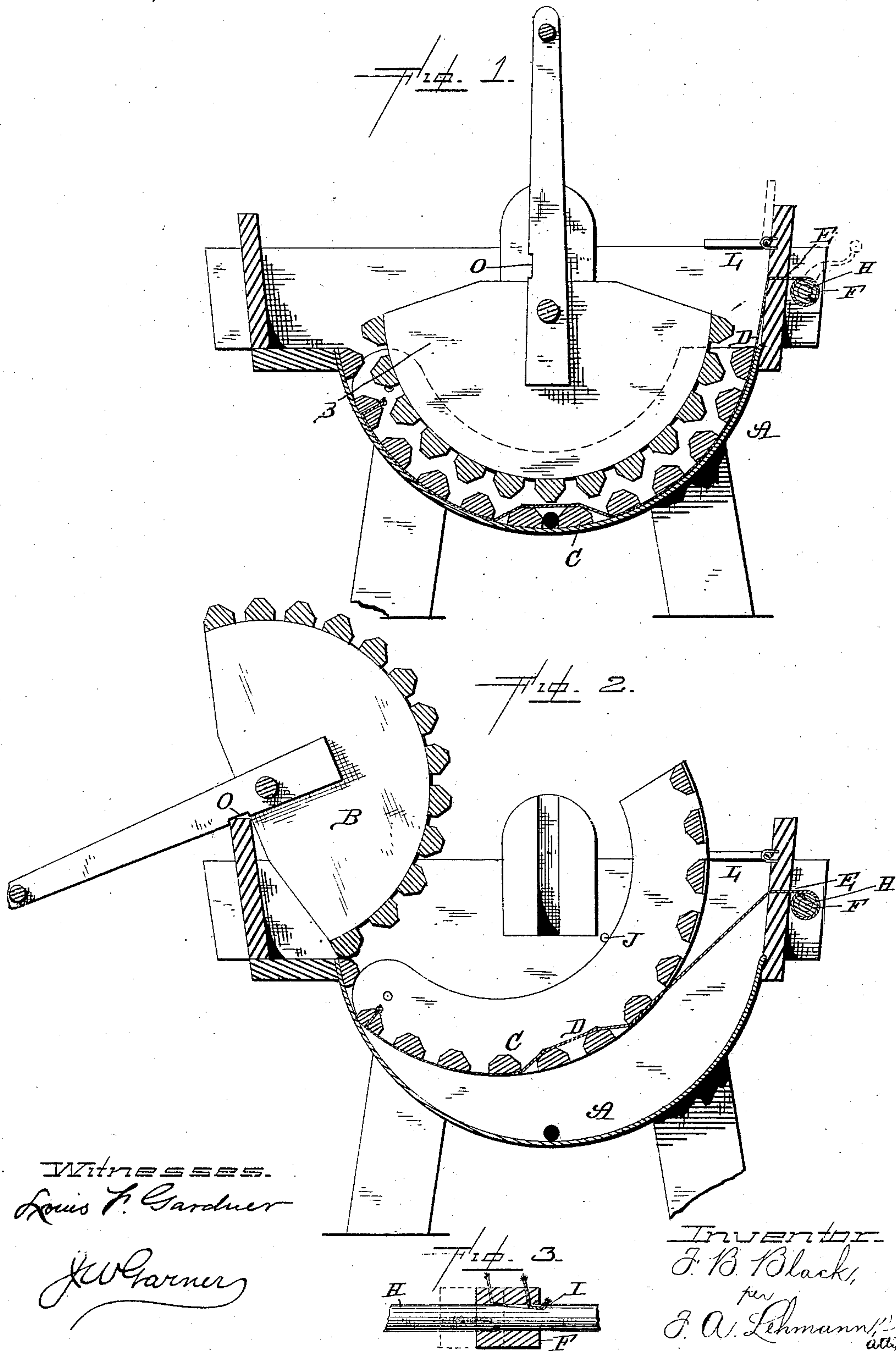


(Model.)

F. B. BLACK.  
WASHING MACHINE.

No. 314,786.

Patented Mar. 31, 1885.





# UNITED STATES PATENT OFFICE.

FRANCIS B. BLACK, OF MOUNT CARMEL, INDIANA.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 314,786, dated March 31, 1885.

Application filed January 21, 1884. (Model.)

*To all whom it may concern:*

Be it known that I, FRANCIS B. BLACK, of Mount Carmel, in the county of Franklin and State of Indiana, have invented certain new and useful Improvements in Washing-Machines; and I 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in washing-machines of that class in which a concave slatted bottom and a circular pivoted rubber are used; and it consists in the arrangement and combination of parts, which will be more fully described hereinafter.

The object of my invention is to provide a means whereby the clothes can be raised above the water at any time, so as to prevent the necessity of having to put the hands in the water when it is too hot, and so as to allow the clothes to drain without removing them from the tub.

Figures 1 and 2 are vertical longitudinal sections of a washing-machine embodying my invention, showing the parts in different positions. Fig. 3 is a detail view of the sliding roller and its shaft.

A represents the box or tub, and B the pivoted curved rubber, both of which are of the ordinary construction. In the bottom of the tub is placed the usual curved slatted bottom, C, which, instead of being secured rigidly in position or entirely removed from the tub, is pivoted at one end so that its free end can be raised upward above the top of the water, as shown. The side pieces of this slatted bottom are made to extend upward above the top of the slats a suitable distance, so as to form a basket or holder for the clothes that are being washed, so that when the bottom is raised upward above the top of the water the clothes will be carried with it in all of its movements. In the under side of the slats of this bottom are made suitable grooves or notches, so that the water and the sediment will freely pass between the under side of the slats and the top of the bottom, and thus run down to the center of the tub at all times when the water is being drained off.

Fastened to the hinged end of the slatted

bottom is a cord, wire, or chain, D, which extends along under a portion of the slats, and then up over the top of any desired number, and thence on up under slats at the free end of the bottom, out through the opening E in the end of the tub, and then through the opening which is made in one end of the sliding roller F on the shaft H. The shaft H has a recess, I, cut in one side just beyond that end of the roller which has the opening made through it. The outer free end of the cord is passed down from the opening in the end of the sliding roller, and then out through the recess I in the shaft, and the roller is then pushed endwise upon the shaft, so as to securely clamp the cord between its inner side and the shaft of the inclined end of the recess I. By this means the cord is detachably secured to the roller and shaft, and in such a manner as to permit the cord to be shortened or lengthened at will, or to be wholly detached when the slatted bottom is to be removed from the tub at any time. After the cord has been securely attached to the shaft and sliding roller by moving the roller endwise upon the shaft until it clamps the cord tightly between the two parts it is only necessary to turn the shaft, when the cord will be wrapped around the sliding roller until the slatted bottom is raised upward until it strikes the stops J, which are passed through the side of the tub, one on each side, to limit its upward movement. In this raised position the bottom carrying the clothes upon its top, the clothes are raised above the top of the water, so as to prevent the hands from being inserted in the water when it is too hot, or when of such a nature that it would injure the hands to put them in it. While the bottom is held in this raised position above the top of the water the clothes can cool sufficiently to be handled readily, or the clothes can be left in this position for the purpose of being drained.

In order to prevent the slatted bottom from sinking downward into the tub after it has been raised upward, the hinged latch L is loosely attached to the end of the tub, as shown. As the end of the slatted bottom is raised upward the latch first raises upward and then drops down behind the end of the raised bottom, and thus holds the bottom securely in its raised position. The bottom can



then only be lowered in place by raising the latch upward, when the bottom will sink back into position from its own weight. This latch is attached to the end of the tub in such a manner as not to interfere or prevent the hanging of the rubber upon that end. Before the slatted bottom is raised upward it is necessary that the rubber should be moved from position. In order to hang this rubber upon the end of the tub, a suitable notch, O, is made in each of its arms, so as to catch over the end of the tub, and thus hold it in position in one end of the tub in such a manner that it will not drain off upon the floor.

By means of the construction described above, where the clothes are being soaked in lye, or where the water is so hot that the hands cannot bear it, it is only necessary to raise the pivoted slatted bottom upward in the usual manner, when the clothes can be handled with perfect ease and comfort. By this construction the clothes can be raised above the top of

the water and left to drain without being compelled to wring them out. In order to permit this bottom to move freely at all times, the sides of the tub and bottom will be slightly wider at their tops than their bottoms, so that the bottom will not stick when it becomes swelled.

Having thus described my invention, I claim—

The combination of the box or tub, the slatted bottom pivoted therein, the cord, the roller, and the shaft provided with a recess, the roller being provided with a hole for the cord to pass through and being made movable upon the shaft in relation to the recess, substantially as set forth.

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

F. B. BLACK.

Witnesses:

GEO. F. O'BYRNE,  
JOHN KING.