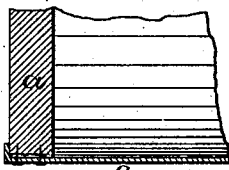
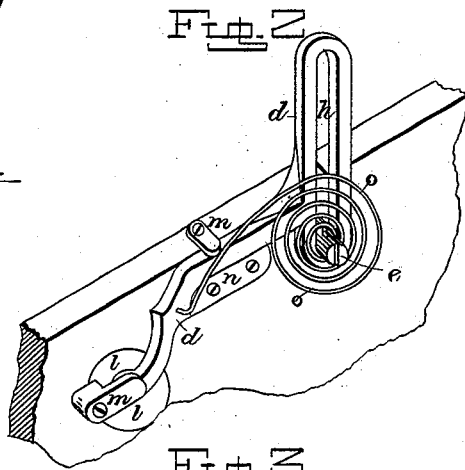
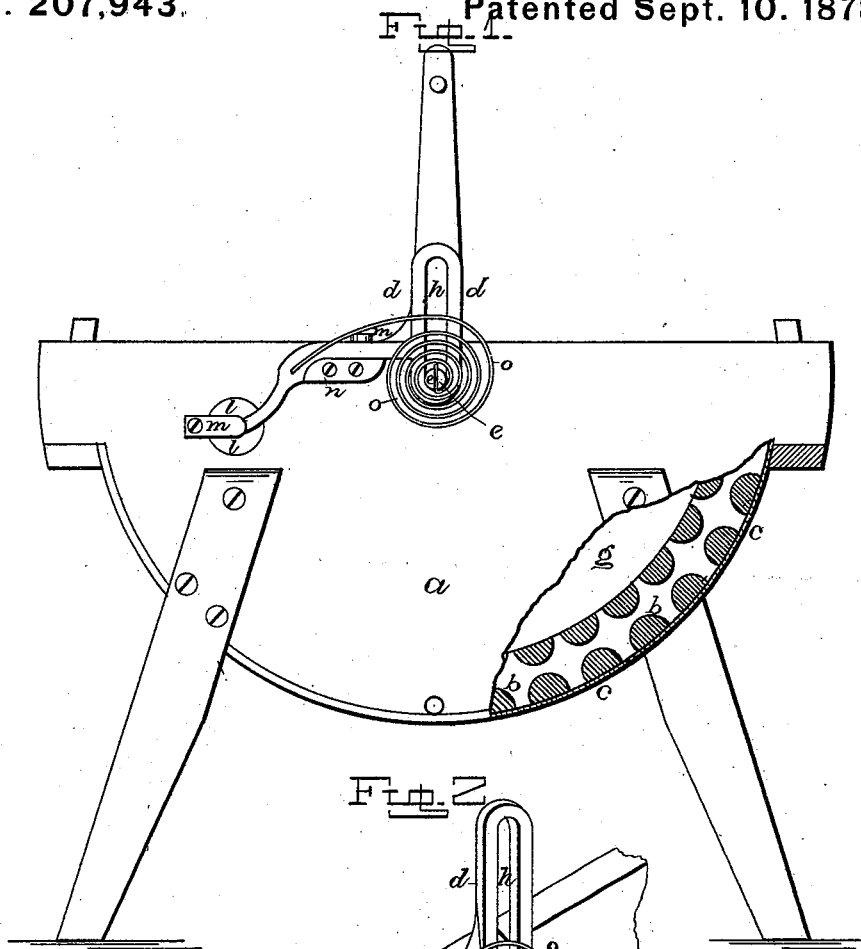


G. F. BURTCH.  
Washing-Machine.

No. 207,943.

Patented Sept. 10. 1878.



Witnesses:

*J. W. Garner*  
*A. S. Haines*

Inventor:

*G. F. Burtch*  
Per *F. A. Lehmann*  
Att'y.

# UNITED STATES PATENT OFFICE.

GILBERT F. BURTCH, OF JACKSON, MICHIGAN.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 207,943, dated September 10, 1878; application filed August 2, 1878.

*To all whom it may concern:*

Be it known that I, GILBERT F. BURTCH, of Jackson, in the county of Jackson and State of Michigan, 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; and it consists in a removable slotted metallic bearing, which is attached to the side of the tub by a support and catches, and is provided with a spring for keeping the journals of the washer pressed downward, as will be more fully described hereinafter.

Figure 1 is a side elevation of my invention. Fig. 2 is a detached view of the same. Fig. 3 is a detail view, showing the joint.

*a* represents the wash-tub, which is provided with the ribs *b* upon its inside, in the usual manner. In order to form a tight joint between the zinc bottom *c* and the sides of the tub, I first place white lead over the surface of the zinc where the joint is to be, and then I take a strip of candle-wick, and, after saturating it with white lead, place it upon the white lead upon the zinc. I then nail the zinc to the edges of the sides of the tub, and this wick and white lead form a perfectly water-tight joint. The more hot water that is poured into the tub the more perfect does the joint become by the hardening of the lead. The bearings *d* for the journals *e* of the washer *g*, instead of being secured to the tub in the usual manner, are made detachable, and of the form shown. At the outer end is formed an eye, which passes over a stud or projection which extends outward from a plate, *l*, fastened in the side of the tub. The other end of this bearing is made long and narrow, and has a slot, *h*, made through it for the journal to move up and down in. Upon the top edge of the tub, so as to catch over the edge of the

bearing, and fastened to the side of the tub, so as to catch over the outer end of the bearing, are the catches *m*, which hold the bearing in position. Secured to the side of the tub is the block or support *n*, upon which the bearing rests. As this bearing cannot move either up or down on account of the catches and the block, it will be readily seen that it forms a secure bearing for the journal, and at the same time can be removed whenever so desired.

Each one of the journals has its end slotted or recessed, and in this slot or recess is fastened the inner end of the coiled spring *o*. The outer end of this spring, after being coiled to any suitable degree, is fastened in the bearing, as shown. This spring serves to return the washer to its position after it has been once moved, and also to exert a constant pressure downward upon the clothes after they have been placed in the tub. By means of this spring, as the washer is returned constantly to its proper position after it has been moved, and as it exerts a constant downward pressure upon the clothes, it will readily be seen that the operator has only to move the washer back and forth, without any other exertion.

Having thus described my invention, I claim—

1. The combination of the removable bearing *d*, having the slot *h*, for the journal *e* of the washer to move in, support *n* and catches *m*, to hold the bearing in place, and the spring *o*, to keep the journal pressed downward, substantially as shown.

2. The combination of the slotted removable bearings *d*, catches *m*, plate *l*, having a stud for the bearing to catch upon, and the support *n*, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 10th day of May, 1878.

GILBERT F. BURTCH. [L. s.]

Witnesses:

RICHMOND LIVERMORE,  
F. LIVERMORE, Jr.