

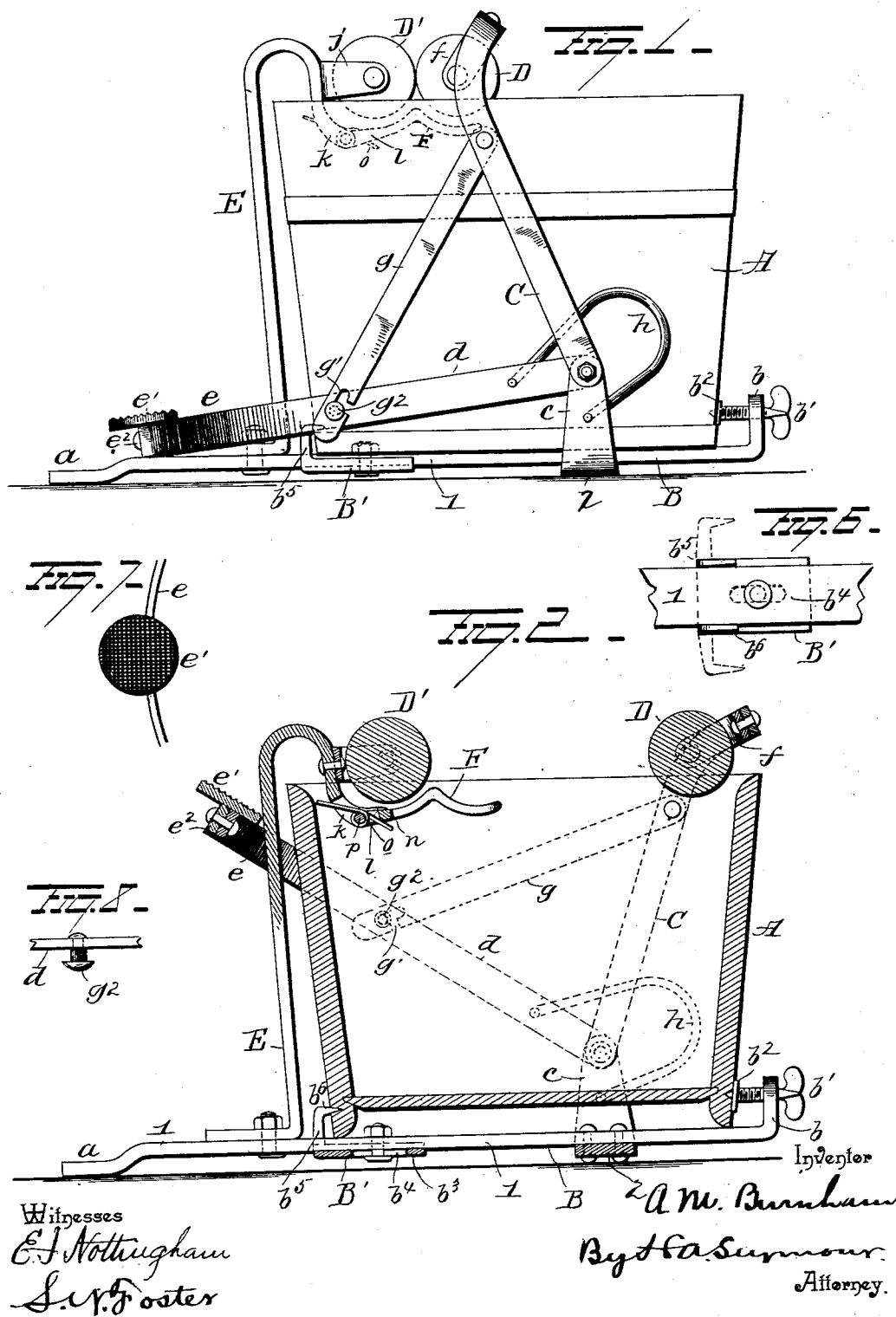
(No Model.)

3 Sheets—Sheet 1.

A. M. BURNHAM.  
MOP WRINGER.

No. 580,249.

Patented Apr 6, 1897.



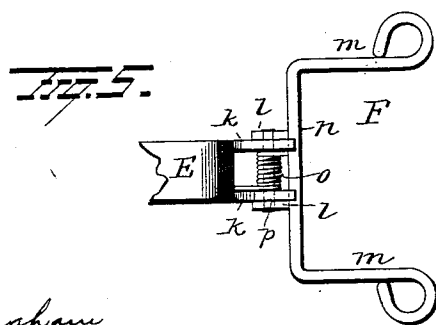
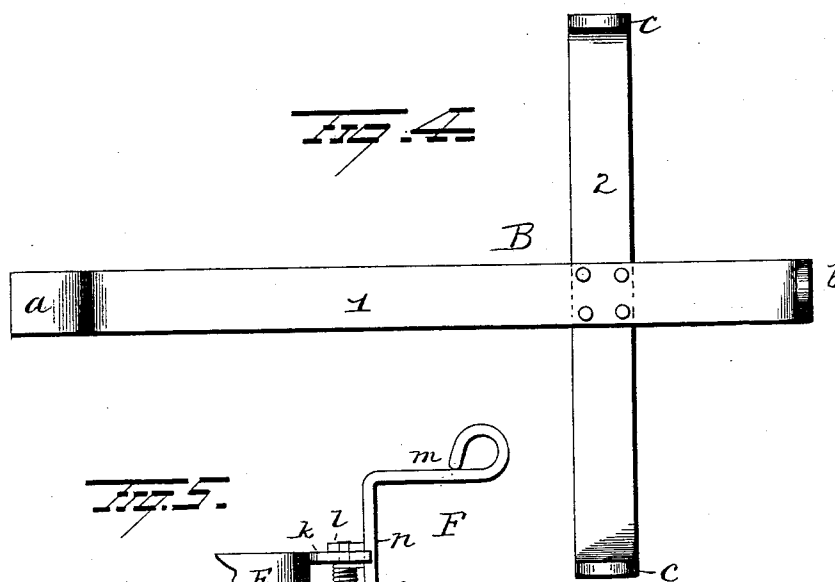
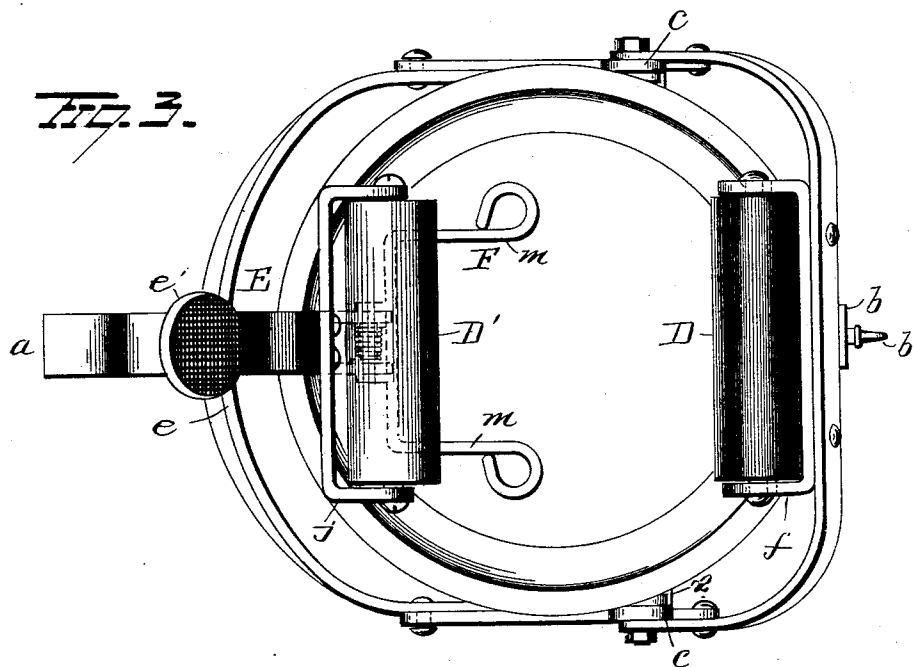
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3 Sheets—Sheet 2.

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Inventor  
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Attorney

(No Model.)

3 Sheets—Sheet 3.

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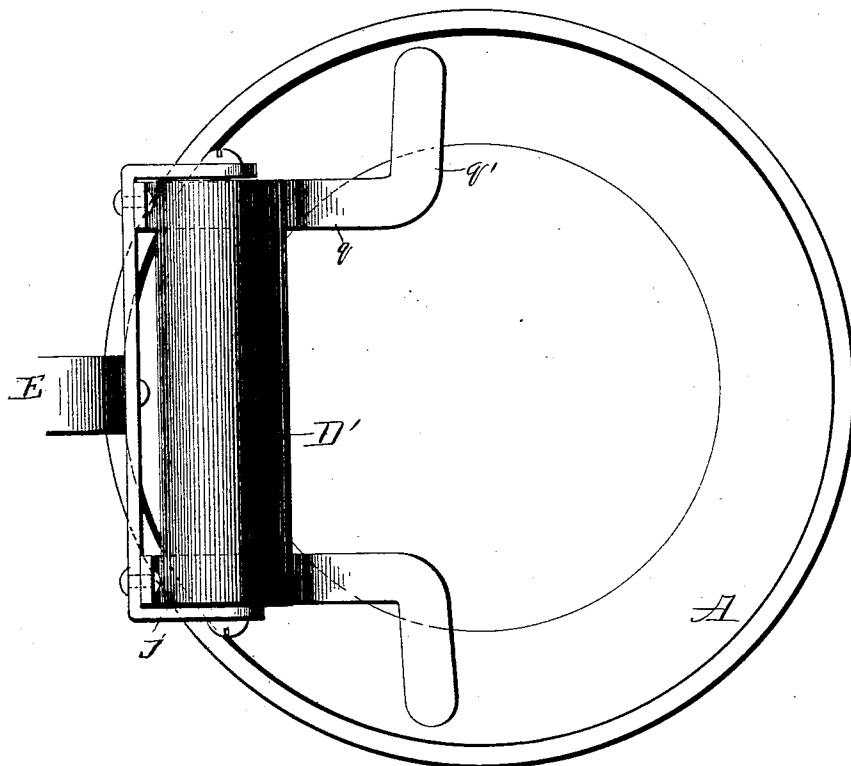


FIG. 9.

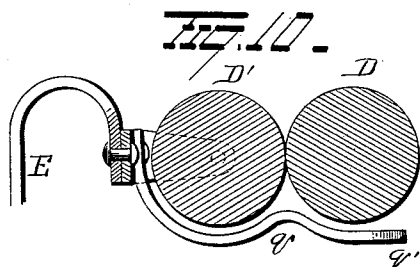


FIG. 10.

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# UNITED STATES PATENT OFFICE.

ARTHUR M. BURNHAM, OF GARDINER, MAINE, ASSIGNOR TO ARTHUR E. HODGKIN, OF LYNN, MASSACHUSETTS.

## MOP-WRINGER.

SPECIFICATION forming part of Letters Patent No. 580,249, dated April 6, 1897.

Application filed July 14, 1896. Serial No. 599,135. (No model.)

*To all whom it may concern:*

Be it known that I, ARTHUR M. BURNHAM, a resident of Gardiner, in the county of Kennebec and State of Maine, have invented certain new and useful Improvements in Mop-Wringers; 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 appertains to make and use the same.

My invention relates to an improvement in mop-wringers, the object of the invention being to produce a mop-wringer which shall be simple in construction, which can be cheaply and quickly manufactured, which can be conveniently packed in small space for shipment, and which shall be effectual in all respects in the performance of its functions.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as hereinafter set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a side view of my improved wringer. Fig. 2 is a sectional view. Fig. 3 is a plan view. Fig. 4 is a detached view of the cross-shaped base. Fig. 5 is a detached view of the upper end of the standard E and the guide F. Fig. 6 is a detail showing the locking-dog B' attached to the base. Fig. 7 is a detail of the tread. Fig. 8 is a detail of stud  $g^2$  and a portion of arm  $d$ . Figs. 9 and 10 are views illustrating modifications of the mop-guide.

A represents a pail which may be of cheap construction and which is supported on a base B. The base B is composed of two strips 1 2 of steel, preferably tire-steel, arranged at right angles to each other and riveted together where they cross. The strip 1 is preferably made somewhat longer than the strip 2 and at one end is bent to form a foot  $a$ , the other end of the strip 1 being bent upwardly to form an ear  $b$  for the accommodation of a thumb-screw  $b'$ , adapted to engage a plate  $b^2$  on the pail. At the opposite side of the bucket to the screw  $b'$  a locking-dog B' is located, and said dog comprises a plate  $b^3$ , having an elongated slot  $b^4$  adjustably secured to the strip 1 of base B and provided with upturned arms  $b^5$ , having teeth  $b^6$  to engage the bucket.

The bucket will thus be held tightly in position between the screw  $b'$  and the locking-dog B', and by making the latter adjustable the devices can be applied to buckets of different sizes.

The ends of the strip 2 of the base B are bent upwardly to form ears  $c$ , to which the arms  $d$  of a foot-lever  $e$  are pivotally connected. The foot-lever  $e$  is provided with a tread  $e'$ , preferably of sheet-steel or malleable iron, and is provided with lugs  $e^2$ , whereby to attach it to the foot-lever. The free ends of the arms of a yoke or frame C are also pivotally connected to the ears  $c$ , and between the ends of the horizontal portion of said yoke or frame, which extends over the pail, ears  $f$  are secured and form bearings for the journals of a roller D. The yoke or frame C is connected with the treadle  $e$  at each side of the pail by means of bars or rods  $g$ , so that when the foot-lever is depressed the yoke or frame C, carrying the roller D, will be moved forward. In order to removably attach the bars or rods  $g$  to the treadle, so that they can be readily attached and detached, each of said rods or bars is provided with an open slot  $g'$  for the reception of studs  $g^2$  on the foot-lever. When the foot-lever is released, the frame will be made to assume its normal position by means of a bow-spring  $h$ , secured at one end to the treadle-arms and at the other end to the ears  $c$ .

A standard E, of spring metal, is secured at one end to the strip 1 of the base B. The upper end of the spring-standard is curved so as to project over the edge of the pail, and has a bail  $j$  secured thereto for the reception of the journals of a roller D', adapted to act in conjunction with the roller D to wring the water from a mop drawn between them. The free end of the spring-standard E is bifurcated to form ears  $k k$ , to which ears  $l l$ , projecting from a mop-guide F, are pivotally connected. The mop-guide F is preferably made in a single piece and comprises curved arms  $m m$ , connected by an integral cross-bar  $n$ . The mop-guide is maintained in its normal position by means of a spring  $o$ , which is coiled on the pin  $p$ , which connects the mop-guide with the standard, and the free ends of said spring bear, respectively, against the mop-

guide and the standard. Should the mop rest on one of the arms of the guide while being inserted into the pail, the guide will move down until the mop shall have passed and will then be returned to its normal position by the action of the spring *o*.

Instead of constructing the mop-guide as above described said guide may consist of two arms *q q*, made of tire-steel, secured to the respective ends of the bail. Each arm *q* is made to curve downwardly under the roller *D'* and its free end bent outwardly, as at *q'*. By mounting the roller *D'* in a yielding standard the mop will be permitted to pass between the rollers should it be uneven or knotty.

By removing the bolts or pins which connect the foot-lever arms and yoke or frame to the ears *c* and removing the bolt which connects the standard to the base the machine can be packed very close for shipment and can be easily and quickly applied to any suitable pail or tub by the user.

My improvements are exceedingly simple in construction, very cheap to manufacture, and are effectual in all respects in the performance of their functions.

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

1. In a mop-wringer, the combination with a base, of a frame pivotally connected to said base, a foot-lever also pivoted to said base and connected with the frame, a stationary standard secured to the base, and rollers mounted on said frame and standard, substantially as set forth.

2. In a mop-wringer, the combination with a base, of a frame pivotally connected to said base, a foot-lever also pivoted to the base, a stationary standard secured to the base, rollers mounted on said frame and standard, connections between said frame and foot-lever, and a spring secured at one end to the base and at the other end to the foot-lever, whereby to return said frame to its normal position, substantially as set forth.

3. In a mop-wringer, the combination with a base, of a frame pivoted thereto, a foot-lever also pivoted to the base and connected with said frame, a stationary spring-standard secured to the base and rollers carried by said spring-standard and frame, substantially as set forth.

4. In a mop-wringer, the combination with a base, of a frame pivoted thereto and carrying a roller, means for moving said frame on its fulcrum, a stationary standard secured to the base, a roller carried by said standard and a mop-guide connected to said standard, substantially as set forth.

5. In a mop-wringer, the combination with

a base, of a frame pivotally connected thereto, means for moving said frame, a roller carried by the frame, a standard secured to the base, a roller mounted on said standard, a mop-guide pivotally connected to said standard and a spring for maintaining said mop-guide in its normal position and returning it to its normal position, substantially as set forth.

6. In a mop-wringer, the combination with a base, of a frame pivotally connected to said base, a foot-lever connected with said frame, a roller carried by the frame, a standard secured to the base, a roller mounted on the standard, a mop-guide comprising curved arms and an integral connecting-bar, pivotally connected to said standard, and a spring coiled on the pin which pivotally connects the guide to the standard, said spring bearing at its ends respectively on the guide and standard, substantially as set forth.

7. In a mop-wringer, the combination with two strips disposed at an angle to each other and constituting a base, an ear at one end of one of said strips, and a set-screw passing through said ear and adapted to engage a pail, of a frame pivotally connected to the other strip of the base, a roller carried by said pivoted frame, a foot-lever pivotally connected to the base, a connection between said foot-lever and frame, a standard secured to the base, ears on said standard, a roller mounted in said ears and adapted to act in conjunction with the first-mentioned roller, and a dog adjustably secured to said base and adapted to enter a pail, substantially as set forth.

8. In a mop-wringer, the combination with a base, of a yoke or frame pivotally connected thereto, a roller supported by said yoke or frame, a standard, a roller supported by said standard, a foot-lever pivotally connected with the base, and rods pivoted at one end to said yoke or frame and removably connected at their other ends to the foot-lever, substantially as set forth.

9. In a mop-wringer, the combination with a base, a pivoted yoke or frame carrying a roller, a standard secured to the base and a roller supported by said standard, of a foot-lever pivotally connected with the base and with the yoke or frame, and a step having ears secured to said foot-lever, substantially as set forth.

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

ARTHUR M. BURNHAM.

Witnesses:

FREDK. M. SMITH,  
GEORGE C. HIGGINS.