

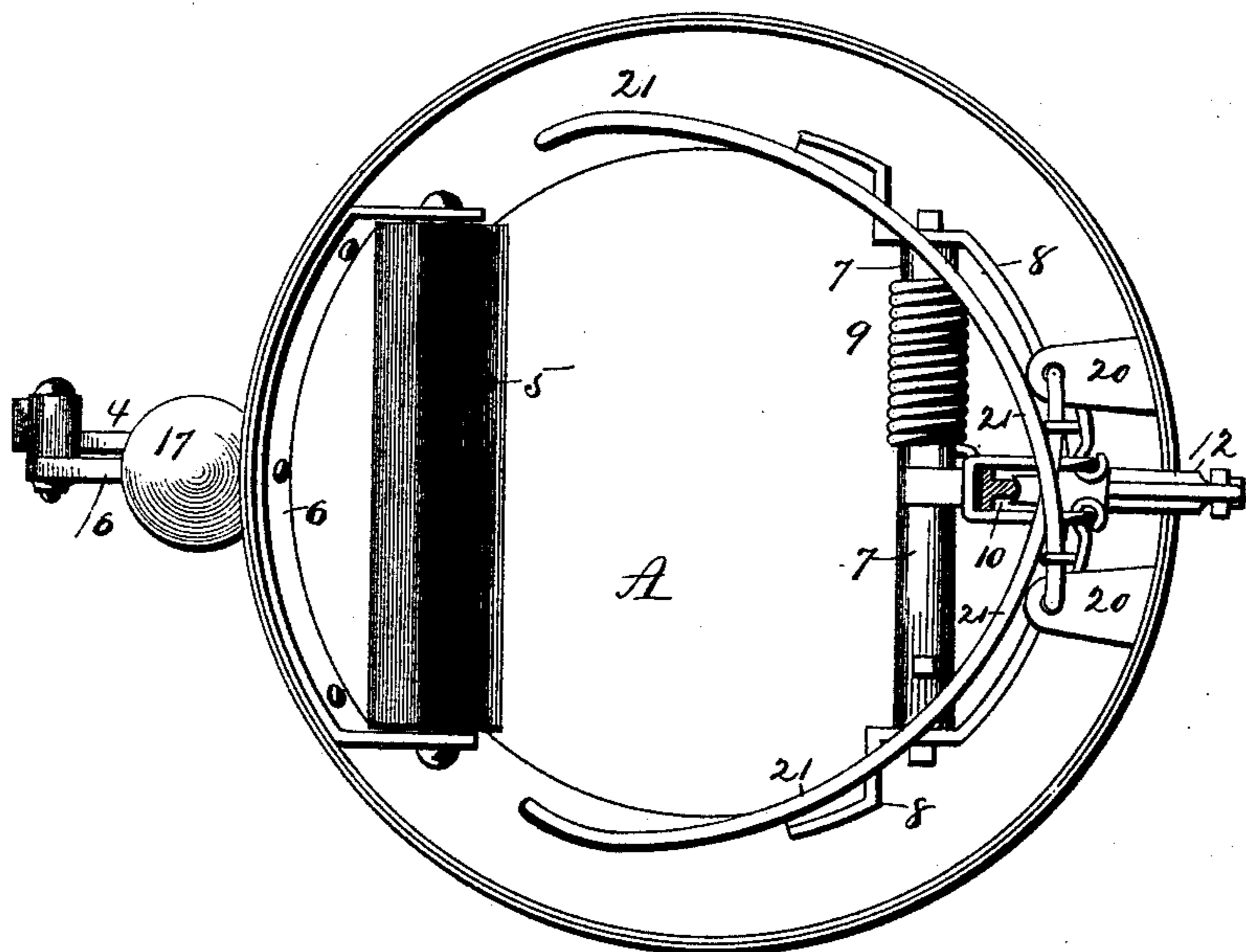
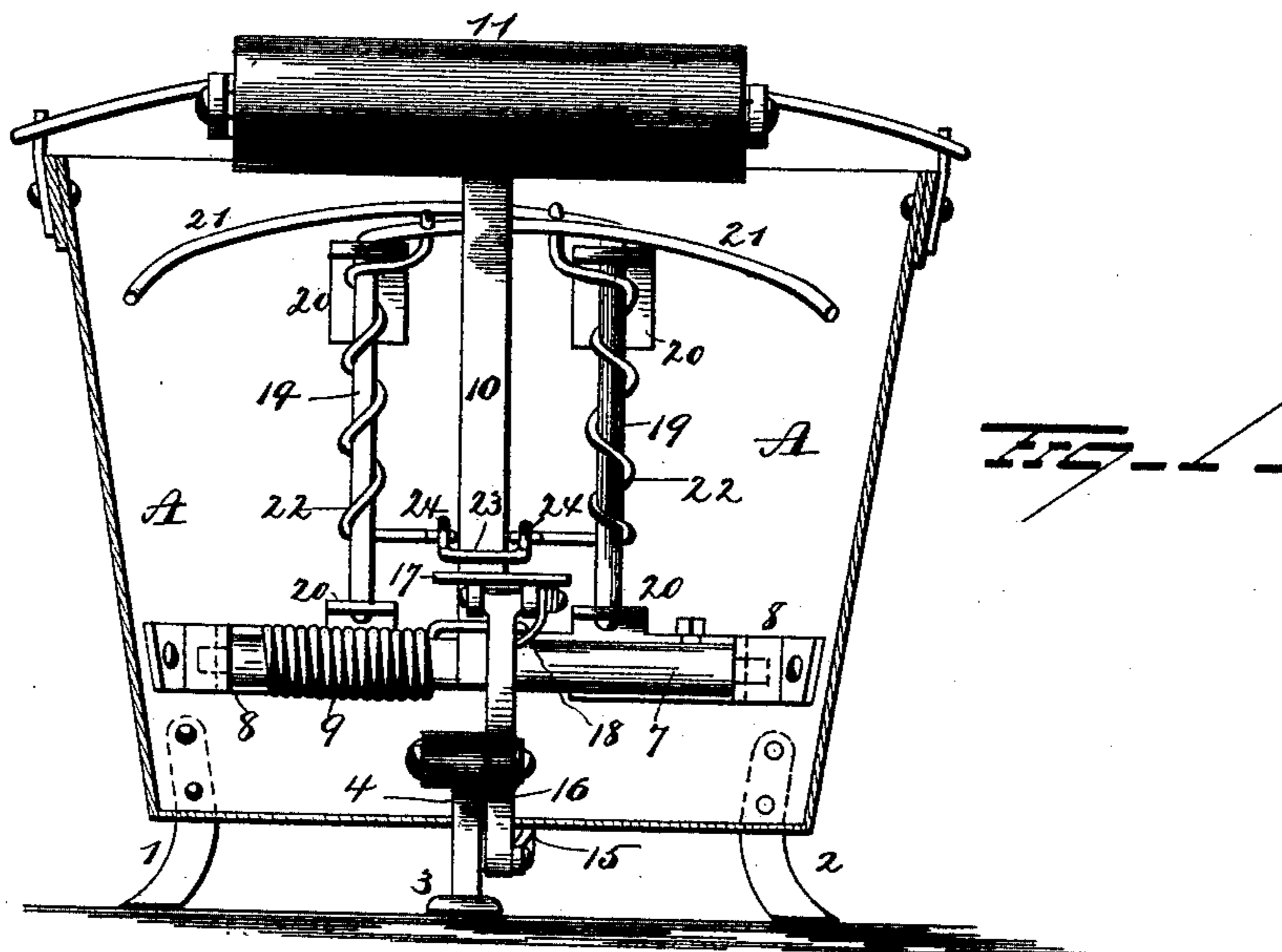
(No Model.)

2 Sheets—Sheet 1.

A. M. BURNHAM.  
MOP WRINGER.

No. 414,189.

Patented Nov. 5, 1889.



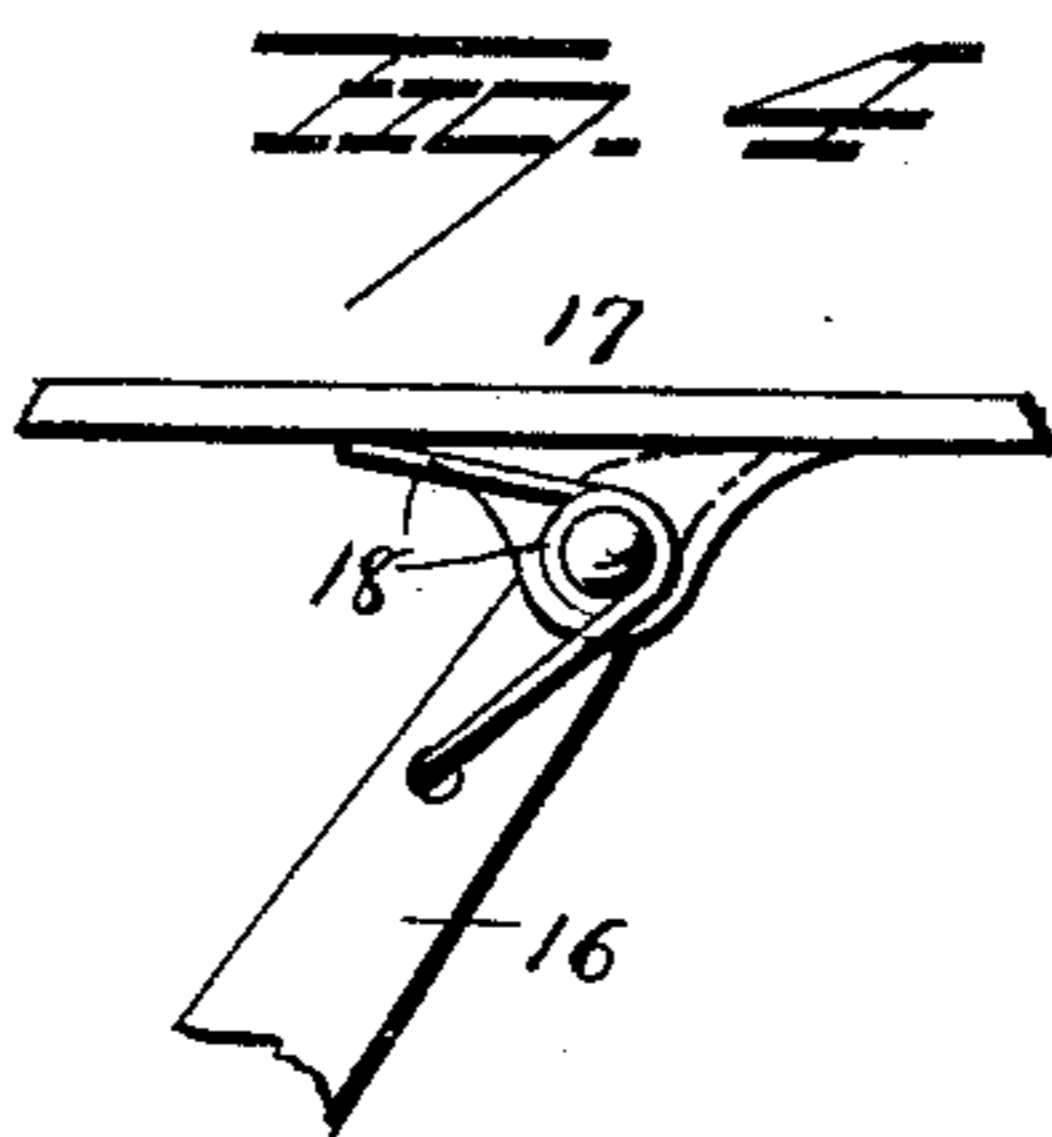
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2 Sheets—Sheet 2.

No. 414,189.

Patented Nov. 5, 1889.



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# UNITED STATES PATENT OFFICE.

ARTHUR M. BURNHAM, OF GARDINER, MAINE, ASSIGNOR TO FRED HILDRETH,  
OF SAME PLACE.

## MOP-WRINGER.

SPECIFICATION forming part of Letters Patent No. 414,189, dated November 5, 1889.

Application filed April 19, 1889. Serial No. 307,790. (No model.)

*To all whom it may concern:*

Be it known that I, ARTHUR M. BURNHAM, of Gardiner, in the county of Kennebec and State of Maine, have invented certain new and  
5 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.

10 My invention relates to an improvement in mop-wringers.

The object is to provide a simple and compact device capable of easy operation, effective in action, and which may be produced at  
15 a comparative slight cost.

With these ends in view it consists in a suitable receptacle employed in connection with certain spring-and-lever-actuated mechanism so arranged that a mop may be placed  
20 in it and wrung dry during its withdrawal by the operator depressing a proper foot-lever.

It further consists in certain novel features of construction and combinations of parts, as will be hereinafter fully described, and pointed  
25 ed out in the claims.

In the accompanying drawings, Figure 1 is a view in rear elevation, the pail or receptacle being in section. Fig. 2 is a plan view, partly in section. Fig. 3 is a longitudinal  
30 vertical section, and Fig. 4 is a detached view of a portion of the device.

A represents the pail or receptacle, which is preferably made of metal, for the reason that pails of lighter material—such as wood—  
35 soon become worn and rickety and incapable of performing the purpose desired. The pail is raised slightly, resting upon legs 1, 2, and 3. The latter one, extending out at the rear, is located some distance from the pail and is  
40 provided with an upwardly-projecting arm 4, to be hereinafter mentioned. Within the pail, and preferably near the upper edge, a roller 5 is located. This is held in a bracket-plate 6, secured to the pail. The rest of the wringing apparatus is located opposite this roller.  
45 An arbor 7 is journaled at its ends in a bracket-plate 8, rigidly secured to the inner wall of the pail. A coiled spring 9 is mounted on this arbor, and its ends are secured in position to rock the arbor forward. A vibrating  
50 arm 10 projects upwardly from the middle of

the arbor and carries a roller 11 in its upper end in position to swing backward in contact with the roller 5 when the mop is being wrung. A goose-necked rocking arm 12 extends over the top of the pail, it being pivoted at point 13 near the upper edge of the pail. One end of this arm extends along the inner wall of the pail for some distance, projecting backward at its extreme end in position to  
55 engage the vibrating arm 10 and force the latter backward, or in an opposite direction from that in which the spring 9 tends to force it. The opposite end of the rocking arm 12 extends down over the side of the pail to a point a little below the bottom of the pail.  
60 From its lower extremity 14 a connecting-rod 15 extends rearward, and is loosely connected at its rear end to the lower end of foot-lever 16. The latter is pivoted to the end of arm 4 and is provided with a foot-treadle 17,  
65 which is pivoted to the upper end of the lever. The end of this foot-lever is of such shape that the treadle is prevented from rocking over forward, but admits of its being rocked backward. A spring 18, however, prevents the  
70 treadle from being rocked very far back and holds it normally in a horizontal position, where it is accessible to the operator and in position to be depressed by the pressure of his foot. The effect of depressing this treadle is to draw the connecting-rod 15 backward in the direction of the arrow, and this forces the  
75 arm 10 in the same direction. This connecting-rod is provided with a nut 15<sup>a</sup> at its forward end, by means of which the position of the rocking arm 12 is regulated to insure the proper movement of the swinging arm 10, which carries the movable roller. It will be  
80 seen that the normal position of this swinging arm, and, in fact, all the other parts, is dependent upon this nut—as, for instance, by turning it on farther the parts are thrown backward, and by turning it off they are  
85 moved in the opposite direction, so that the length of swing of the parts is regulated by this nut.  
90  
95  
100

A pair of spindles 19 19 are vertically supported in boxes 20 20 on each side of the arm 12, and at their upper ends these spindles are provided with the curved laterally-swinging guide-arms 21 21, which are adapted to swing

toward each other at suitable periods to confine the mop between the rollers 5 and 11. These arms extend around in the shape of the pail toward each other, so that they cross  
 5 about midway between the spindles. The motion of these spindles is effected by spiral springs 22 22 and the loop 23. The latter is looped around the vibrating arm 10 and its ends are connected at points 24 24 to the lower  
 10 ends of the springs 22 22, and the opposite ends of these springs extend around the swinging guide-arms 21 21 in such a manner that when the loop 23 is carried backward by the motion of the arm 10 the springs 22 22  
 15 are made to exert pressure upon the guide-arms and force them yieldingly together simultaneously with the action of the other parts.

It will be seen at a glance that the parts of  
 20 this wringer are reduced to a minimum, and at the same time what parts there are are so fastened to the pail that they cannot get out of place readily or become inoperative; also, that all the apparatus is placed quite a distance above the bottom of the pail, so that no  
 25 dirt can become lodged in it to prevent its easy operation, and neither is it liable to catch the mop and thus prevent its easy withdrawal.

In operation the mop is placed in the pail  
 30 and the foot of the operator is placed on the treadle until the roller 11 is brought into contact with the roller 5. The mop is then drawn through in the usual manner, and by removing the foot the parts all open again.

It is evident that slight changes might be resorted to in the form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I do not wish to limit myself to the  
 40 particular construction herein set forth; but,

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  
 45 a receptacle, of a roller mounted on a movable arm, vertical spindles, and horizontal guide-arms mounted on said spindles and adapted to be swung laterally by the movable arm, substantially as set forth.

2. In a mop-wringer, the combination, with  
 50 a receptacle, of a movable arm, a roller mounted thereon, vertical spindles, horizontally-swinging guide-arms adapted to be moved by the movement of the arm carrying the  
 55 roller, and springs for returning the parts to

their normal positions, substantially as set forth.

3. In a mop-wringer, the combination, with a receptacle and a roller journaled in fixed bearings, of a rocking shaft, a spring secured  
 60 to the shaft for turning it in one direction, an arm secured to the shaft for turning it in one direction, an arm secured to the shaft and carrying a roller, and a lever for moving the arm and turning the shaft in a direction  
 65 against the pressure of the spring, substantially as set forth.

4. In a mop-wringer, the combination, with a receptacle and a fixed and vibrating roller, of a rocking shaft pivoted to the receptacle  
 70 for operating the vibrating arm, horizontally-swinging guide-arms, and springs and levers for operating all the parts simultaneously, substantially as set forth.

5. In a mop-wringer, the combination, with  
 75 a pail, and a roller, a spring-actuated arbor having a vibrating arm thereon with a roller in the latter, of a goose-necked arm pivoted to the pail for operating this vibrating arm, a foot-lever, and a rod connecting the latter with  
 80 the goose-necked arm, substantially as set forth.

6. In a mop-wringer, the combination, with a pail, a roller, and a spring-actuated arbor having a vibrating arm thereon with a roller  
 85 therein, of a goose-necked arm pivoted to the pail for operating this vibrating arm, a foot-lever, a connecting-rod, spring-cushioned treadle, spring-actuated horizontally-swinging guide-arms, and a loop connecting said  
 90 arms with the vibrating arm, whereby they are all operated together, substantially as set forth.

7. In a mop-wringer, the combination, with a pail, a roller, and spring-actuated arbor  
 95 having a vibrating arm thereon with a roller in the latter, of a goose-necked arm pivoted to the pail for operating this vibrating arm, a foot-lever, a rod connecting the latter with the goose-necked arm, and an adjusting-nut  
 100 for regulating the position of the parts, substantially as set forth.

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

ARTHUR M. BURNHAM.

Witnesses:

HENRY FARRINGTON,  
 CHAS. H. LENNAN.