

(No Model.)

J. L. SANFORD.
COMBINED MOP AND MOP WRINGER.

No. 549,688.

Patented Nov. 12, 1895.

Fig. 1.

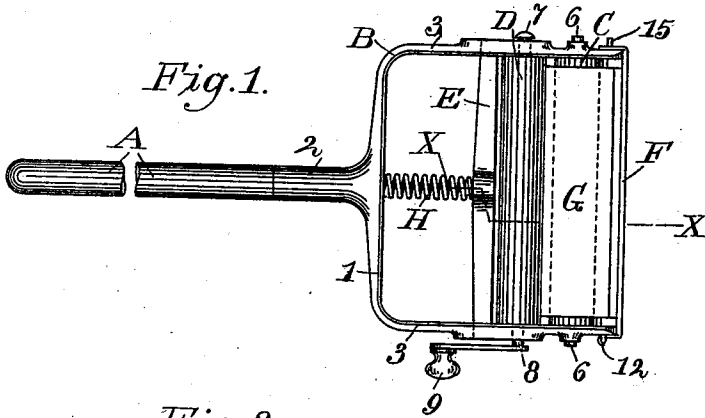


Fig. 2.

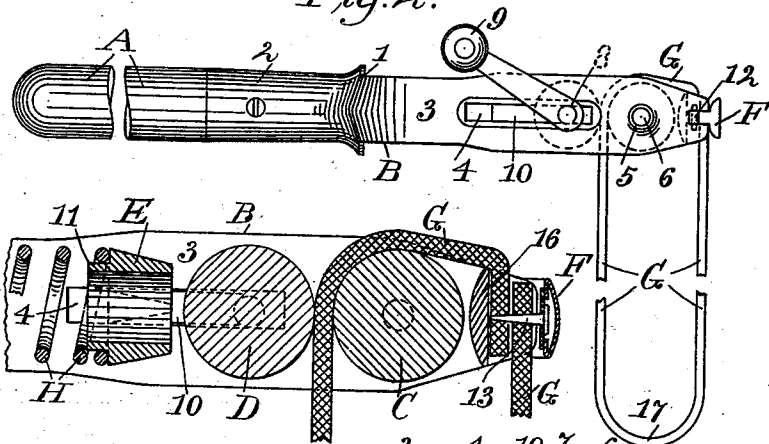


Fig. 3.

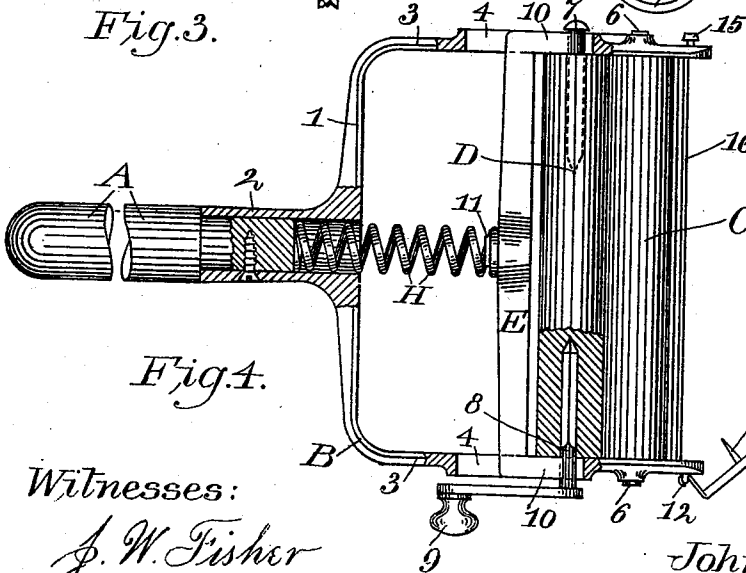
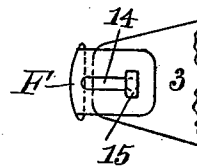


Fig. 4.

Fig. 5.



Witnesses:

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Inventor:

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UNITED STATES PATENT OFFICE.

JOHN L. SANFORD, OF ALBANY, NEW YORK, ASSIGNOR OF TWO-THIRDS TO
THOMAS F. LENNON AND JOHN J. MURPHY, OF SAME PLACE.

COMBINED MOP AND MOP-WRINGER.

SPECIFICATION forming part of Letters Patent No. 549,688, dated November 12, 1895.

Application filed July 2, 1895. Serial No. 554,700. (No model.)

To all whom it may concern:

Be it known that I, JOHN L. SANFORD, of Albany, in the county of Albany and State of New York, have invented new and useful Improvements in a Combined Mop and Mop-Wringer, of which the following is a specification.

This invention relates to improvements in mops and mop-wringers combined in one implement; and it consists of the arrangement and construction shown in the drawings and pointed out in the claims, which form part of this specification.

In the accompanying drawings, which are herein referred to, Figure 1 is a front elevation of my invention; Fig. 2, a side elevation of the same; Fig. 3, an enlarged section of Fig. 1 at the line X X; Fig. 4, a front elevation showing parts of the frame broken away and the spicular bar by which the mop-cloth is secured swung downward; and Fig. 5, a detached side elevation of the lower part of the frame, showing a fastening for the swinging end of the fastening-bar.

As represented in the drawings, A designates the handle of the mop, commonly made of wood in cylindrical form; B, a metallic frame consisting of a cross-bar 1, having a socket 2 on its upper face, said socket being adapted to receive the lower end of the handle A and the upper end of a spring, as hereinafter explained, and at each end of said cross-bar arms 3 are formed at right angles to the cross-bar. Each of said arms is provided with a slotted opening 4 and with a journal-bearing 5 for a purpose shortly to be explained.

C is the lower roller of the wringer. Said roller is provided with a journal 6 at each end, which journals are preferably driven into holes in the ends of the roller through the journal-bearings 5 to form rigid attachments to the roller.

D is the upper roller for the wringer, which roller has a journal 7 inserted in one end of it, and at the opposite end a journal 8 is inserted to form a rigid attachment to said roller. The journal 7 is provided with a crank 9, which may be removably attached thereto or made integral with said journal. When preferred, the journals 7 and 8 may be formed

in one piece, but for that purpose the roller D must have a longitudinal hole bored through it at its central line, and into said hole the elongated journal must be driven after the roller D is placed in the frame B.

E is a movable cross-bar provided at each end with a pendent arm 10, that has its lower end fitted to bear upon a corresponding journal, either 7 or 8, according to the manner in which the roller D is arranged in the frame B. The arms 10 are fitted to slide in the slotted openings 4, and in order to obtain a required pressure of the roller D in the direction of the roller C a spiral spring H, whose lower end engages on a boss 11 and whose upper end is fitted to enter the lower end of the socket 2, is arranged to bear upon the movable cross-bar E.

F is a mop-retaining bar, which has one end jointed to one of the arms 3, as at 12, to swing downward. The upper face of said bar is provided with a series of spurs or spikes 13 to enter the fabric of a mop and retain the latter in place. The free end of the bar F is provided with a fastening for securing that end of the bar F to the frame B. As shown in the drawings, the fastening for said bar consists of a slotted opening 14, formed in the bent end of the bar F, and a turn-button 15, pivoted in the corresponding arm 3 on the frame B and arranged to pass through the slotted opening 14 and then, by turning the turn-button 15 transversely in said opening, effecting the fastening of the bar F in position on the outer end of the frame B. For the purpose of preventing the arms 3 from being spread apart beyond the proper distance a cross-tie 16 is formed in the frame B to retain said arms in a proper position.

G is a mop that is removably attached to the retaining-bar F. Said mop is made of a rectangular piece of woven or knitted fabric of suitable texture and of an oblong form. The opposite ends of said mop are attached to the retaining-bar by pressing the spikes 13 through the fabric of the mop and fastening the retaining-bar in the position shown in Fig. 1, a single thickness of said mop passing between the rollers C and D and a bight 17 being formed in said mop by this arrangement. By rotating the roller D in either direction the

mop G will be fed in a corresponding direction until the fastened end of the mop prevents a further movement in that direction. While the mop is being fed between the rollers C and D the water held in the fabric of said mop will be squeezed therefrom by the pressure exerted by said rollers. After the mop has been moved in one direction as far as the bight 17 will permit it to go the direction of the movement of the roller D must be reversed to feed the mop in an opposite direction, and by such alternating movements of the roller D the dirty water will be effectually removed from the mop and the latter will be in condition for a continuance of its functions.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

1. The combination with a frame, B, provided with pendent arms, 3, each having a slotted opening, 4, and journal bearing, 5 formed therein, a cross-tie, 16, connecting

said arms near their lower ends, a mop-retaining bar, F, hinged to said frame and provided with spurs or spikes, 13, for attaching a mop thereto, of wringer-rollers, C and D, arranged to rotate in said frame, a movable cross-bar, E, fitted to slide in said slotted openings and to bear against the journals of the roller D, and a spring, H, arranged to bear upon the cross-bar E, as and for the purpose specified.

2. The combination of a frame, B, having a mop-retaining bar, F, provided with spurs or spikes, 13, for attaching a mop thereto, wringer-rollers, C and D, arranged to rotate in said frame, and a mop, G, having its ends attached to the bar F and a single part of said mop being passed between the rollers C and D, as and for the purpose specified.

JOHN L. SANFORD.

Witnesses:

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