May 26, 1931. A. COLANGELO 1,807,387

MOP HOLDER AND WRINGER

Filed April 29, 1930

Fig. 1

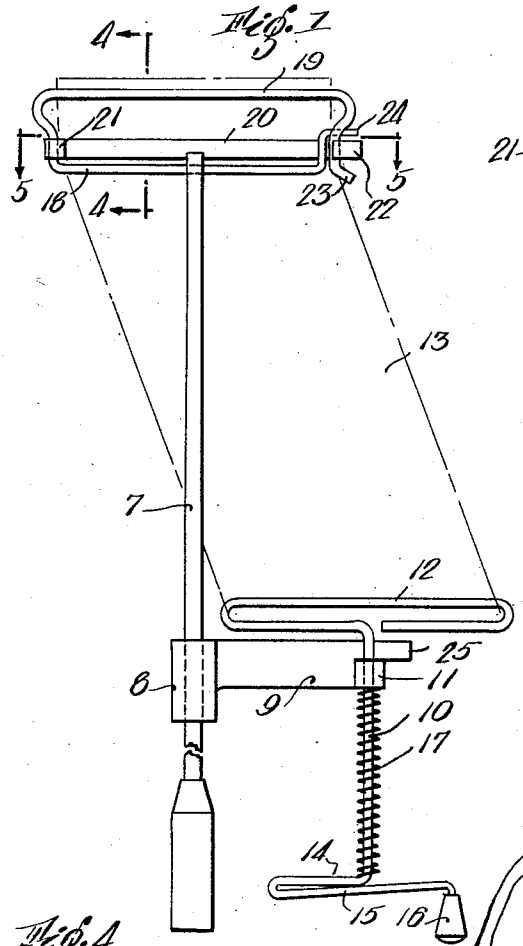


Fig. 2

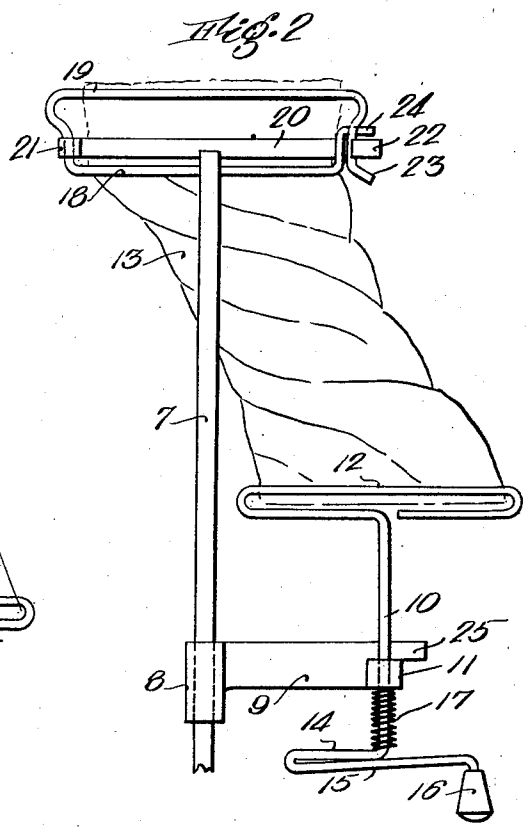


Fig. 4

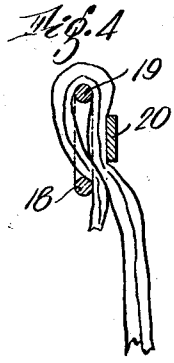


Fig. 6

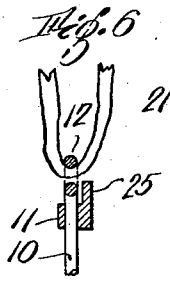


Fig. 3

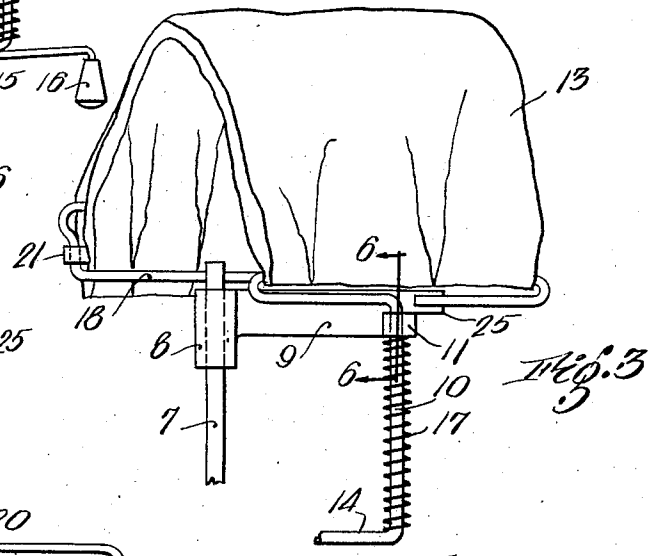
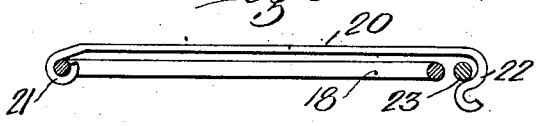


Fig. 5



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UNITED STATES PATENT OFFICE

ANTONY COLANGELO, OF REVERE, MASSACHUSETTS

MOP HOLDER AND WRINGER

Application filed April 29, 1930. Serial No. 448,352.

This invention relates to improvements in mop holders of the type in which a mop may be selectively supported in position for use or may be wrung dry after immersion in water. The principal object of the invention is to provide an improved mop holder and wringer so constructed and arranged as to permit the mop to be wrung dry by an easily operated crank and to be held in useful position with the mop holding parts of the device locked against rotation relative to the mop handle.

A preferred embodiment of the invention is illustrated in the accompanying drawings in which:

Fig 1 is a face view of the improved device showing the parts in position for wringing the mop;

Fig. 2 is a similar view showing the mop twisted about itself to wring out the water;

Fig. 3 is a fragmentary view of the lower end of the mop holder showing the parts in position for use in mopping the floor;

Figs. 4 and 5 are enlarged sections on the lines 4—4 and 5—5 respectively of Fig. 1; and

Fig. 6 is an enlarged section on line 6—6 of Fig. 3.

The particular embodiment shown for the purpose of illustration comprises an elongated handle 7 preferably formed of metal of rectangular cross-section, a sleeve 8 slidable along the handle and having an arm 9 extending transversely thereof, a crank shaft 10 slidable and rotatable in a hub 11 provided adjacent the outer end of the arm 9, the lower end of the shaft 10 being bent in the form of a loop to receive and hold a doubled portion of the mop 13. The upper end of the shaft 10 is bent transversely to provide a shoulder portion 14 and a returned lever portion 15 having a knob 16 for rotating the shaft 10 and loop 12; and a coiled spring 17 surrounds the shaft between the hub 11 and shoulder 14. It is thus evident that the lever 14, shaft 10 and loop 12 may be formed of a single length of wire and fitted to the hub 11 either before or after shaping its several portions.

The free ends of the doubled mop are secured at the lower end of the handle 7 by suitable retaining means which preferably comprise a wire holder bent into substantially rectangular form to provide upper and lower cross members 18 and 19 respectively, the upper member 18 being secured intermediate its ends to the handle 7 as by fitting it in a suitable opening at the end of said handle or by other common fastening devices. The ends of the wire holder overlap each other at one side of the rectangle, and the opposite side of the rectangle has a clamp 20 pivoted thereto at 21. The free end of the clamp 20 has a hook 22 arranged to snap over the end portion 23 of the wire holder to secure the mop end thereon.

Any suitable fabric of appropriate length and thickness may be employed as a mop in association with my improved holder and wringer, and the mop is preferably applied by passing one end through the loop 12, doubling the mop upon itself and securing the free ends, in juxtaposition, to the wire holder at the bottom of the handle by the clamp 20. For example, as shown in Fig. 4 the mop ends may be passed beneath and around the lower cross member 19 and then behind the upper cross member 18, and the clamp 20 may be swung over the folded ends and latched upon the wire end 23 by snapping its hook portion 22 transversely over the wire. The end portion 24 of the upper cross member 18 is thus clamped between the cloth and the said end portion 23 of the lower cross member, as shown in Figs. 1 and 2.

It will be noted that the free end of the arm 9 projects beyond the hub 11 at 25 and that said hub is spaced from the lower edge of said arm. Consequently the tension of spring 17, which tends to draw the loop 12 toward the hub 11, normally holds said loop in engagement with the face of the arm 9 and its projecting portion 25 at both sides of the axis of the loop, as best indicated in Fig. 3. It is accordingly evident that the loop 12 is normally restrained from rotation relative to the handle 7 by said engagement. This feature is most important when the sleeve 7 and its arm 9 are moved downwardly toward the lower end of the handle to carry the mop to useful position (Fig. 3),

for the accidental twisting of the loop would interfere with proper operation of the mop.

When it is desired to wring out the mop after immersing it in water, the sleeve 7 and arm 9 are moved upwardly of the shaft 7 by hand, and the lever 15 of the crank shaft 10 is rotated to twist the loop 12 and the upper end of the mop. The spring 17 will yield during this operation, so that it is unnecessary to move the sleeve 7 along the shaft as the mop is twisted. Before commencing to wring the mop, it is, of course, necessary to depress the shaft 10 in order to release the loop 12 from its locking engagement with arm 9, as shown in Fig. 1.

It is thus apparent that I have devised a mop holder and wringer which may be economically constructed from relatively inexpensive materials, yet which securely holds the mop in proper position for use in mopping the floor or for wringing out its moisture content. The device is easy to operate and the mop may be readily attached to or removed from the upper and lower holders of the device. It is obvious that the details of construction herein described may be varied to suit particular purposes without departing from the spirit of this invention as defined in the following claim.

I claim:

A mop holder and wringer comprising an elongate handle, means at the lower end of the handle for holding one end of a mop, a sleeve slidable along the handle and having an arm extending transversely thereof, a hub on said arm, a crank shaft rotatable and longitudinally slidable in said hub, the lower end of the shaft having a transverse loop for holding the opposite end of the mop and the other end being bent to form a transverse shoulder and operating lever, and a coiled spring surrounding the shaft between said hub and said shoulder and tending to hold said loop adjacent said arm, the hub being spaced from the lower edge of the arm so that the loop normally engages the arm and is thereby prevented from rotation when the mop is in use.

Signed by me at Boston, Massachusetts, this 22nd day of April, 1930.

ANTONY COLANGELO.