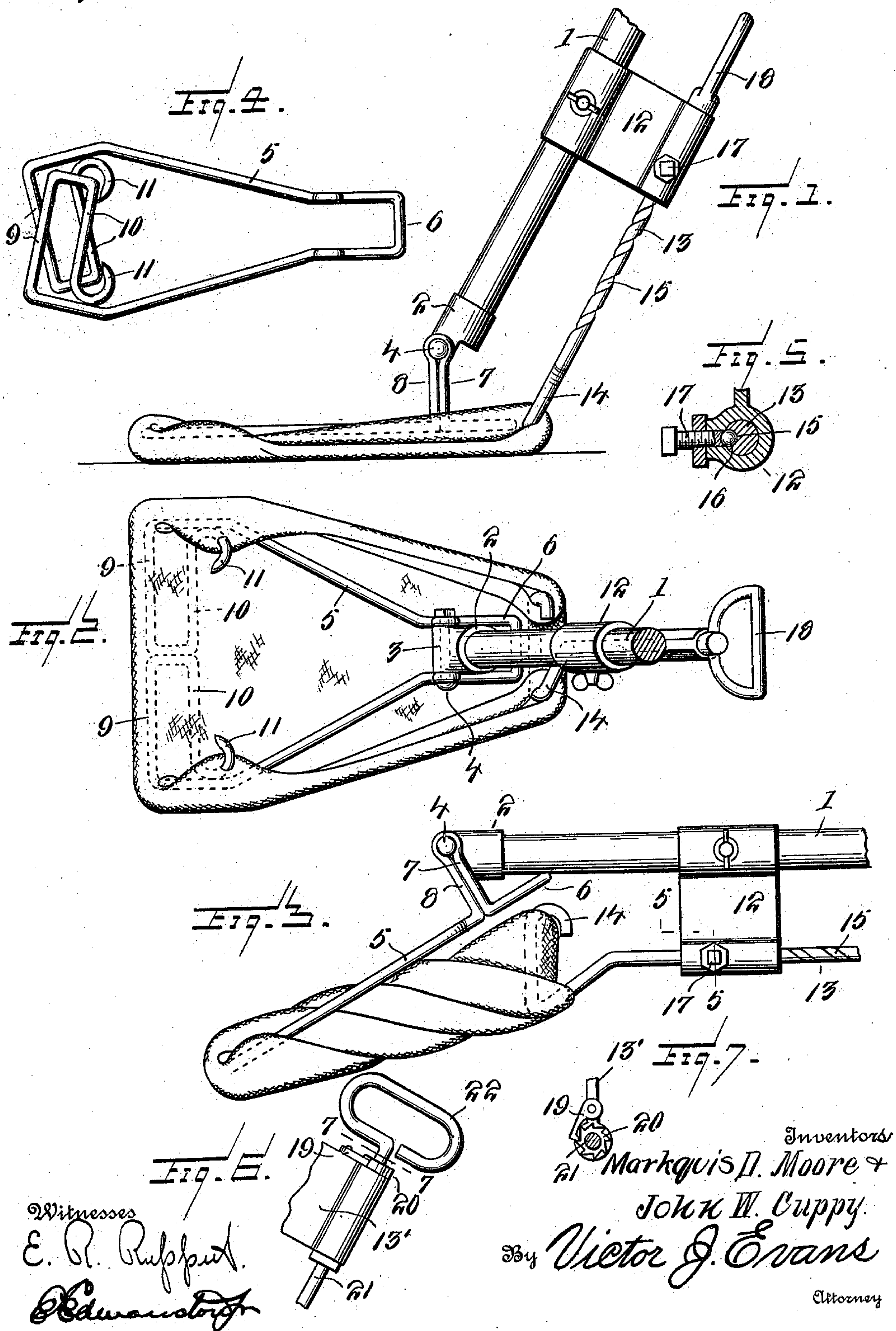


J. W. CUPPY & M. D. MOORE.  
COMBINED MOP HEAD AND WRINGER.  
APPLICATION FILED APR. 29, 1910.

982,084.

Patented Jan. 17, 1911.





# UNITED STATES PATENT OFFICE.

JOHN WM. CUPPY AND MARKQUIS D. MOORE, OF BALTIMORE, MARYLAND.

COMBINED MOP HEAD AND WRINGER.

982,084.

Specification of Letters Patent.

Patented Jan. 17, 1911.

Application filed April 29, 1910. Serial No. 558,376.

*To all whom it may concern:*

Be it known that we, JOHN WILLIAM CUPPY and MARKQUIS D. MOORE, citizens of the United States, residing at Baltimore, in the State of Maryland, have invented new and useful Improvements in Combined Mop Heads and Wringers, of which the following is a specification.

This invention relates to mops and the object of the invention is the provision of means for maintaining the entire mop surface upon the floor or other surface to be cleaned.

A still further object of the invention is the provision of novel means for wringing the mop fabric and for returning the mop fabric to normal position after wringing.

Further objects of the invention will appear as the specific description which follows is read in connection with the accompanying drawings which form a part of this specification, and in which:—

Figure 1 is a side elevation showing the mop in operative position. Fig. 2 is a top plan view. Fig. 3 is a side elevation showing the mop in wringing position. Fig. 4 is a detail plan view of the mop foot. Fig. 5 is a sectional view taken on the line 5—5 of Fig. 3. Fig. 6 is a fragmentary elevation of a modified form of wringer rod and its bearing, and Fig. 7 is a section on the line 7—7 of Fig. 6.

Referring more especially to the drawing, 1 represents the handle of the mop which is provided on its end with a bearing member 2 which is apertured at 3 to receive a pivoting bolt 4. Mounted upon the ends of this bolt is a mop supporting foot 5 which is constructed in the manner shown in Figs. 1 and 2. It may be specifically stated that the foot comprises a single piece of wire bent into yoke form at its inner end as at 6 to provide a limiting stop which engages the handle for a purpose to be hereinafter described. Immediately forward of the yoke 6 the respective legs of the foot are bent at right angles as at 7 and then bent back upon themselves as at 8 to form the bearing arms by which the foot is pivoted to the bolt 4. The legs of the foot are then extended forward on diverging lines to their ends where they are bent at right angles as at 9 and then bent back upon themselves to form the loops 10 and the extremities of each leg are formed into hooks 11 which are adapted to engage the fabric of the mop.

The mop fabric which is used is made in the form of a complete loop which has diverging sides in plan view and the foot 5 has its loops 10 extended between the folds of the loop or fabric and the fabric pulled over to engage the hooks 11 whereby said fabric is properly held in position.

Adjustably mounted upon the handle 1 is a bracket 12 in which is slidably mounted the wringer rod 13 having upon its lower end a loop 14 which is engaged between the folds of the fabric at its narrow end. The rod 13 is spirally grooved throughout its length as shown at 15 and this groove is engaged by an anti-friction ball 16 which is pressed into engagement with the groove by a screw 17 threaded into the bracket 12. On the outer end of the rod there is swiveled an operating handle 18 by which the rod 13 is reciprocated in the bracket.

When the mop is in operative position as shown in Fig. 1 the handle 18 limits the outward movement of the rod 13 and the limiting end 6 of the foot 5 engages the upper side of the fabric to press it into engagement with the floor or other surface being operated upon. When it is desired to wring the mop the handle 1 is held stationary while the rod 13 is drawn through the bracket 12. The spiral groove being in engagement with the anti-friction ball 16 causes the rod to rotate and the fabric to be twisted as shown in Fig. 3. As the fabric is twisted up into wringing position, the spring legs of the foot 5 come together in the position shown in Fig. 4 and permit easy wringing of the fabric.

In the modification shown in Fig. 6 the bracket 13 has mounted upon its upper face a pawl 19 which is adapted to engage a ratchet wheel 20 upon the end of the wringing rod 21. This wringer rod slides freely through the bracket 13' and has rigidly secured to its outer end a twisting handle 22 by which the rod may be operated. The pawl and ratchet hold the rod in any rotated position until it is desired to release the same at which time the pawl is thrown out of engagement with the ratchet wheel and the rod 21 rotated in the opposite direction to untwist the fabric. The spring arms of the mop foot in returning to normal position will assist in untwisting the fabric.

Having thus described the invention, what is claimed, is:—

1. In a mop, an operating handle, a fabric



supporting foot pivoted thereto and comprising diverging spring arms, fabric engaging loops upon said arms adapted to be arranged between the folds of an endless mop, fabric  
5 engaging hooks carried by said loops and a wringing device adapted to stretch the fabric over the foot.

2. In a mop, an operating handle, a fabric retaining foot pivoted to said handle and  
10 comprising a pair of diverging spring arms, means carried by the foot for engagement between the folds of an endless mop, means carried by the foot for engaging and holding the underfold of the mop over said en-  
15 gaging means and thereby the mop in position upon the foot, a wringing device adapted to stretch the mop over the foot whereby its entire surface is presented for operation and a limiting member on the foot to engage

the handle to limit the movement of the foot 20 when the wringer is in use.

3. In a mop, a handle, a mop foot pivoted thereon and comprising a pair of diverging spring arms each having loops formed at their free ends adapted to enter between the 25 folds of an endless mop, hooks carried by said loops and adapted to enter the fabric and hold the lower fold thereof over the loops and thereby secure the mop upon the foot and a wringing device adapted to stretch 30 the fabric upon the foot.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN WM. CUPPY.

MARKQUIS D. MOORE.

Witnesses:

H. K. STEVENS,

MYERS UHLFELDER.