(No Model.)

J. P. REUTER.

MOP WRINGER.

No. 456,777. Patented July 28, 1891.

Fig. 1.

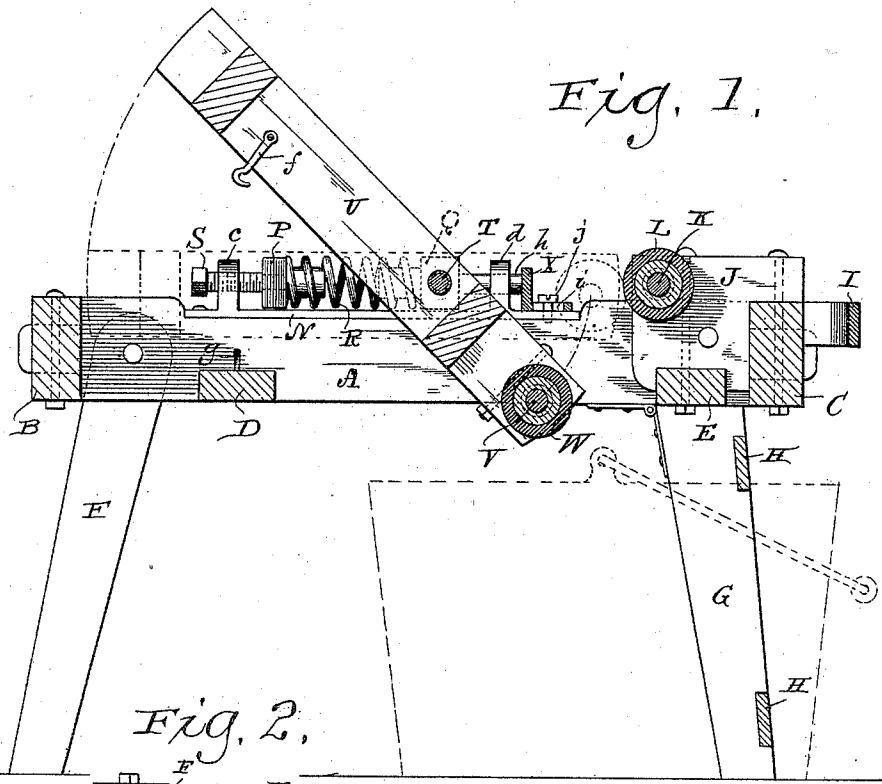
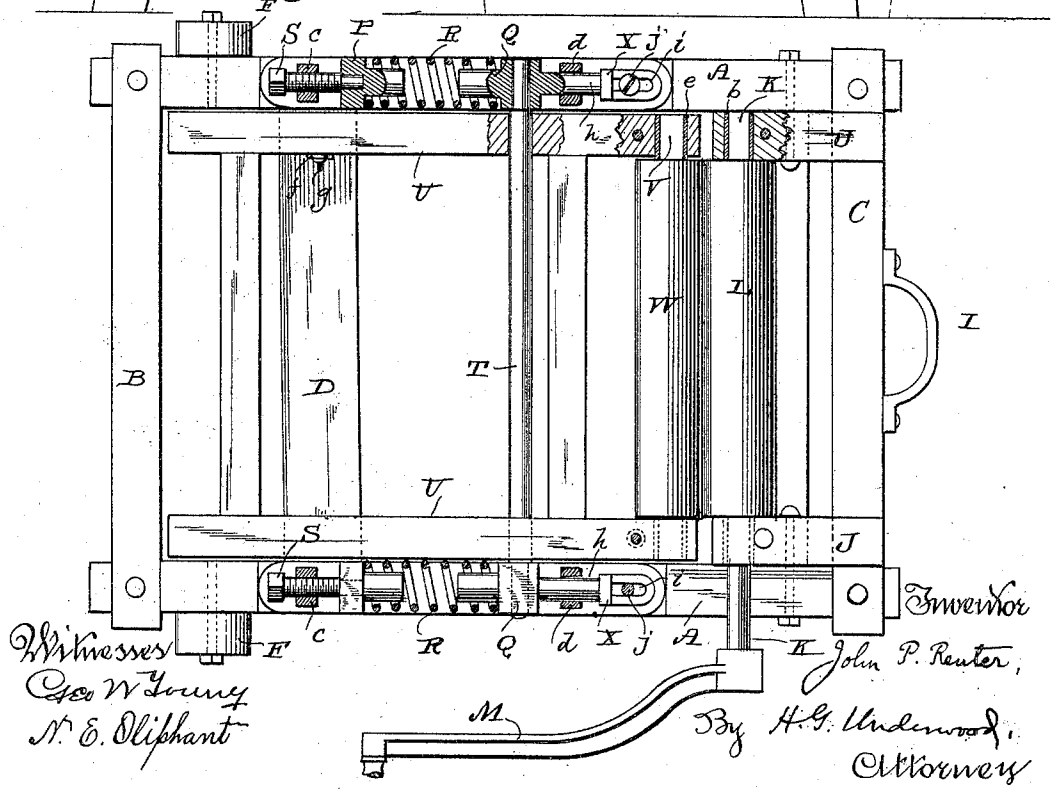


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN P. REUTER, OF KAUKAUNA, WISCONSIN.

MOP-WRINGER.

SPECIFICATION forming part of Letters Patent No. 456,777, dated July 28, 1891.

Application filed March 23, 1891. Serial No. 385,992. (No model.)

To all whom it may concern:

Be it known that I, JOHN P. REUTER, a citizen of the United States, and a resident of Kaukauna, in the county of Outagamie, and in the State of Wisconsin, have invented certain new and useful Improvements in Mop-Wringers; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention consists in certain peculiarities of construction and combination of parts, to be hereinafter described with reference to the accompanying drawings, and subsequently claimed.

In the drawings, Figure 1 represents a vertical longitudinal section of a mop-wringer constructed according to my invention, and Fig. 2 a plan view of the same with parts broken away.

Referring by letter to the drawings, A represents the side bars, B C the end bars, and D E the transverse braces, of the main frame of my wringer. Pivoted to said side bars adjacent to the frame-brace D are legs F, and hinged to said side bars adjacent to the frame-brace E are other legs G, the latter being preferably united by braces H, the braces being illustrated in section in Fig. 1. When the wringer is not in use, the legs F are swung in along the outer faces of the main-frame side bars A and the legs G fold down against the under faces of said side bars to economize space, the end bar C of the main frame being preferably provided with a handle I, in order that the wringer may be readily carried from one place to another.

Fitted to the end bar C and transverse brace E are blocks J, held in place by bolts or other suitable means, and inserted in these blocks are bushings *b*, that serve as bearings for the core K of a wringing-roll L, the latter being preferably of rubber, as is usual in the art to which my invention relates. It is also preferable to provide the core of the wringing-roll with a crank M, as shown in Fig. 2.

Retained on the upper faces of the side bars A are plates N, provided with ears *c d* at right angles thereto, and arranged to slide on said plate between the ears are stud-blocks P Q, the latter serving as supports for spiral springs R of considerable stiffness. Engaging the ears *c* of the plates N are set-screws S, (shown as having unthreaded and reduced inner ends loosely engaging corresponding sockets in the stud-blocks P,) these set-screws serving as a means for regulating the tension of the spiral springs R, above specified. The stud-blocks Q are bored in a transverse direction to form bearings for a pivot-rod T, on which a supplemental frame U is made fast, the forward end of the side bars of this supplemental frame being provided with bushings *e* for the core V of another wringing-roll W, the latter being similar in material to the one above specified. The supplemental frame U is also provided with hooks *f* for engagement with eyes *g* on the transverse brace D of the main frame, whereby said supplemental frame may be held closed within the side bars of said main frame when the wringer is knocked down for storage or transportation.

Extending from the stud-blocks Q through openings in the ears *d* of the plates N are shanks *h*, that abut against stop-plates X, having longitudinal slots *i*, that engage set-screws *j*, the latter having their bearings in the former plates. By the adjustment of the stop-plates X the set of the supplemental frame U, carrying the wringing-roll W, is determined, and thus said roll is positioned with relation to the one L that has its bearings in the main frame, it being obvious that the expansion of the springs R is limited by said stop-plates.

In practice the legs of the main frame are swung down to the position shown in Fig. 1, the supplemental frame unhooked, and the entire device set up over a pail or other receptacle for water. The preponderance of weight being at the forward end of the supplemental frame, the latter will tilt on its pivots to normally stand in the position shown in Fig. 1. A mop having been plunged into the water-receptacle is drawn up between the wringing-rolls L W, and at the same time the supplemental frame U is swung on its pivots by the foot or knee of the operator to bring the latter wringing-roll as close as possible to the former, to thus wring the mop as it is drawn up, the crank M being operated, if necessary or desirable, in order to aid in the wringing operation. The stud-blocks Q being movable against the springs R, a yielding pressure is exerted against the mop as the

latter is wrung out, and this yield compensates for such irregularities as occur in said mop.

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

1. The combination, in a mop-wringer, of a knockdown roller-carrying main frame, a supplemental roller-carrying frame pivoted to the main one, and suitable means for locking the supplemental frame closed within said main frame, substantially as set forth.

2. The combination of the main frame, a wringer-roll mounted therein, spring-controlled blocks on said frame, a supplemental frame pivotally connected to the blocks, and another wringer-roll mounted in the latter frame, substantially as set forth.

3. The combination of the main frame, a wringer-roll mounted therein, stud-blocks arranged to slide on said frame, spiral springs supported by the blocks, set-screws opposing certain of these blocks, a supplemental frame pivotally connected to the remainder of said blocks, and another wringer-roll mounted in the latter frame, substantially as set forth.

4. The combination of the main frame, a wringer-roll mounted therein, stud-blocks arranged to slide on said frame, spiral springs supported by the blocks, a supplemental frame pivotally connected to certain of the blocks, longitudinal extensions on these particular blocks, adjustable stops arranged to oppose the block-extensions, and another wringer-roll mounted in the supplemental frame, substantially as set forth.

5. The combination of the main frame, a wringer-roll mounted therein, stud-blocks arranged to slide on said frame, spiral springs supported by the blocks, set-screws opposed to certain of these blocks, a supplemental frame pivotally connected to the remainder of said blocks, longitudinal extensions on the latter blocks, adjustable stops in opposition to the block-extensions, and another wringer-roll mounted in the supplemental frame, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Kaukauna, in the county of Outagamie and State of Wisconsin, in the presence of two witnesses.

JOHN P. REUTER.

Witnesses:
PETER REUTER,
F. A. TOWSLEY.