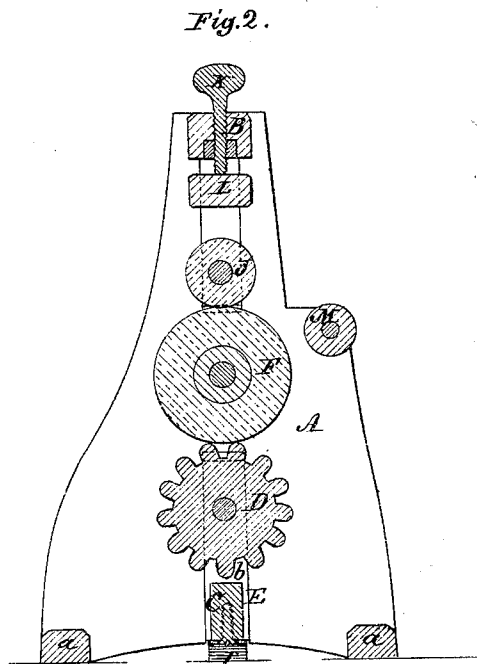
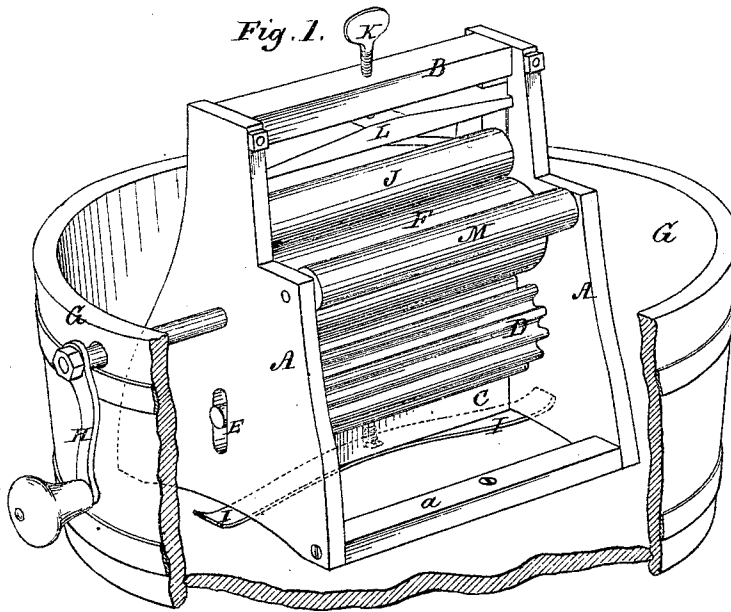


JESSIE H. MURRAY.

Improvement in Washers and Wringers Combined.

No. 114,462.

Patented May 2, 1871.



Witnesses.

Alex. Mahon
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Inventor.

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United States Patent Office.

JESSIE H. MURRAY, OF KIRKWOOD, NEW YORK.

Letters Patent No. 114,462, dated May 2, 1871.

IMPROVEMENT IN WASHERS AND WRINGERS COMBINED.

The Schedule referred to in these Letters Patent and making part of the same.

I, JESSIE H. MURRAY, of Kirkwood, in the county of Broome and State of New York, have invented certain Improvements in Combined Washing and Wringing-Machines, of which the following is a specification.

My invention relates to the combination and arrangement of rubber-covered and corrugated rollers, drawn together by suitable metallic springs, which work in a frame placed in a tub or vessel, the object being to obviate difficulties which render similar machines inoperative and useless to the public.

Figure 1 in the accompanying drawing is a side elevation of a machine embodying my invention with a section of the tub removed.

Figure 2 is an end elevation of the same removed from the vessel.

A A are the ends of the machine, which, with the longitudinal head-piece B and pieces *a a* and C, constitute the frame.

D is a corrugated wooden roller, hung in movable bearings *b b*, which work in slots E in the end of the machine, which slots are only made of sufficient length for the required movement of said bearings.

F is a rubber-covered roller with stationary bearings in the end pieces A A, its shaft extending through the rim of the tub G for the attachment of the crank H.

The rollers D and F are pressed together by an elliptic spring, I, under the machine; or they may be drawn together by spiral springs, which springs are adjusted to the required tension for compressing the work as it passes between said rollers for washing.

J is the roller which operates with the roller F for wringing, which is also covered with rubber and hung in movable bearings, which work in grooves on the inside of the end pieces A A. This roller may be depressed to the required pressure for wringing by the thumb-screw K, which works in the center of the

head-piece B and bears on the center of a slightly-elastic cross-piece, L, the ends of which engage with said movable bearings, which are made to project above the face of the rollers for that purpose.

M is a wooden roller, over which the clothes are removed from the machine after wringing.

The clothes to be washed are placed between the rollers D and F, when the crank H is vibrated until the operation is accomplished. The clothes are then placed between the wringing-roller J and roller F, when the thumb-screw K is turned down until said roller J is sufficiently depressed to give the required pressure for wringing. The crank is then turned and the clothes carried over the roller M from the machine.

The center piece C, in the base of the frame, prevents the clothes from floating under the machine and winding around the rollers.

The absence of the ordinary iron parts in my invention obviates the liability of "iron-rust," which is common in the operation of machines of similar construction.

When the ordinary rubber springs are exposed to the action of heated water they soon lose their elasticity, and the common metal-covered roller is found to be inoperative for the double purpose of washing and wringing.

I claim as my invention—

The combination of the elliptic spring I, wooden corrugated roller D, rubber-covered roller F with roller J, head-piece B, thumb-screw K, elastic cross-piece L, and crank H, all being constructed and operating substantially as hereinbefore set forth for the purpose specified.

Witnesses: JESSIE H. MURRAY.
S. W. ROGERS,
THOMAS JOHNSON.