M. N. LOVELL.
Wringers.

No. 198,494. Patented Dec. 25, 1877.

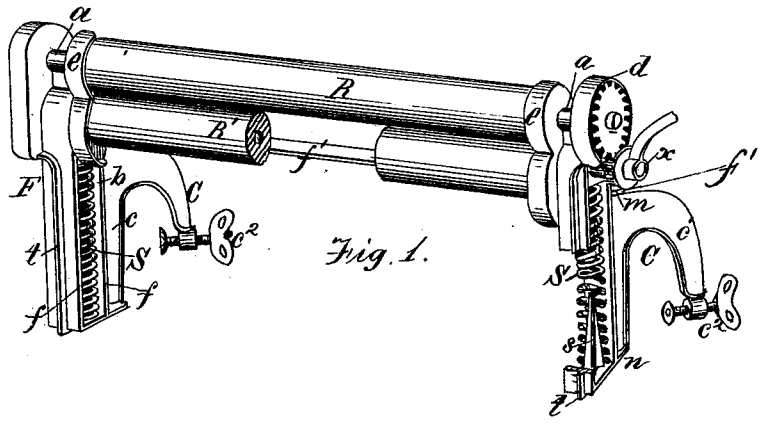


Fig. 1.

Fig. 2.

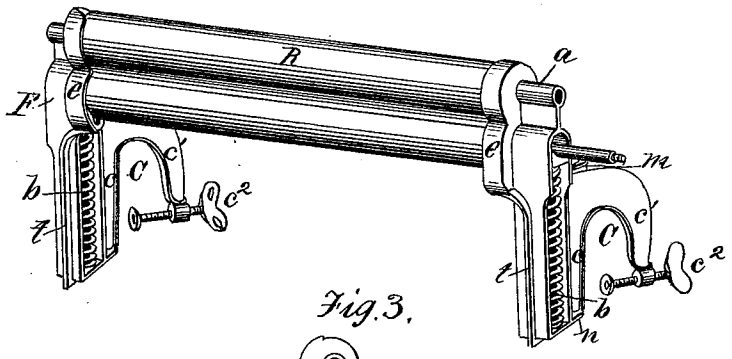
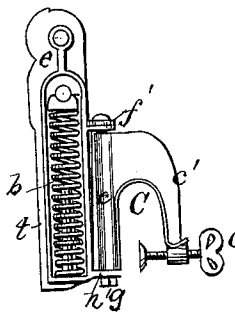


Fig. 3.



Witnesses;
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UNITED STATES PATENT OFFICE.

MELVIN N. LOVELL, OF ERIE, PENNSYLVANIA.

IMPROVEMENT IN WRINGERS.

Specification forming part of Letters Patent No. **198,494**, dated December 25, 1877; application filed February 17, 1877.

To all whom it may concern:

Be it known that I, MELVIN N. LOVELL, of Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Clothes-Wringers; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figures 1 and 2 are perspective views of different forms of the invention, and Fig. 3 is an end elevation.

Similar letters of reference in the accompanying drawings denote the same parts.

This invention relates to improvements in clothes-wringers; and consists in the construction of the parts hereinafter fully described, and pointed out in the claim.

In the drawings, R R′ indicate the upper and lower rolls, respectively, the same being of any suitable construction. F indicates the frame, which is of cast metal, preferably iron tinned, galvanized, or otherwise rendered non-corrosive. C C are the clamps by which the structure may be secured to the tub, and S S are the pressure-springs.

The frame consists, substantially, of two standards, *f f*, connected, about midway between their ends, by a light, but rigid, bar, *f′*.

Each standard is cast with an elongated socket, *a*, for the journals of the upper roll, with an oblong vertical opening, *b*, to accommodate the pressure-spring and the journal and movable bearing of the lower roll, with a vertical stud, *s*, arranged in said opening for the purpose of supporting and guiding the coils of the pressure-spring, and with lugs *m n*, between which the clamp is pivoted, and the upper one of which also serves to receive and hold the end of the connecting-bar *f′*. This casting may be strengthened, if necessary, by a suitable rib or ribs, *t t*, and may, when gears are used, be provided with a stud or pin, *x*, to receive a pinion or purchase gear, and a hood or flange, *d*, to cover them and prevent the clothes from becoming accidentally injured thereby.

The guards *e e*, which keep the clothes away from the journals, may either be cast on the frame, as shown in Fig. 2, or cast separately, and afterward attached to the machine by means of a slot or slots, through which the journals extend, as represented in Fig. 1.

Each clamp is constructed in the form of an upright shaft or sleeve, *c*, having an arm, c^1, extending outward and downward, so as to hook over the upper edge of the tub, with a clamping-screw, c^2, in the lower end of said arm, to bear against the outside of the tub, in the usual manner. This casting *c* c^1 is pivoted between the lugs *m n* by any suitable means—such as, for example, a bolt, *g*, extending through it—whereby the arm c^1 can he swung laterally on its vertical axis, and adjust itself, automatically or otherwise, to the surface of the tub, and thereby not only hold the machine more securely in place, but prevent the clamping-screws from warping or injuring the staves.

The same construction also enables the wringers to be packed in less space for transportation or storage.

The form and arrangement of the clamps, projecting, as they do, from the side of the frame, also have the effect to hold the rolls at a considerable distance inward from the walls of the tub, and obviate the necessity of an inclined board for shedding the expressed water into the tub.

It will be observed that my construction greatly simplifies and reduces the size of the frame of the machine, dispensing altogether with the ordinary cross-bar or yoke at the top, utilizing the elongated journals and bearings of the upper roll, in connection with the bar *f′*, as the means for holding the parts together in their proper working relations, and employing, for the purpose of holding the pressure-springs, that downward extension of the frame which is always necessary to accommodate the clamps, but which I am not aware has heretofore been used to also accommodate the springs.

Having thus described my invention, I claim as new—

The standards *f f*, cast with the fixed sockets or bearings of the upper roll, the oblong opening for the springs, and movable bearings of the lower roll, and the lugs for attaching the clamps and cross-bar, substantially as described.

MELVIN N. LOVELL.

Witnesses:
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