M. N. LOVELL.
Wringers.

No. 198,493. Patented Dec. 25, 1877.

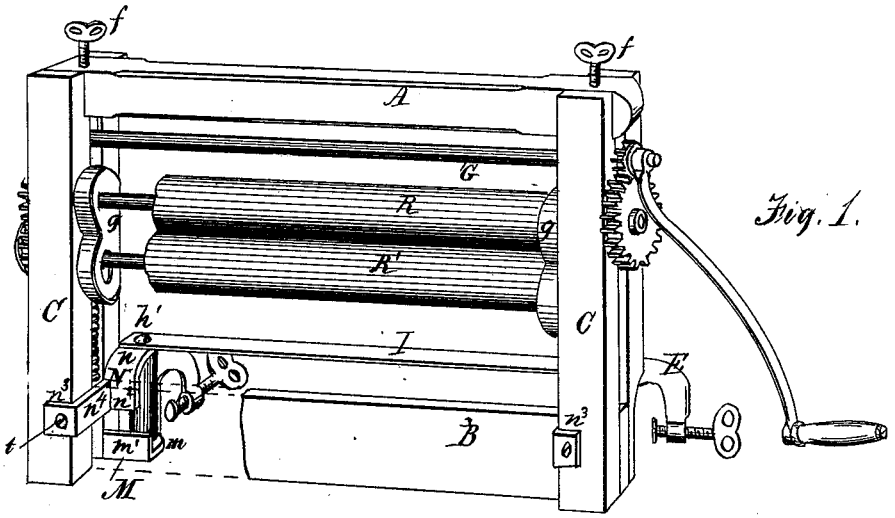

Fig. 1.

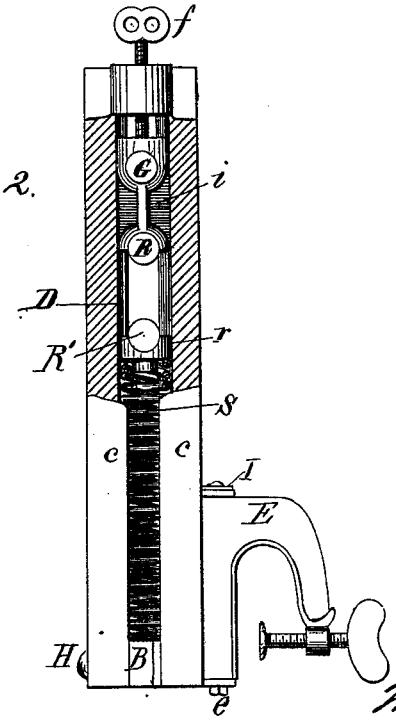

Fig. 2.

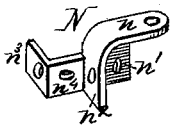

Fig. 3.

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. **198,493**, 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 a new and Improved Clothes-Wringer; 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—

Figure 1 is a perspective view of the machine. Fig. 2 is an end view of the same with a part broken away. Fig. 3 is a perspective view of the lower casting of the clamp detached.

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

This invention relates to that class of clothes-wringers in which the squeezing-rolls are supported in a wooden frame; and it consists in certain details of construction, which I will now proceed to describe, and point out in the claim.

In the drawings, A is the top cross-bar, and B the bottom cross-bar, of the frame, and C C are the side standards, each of the latter being composed of two vertical parallel pieces, *c c*, inclosing a recess or space, D, between them, from top to bottom, for the purpose of accommodating the bearings and pressure-springs. The latter are spiral in form, and are supported at their lower end on a shoulder formed on the cross-bar B, and guided and held in position by the concave form of the recess in which they are arranged.

The journals of the lower roll R′ rest on bearings *r*, supported on the upper end of the spring S. The upper roll R rests on the lower one, and is held down against it by means of elongated sliding blocks *i*, arranged in the upper end of the concave recess aforesaid, and adjusted by means of screws *f f*.

The guards *g*, which prevent the clothes from running over the ends of the rolls, may be either attached to the frame or hung on the journals inside of the frame, or the ends of the rolls may be protected by recesses in the standards *b b*, as preferred. The two rolls may be connected by gearing or not, at the option of the manufacturer.

For the purpose of assisting to guide the sliding blocks *i*, and preventing them from displacement, they may be directly connected together by a stout rod or shaft, G, extending into or through them, and the ends of said shaft may be made to project for the purpose of receiving a crank at one end, and supporting a power-gear at the other, if preferred.

The clamps E are made to swivel on vertical axes *e*, and are attached to the frame by castings M N, (shown in Fig. 1,) which castings perform also an important function in strengthening the frame and providing means for the connection of its parts. To these ends the lower casting is provided not only with a flange, *m*, which fits against the face of the cross-bar B, and into a gain in the inner side of the standard-piece C, through which the two parts *c c* of the standard and the end of the cross-bar are bolted, as shown at *h*, but also with a projecting lug, *m′*, which serves to support the lower end of the clamp; and the upper casting N is provided with a lug, *n*, which holds the upper end of the clamp, and also with a flange, n^1 which bears against the side of the piece *c* next to the clamp, a flange n^2, which fits against the face of the cross-bar B, a projection, n^3, which extends across the cross-bar and unites the two parts *c c* of the standard, and a flange, n^4, which fits against the face of the part *c* farthest from the clamp, so that when the said flanges are riveted or screwed to the cross-bar and standard, as shown at *t t′*, they lock all the parts at the lower end of the machine firmly together, and render it exceedingly strong and durable. The two upper castings N may also be connected by a metal bar, I, resting on the lugs *n n*, and bolted thereto in any suitable manner, as shown, which will render the structure still more rigid and strong.

Having thus described my invention, I claim as new—

The metallic plate N, adapted to be applied to the inner face and outer edges of the wooden wringer-standards, for the purpose of binding their parts firmly together, in combination with the swiveled clamp-legs E, having their bearings in said plate, substantially as described.

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Witnesses:
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