E. DUMMER.

Wringing-Machines.

No. 134,131. Patented Dec. 24, 1872.

Fig. 1.

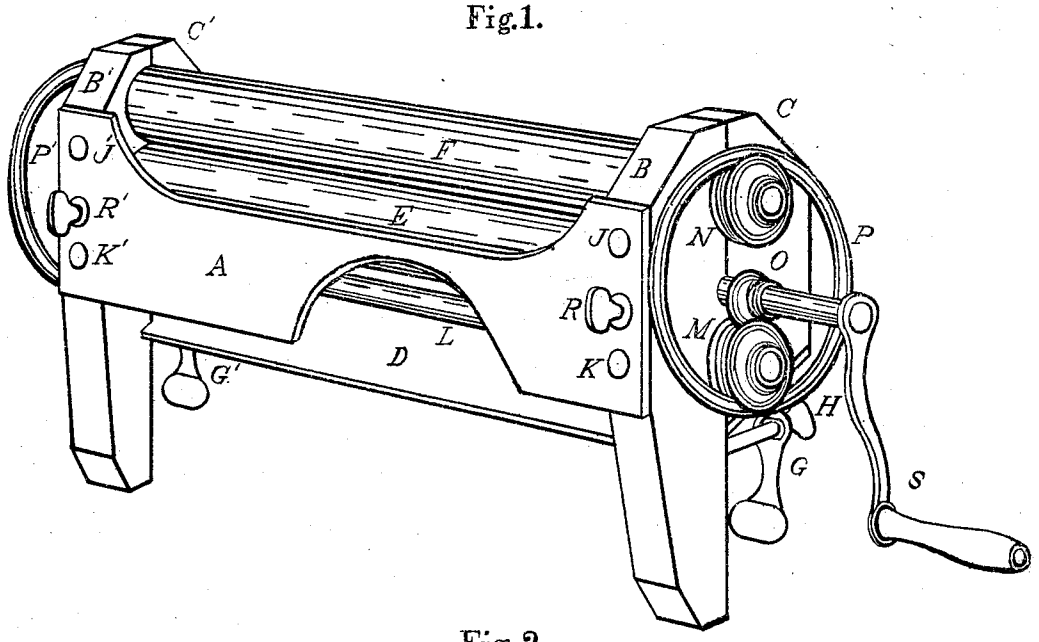


Fig. 2.

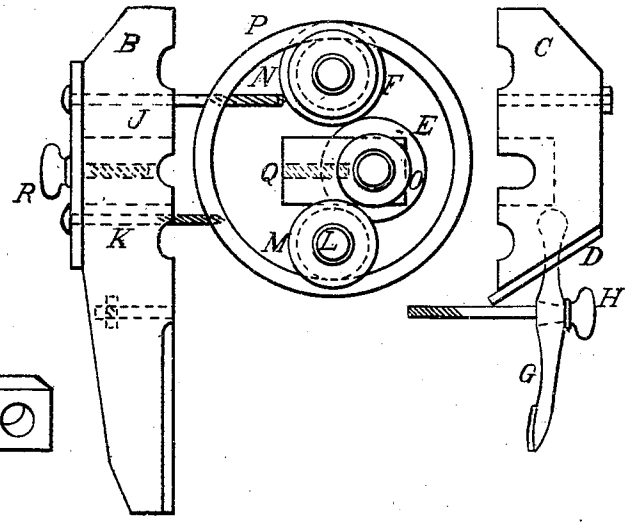


Fig 3.

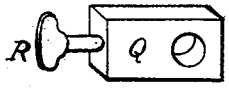


Fig. 4.


WITNESSES:

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# UNITED STATES PATENT OFFICE.

EDWARD DUMMER, OF NEWBURYPORT, MASSACHUSETTS.

## IMPROVEMENT IN WRINGING-MACHINES.

Specification forming part of Letters Patent No. **134,131**, dated December 24, 1872.

*To all whom it may concern:*

Be it known that I, EDWARD DUMMER, of Newburyport, in the county of Essex and State of Massachusetts, have invented certain Improvements in Wringing-Machines, of which the following is a specification:

The first part of my invention relates to the application of my invention for reducing friction on bearings (and for which Letters Patent were granted September 5, 1871) to a clothes-wringer; the object of this part of my invention being to reduce the power necessary to operate said wringers. The second part of my invention relates to the moving a roll or pulley in or out of line with the other rolls or pulleys, the object of this part of my invention being, by widening the distance between the rolls or narrowing said distance, to graduate the pressure, or prevent the rolls remaining under pressure the one upon the other when not in use. The third part of my invention relates to the manner of fastening the wringing-machine upon the tub or other support; the object of this part of my invention being to provide a simple device easily adjusted to all forms to which the machine may be fastened.

Figure 1 is a perspective view of a clothes-wringer embodying my invention. Fig. 2 is an elevation, showing the end of the machine at the right hand in Fig. 1, (the crank being left off,) having the parts of which it is composed separated the better to show the relation of said parts. Fig. 3 is a perspective view of one of the slides with its thumb-screw for moving in and out of the shaft of the lower roll. Fig. 4 is one of the legs or clamps seen in position in Figs. 1 and 2.

A is the board, a piece being broken out in the drawing the better to show the construction of the machine, over which the clothes pass before going between the rolls, and which assists in holding the ends of the machine in position. B C are the two parts of which the right end of the frame of the machine is composed, and B′ C′ are the corresponding parts of the other end. D is the board which throws back the water and assists, as a part of the frame, in holding the ends in position. E F are the rolls between which the articles to be pressed pass. G G′ are the legs or clamps, which are made so that, being simply thrust in the holes bored upward in the lower ends of C C′, they may be turned about the axis of their length or swung toward the lower parts of B B′. Said legs or clamps have holes in them for the passage of thumb-screws. Said holes are so countersunk upon the sides opposite the thumb-pieces of the screws that the legs may be turned and swung, as aforesaid, and, under pressure of the thumb-screws with the lower parts of B B′, clamp the machine to a variety of forms. At H is shown one of the thumb-screws in position for operating the leg or clamp. Said thumb-screws screw into the lower part of B B′, either with the use of nut, as in drawing, or without. J J′ K K′ are bolts and screws, by which the two parts of each end of frame are held firmly together. L is a shaft, its object being to hold in position the pulleys or rollers, one pulley being shown at M, there being a similar one at the other end of said shaft. N is a pulley or roller on the same shaft with roll F, this shaft having a similar one at the other end. O is a pulley or roller on the same shaft with roll E, this shaft having a similar one at the other end. The pulley or roller O bears and moves upon and with the pulley or roller M. The operation at the other end of the machine is similar. Instead of using the long shaft L, the pulley at the other end might be held in position, and the pulley M, by short bearings, on each side of said pulleys. P is a ring which bears upon and moves with the pulleys M N. The proportion and office of this ring and the pulleys M N O, operating with the rolls E F, are such that while there may be pressure on the rolls E F, the one against the other, or against the substance passed between said rolls, the shafts of said rolls are relieved of much of the pressure and consequent rubbing or sliding friction in the ordinary bearings, there being substituted a rolling for said sliding friction. P′ is a ring at the other end of the machine, operating in a similar manner as P. Only one system of ring with pulleys or rollers may be used. Q is a slide having in it a bearing for the shaft of the roll E, and working in a slot or mortise cut in B and C. Said slide also forms a nut for the thumb-screw R. R′ is a thumb-screw operating a similar slide. By manipulating the thumb-screw the shaft of the roll E is

drawn into or let out of line with the shaft of roll F and of pulley or roller M, so that the pressure of the rolls E F, the one against the other, or against the substances passed between, may be graduated or destroyed. The crank S is shown only in Fig. 1.

I claim as my invention—

1. The combination of the ring P, the pulleys M N O, and rolls E F, substantially as and for the purpose hereinbefore set forth.

2. The combination of the slide Q, frame B C, and pulleys M N O, substantially as and for the purpose hereinbefore set forth.

3. The clamp or leg G, countersunk at H, and thrust in the part of frame C, or similarly confined, so as to turn about the axis of its length, substantially as and for the purpose hereinbefore set forth.

EDWARD DUMMER.

Witnesses:

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