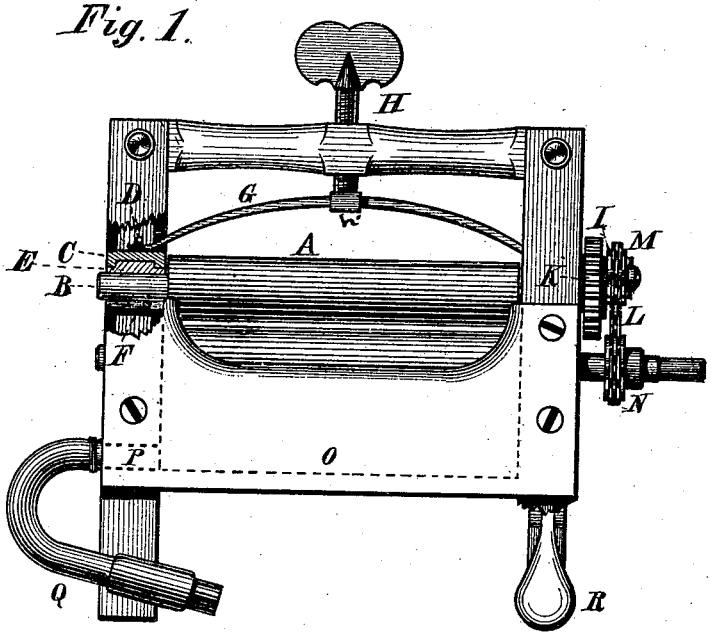
J. W. HALL.

WRINGERS.

No. 180,125. Patented July 25, 1876.

Fig. 1.



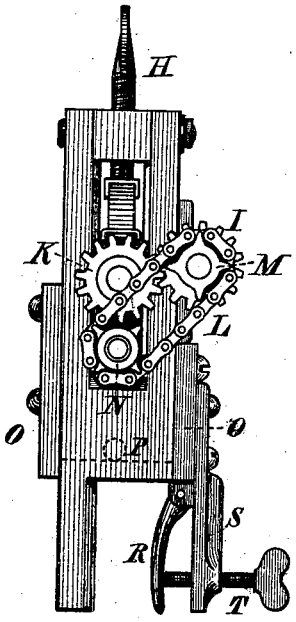


Fig. 2.

Witnesses:

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UNITED STATES PATENT OFFICE.

JUDSON W. HALL, OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN WRINGERS.

Specification forming part of Letters Patent No. **180,125**, dated July 25, 1876; application filed May 24, 1876.

To all whom it may concern:

Be it known that I, JUDSON W. HALL, of Worcester, county of Worcester, Massachusetts, have invented certain Improvements in Clothes-Wringers, of which the following is a specification:

My invention relates to clothes-wringers having horizontal parallel rollers which are adjustable in a frame, the whole being placed in a frame which may be fastened to the tub.

My invention consists in the improved arrangement, construction, and combination of parts, which will be first described, and then pointed out in the claims.

In the drawings, Figure 1 is a side elevation of my improved clothes-wringer with part of the frame broken away. Fig. 2 is an end elevation of the same.

The letter A represents the wringing-rolls, which are made in the usual manner. The journals of these rolls are set in boxes C, which may be lined with glass or other vitreous material, if desired. The journal-boxes of the upper roll are secured to the journals by passing a pin or rod, F, directly beneath the journals, the ends of said pin entering the prolonged sides of the boxes C, while the pin itself is so placed as not to interfere with the free rotation of the roll. To the upper surface of the boxes C is secured a link or retainer, D, (shown in both figures of the drawing,) and so constructed that the ends of the spring G may be inserted within said retainer, and move freely therein. The screw H is provided with a swiveled foot, *h'*, through which the spring G passes. Now it will be evident, from the foregoing description, that when the screw is retracted or raised the spring G will also be drawn up, and the latter, in turn, will lift the journal-boxes C by means of the retainers D, thus carrying the upper roll away from the lower, and at the same time allowing it, when adjusted at any height above said lower roll, to still retain all the elastic action of the spring.

The great advantages of this construction are evident. The rolls may be adjusted to suit different kinds of articles, both thick and thin, and when the former are being wrung it is not necessary to open the rolls with the hand in order to introduce the fabric.

In order to communicate motion from one roller to the other, when at any distance apart, I have devised the construction following. To the upper portion of the frame I journal the pinion M, which is provided with both ordinary gear or cogs I and with a chain-gear. This pinion is located, with relation to the upper roll, a little above the level of said roll when at its lowest point of vertical adjustment. The power, whether by a crank or other kind of mechanism, is applied to the lower roll, and, by means of the pinion N, is transmitted, by the chain L, to the double-geared pinion I M, which latter meshes with the gear-wheel K on the upper roll. Now it will be seen that the latter, carrying the pinion K, may rise and fall and carry the latter pinion some distance above the level of the gear I without withdrawing them from operative connection with each other. This distance is more than sufficient for all practical uses.

The wringer-frame is fastened to the tub by screws T playing in holders S. In order to prevent injury to the tub, and at the same time to secure a tight gripe of the clamping mechanism, I pivot oval tapering pads R to an ear formed on the holders S. These pads are pivoted loosely, so that they will always be retained in contact with the ends of the clamping-screws by their own weight; and they are also curved, so that when brought in contact with the sides of the tub they will lie flat against it, thus securing a firm hold.

The bottom of the wringer-frame may, if desired, be made tight, so as to furnish a trough, O, in which the water wrung from the clothes may be caught. The contents of this tub may be drained off by means of the tube Q, which is adapted to be laid over the edge of an adjoining vessel or tub.

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

1. In a clothes-wringer, the combination, with the screw H, spring G, and the journal-boxes of the upper roll, of the retainers D, fitting over the ends of the said spring, as and for the purpose set forth.

2. In combination with the gear K, attached to the upper roll, the pinion I, placed on a level with or a little above the axis of said roll, and having cogs to mesh with the gear

K, and chain-gearing to receive the motion of the lower roll, as and for the purpose set forth.

3. The jaw S, in combination with the screw T, and the loosely-pivoted curved pad R, as and for the purpose set forth.

4. In combination with the journal-boxes of the upper roll in a wringing-machine, the retainers D and the pins F, all as and for the purpose described.

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Witnesses:
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