J. YOUNG.

CLOTHES-WRINGERS.

No. 194,981. Patented Sept. 11, 1877.

Fig. 1

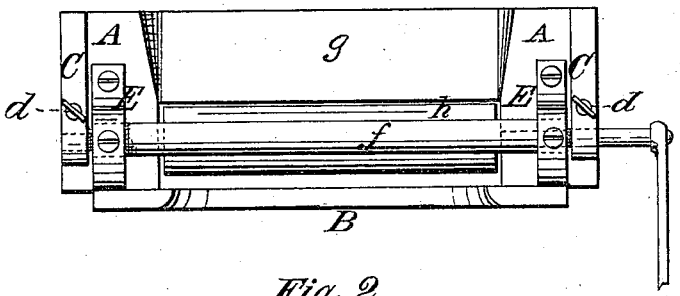


Fig. 2

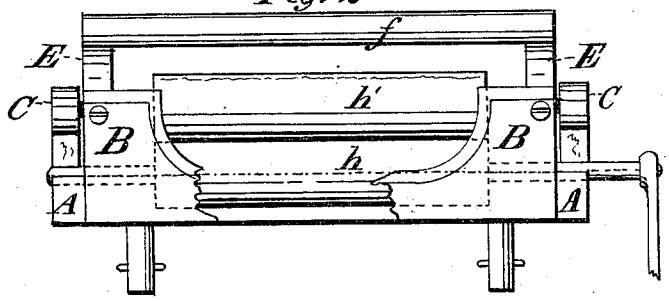


Fig. 4

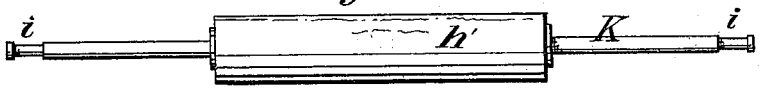
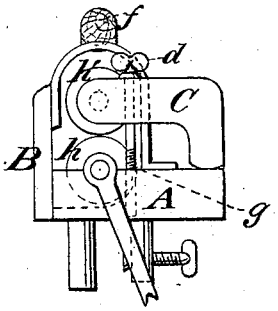


Fig. 3



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IMPROVEMENT IN CLOTHES-WRINGERS.

Specification forming part of Letters Patent No. **194,981**, dated September 11, 1877; application filed March 13, 1877.

To all whom it may concern:

Be it known that I, JOHN YOUNG, of Amsterdam, in the county of Montgomery and State of New York, have invented a Clothes-Wringer, of which the following is a specification:

The object of this invention is to construct a clothes-wringer so as to dispense with the use of springs or weights usually employed to compress the elastic rollers against each other during the operation of wringing, by the use of a shaft made of steel or other elastic or springy metal, and having each end of the shaft extend a considerable distance beyond the ends of the rubber covering, and providing bearings near the ends of the shaft, in order to secure an elastic or springy function of the shaft in conjunction with the elastic covering.

My invention further consists in a simple and efficient frame for clothes-wringers, especially in conjunction with the roller-shafts above alluded to, a description of which will be made following:

Figure 1 is a top-plan view of my invention. Fig. 2 is a side elevation; and Fig. 3 represents an end elevation of the same. Fig. 4 is a longitudinal elevation of my improved spring-shaft and elastic covering.

Similar letters of reference indicate corresponding parts in the various figures.

A, Figs. 1, 2, and 3, represents the bed-frame of the wringer; B, the feed-board secured to the bed-frame A, as indicated in the drawings. The lower roller-bearings are located in the bed-frame, while the upper roller has its bearings located in the adjustable frames C C, which may be compressed to any required degree by means of the thumb-screws *d d*, which will be understood by reference to Fig. 3. The upper edge of the feed-board is secured in position by means of a brace, E E, which also firmly holds the top cross-bar *f*. The said top bar is used for carrying or handling the wringer, as well as to render support to the braces E E. The bed-frame A of the wringer has an inclined recess formed on its upper surface, as shown in Figs. 1 and 3 at *g*, to serve the purpose of an apron, and also to take the place of the cross-bar usually employed. The clamping devices are applied to the lower side of the bed-frame A, as shown in Figs. 2 and 3. Great strength and rigidity are secured by having the bed-frame A made of one solid piece, as well as to serve as a convenient attachment for the other necessary parts, such as the feed-board, clamp, and bearing-frames for the upper rollers. *h* represents the lower roller, and *h'* the upper roller. The lower roller may be made of wood, and used in connection with a rubber roller on the upper side, though rubber is to be preferred for both rollers.

I employ no springs in my wringer to compress the rollers against each other, but have a much simpler means of securing the desired yielding action of the rollers. It consists in having a shaft made of spring-steel or other flexible metal of sufficient length and of a suitable diameter or cross-section to afford the requisite elasticity in conjunction with its elastic covering, and having the journals *i i* located at the proper distance from each other, as shown in Fig. 4.

I make the shaft about double the length covered by the rubber. Its operation is therefore fully understood.

The bearings C C may be held rigid or secure, in conjunction with the flexible or yielding shaft K, which will accommodate itself to the varying thicknesses of the articles which are passed between the elastic rolls.

What I claim as new, and desire to secure by Letters Patent, is—

The combination, in a clothes-wringer, of the solid bed-piece A, having an inclined recess, *g*, with the feed-board B, adjustable frames C C, elastic rollers *h h'*, braces E E, and top cross-bar *f*, all arranged and operating as set forth.

JOHN YOUNG.

Witnesses:

J. W. LATCHER,

GEO. S. DEVENDORF.