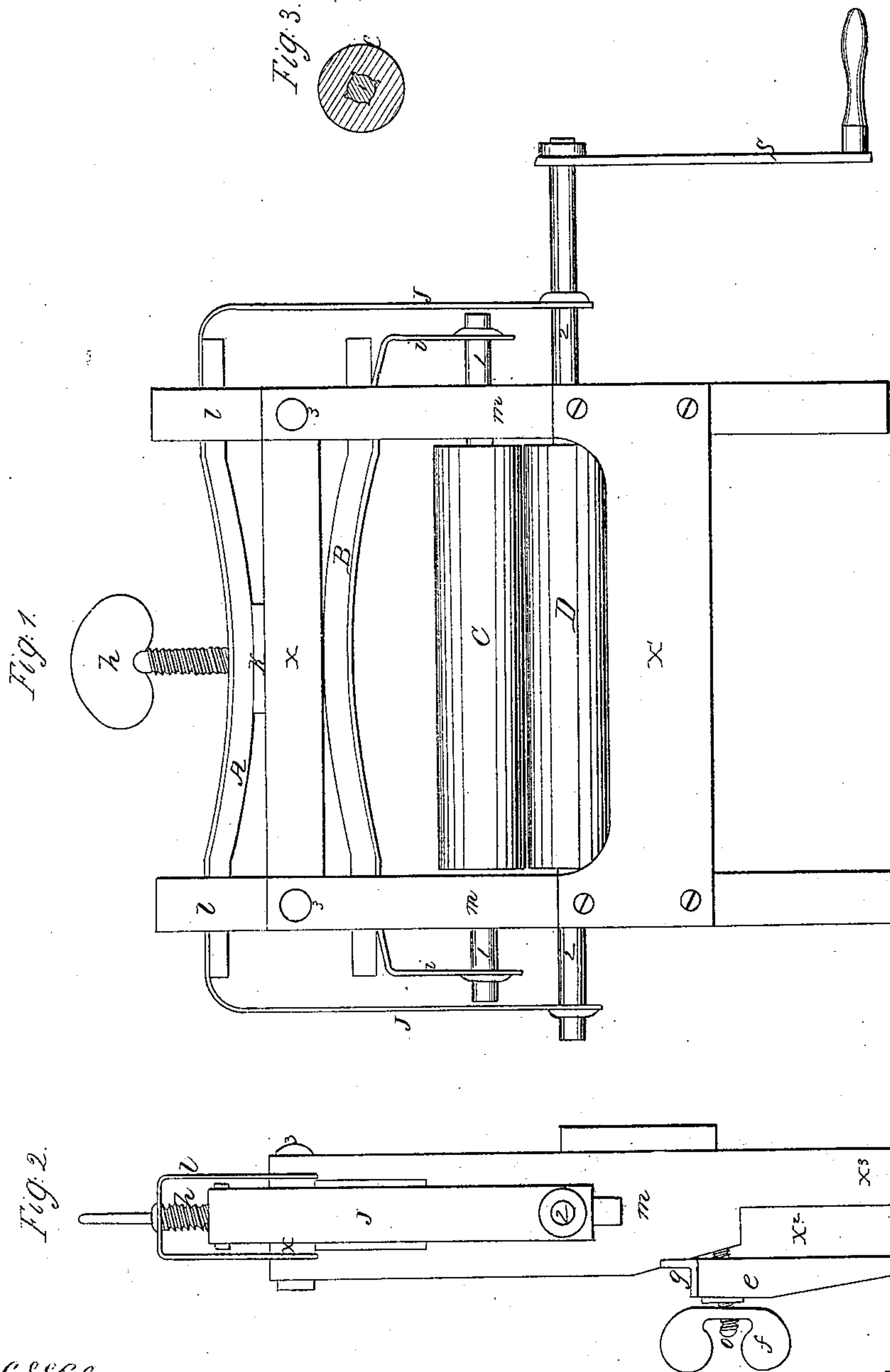


B. Reed,

Wringer.

N^o 76,659.

Patented Apr 14, 1868.



Witnesses.
Amos B. Cate
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BENJAMIN REED, OF ALLEGHENY, PENNSYLVANIA.

Letters Patent No. 76,659, dated April 14, 1868.

IMPROVED CLOTHES-WRINGER.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, BENJAMIN REED, of the city and county of Allegheny, in the State of Pennsylvania, have invented a new and useful Improvement in Clothes-Wringer; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters and figures of reference marked thereon.

The nature of my invention consists in suspending the rollers of clothes-wringers in spring-yokes, which are so arranged, with relation to each other, as that in the wringing process one roller will yield downwards and the other upwards.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawings, which form part of my specification—

Figure 1 is a side elevation of my improvement in clothes-wringers.

Figure 2 is an end view of the same.

Figure 3 is a transverse section of one of the rollers and its shaft.

In the drawings, *m* represents the end-pieces of the frame, which are held in position by the cross-bars *X* and *X'*. The cross-bar *X* and the guides *Z* for the spring-yoke *A* are held in position by the bolts marked 3. The spring-yokes consist of wooden spring-bars, marked *A* and *B*, and iron straps, marked *i* and *J*. Near the ends of these straps are openings, through which pass the ends of the shafts 1 and 2 of the rolls *C* and *D*. To the spring-yoke *A* is attached a screw-nut, *k*, which is fitted to the screw *h*, which passes down through the cross-bar *X* to the upper side of the spring-yoke *B*. The clamps *e* are pivoted, by means of hinges *g*, to the end-pieces *m*, in which are secured screws *o*, which pass through openings in the clamps *e*, and are provided with "thumb-nuts" *f*.

The rolls *C* and *D* consist of felt, which is secured on the shafts 1 and 2 by means of "water-proof gum." That portion of the shafts on which the felt is placed is provided with a series of projecting points, as shown in fig. 3. The shafts are coated with dissolved gum-shellac, and the felt is then kneaded and knit to the shafts in the manner similar to that practised by hatters in securing felt on the body of hats.

As the construction of my improvement in wringers, and the relation that the several parts of it bear to each other, will be readily understood from the foregoing description, and by reference to the accompanying drawings, I will therefore proceed to describe its operation, which is as follows:

The wringer is secured on the side of the wash-tub or washing-machine, by arranging the wringer so that a portion of the side of the tub or washing-machine will come in the opening *X*², with the lower ends *X*³ of the end-pieces *m* on the inside of the tub or washing-machine, and the clamps *e* on the outside; the thumb-nuts *f* are then turned so as to force the clamps *e* against the side of the tub or washing-machine, which will thereby secure the wringer in a firm position.

The rolls are brought close together by turning the screw *h* down into the nut *k*, which will, by pressing down on the spring-yoke *B*, force down the roll *C*, and cause the spring-yoke *A* to draw upwards the roll *D*.

The wringing of the clothes is performed by turning the roll *D*, by means of the crank *S*, and passing the clothes between the rolls *D* and *C*, which operation will readily be understood by all who construct or use wringers.

The advantages of my improvement in wringers consist—

First. In so arranging the rolls, with relation to each other, that in the wringing process, the rolls are each subjected to the same pressure and force.

Second. Rolls formed of felt are not liable to split open by the drawing and twisting action of the clothes on the rolls while being passed between them.

Third. The fibre of the felt-rolls works in harmony with the texture of the cloth in the clothes; hence the

wear and tear of the clothes will be less when the wringing is performed with felt-rolls, than it will be with any other known rolls.

Having thus described the nature, construction, and operation of my improvement, what I claim as of my invention is—

The spring-yokes A and B, in combination with the rollers C and D, constructed, arranged, and operating substantially as herein described, and for the purpose set forth.

BENJAMIN REED.

Witnesses:

AARON B. CATE,

A. B. SPROUT.