

R. S. CATHCART.

Clothes-Wringers.

No. 134,461.

Patented Dec. 31, 1872.

Fig. 1.

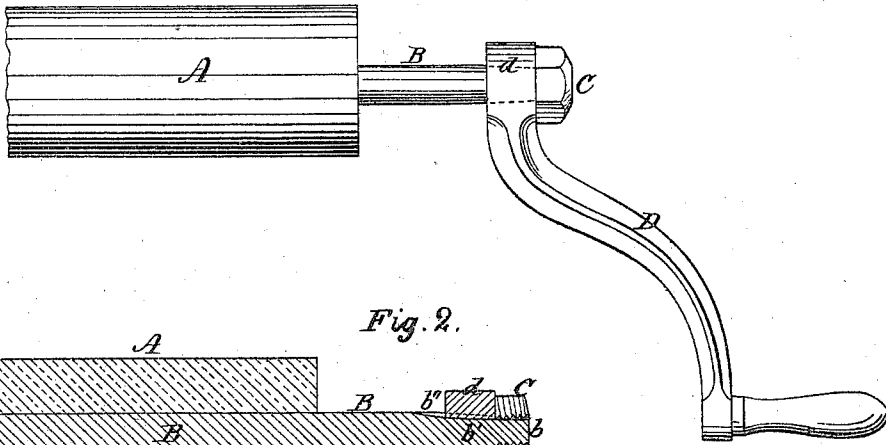


Fig. 2.

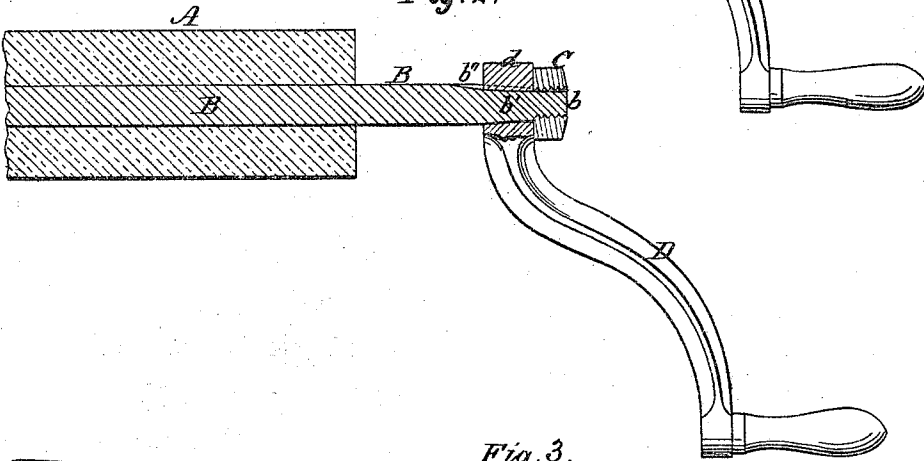
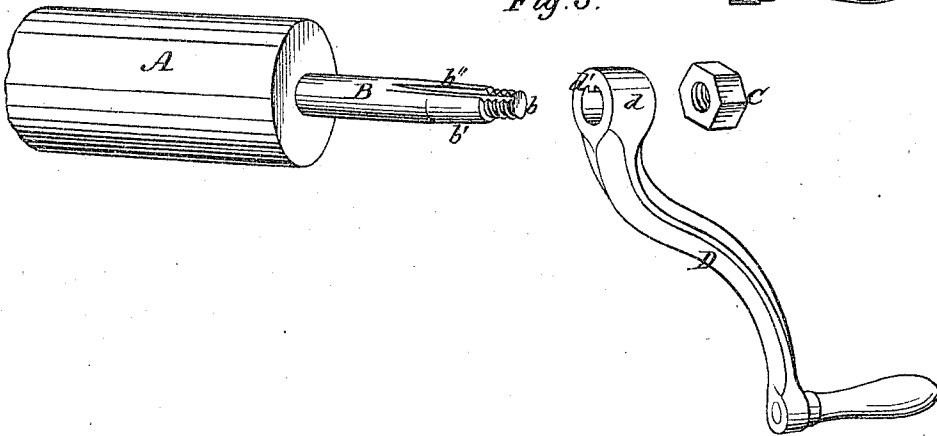


Fig. 3.



Witnesses.

Edmund Masson

John D. Young

Inventor.

R. S. Cathcart, by
Prindle & Co. His Attys.

UNITED STATES PATENT OFFICE.

RODNEY S. CATHCART, OF CINCINNATI, OHIO, ASSIGNOR TO HIMSELF AND THE QUEEN CITY WRINGER COMPANY, OF SAME PLACE.

IMPROVEMENT IN CLOTHES-WRINGERS.

Specification forming part of Letters Patent No. 134,461, dated December 31, 1872.

To all whom it may concern:

Be it known that I, RODNEY S. CATHCART, of Cincinnati, in the county of Hamilton and in the State of Ohio, have invented certain new and useful Improvements in Clothes-Wringers; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a side elevation of a roller and crank constructed and combined in accordance with my improvements; Fig. 2 is a central longitudinal section of the same; and Fig. 3 is a perspective view of said parts detached.

Letters of like name and kind refer to like parts in each of the figures.

The object of my invention is to remedy the heretofore serious difficulty which has been experienced in the loosening of the operative crank whenever it became necessary to reverse the motion of the rollers for the purpose of rearranging the clothing passing through the same; and it consists in the combination of a crank-hub provided with a tapering opening, and with a key extending lengthwise of or within the same, with a roller-shaft provided with a correspondingly-tapered portion and key-way, and having outside of the same a threaded end and corresponding nut, substantially as and for the purpose hereinafter specified.

In the annexed drawing, A represents a roller provided with a central metal shaft, B, of usual construction. Upon the outer reduced end *b* of the shaft B is provided a screw-thread, and upon the same is fitted a nut, C, as shown. From the inner end of the threaded portion *b* the shaft B increases inward regularly in diameter until at a distance of about one inch the full size of the same is reached, and within the tapering portion *b'* thus formed is provided a key-way, *b''*, which extends longitudinally along, and has an inclination corre-

sponding to the surface of the same. The crank D, having any desired form, is provided at the center of its hub *d* with an opening which corresponds in size and taper to the like features of the portion *b'* of the shaft B, so that when placed upon the latter said hub shall closely embrace the same, and its outer face shall extend over the threaded end *b* sufficiently to be within the action of the nut C. A key, *d'*, corresponding to the size and shape of the key-way *b''*, secured within one side of the opening in the hub completes the improvement, the operation of which is as follows:

The crank being placed in position upon the roller with the key contained within the key-way, the nut is placed upon the threaded end of said shaft, and turned inward until it bears against the crank-hub and has pressed the same firmly upon the tapered portion. When thus combined, it will be seen that a slight pressure of the nut will be sufficient to hold the crank firmly in longitudinal position upon the shaft, while all rotary motion of the former will be effectually prevented.

The method of fastening described is but slightly more expensive than that ordinarily employed, while the benefits derived from its use render the wringer far more effective and useful than heretofore.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

The crank D provided, in and through its hub *d*, with a tapering opening and with the key *d'*, in combination with the shaft B provided with the tapering section *b'*, the key-way *b''*, the threaded end *b*, and the nut C, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 14th day of December, 1872.

RODNEY S. CATHCART. [L. S.]

Witnesses:

W. I. FITZGERALD,
I. W. BREWSTER.