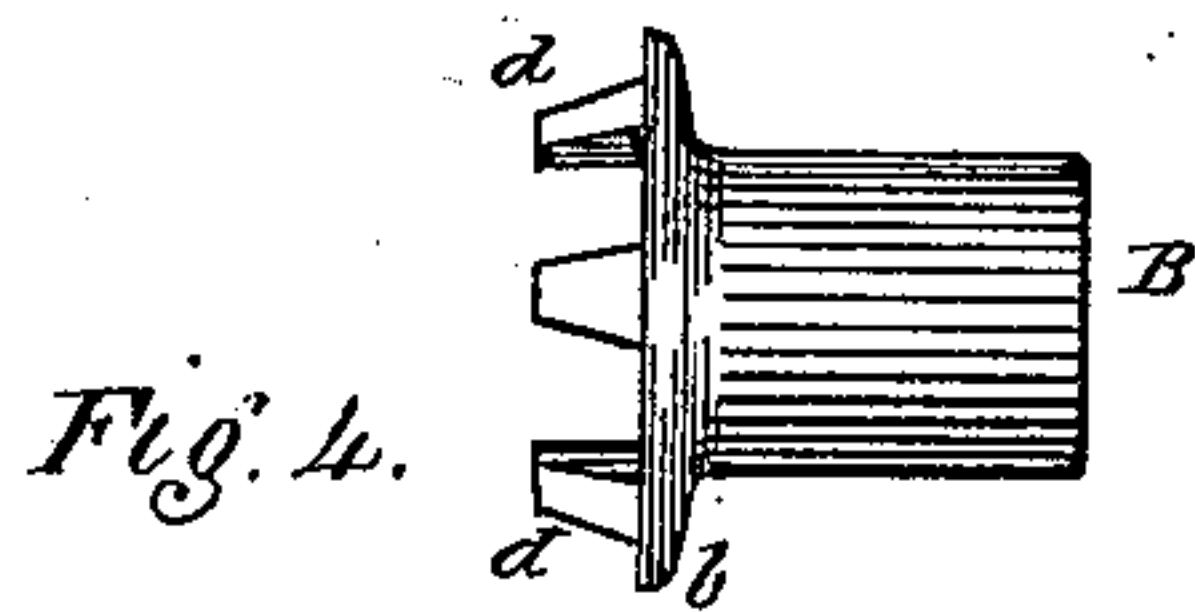
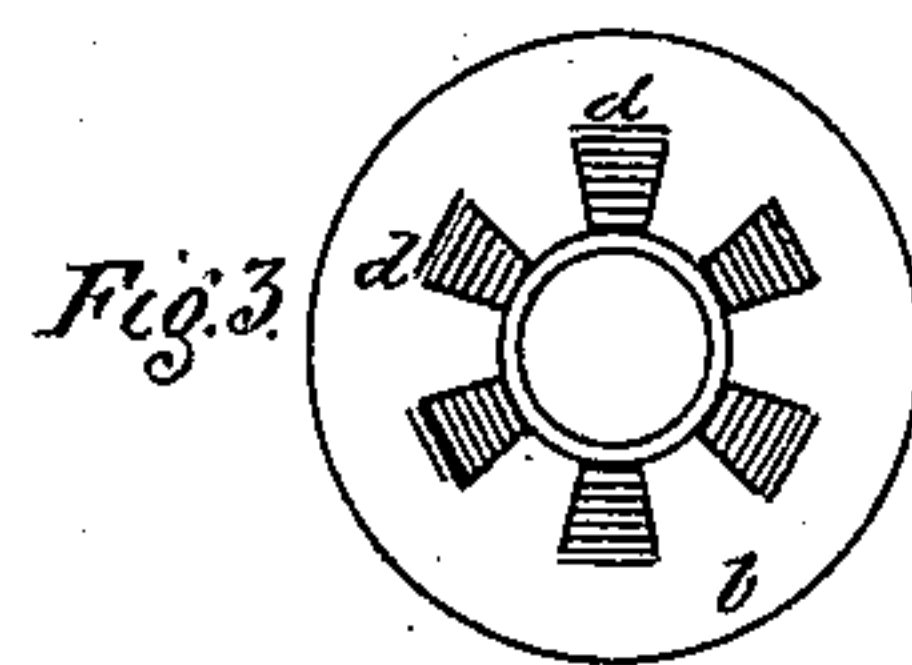
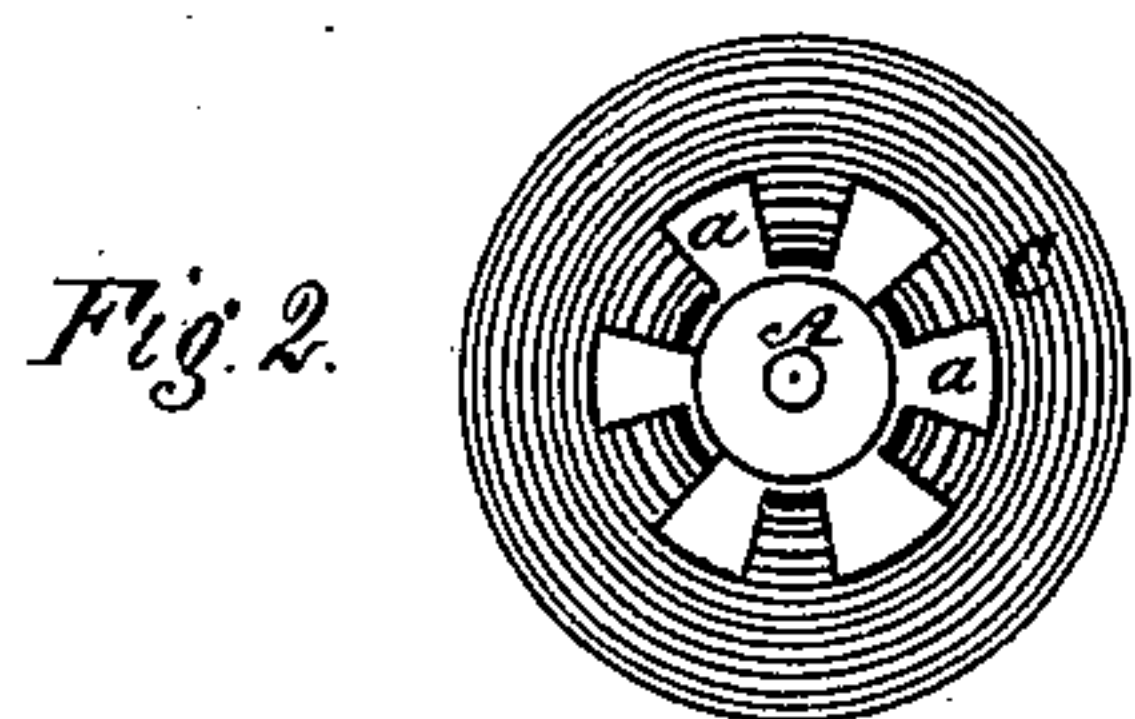
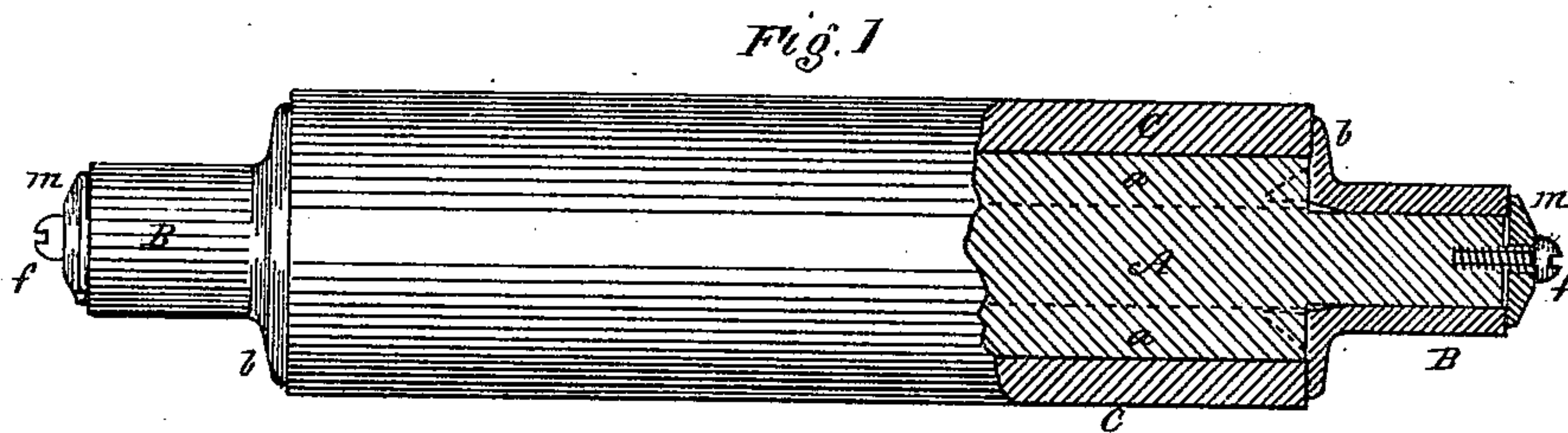


E. P. H. CAPRON.
Clothes-Wringer Rollers.

No. 141,424.

Patented August 5, 1873.



Witnesses:
John S. Thornton
W. M. Roberts

Inventor:
Elisha P. H. Capron

UNITED STATES PATENT OFFICE.

ELISHA P. H. CAPRON, OF HUDSON, NEW YORK.

IMPROVEMENT IN CLOTHES-WRINGER ROLLERS.

Specification forming part of Letters Patent No. **141,424**, dated August 5, 1873; application filed January 30, 1873.

To all whom it may concern:

Be it known that I, ELISHA P. H. CAPRON, of the city of Hudson, Columbia county and State of New York, have invented a new and useful Improvement in Clothes-Wringer Rollers; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing forming a part of this specification.

My invention relates to an improved construction of the rollers of a clothes-wringer, by means of which the use of oil or other lubricators may be dispensed with and is rendered unnecessary, and whereby injury to the fabrics passed through the wringer, by reason of oxidation of the iron or metal shaft upon which the rubber is secured, is entirely obviated and avoided. The nature of my invention consists in a sleeve or cover of peculiar construction, which I secure upon the journals or ends of the shaft in manner hereinafter more particularly described, and which said sleeve I make of Babbitt-metal or other soft metal possessing similar properties, so that an iron shaft may be used in the roller without injuring the fabrics which are passed through the machine.

In order that my invention may be fully understood, I will proceed to a more particular description thereof.

Figure 1 represents a plan view of a roller with my improvements, a portion thereof being shown in section. Fig. 2 is an end view of the roller with the sleeve or cover removed, and Figs. 3 and 4 are detached views of the sleeve.

Similar letters of reference indicate like parts in all the figures.

A represents the shaft upon which the rubber roller is secured, which may be of iron, and which I ordinarily construct in the form or manner shown in the drawing—that is to say, with corrugations *a* running longitudinally thereon. B is the sleeve or cover, which I make of Babbitt-metal or other soft metal not liable to oxidation, and which fits closely upon the ends of the shaft A. A flange, *b*, is formed upon this sleeve, which said flange extends

beyond the corrugations *b*, completely covering the ends of the same, and fits closely to the rubber C of the roller. On the inner side of this flange are a suitable number of tenons or projections, *d*, which correspond in number with the corrugations on the shaft A and fit in between the said corrugations, so that when the said sleeve is in position it is rotated with the shaft and forms or becomes the journal of the roller. The sleeve B is secured in position by means of a tap-screw, *f*, which enters the end of the shaft A, and by means of which the flange *b* is pressed closely to the rubber of the roller, so as to effectually prevent the access of water or moisture to the shaft A. The said screw *f* passes through a washer, *m*, which may be of copper or other metal, which will not corrode or oxidate by the action of water thereon, and which said washer fits tightly to the end of the sleeve B, so as to effectually prevent the access of water or moisture to the end of the shaft A. This washer *m* may be made of hard rubber or other suitable material, if desired.

It will be seen that the sleeve B, constructed and fitted to the roller in the manner above mentioned and described, will effectually prevent the access of water or moisture to any part of the shaft, so that the latter may be made of iron, thus securing strength and durability, more especially when it is corrugated or fluted; and at the same time there is no danger of the fabrics operated upon being injured or stained by rust; and another advantage resulting from my improvement is that oil or other lubricators are not needed for the journals.

Having thus described my invention, what I claim is—

The sleeve B made of Babbitt-metal or similar material, provided with the tenons or projections *d*, and constructed and fitted to the roller, substantially in the manner herein shown and described, for the purposes set forth.

ELISHA P. H. CAPRON.

Witnesses:

JOHN S. THORNTON,
M. M. ROHRER.