

(No Model.)

W. J. FITCH.
CLOTHES WRINGER.

No. 300,860.

Patented June 24, 1884.

Fig. 1.

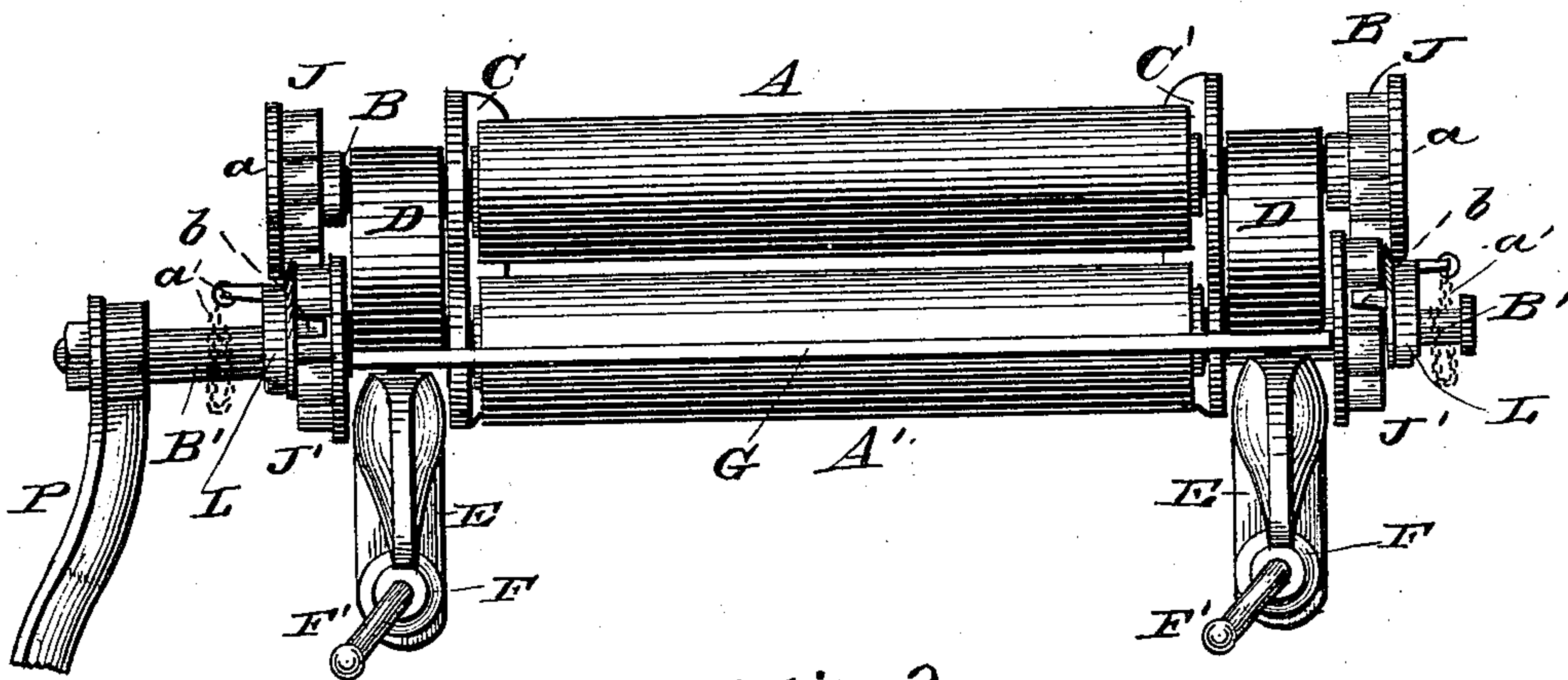


Fig. 2.

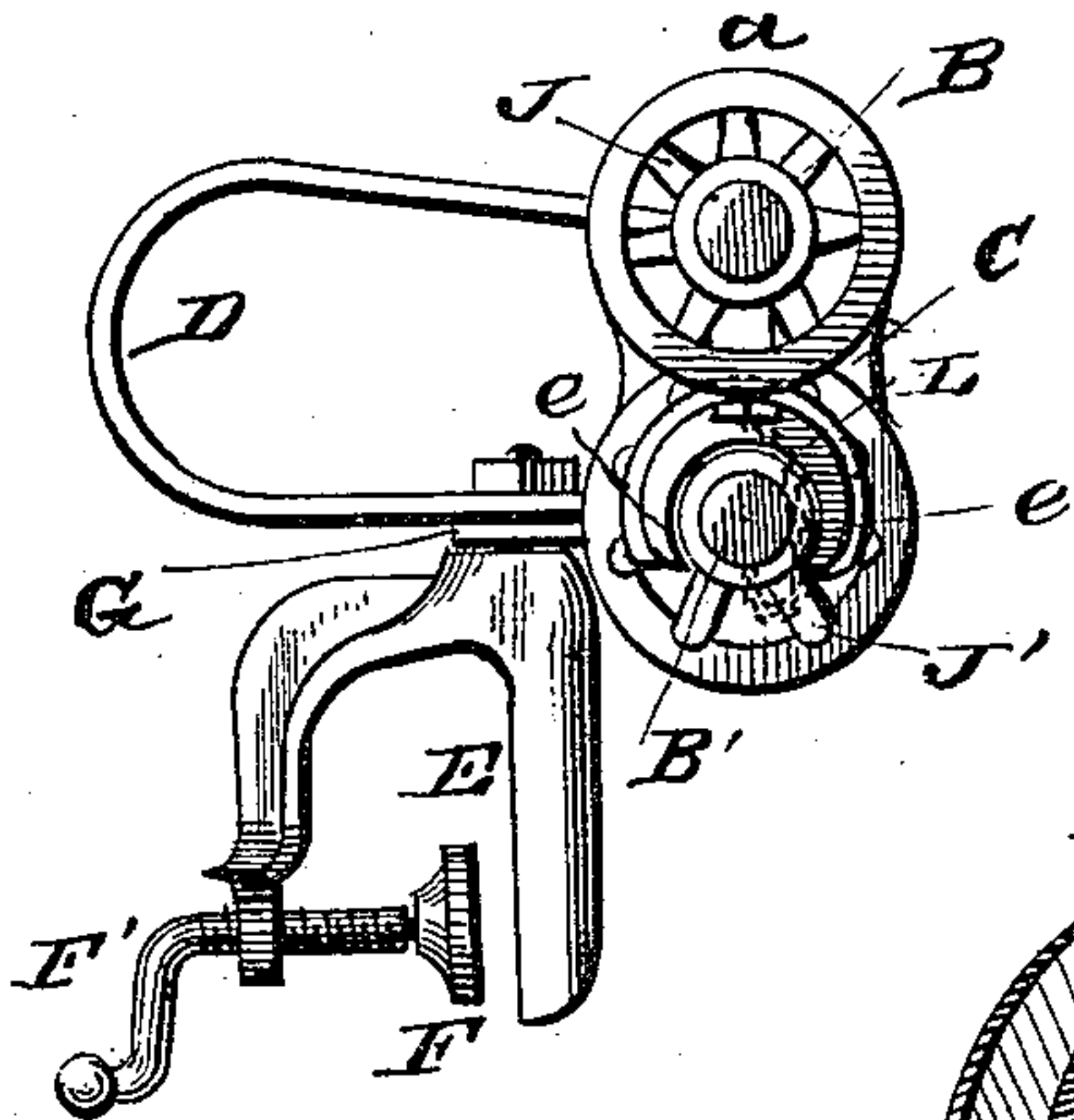


Fig. 3.

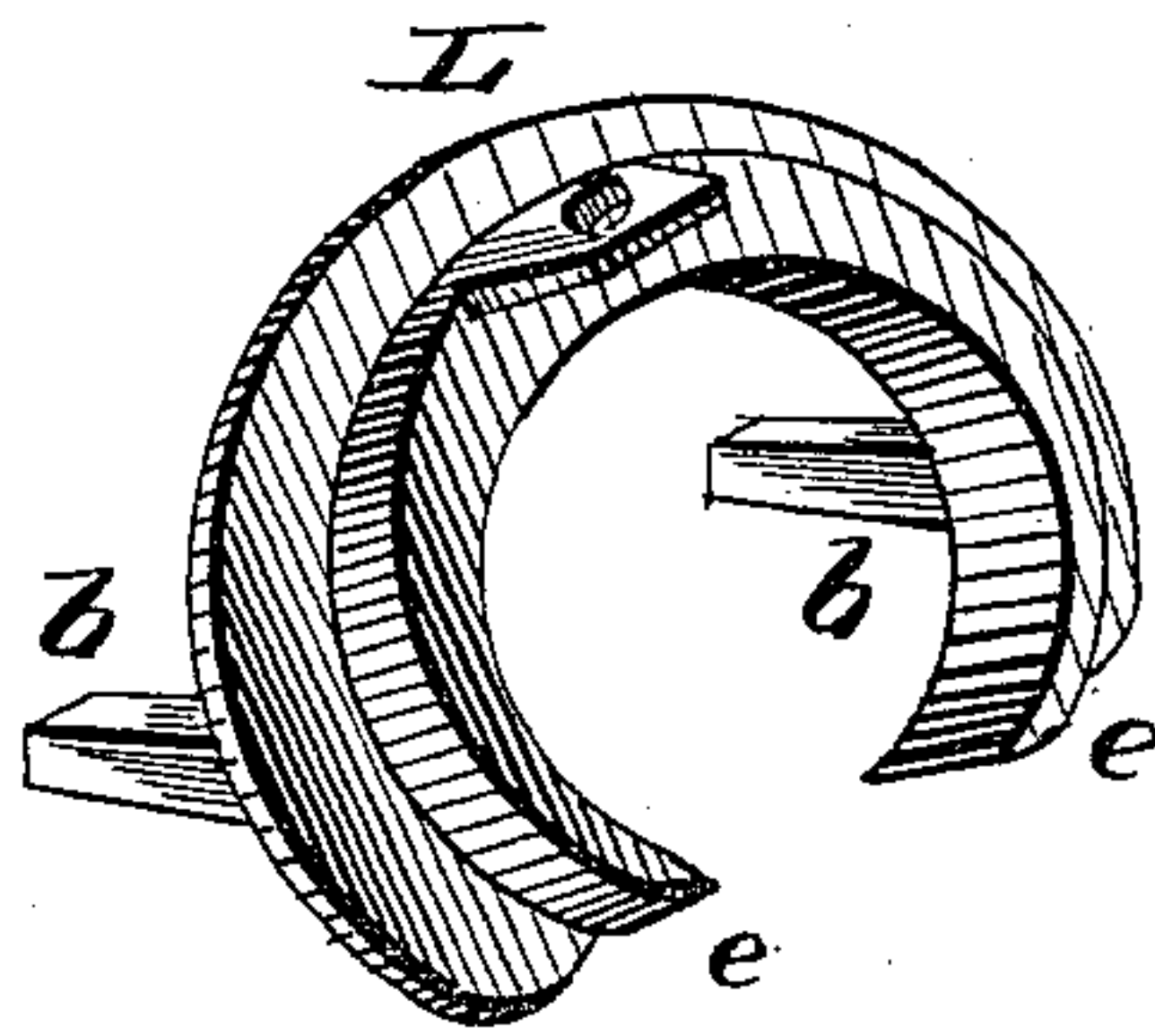
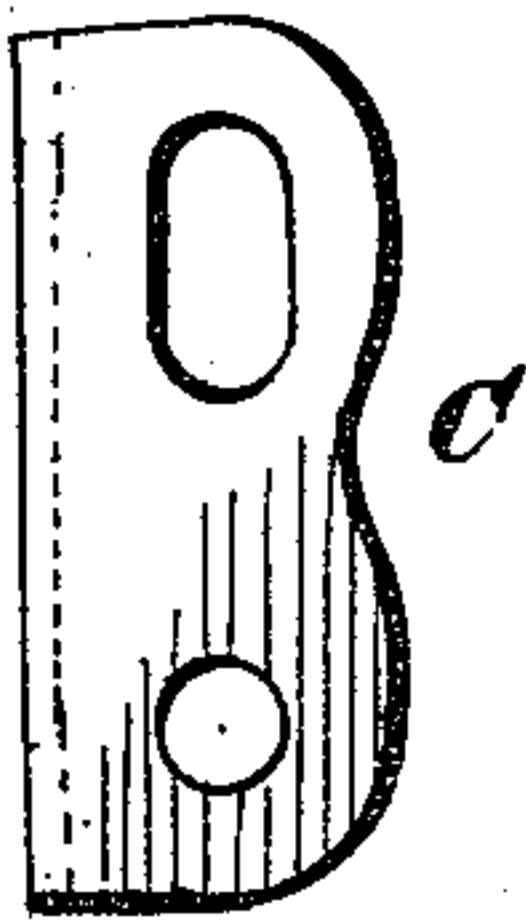


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

WASHINGTON I. FITCH, OF BLUFFTON, INDIANA, ASSIGNOR TO HIMSELF
AND WILLIAM W. WEISELL, OF SAME PLACE.

CLOTHES-WRINGER.

SPECIFICATION forming part of Letters Patent No. 300,860, dated June 24, 1884.

Application filed May 18, 1883. (No model.)

To all whom it may concern:

Be it known that I, WASHINGTON I. FITCH, of Bluffton, in the county of Wells and State of Indiana, have invented certain new and useful Improvements in Clothes-Wringers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification, in which—

Figure 1 is a side elevation of an elastic-roller clothes-wringer having my improvements applied to it, showing the rollers separated. Fig. 2 is an elevation of one end of the wringer, showing my spreading-collar applied. Fig. 3 is a perspective view of one of the spreading-collars. Fig. 4 shows one of the slotted guide-plates C.

This invention relates to elastic-roller wringing-machines; and it consists in clamping springs of a U shape between the ends of the flanged roller-guides and flanged toothed wheels which are keyed on the shafts of the elastic and yielding rollers; also, in toothed collars which are adapted for separating the two wringing-rollers from each other when the machine is not in immediate use, all of which will be fully understood from the following description, when taken in connection with the annexed drawings.

A A' designate two india-rubber wringing-rollers, which are secured on shafts B B' in any well-known manner, and C C' are two flanged guide-plates, which are applied on the shafts B B' at the ends of the rollers A A'. The upper roller-shaft, B, passes through vertically-oblong holes through the plates C C', which allow the rollers to separate more or less, according to the bulk of clothes passed between them, and to accommodate themselves to these articles.

DD are U-shaped springs, the ends of which are bent so as to closely clasp the two shafts and hold the rollers A A' forcibly together with spring action. To these springs D D, I apply by means of swivels the tub-clamps E E. To one of the jaws of each I apply a clamping-jaw, F, which is allowed to swivel on the end of the screw-threaded portion of a hand-crank, F'. By means of these clamps the

wringer can be rigidly secured to a tub and readily removed from it when desired. A cross-bar, G, connects the two springs D D, and is secured to them by the pivots of the swivel tub-clamps and nuts screwed on said pivots.

J J are two long-toothed spur-wheels, which are constructed with flanges *a a* on their outer ends, that lap over the ends of two corresponding flanged spur-wheels, J' J'. The wheels J J are keyed on the shaft B of the upper roller, A, and the wheels J' J' are keyed on the lower shaft, B', of the roller A'.

L L designate two flanged collars having teeth *b b* cast on them, and, if desired, eye-pieces are formed on them for the use of chains *a'*, that attach the collars to the shaft B'. It will be seen by reference to the end view and the perspective view of the drawings that each collar is about four-fifths of a circle, and that the ends of the collar are beveled, as indicated at *e e*. When the collars L are slipped upon the hubs of the cog-wheels J' J', with the beveled ends upward and the crank P turned either toward the right or left, the flanges *a a* on the wheels J J will ride up the beveled surfaces of the collars upon their hubs and cause a separation of the peripheries of the rollers A A'. The teeth *b b* on the eccentric spreading-collars L L are received between the teeth of the lower cog-wheels, J' J', which prevent the collars from turning loosely on the hubs of these wheels.

It will be seen from the above description that the ends of springs D D press against the roller-shafts between the ends of the wringing-rollers and the cog-wheels on these shafts, thereby allowing the outer ends of these wheels to be free for the reception of the collars L.

It will be also seen that when the machine is not in immediate use by means of the detachable collars L the two rubber wringing-rollers can be spread apart, so that their peripheries do not touch. I thus prevent the surface of the rollers from being flattened or otherwise injured or grooved by a long-standing compression of these rollers when the machine is idle.

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

The combination, in a clothes-wringer, of the wringing-rollers A A', mounted on the shafts B B', the guide-plates C C', which limit the movement of the rollers, the springs D, having bearings at their ends in which the roller-shafts are journaled, the flanged spur-wheels on the journals of said rollers, and the flanged collars L L, having beveled surfaces and teeth b b, the said collars being fitted on the shaft of the lower roller and connected with said shaft,

as described, whereby they will operate to separate the two rollers, substantially as and for the purposes specified.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

WASHINGTON I. FITCH.

Witnesses:

CHARLES T. MELSHENNER, Jr.,
AMOS G. KING.