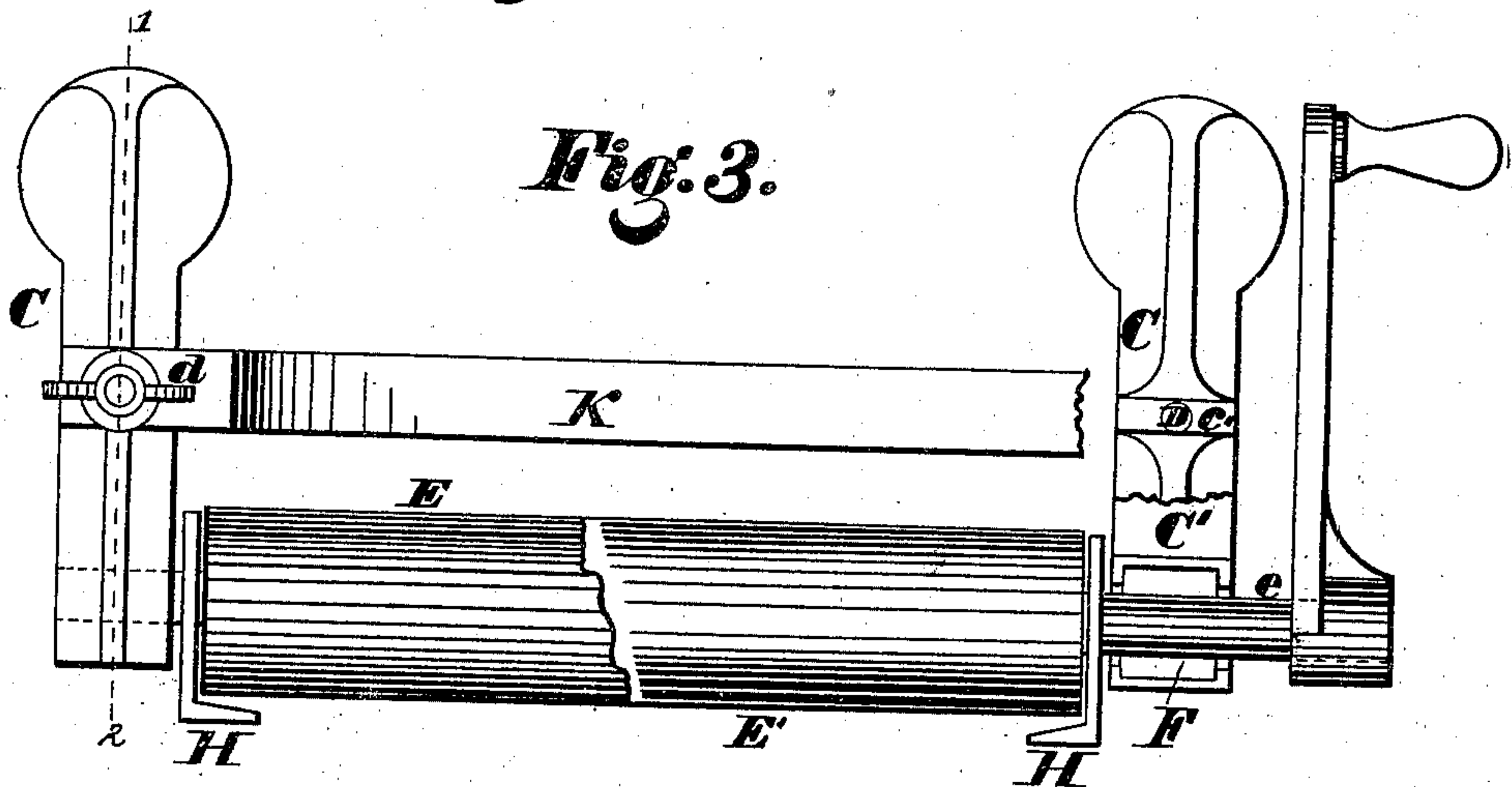
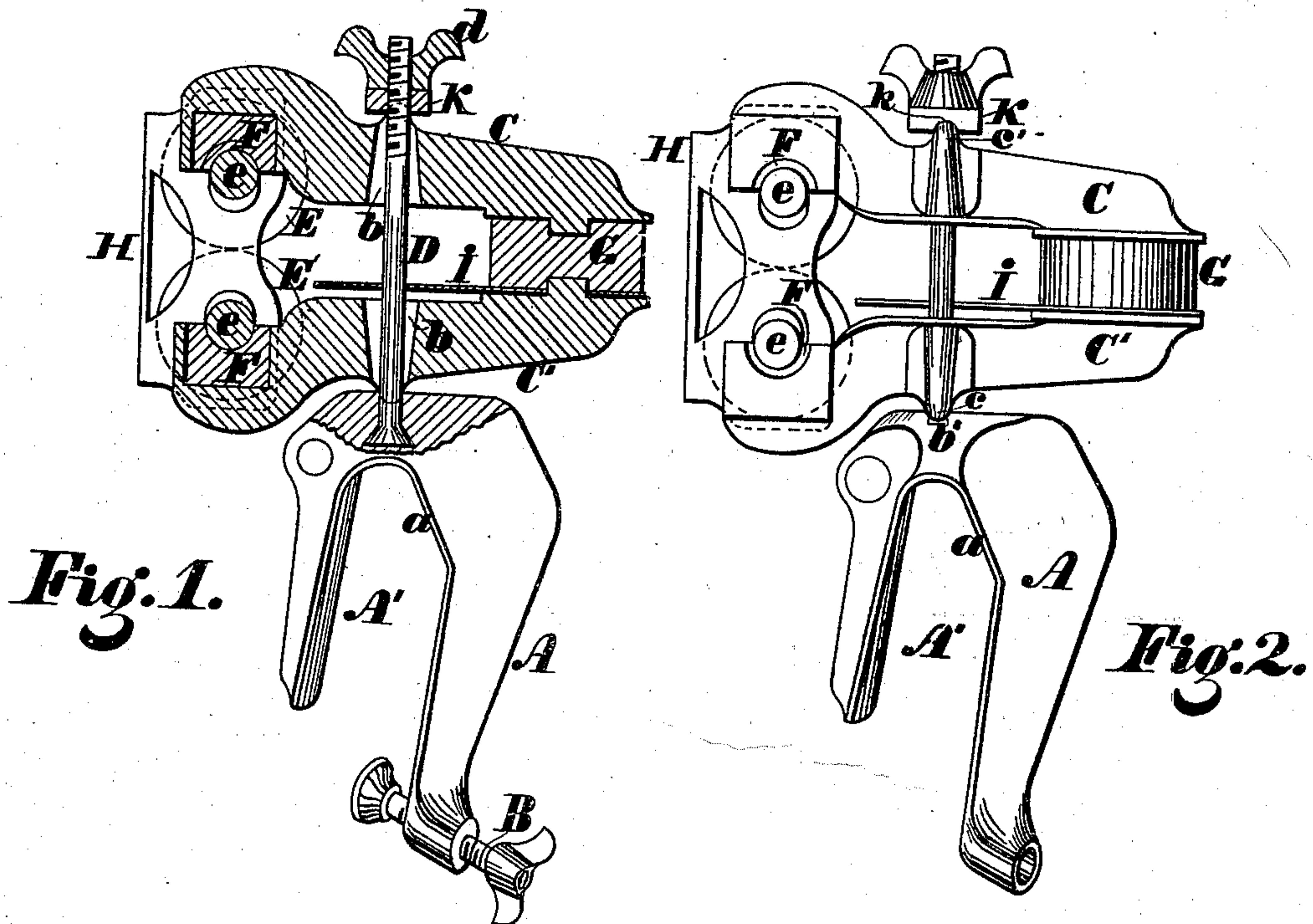


J. SMITH.
WRINGER.

No. 170,121.

Patented Nov. 16, 1875.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN SMITH, OF CONSHOHOCKEN, PENNSYLVANIA.

IMPROVEMENT IN WRINGERS.

Specification forming part of Letters Patent No. **170,121**, dated November 16, 1875; application filed October 19, 1875.

To all whom it may concern:

Be it known that I, JOHN SMITH, of Conshohocken, in the county of Montgomery and State of Pennsylvania, have invented certain new and useful Improvements in Wringers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification, in which—

Figure 1 is a vertical section on the line 1 2. Fig. 2 is an end view. Fig. 3 is a plan with one of the upper levers broken away.

The object of my invention is to provide a wringer in which both rollers will yield equally, which shall have bearings for said rollers which will not require to be lubricated, and which may be securely fastened to a tub of any thickness, binding firmly thereon at two points, by means of a single set-screw.

My invention accordingly consists, first, in the peculiar construction and arrangement of the levers by which the rollers are supported, and their combination with a bearing spring or springs and adjusting-screws; secondly, in the employment of rawhide as a bearing for the roller-journals.

Referring to the accompanying drawing, A shows the clamp, slotted or recessed at A', the slot being beveled at *a*, so as to wedge or bind firmly at that point any thickness of tub. B represents the ordinary set-screw. A clamp thus constructed, it will be seen, will bind the tub the full length of the slot A', dispensing with a screw at the upper extremity, and serving to retain the wringer more securely than heretofore by means of a single screw.

C and C' represent levers, having beveled openings *b b* for the passage of a rod, D, which is cast in the clamp A, and threaded at its upper end for the reception of a thumb-nut, *d*. The rollers E E' are sustained in the outer extremities of these levers, their journals *e e* resting in rawhide bearings or boxes F, fitted in recesses in the ends of said levers. G G represent india-rubber or other springs, placed between the rear ends of the levers C C', for the purpose of forcing their forward extremi-

ties toward each other, and thus keeping the rollers in frictional contact.

The lever C' is formed with a shoulder or ridge, *c*, which fits snugly in a corresponding cavity, *b'*, in the clamp A, so as to permit said lever to rock on said clamp when the rollers are moved toward each other or apart.

H H represent guards, and I the plate on which the garments are laid before passing through the rollers. K is a yoke, having a cavity, *k*, in which the shoulder *c'* on the lever C fits and rocks.

The advantages of the foregoing construction are as follows: The clamp will adapt itself to any thickness of tub, and will bind throughout. The rawhide bearing will not require any grease or other lubricant, which, when once in the rubber portion of the rollers, cannot be washed out, and will forever soil the clothing wrung between them.

The rollers, being sustained in levers which are fulcrumed in their centers, will each yield independently and simultaneously, the rigidity of bearing in the lower roller heretofore so generally encountered being thus overcome.

The springs for forcing the rollers together being located at the remote end of the levers in which said rollers are sustained, or the rollers and springs being on opposite sides of the fulcrum of said levers, it follows that the same adjustment will answer for the lightest or thinnest, and heaviest or thickest, fabrics. Thus, the adjusting-screw being turned down so as to bring the rollers in frictional contact, the lightest fabric may be passed between them and successfully wrung, while the very same adjustment will answer for a bed-quilt, for instance, the immense leverage obtained by placing the rolls and springs on opposite sides of the fulcrum permitting the rollers to separate any required distance, and yet exert a compressing force equal to the necessities of the case. The rollers may be readily removed by loosening the adjusting-nut and drawing the levers slightly apart.

What I claim as my invention is—

1. In combination with the levers C C', sustaining the rollers E E', and having beveled or tapering holes *b b*, the fulcrum-rods D, passing through said holes, secured to the clamps

A, and provided with adjusting-screws *d*, substantially as shown and described.

2. As an improvement in clothes-wringers, the combination, with the roller-shafts *e e* and recessed levers or bearings C C', of the rawhide linings F F, substantially as described.

3. In combination with the rollers E E', the levers C C', fulcrumed on rods D, said levers having tapering openings for the passage of said rods, and being provided with shoulders

e e', fitting in corresponding cavities, so as to permit said levers to rock and the rollers to yield independently, as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 8th day of October, 1875.

JOHN SMITH.

Witnesses:

SAML. J. VAN STAVOREN,
M. DANL. CONNOLLY.