

H. E. SMITH.

Improvement in Clothes-Wringers.

No. 127,521.

Patented June 4, 1872.

Fig. 1.

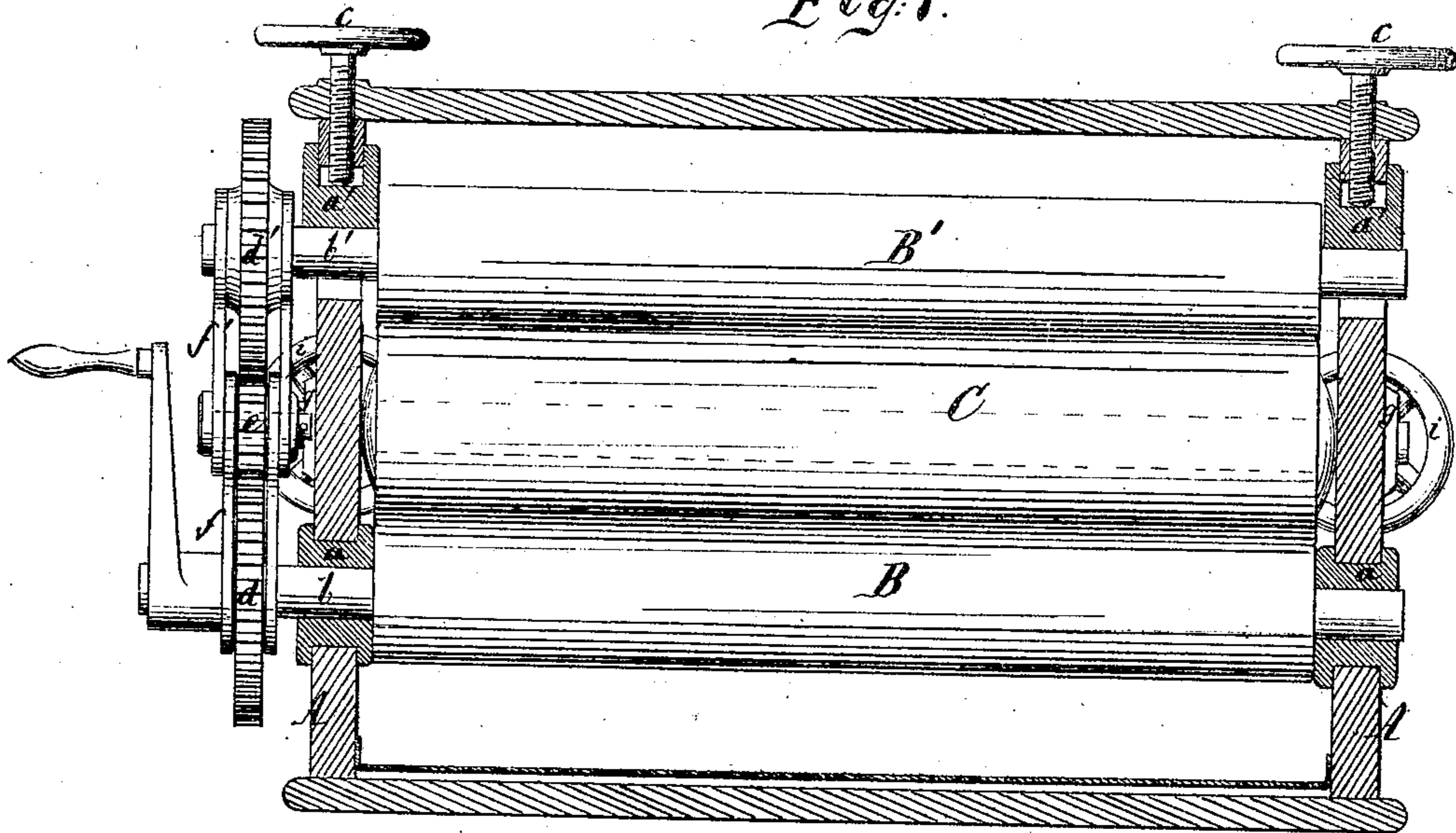
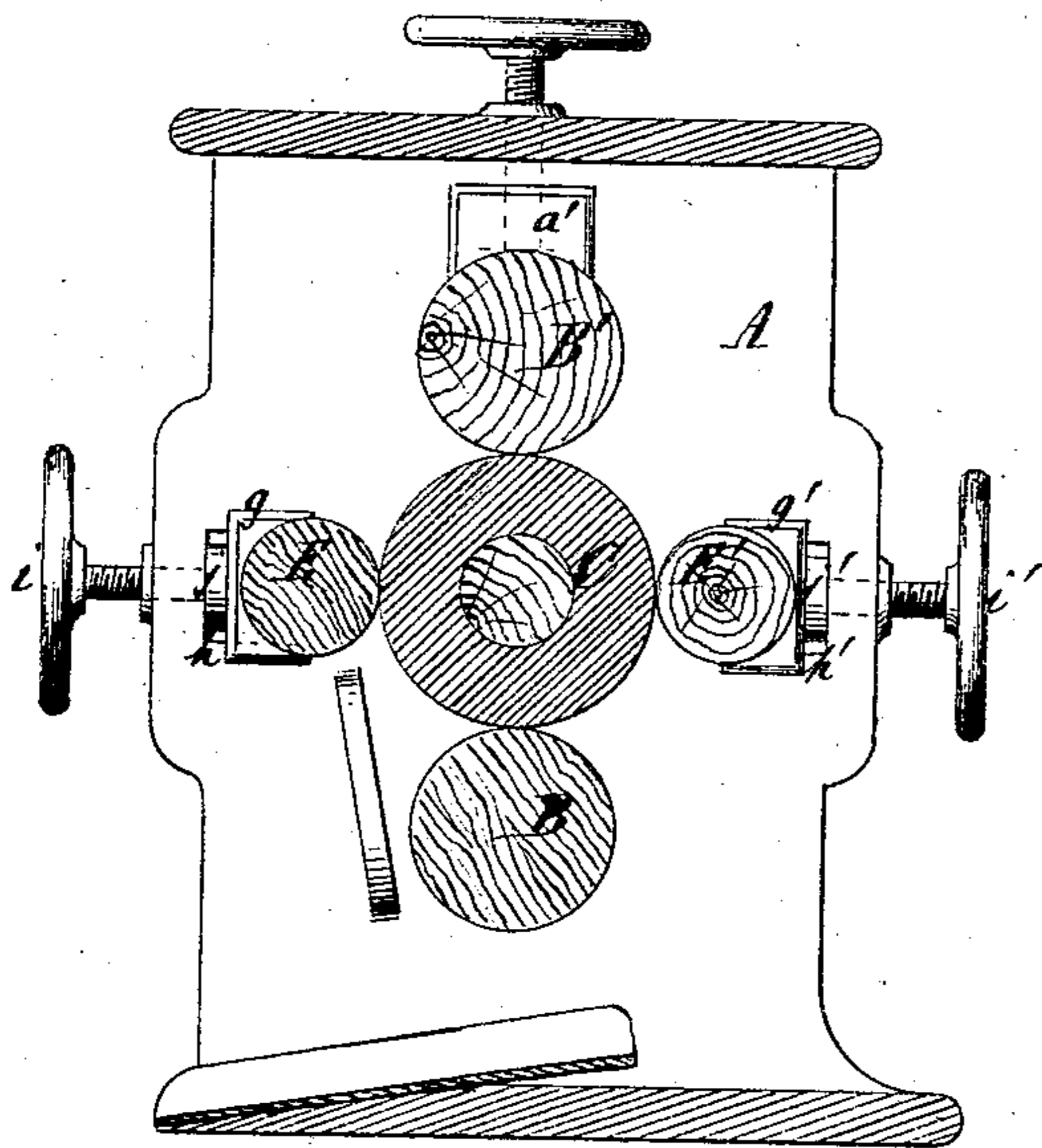
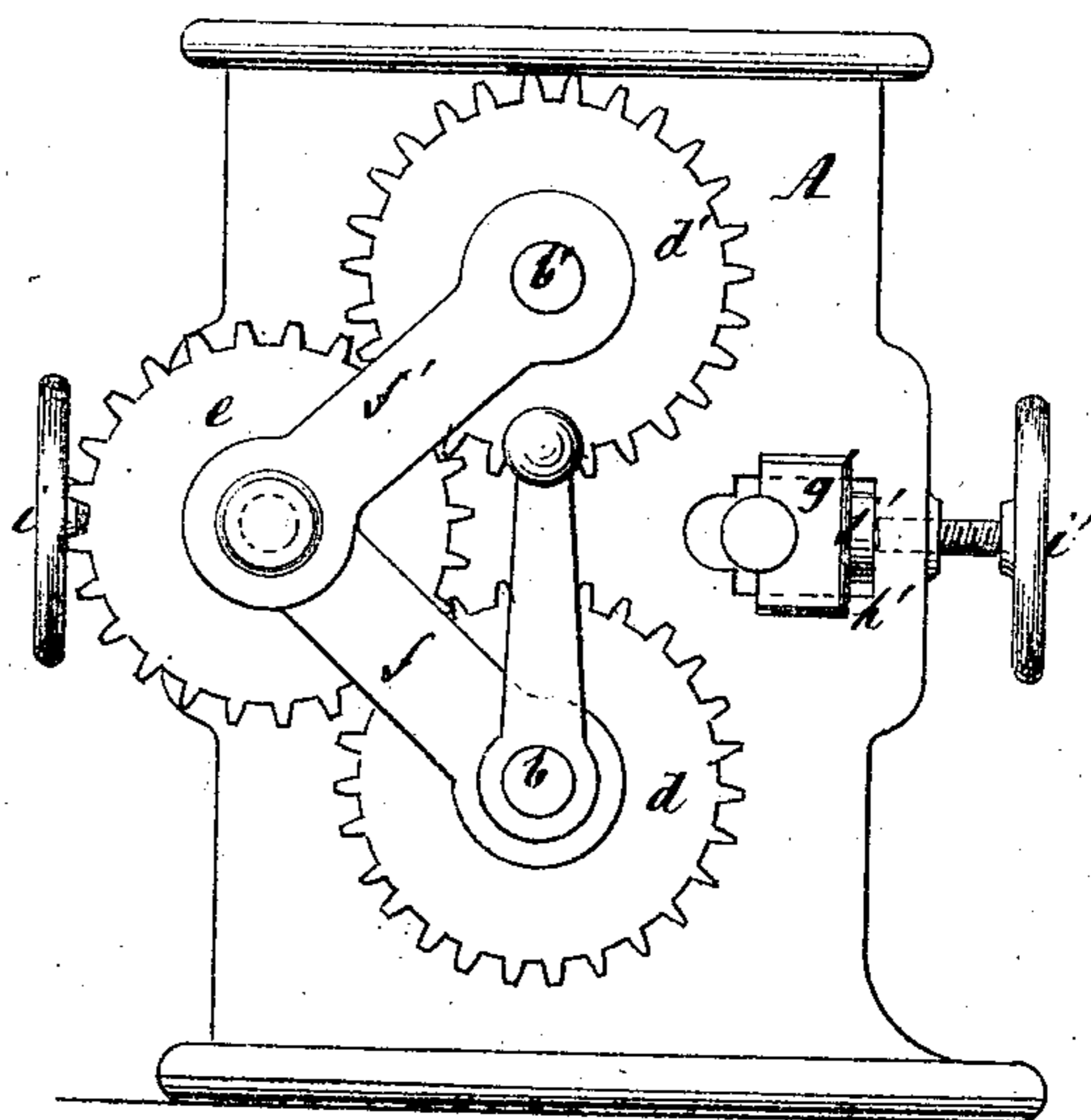


Fig. 2.



Witnesses.
b. Wahlers
E. F. Kastenhuber

Fig. 3.



Inventor.
Hamilton E. Smith
By Paul Attwood Smith
his atty

UNITED STATES PATENT OFFICE.

HAMILTON E. SMITH, OF NEW YORK, N. Y., ASSIGNOR TO MARY JANE SMITH,
OF SAME PLACE.

IMPROVEMENT IN CLOTHES-WRINGERS.

Specification forming part of Letters Patent No. 127,521, dated June 4, 1872; antedated May 20, 1872.

To all whom it may concern:

Be it known that I, HAMILTON E. SMITH, of the city, county, and State of New York, have invented a new and useful Improvement in Clothes-Wringer; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a longitudinal section of this invention. Fig. 2 is a transverse section of the same. Fig. 3 is an end view of the same.

Similar letters indicate corresponding parts.

This invention relates to a clothes-wringer, in which a loose elastic roller is used in combination with a series of guide and pressing-rollers, all or some of which are geared together so as to impart to the clothes a positive motion through the wringer. My improvement consists in the arrangement of radius bars suspended from the shafts of the geared pressing-rollers, and forming the bearings for the shaft of the intermediate cog-wheel, in combination with said pressing-rollers and with the loose elastic roller, and with set-screws acting on the boxes of one or more of the pressing-rollers in such a manner that the pressing-rollers can be adjusted toward and from the loose elastic roller without disturbing the correct action of the gear-wheels. My improvement consists also in the arrangement of two adjustable guide-rollers in combination with the geared pressing-rollers and the loose elastic roller in such manner that the position of the loose elastic roller in relation to the geared pressing-rollers can be controlled with the greatest accuracy, and thereby the correct operation of the wringer is insured.

In the drawing, the letter A designates a frame, which forms the guides for the axle-boxes *a a'* of the pressing-rollers B B'. These pressing-rollers are mounted on shafts *b b'*, and they are situated on opposite sides of the loose elastic roller C. The journal-boxes *a* of the lower pressing-roller B are stationary, but the boxes *a'* of the upper pressing-roller B' are fitted into guide-slots in the frame A, and they are exposed to the action of set-

screws *c*, so that the roller B' can be set toward or from the roller B, and the elastic roller C can be compressed between the rollers B B' with more or less force. On the shafts *b b'* of the pressing-rollers B B' are mounted cog-wheels *d d'*, which are geared together by an intermediate cog-wheel, *e*, so that the two pressing-rollers will revolve in the same direction. The arbor of the intermediate cog-wheel *e* has its bearings in radius-bars *f f'*, which swing on the shafts *b b'*, so that when the rollers B B' are moved toward or from each other the cog-wheel *e* will always preserve the correct relation toward the cog-wheels *d d'*. On the opposite sides of the elastic roller C are situated two guide-rollers, E E', the shafts or gudgeons of which have their bearings in boxes *g g'*, (best seen in Fig. 2.) These boxes are fitted into guide-slots *h h'* in the frame A, and they are subjected to the action of set-screws *i i'*, so that the guide-rollers can be moved toward and from the elastic roller. Beneath the set-screws *i i'* are placed elastic pads *j j'* to render the guide-rollers yielding. By means of the adjustable guide-rollers E E' the elastic roller C can be held exactly between the pressing-rollers B B', and its correct position can be preserved at all times.

This wringing-machine is simple in its construction, and it produces the desired effect without injuring the clothes passed through it.

What I claim as new, and desire to secure by Letters Patent, is—

1. The radius-bars *f f'*, suspended from the axles of the pressing-rollers, and forming the bearing for the arbor of the intermediate cog-wheel *e*, in combination with the adjustable journal-boxes *a'*, pressing-rollers B B', and loose elastic roller C, all constructed and operating substantially in the manner herein shown and described.

2. The adjustable guide-rollers E E', in combination with the loose elastic roller C and with the geared pressing-rollers B B', substantially as set forth.

This specification signed by me this 2d day of October, 1871.

HAMILTON E. SMITH.

Witnesses:

W. HAUFF,
E. F. KASTENHUBER.