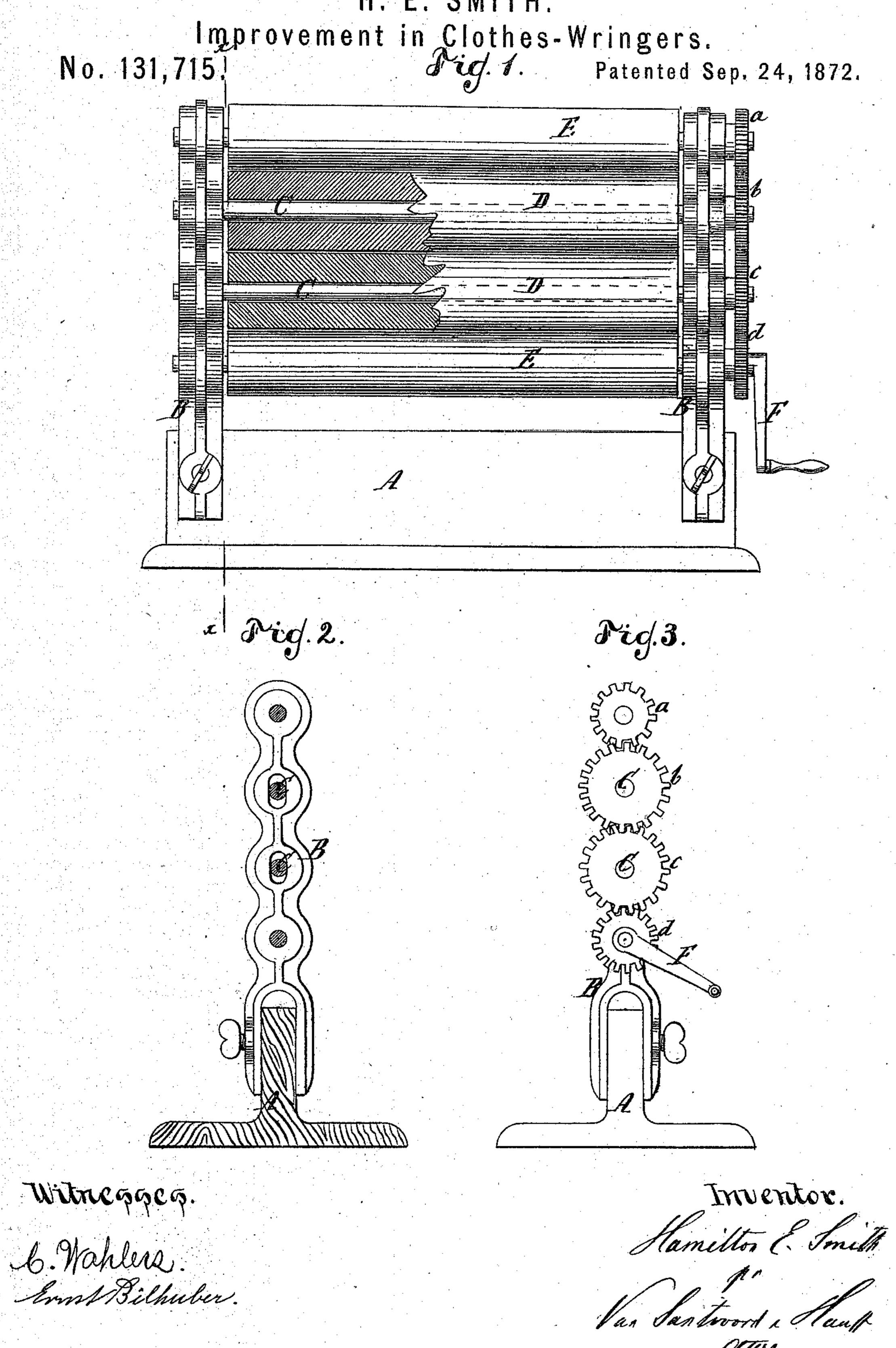
H. E. SMITH.



UNITED STATES PATENT OFFICE.

HAMILTON E. SMITH, OF NEW YORK, N. Y.

IMPROVEMENT IN CLOTHES-WRINGERS.

Specification forming part of Letters Patent No. 131,715, dated September 24, 1872.

CASE B.

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-Wringers; 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 sectional side view of this invention; Fig. 2 is a transverse section of the same; and Fig. 3 is an end view of the same.

Similar letters indicate corresponding parts. This invention consists in the arrangement of two elastic tubes placed loosely upon shafts, which are geared together with each other and with two pressing-rollers bearing on the elastic tubes, and serving to hold them in contact with each other, the driving power being applied to one of said pressing-rollers in such a manner that the elastic tubes can readily accommodate themselves to the varying thickness of the clothes made to pass through between them, and that if the clothes stick the shafts carrying said elastic tubes will slip in them, allowing the tubes to remain stationary, and precluding all danger of tearing the clothes.

In the drawing, the letter A designates a frame, which is provided with two standards, B B, which form the bearings for two shafts, C C, on each of which is slipped loosely a thick elastic tube, D D, the bearings of the shafts C C being oblong, (see Fig. 2,) so that the elastic tubes D D can be pressed against each other with any desired force. The purpose of pressing the elastic tubes against each other is effected by means of two pressing-rollers, E E, one of which is situated above

and the other below the elastic tubes, as shown in the drawing. The axles or gudgeons of these pressing-rollers have their bearings in the standards B B, and the shafts C C of the elastic tubes are geared together with each other and with the pressing-rollers by means of cog-wheels a b c d, (see Figs. 1 and 2,) and on the outer end of the shaft or gudgeon of one of the pressing-rollers is secured a hand-crank, F, which serves to impart motion to the several rollers. The cog-wheels a b c d are of such proportion that the rollers D D E E move with a uniform superficial velocity.

If a piece of clothing is passed through between the elastic tubes, said tubes being elastic and of considerable thickness are free to accommodate themselves to the varying thickness of the article, and at the same time, by the frictional contact with the pressing-rollers, said elastic tubes are compelled to revolve and to advance the clothing through between them without slipping thereon or without danger of tearing them. But if from some cause the elastic tubes should be clogged their shafts will slip in them, and the article held between will not be injured.

This wringer is intended particularly for thick articles, such as quilts, blankets, &c., and it works with good results.

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

The elastic tubes D D, placed loosely on their shafts C C, in combination with pressing-rollers E E, gear-wheels a b c d, and hand-crank F, all constructed and operated substantially in the manner herein shown and described.

HAMILTON E. SMITH.

Witnesses:

WM. H. ALLEN, JERRY POTTS.