

(No Model.)

H. ANDERSON.

MANGLE.

No. 412,156.

Patented Oct. 1, 1889.

Fig. 1.

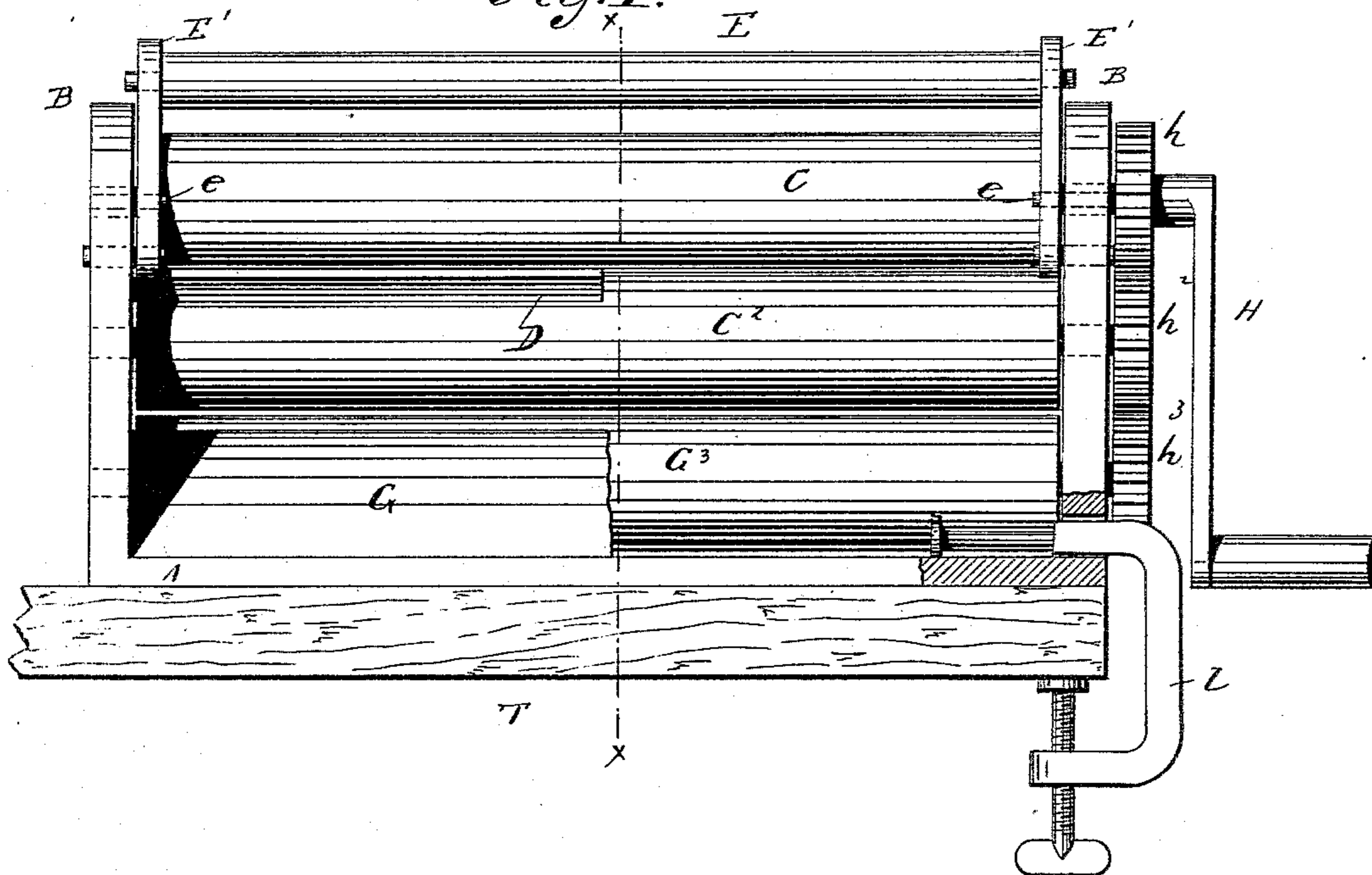
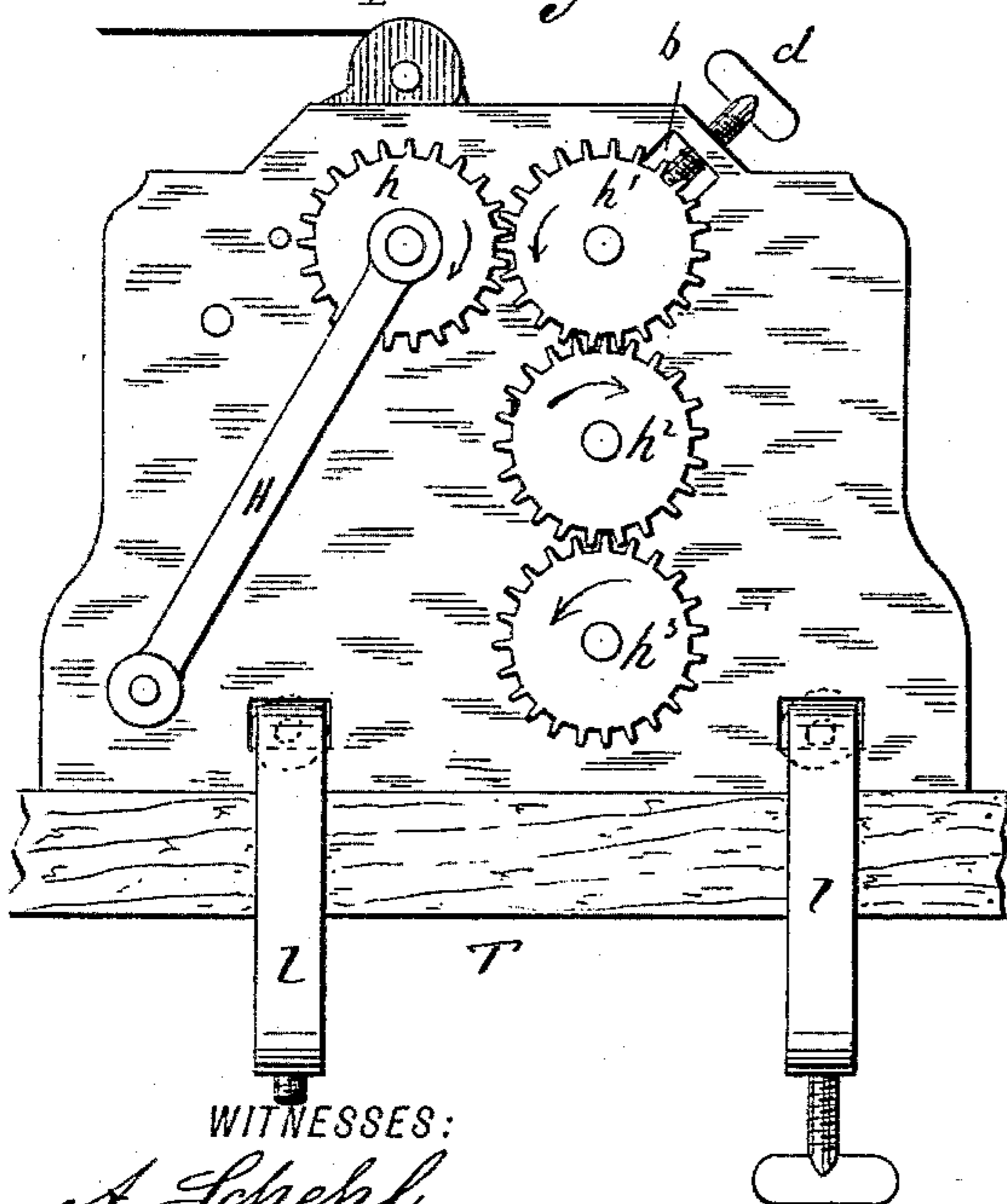


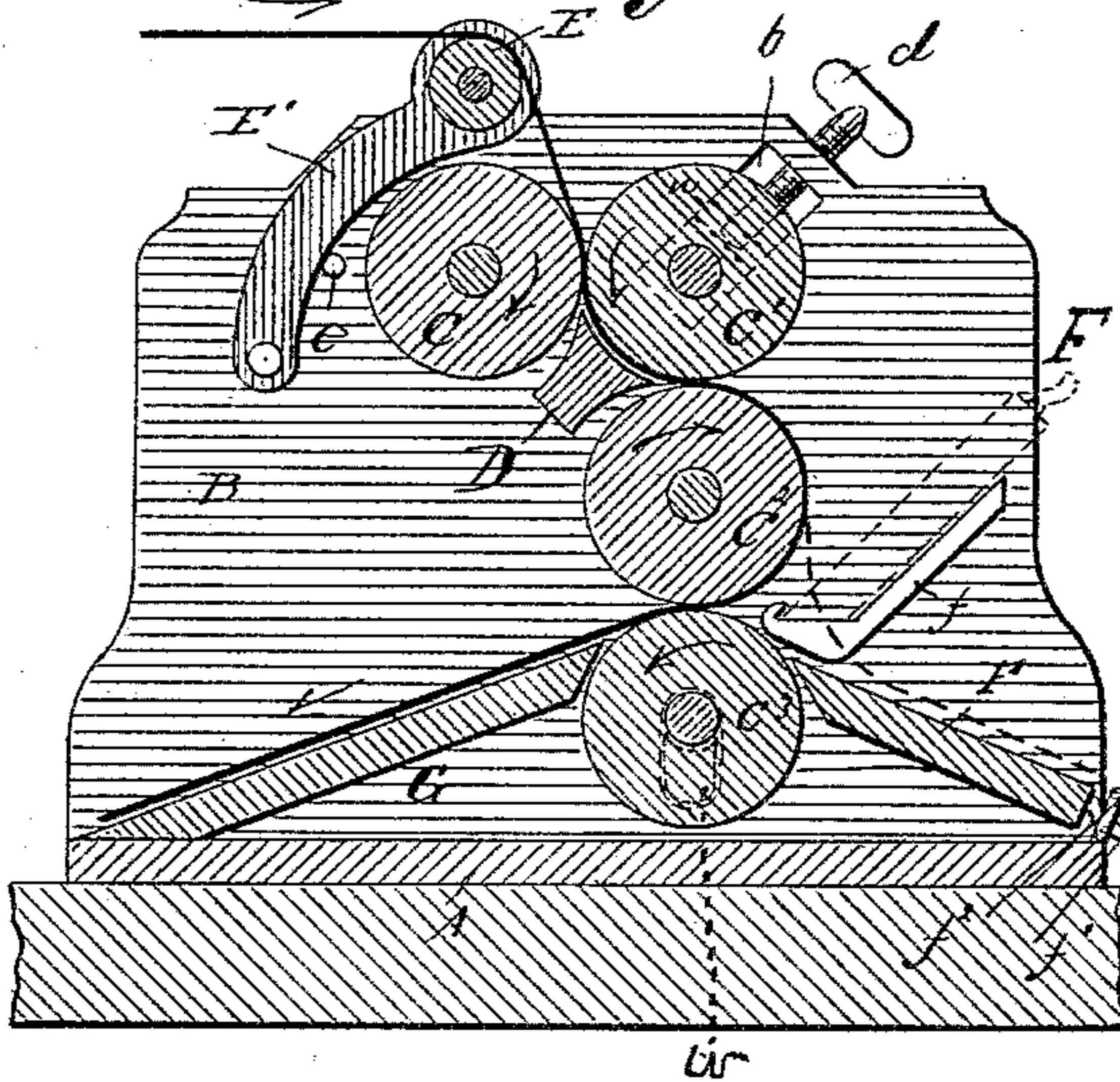
Fig. 2.



WITNESSES:

A. Schehl.
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Fig. 3.



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HENRY ANDERSON, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO
MORITZ SAMISCH, OF SAME PLACE.

MANGLE.

SPECIFICATION forming part of Letters Patent No. 412,156, dated October 1, 1889.

Application filed June 8, 1889. Serial No. 313,605. (No model.)

To all whom it may concern:

Be it known that I, HENRY ANDERSON, of the city, county, and State of New York, a citizen of the United States, have invented certain new and useful Improvements in Mag-

gles, of which the following is a specification. This invention relates to certain improvements in mangles which are especially designed for domestic use, as the clothes can be quickly and with very little effort smoothed by passing them through the rolls of the mangle; and the invention consists of a mangle formed of four smoothing-rolls, an abutment between the first and third rolls, means for adjusting the second roll relatively toward the first and third rolls, and an inclined guide-board between the third and fourth rolls, said guide-board being adjustable in upward or downward inclination, and a fixed inclined guide-board in front of the fourth roll. The clothes are conducted to the upper rolls by means of a guide-roller supported in curved and pivoted arms, the roller being supported above the first roll, so as to facilitate the introduction of the clothes to the first and second rolls.

In the accompanying drawings, Figure 1 represents a front elevation of my improved mangle, the same being partly in section and with parts broken away. Fig. 2 is a side elevation of the mangle, showing it clamped to a table or other support; and Fig. 3 is a vertical transverse section of the same on the line $x x$, Fig. 1.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the base part, and B B the upright standards, which are attached to said base part and are provided with bearings for the several smoothing-rolls of the mangle. The mangle is composed of four rolls C C' C² C³, of which the rolls C C' are arranged sidewise of each other, while the rolls C² C³ are arranged vertically one below the other. Between the rolls C C² is arranged a fixed abutment D, having a concaved face, the curvature of which is concentric to the axis of the second roll C'. The roll C' is supported in bearings which are adjustable in the openings $b b$ of the upright standards B, and can be adjusted by means

of set-screws d , as shown in Figs. 2 and 3, so that the roll C' may be set closer to or far away from the rolls C C² and abutment D, according to the pressure desired to be exerted upon clothes passing through the rolls C C' C². The clothes are guided to the rolls C C' by a guide-roller E, supported on arms E', which are pivoted to the upright standards B B, said arms resting on stop-pins e when the guide-roller is placed in position over the first roll C, as shown in Fig. 3. By inserting the end of the clothes between the first and second rolls C C' the remaining parts of the same are guided between the rollers C' C² and past the abutment D.

To the standards B are attached, back of the roll C², inclined ledges f , on which is supported an inclined guide-board F, which serves to conduct the clothes forward between the rolls C² C³ and upon the fixed inclined guide-board G, which is arranged in the front of the lowermost roll C³.

For small clothes the guide-board F is supported in upwardly-inclined position and upon ledges f , as shown in dotted lines in Fig. 3, in which case the clothes pass through between the four rolls C C' C² C³, as shown by the arrows in Fig. 3. For longer clothes—such as sheets and the like—the guide-board F is moved from the inclined ledges and inserted by means of pins f' into eyes f^2 at the rear part of the base-plate A, as shown in Fig. 3. In this case the clothes or sheets do not pass through between the rolls C² C³, but pass from the roll C² along the downward-inclined guide-board F to the rear of the machine, as shown by dotted lines in Fig. 3.

Motion is imparted to the rolls of the mangle by a crank-handle H, which is applied to the axis of the first roll C, from which motion is transmitted by intermeshing gear-wheels of uniform sizes $h h' h^2 h^3$ on the axis of the rolls C C' C² C³, as shown clearly in Fig. 2. The direction of the motion of the rolls is indicated by the arrows in Figs. 2 and 3.

The mangle is attached to a table T or other suitable support by means of clamps l , which are set into square openings of the standard B, said clamps being in corresponding cross-section and provided at the inner ends with check-disks or washers m , so as to prevent

their being entirely detached from the mangle when the same is removed from the table. The bearings of the rolls $C' C^3$ are cushioned by suitable rubber or elastic blocks $w w$, so as to permit these rolls to give sufficiently as extra thicknesses of clothes are passed through between them.

The mangles, when constructed of a smaller size, are then adapted for family purposes, while when constructed on a larger scale the same can be run by power and used for laundry purposes.

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

1. The combination, with supporting-standards $B B$, of the rolls $C C' C^2 C^3$, a fixed abutment D between the rolls $C C^2$, the face of the abutment being concentric to the roll C' , an inclined guide-board F , supported on ledges f of the standards B , and an inclined guide-board G in front of the lower roll C^3 , substantially as set forth.

2. The combination of supporting-standards

$B B$, rolls $C C' C^2 C^3$, a fixed abutment D between the rolls $C C^2$, the face of the abutment being concentric to the axis of the roll C' , and an inclined guide-board F , provided with pins and engaging a fixed eye f^2 of the base-board A , substantially as set forth.

3. The combination, with supporting-standards $B B$, of rolls $C C' C^2 C^3$, a fixed abutment D between the rolls $C C^2$, the face of said abutment being concentric to the axis of the roll C' , a guide-roller E above the roll C , said guide-roller being supported by curved and pivoted arms E' , stop-pins e for said arms, and the inclined guide-board F back of the rolls $C^2 C^3$, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

HENRY ANDERSON.

Witnesses:

PAUL GOEPEL,
MARTIN PETRY.