

S. SHORT.
Clothes-Mangles.

No. 145,910.

Patented Dec. 23, 1873.

FIG. 1.

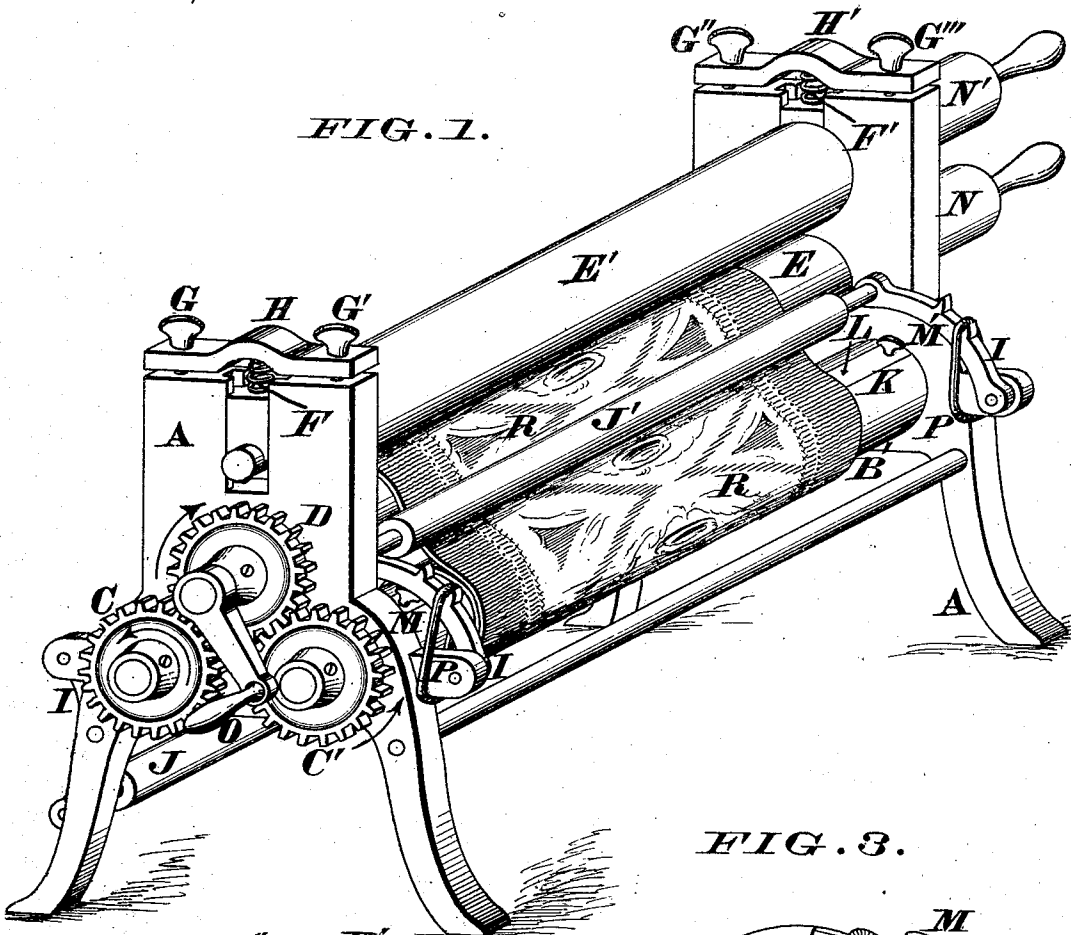


FIG. 3.

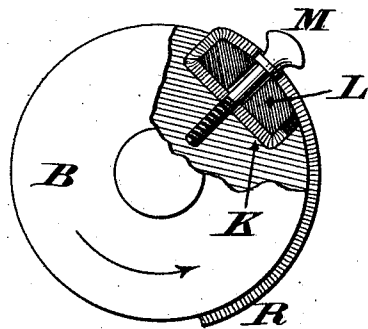
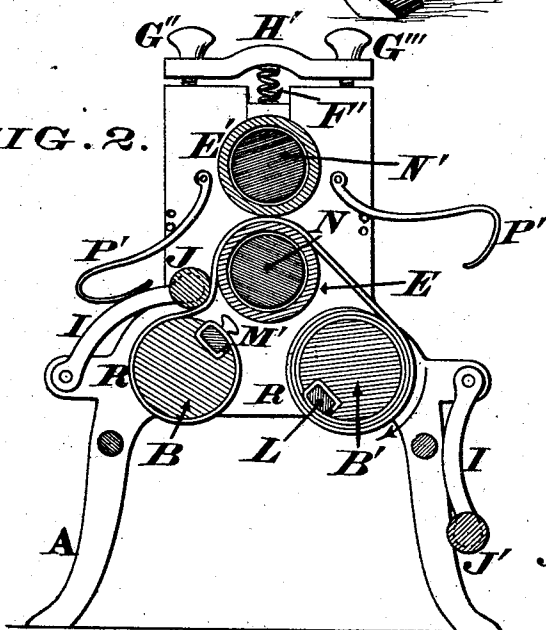


FIG. 2.



Elemerle Elhart
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Attys.

Attest.
pat. H. Layman,
Walter Allen

UNITED STATES PATENT OFFICE.

SEMELE SHORT, OF CINCINNATI, OHIO.

IMPROVEMENT IN CLOTHES-MANGLES.

Specification forming part of Letters Patent No. **145,910**, dated December 23, 1873; application filed December 10, 1873.

To all whom it may concern:

Be it known that I, SEMELE SHORT, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Clothes-Mangle, of which the following is a specification:

My mangle, although especially designed for smoothing of table and stair linen and like bulky articles, is, nevertheless, applicable to every description of clothes or garments except those having very unequal thicknesses or possessing brittle projections, such as buttons, &c.

Figure 1 is a perspective view of a mangle embodying my improvements. Fig. 2 is a transverse section thereof. Fig. 3 is an enlarged transverse section of one of the clamping-rolls.

Journalled horizontally in a suitable frame, A, are two wooden clamping-rolls, B B', which terminate outside of the frame in spur-wheels C C', which gear with a corresponding cog-wheel, D, on the end of a hollow metallic cylinder, E. E' is another precisely similar cylinder, which is caused to press down upon the one E by the action of springs F F', whose stress is capable of being increased, at will, through the instrumentality of screws G G' G'' G''' and caps H H'. Arms I I', pivoted to the frame, carry at their free extremities wooden idlers J J', which, resting upon the cloth or goods being operated upon, act to take up the slack of said goods, and to keep it properly on the stretch. These idlers may be caused to press down upon the goods with any degree of force by india-rubber bands P, which engage over the arms I, and under the brackets to which said arms are pivoted. These arms may be provided with spurs or notches to retain the bands in proper position, or said bands may be omitted and metallic springs P' substituted for them, as shown in Fig. 2. The clamping-rolls have each a longitudinal groove or channel, K, to receive a clamp, L, which, after the end of the goods has been introduced, is secured by means of screws M M'. N N' are iron heaters, which, having been raised to the proper temperature, are inserted in their respective cylinders, E E', in order to bring and maintain the same at that degree of heat which will effectually smooth without injuring the goods. A winch,

O, on the end of the cylinder E, enables the laundress to rotate the same, whence motion is communicated, as per arrows, to the rollers.

The operation of the machine is as follows: The heaters having been made sufficiently hot, by being inserted in a fire, are then introduced into the cylinders E and E'. Then the goods R, having been folded longitudinally, if necessary, have one end clamped and wound upon one of the rolls B or B'. The other end is then introduced backward between the cylinders E and E', and, having been clamped in the other roll, the crank is then rotated to and fro until the article is sufficiently smoothed. Should the pressure of the upper cylinder E' be found too great or too little, it can be regulated by means of the screws G G' G'' G'''. The idlers J J' effectually take up any slack which must otherwise arise from the changing diameters of the clamp-rolls, in consequence of the increase or decrease of goods upon them, in course of winding and unwinding. The ends of the goods being firmly caught in the clamp-rolls, it is impossible that the laundering should operate bias upon the goods, as in common mangling, or in smoothing by sad-irons, and consequently the article, when finished, is found to possess its proper rectangular form, and not to be in any place unequally stretched.

While thus especially applicable for use on larger articles, such as are liable to lose their proper shape in the laundry, it is evident my apparatus may also be used with great advantage on almost every description of clothing or linen.

I claim as new and of my invention—

The mangle constructed, as herein described, with clamp-rolls B B', metallic cylinders E E', heaters N N', springs F F', caps H H', idlers I J J', and springs P, the whole mounted in a suitable frame and driven by suitable gearing, in manner substantially as and for the purpose set forth.

In testimony of which invention I hereunto set my hand.

SEMELE SHORT.

Witnesses:

S. B. SPEAR,
GEO. H. KNIGHT.