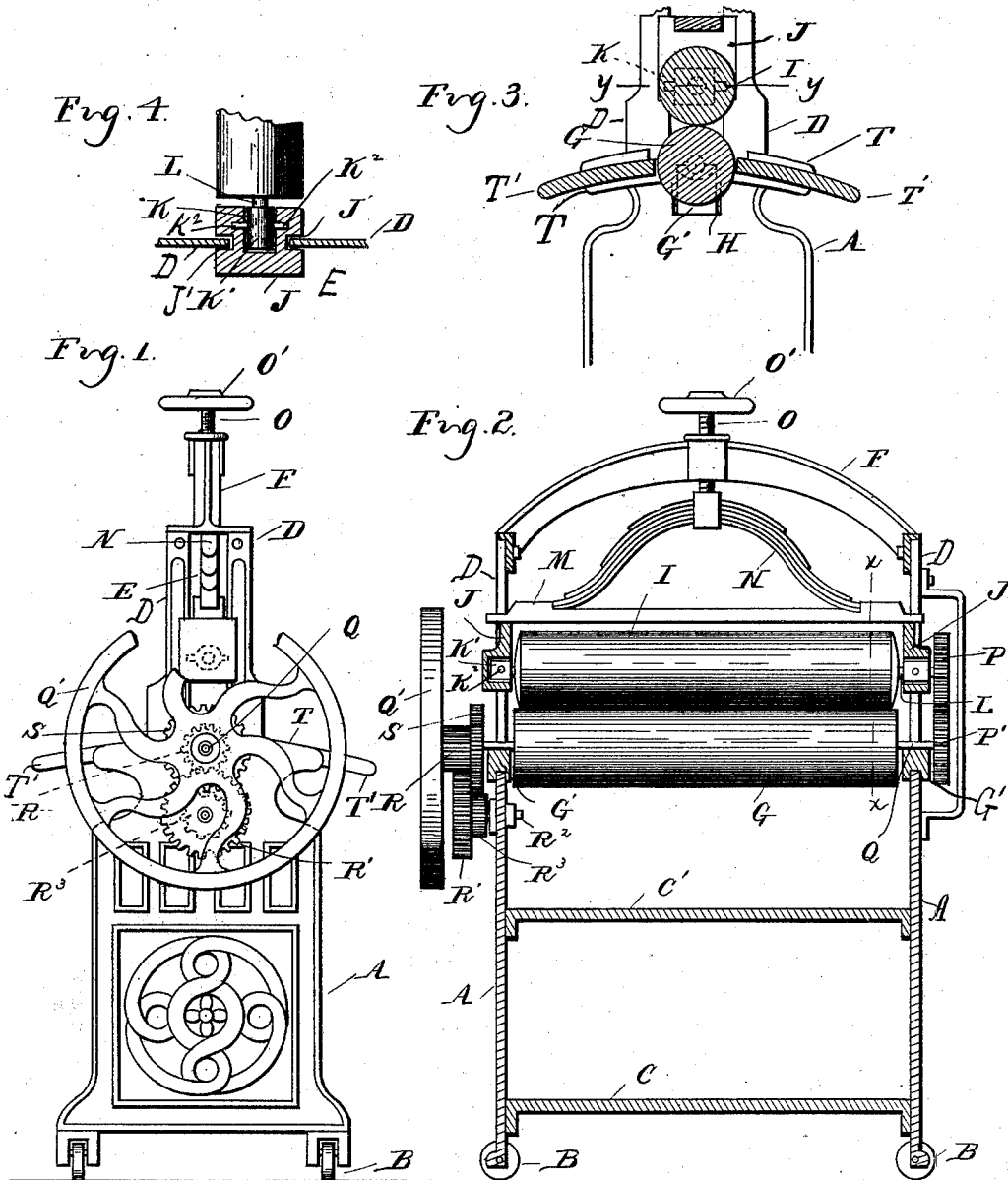


(No Model.)

A. COUSEN.
MANGLE.

No. 476,004.

Patented May 31, 1892.



Witnesses
a L. Kobbie
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UNITED STATES PATENT OFFICE.

ALFRED COUSEN, OF DETROIT, MICHIGAN.

MANGLE.

SPECIFICATION forming part of Letters Patent No. 476,004, dated May 31, 1892.

Application filed July 27, 1891. Serial No. 400,889. (No model.)

To all whom it may concern:

Be it known that I, ALFRED COUSEN, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Mangles, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in mangles; and the invention consists in the improved construction, arrangement, and combination of the various parts, all as more fully hereinafter described.

In the drawings, Figure 1 is an end elevation of my improved machine, parts being broken away. Fig. 2 is a vertical central section thereof, parts being shown in elevation. Fig. 3 is a vertical section on line *xx*, showing the journals for the rollers and the manner of securing the tables in position. Fig. 4 is a horizontal section on line *yy* in Fig. 3.

A are two side frames supported upon rollers B, connected by cross-bars C C', forming the frame of my machine.

D are standards rising centrally from the top of the side frames and forming between them a vertical guide E. These standards are connected at the top by the arched cross-bar F.

G is a roller journaled in stationary bearings G', which are secured in notches H at the top of the frame A at each side of the machine.

I is an upper roll contacting with the upper face of the roll G. This upper roll is secured slidingly in position by means of the blocks J, each of which is provided with a guide-groove J' in each side to engage with the guides E of the standards. These blocks are provided on their inner faces with the recesses K, in which is pivotally secured a box K', having a trunnion K² on each side which engage in suitable bearings in the block. The trunnions may be inserted in the block by either dividing the block or forming suitable openings through which they may be passed. Pintles L at the end of the rollers are mounted in these boxes.

M is a cross-bar resting at its ends upon the tops of the blocks J and guided between the standards D.

N is a spring-bearing upon the top of the

cross-bar M and put under tension by means of a screw O, which passes through a central bearing in the arched bar F, a suitable hand-wheel O' serving as a convenient means for moving the same.

P P' are intermeshing gear-wheels upon the extended shafts of the upper and lower rolls, so that both rolls will be driven. Motion is imparted to the lower roll by means of the shaft Q, extending therefrom through one side of the frame and carrying the hand-wheel Q'. Loose upon this shaft and secured to the hand-wheel Q is a pinion R, which meshes with a gear-wheel R' upon the stud R², beneath the shaft Q. Secured to the gear-wheel R' is a pinion R³, which meshes with the gear-wheel S, which is fast upon the shaft Q, thereby suitably reducing the motion of the hand-wheel Q'.

T are flanges formed upon the inner side of the frame A at the top thereof, in which are secured tables T' upon opposite sides of the lower roll G to receive the clothes in feeding them through the rolls and as they come therefrom.

It will be seen that if the clothes are fed unevenly, so that one end of the upper roll will be raised more than the other, the angular movement of the rolls will be permitted by the boxes K' allowing the blocks J to move vertically without danger of binding in the guides.

What I claim as my invention is—

1. In a mangle, the combination, with the frame of the machine, of the roll G in fixed bearings in the frame, a spring-pressed roll I, the standards D, guides E, blocks J, and boxes K', pivotally secured in said blocks, substantially as described.

2. In a mangle, the combination, with the standards D, of guides E, formed thereby, the blocks J, having grooves J' engaging with said guides, the roll I, the boxes K', having pintles K², the cross-bar M, the spring N, cross-bar F, and screw O, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ALFRED COUSEN.

Witnesses:

M. B. O'DOHERTY,
N. L. LINDOP.