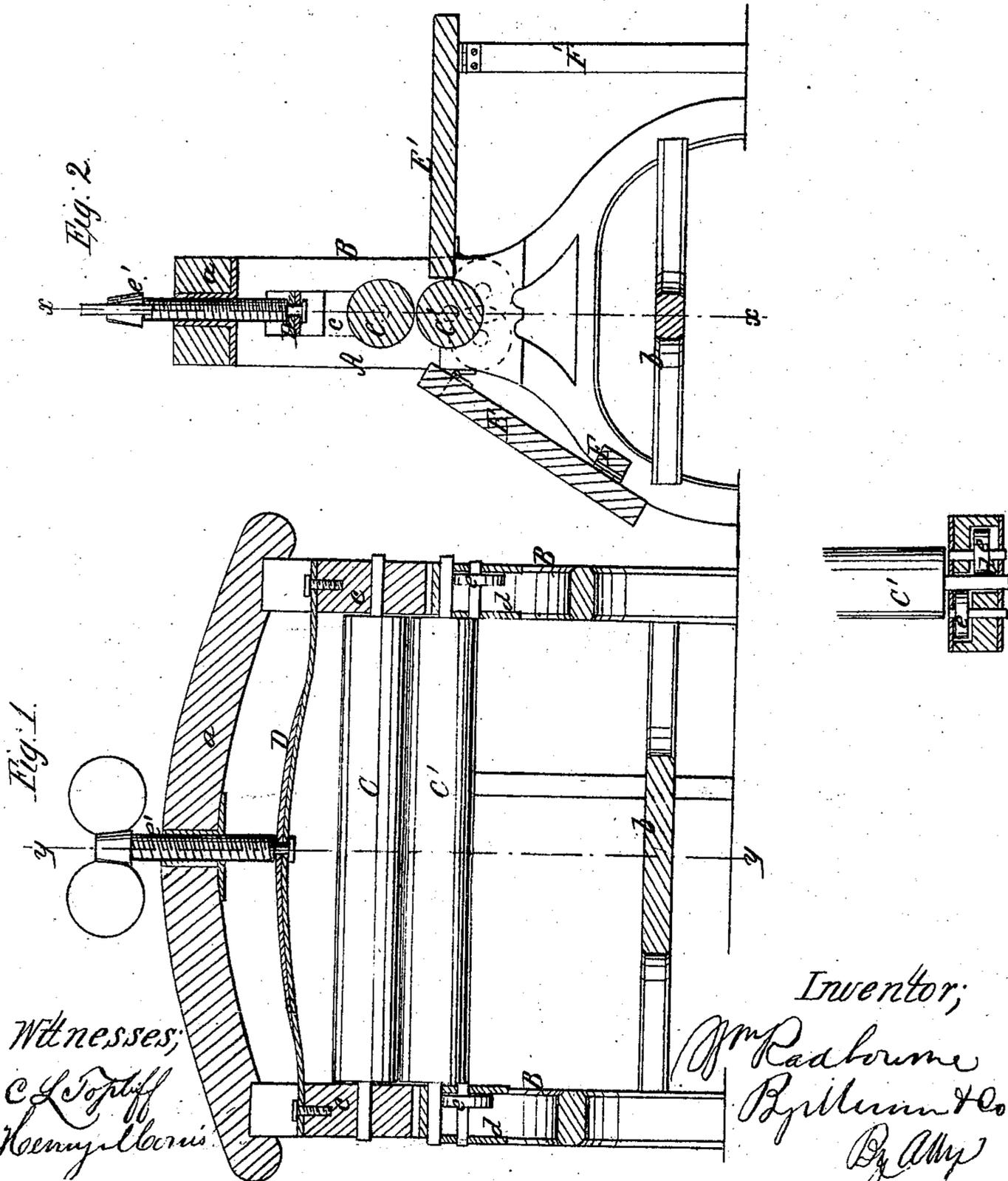


W. Radbourne,

Mangle.

N<sup>o</sup> 46,263.

Patented Feb. 7, 1865.



Witnesses;  
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# UNITED STATES PATENT OFFICE.

WILLIAM RADBOURNE, OF RAHWAY, NEW JERSEY.

## IMPROVED MANGLE.

Specification forming part of Letters Patent No. 46,263, dated February 7, 1865.

*To all whom it may concern:*

Be it known that I, WILLIAM RADBOURNE, of Rahway, in the county of Union and State of New Jersey, have invented a new and Improved Mangle; and I do hereby declare that the following is 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 drawings, forming part of this specification, in which—

Figure 1 represents a longitudinal vertical section of this invention, the line *x x*, Fig. 2, indicating the plane of section. Fig. 2 is a transverse vertical section of the same, taken in the plane indicated by the line *y y*, Fig. 1. Fig. 3 is a sectional plan or top view of one of the bearings of the lower roller.

Similar letters of reference indicate corresponding parts.

This invention relates to a mangle the lower roller of which has its bearings on friction-rollers, while its upper roller is pressed down by the action of a semi elliptic spring and thumb-screw in such a manner that one spring and screw is sufficient for both ends of said roller, and that by the action of the friction-rollers the power requisite to operate the mangle is materially reduced. The frame of my mangles provided with two hinged tables—one on either side of the rollers—and provided with hinged legs in such a manner that when the mangle is not used said tables can be readily turned down out of the way, and when the same is used one or both tables can be turned up instantaneously and the clothes are run through the rollers with great convenience.

A represents a frame, made of wood or other suitable material, and composed of two end-pieces, B, which are connected to each other by longitudinal connecting-pieces *a b* on top and bottom. The end pieces or standards, B, form the guides for the boxes *c*, in which the gudgeons of the upper pressing-rollers, C, have their bearings, and they are provided with cavities *d*, to receive the friction-rollers *e*, supporting the gudgeons of the lower roller, C'. The boxes *c* slide up and down in suitable slots in the standards B, and they are exposed to the action of a semi-elliptical spring, D, which extends from one of said boxes to the other, and the tension of which is regulated by a thumb-screw, *e'*, as clearly shown in Fig. 1 of the drawings. The friction-rollers which support the gudg-

eons of the lower roller, C', are mounted on axles which have their bearings in metallic plates attached to the outer and inner surfaces of the standards B, and by their action the power requisite to turn the machine is materially reduced, an item which is of great importance when it is considered that mangles generally have to be operated by the female portion of the community. Without the friction-rollers the use of the spring D would be impracticable, because in that case the rollers would hardly be compressed with sufficient force to produce a good result without increasing the friction to such an extent that the mangle would not be successfully worked by one person.

The clothes to be exposed to the rollers are fed in over a table, E, which is hinged to one side of the frame A, and they are received on another similar table, E', hinged to the opposite side of the frame, as clearly shown in Fig. 2 of the drawings. These tables when in working position are supported by legs F F', which are connected to them by means of hinges, so that they can be readily turned down to a vertical position when the table is to be used, or up to a horizontal position under the table when the same is not used. In Fig. 2 one of the tables is shown in working position and the other is turned down. By this arrangement the mangle can be easily and expeditiously rigged up ready for working, and when not used the tables can be quickly turned down out of the way, and the bulk of the machine is thereby materially reduced.

This mangle is so constructed that it can readily be managed by any person of ordinary understanding. All its parts are so constructed that they do not readily get out of order, and by the action of the rollers the clothes are rendered smooth, the same as by ironing.

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

The application to a mangle of the semi-elliptical spring D, acting simultaneously on both boxes of the roller C, in combination with friction-rollers *e*, supporting the gudgeons of the lower roller, constructed and operating substantially as and for the purpose set forth.

WILLIAM RADBOURNE.

Witnesses:

JOHN L. YOUNG,  
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