P. O'THAYNE.

IRONING APPARATUS.

No. 190,444. Patented May 8, 1877.

Fig: 1

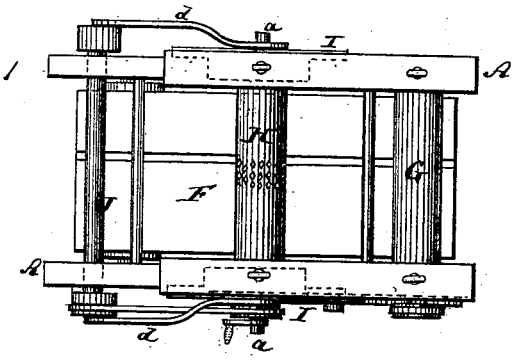

Fig: 2

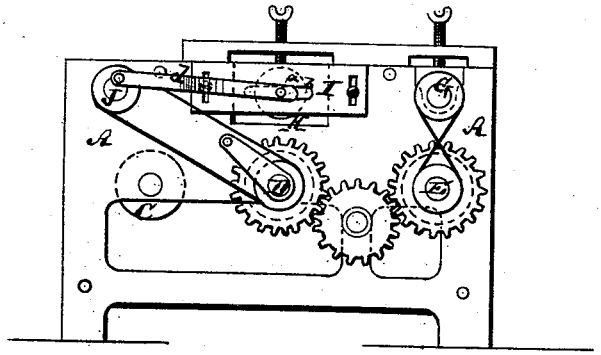

Fig: 3

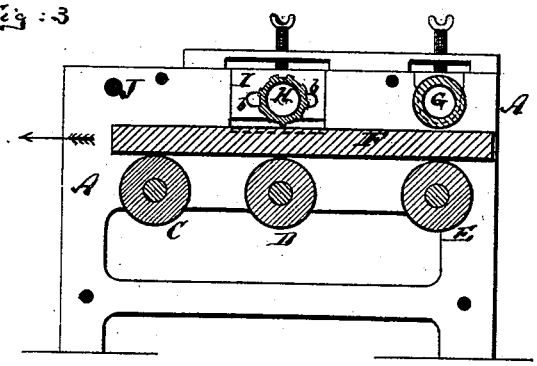

Fig: 4

Witnesses:
John C. Tunbridge.
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Inventor:
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by his attorney
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UNITED STATES PATENT OFFICE.

PATRICK O'THAYNE, OF NEW YORK, N. Y.

IMPROVEMENT IN IRONING APPARATUS.

Specification forming part of Letters Patent No. **190,444**, dated May 8, 1877; application filed February 8, 1877.

To all whom it may concern:

Be it known that I, PATRICK O'THAYNE, of New York city, in the county and State of New York, have invented a new and Improved Ironing-Machine, of which the following is a specification:

Figure 1 is a top view, Fig. 2 a side view, and Fig. 3 a vertical longitudinal section, of my improved ironing-machine. Fig. 4 is a detail cross-section of the ironing-board used thereon.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to certain improvements in machines for ironing shirts and other garments or fabrics; and consists more particularly in the use of a reciprocating ironing or rather polishing roller, in contradistinction to rollers having a greater or less degree of mere rotary motion.

The invention also consists in other details of improvement, hereinafter more clearly pointed out.

The letter A in the drawing represents the frame of the machine. In the same are hung three, more or less, rollers, C D E, which are all in line with one another and parallel, as in Fig. 3, and which constitute supports for the ironing-board F, serving also to move the same forward in the machine. If the weight of this ironing-board should be insufficient to supply friction for moving the board by the said rollers, I may form a toothed rack on the board, and move it by means of a toothed wheel, or by other suitable device. Above the ironing-board F is hung, near one end of the frame, a hollow heating and ironing roller, G, which receives rotary motion by belt or gear-wheels, or otherwise, as do also the supporting and feed rollers C D E, or either one of said feed-rollers. The roller G is vertically adjustable in its bearings, so that it may be set nearer to or farther away from the face of the ironing-board. H is another ironing roller or plate, which has projecting gudgeons or pins *a a*, which are supported in horizontal slots *b*, that are formed in boxes I, which are applied to the sides of the frame A. The gudgeons or pins *a* of the roller H are, by suitable rods *d*, connected with a crank-shaft, J, so that by rotating said crank-shaft horizontal reciprocating motion will be imparted to the roller or plate H, the same sliding by its gudgeons in the slots *b* of the boxes I. The boxes are vertically adjustable on the frame A, and are held by suitable set-screws, nuts, or other devices, for the purpose of regulating the distance between the ironing roller or plate H and the ironing-board F.

The operation of the machine is as follows: The garment to be ironed is placed upon the ironing-board F, and the latter then, by the feed-rollers C D E, moved through the machine in the direction of the arrow shown in Fig. 3. The garment is thereby first subjected to the pressure and action of the roller G, which, being heated, evaporates the moisture, and serves also partially to iron the garment. The dried garment is thereupon subjected to the back and forward sliding action of the roller or plate H, which, by its sliding motion, imparts a superior polish to the garment, far superior, in fact, to the effect produced by the ordinary rotating ironing-rollers. It is quite clear that if the single roller G should not suffice to properly dry the garment before it reaches the finishing-roller H an additional larger number of such rotary ironing-rollers may be placed in front of the finishing roller or plate H. Said roller or plate H may, if desired, be roughened, in order to heighten its effect, as the edges of the grooves or notches formed therein will constitute smoothing devices of superior kind. The ironing-board has its upper surface grooved lengthwise, as shown at *f* in Fig. 4, this groove serving to receive or form beads on the bosoms of shirts or other garments to be ironed, or to make room for hems or other projecting things thereon. There may be one or more such grooves, if desired, or the groove may be formed in the roller or plate H; but in this application I do not claim the forming of such groove in the roller or plate H.

I do claim as my invention, and desire to secure by Letters Patent—

1. In an ironing-machine, the combination of the movable ironing-table F with the horizontally-reciprocating ironing roller or plate H, which moves partly in the same direction and partly in the reverse direction as the ironing-board, substantially as specified.

2. The combination of the reciprocating ironing roller or plate H with the vertically-adjustable boxes I I, which have horizontal slots *b b*, in which the roller or plate H moves and is supported, substantially as and for the purpose herein shown and described.

3. The ironing-board F, made with one or more grooves, *f*, on its upper surface, and combined with one or more ironing-rollers, which extend laterally over such grooves without entering the same, substantially as and for the purpose set forth.

PATRICK O'THAYNE.

Witnesses:

ERNEST C. WEBB,

F. v. BRIESEN.