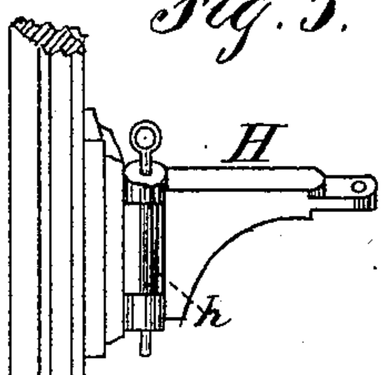
E. L. WILSON.

Ironing-Machine.

No. 204,777. Patented June 11, 1878.

Fig. 5.



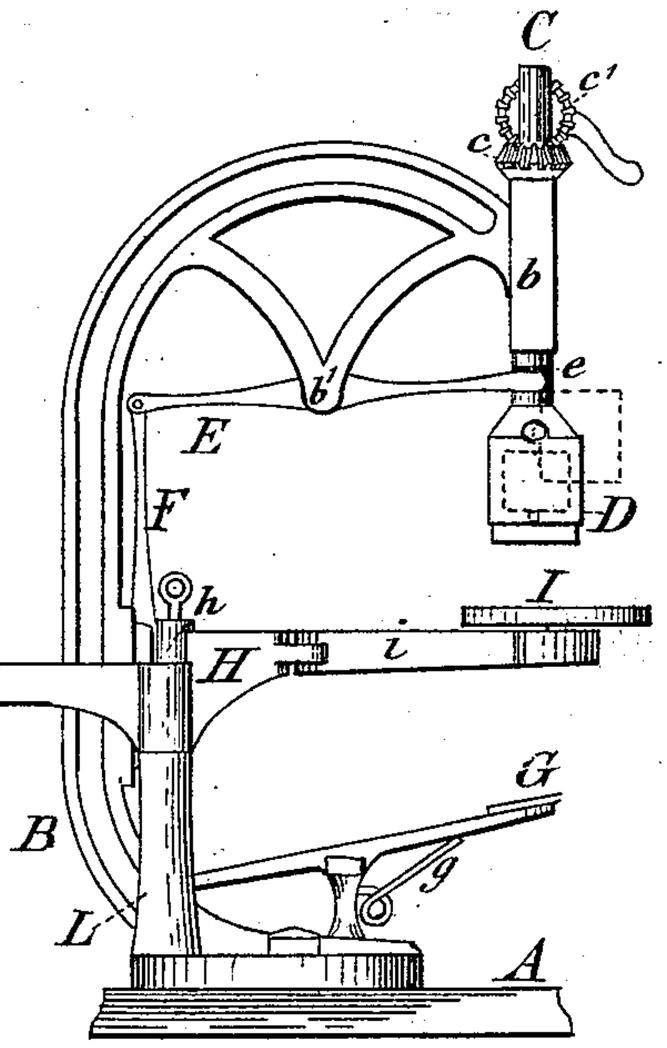
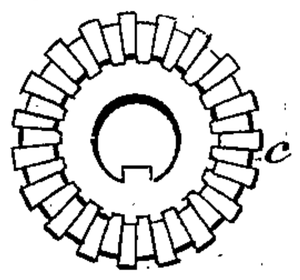


Fig. 1.

Fig. 6.



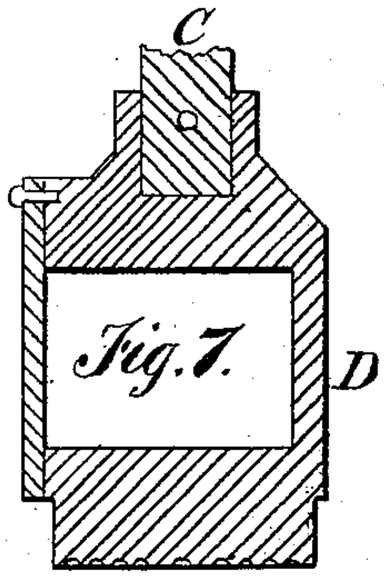


Fig. 7.

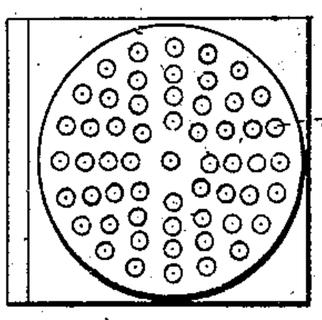


Fig. 8.

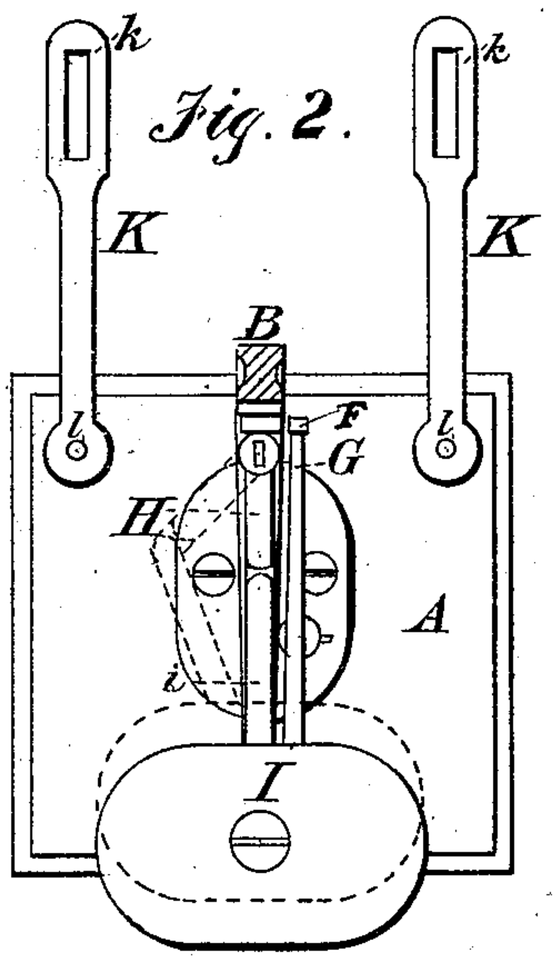


Fig. 2.

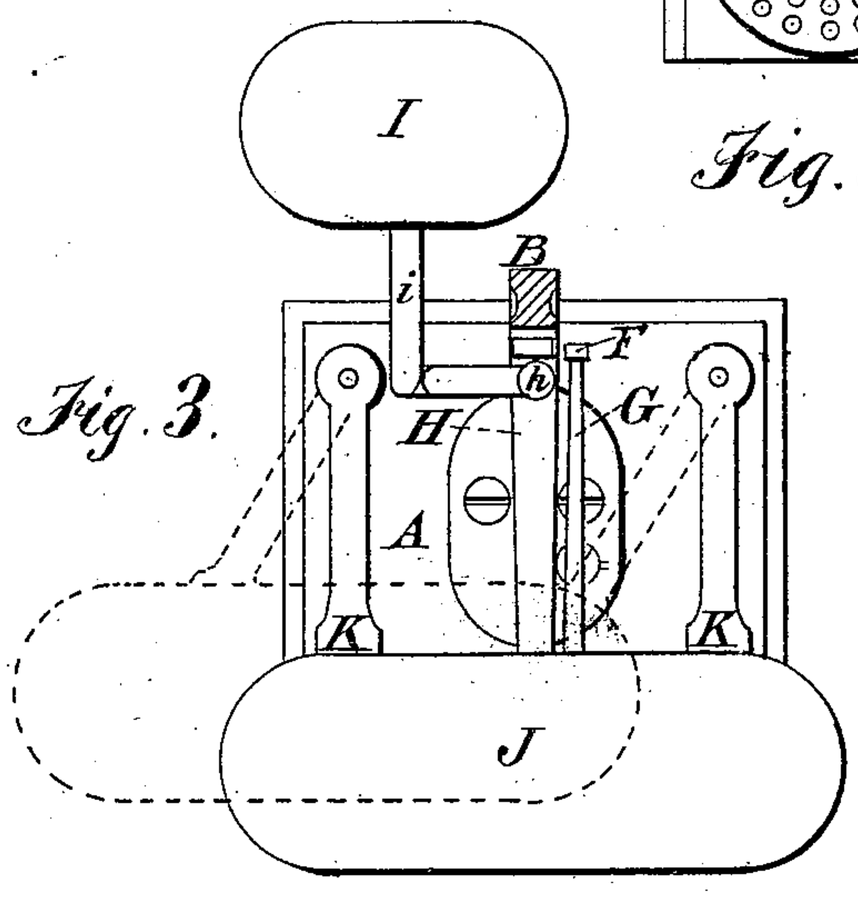


Fig. 3.

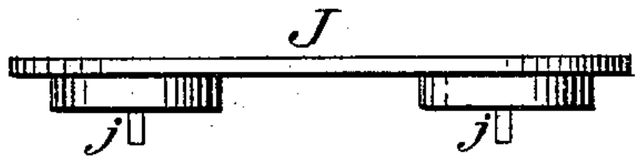


Fig. 4.

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UNITED STATES PATENT OFFICE.

ELIAS L. WILSON, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-THIRD HIS RIGHT TO WILLIAM H. KELLOGG, OF SAME PLACE.

IMPROVEMENT IN IRONING-MACHINES.

Specification forming part of Letters Patent No. **204,777**, dated June 11, 1878; application filed August 9, 1877.

To all whom it may concern:

Be it known that I, ELIAS L. WILSON, of Chicago, county of Cook, and State of Illinois, have invented a new and useful Improvement in Ironing-Machines, which is fully described in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 represents a side elevation of an ironing-machine embodying my improvement; Fig. 2, a plan view of same, the upper portion of frame and the iron being removed; Fig. 3, a similar view, showing the small board turned back and the skirt-board in position for work; Fig. 4, a side view of skirt-board; Fig. 5, a detailed view of the hinged arm attached to the ironing-board; Fig. 6, a plan view of the pinion on the shaft which carries the iron; Fig. 7, a sectional view of the iron; Fig. 8, an inverted plan view of the same.

My invention relates to a machine for ironing clothes, in which a rotary iron is used, driven by any suitable means, adjustable ironing-boards being arranged underneath the iron, suitable for supporting different articles of clothing and bringing them under the action of the rotating iron.

It consists, first, in a pinion turning in a fixed bearing at the top of the frame, and a shaft which slides through said pinion and is rotated by it, whereby the iron is rotated and raised or lowered; second, in a sliding shaft driven by a pinion, which revolves in a stationary bearing at the top of the frame, and a foot-lever connected with said shaft to raise or lower the same; third, it also consists in an ironing-board attached to the supporting-frame by a double hinged connection, whereby the board may be adjusted to any position required; fourth, it also consists in an independent skirt-board supported upon independent swinging arms.

It further consists in the special construction of various devices and in various combinations, all of which will be hereinafter more fully set forth.

In the drawings, A represents a platform or support of any suitable description, upon which is mounted an upright curved arm, B. At the extreme upper end of this arm is a vertical enlargement, *b*, affording a support and bearing for a shaft, C, which is constructed to slide vertically in said bearing, and is provided with a bevel-pinion, *c*, fastened to it by a spline-groove, so as to permit the shaft to slide through in it, and meshing with a similar pinion, *c'*, mounted on a short shaft supported by the arm B, and driven by any suitable mechanism, either hand or power.

At the lower end of the shaft C is the iron D, attached thereto, so as to revolve with it, and constructed in the usual style of rotary irons, except that its face has a series of shallow indentations or depressions, *d*, extending over its entire surface, as shown in Fig. 8 of the drawings.

A lever, E, is pivoted to a pendent portion, *b'*, of the upper part of the main supporting-arm B. The forward end of this lever is forked and pivoted to a collar, *e*, on the shaft C, and held in place by suitable rings or flanges on the shaft. The rear end of the lever is hinged to a connecting-rod, F, the lower end of which is, in turn, hinged to one arm of a foot-lever, G, pivoted to a suitable support at the lower end of the main arm B, and provided with a suitable spring, *g*, arranged to act upon the outer end of the lever, so as to throw this end up when released from pressure in the opposite direction.

A short arm, H, is pivoted to a lug, *h*, on the central portion of supporting-piece B, arranged at about the distance above the support A at which it is desired to hold the ironing-board I, which is fixed upon one end of the arm *i*, the other end of which is hinged to the curved end of the arm H.

The length of the arms H and *i* is such as to bring the ironing-board I underneath the rotary iron D; and it is evident that, by means of the double hinge support, which is furnished for the table, great range and freedom of motion are given to the latter, so that any part of it can be readily brought directly underneath the iron. The ironing-board I is of medium size and design, for use in ironing small-sized articles and the bosoms of shirts.

Whenever it is desired to iron large-sized articles a skirt-board, J, is employed, which is much longer than the board I, and is provided with pins *j*, projecting from its lower side, by

means of which it is secured to arms K, the outer ends of which have slots *k*, in which the pins are inserted. The other ends of the arms K are pivoted to posts L at the rear of platform A, a connection being made, so that the arms K may be elevated off from the pivot-pins *l* whenever desired. These arms K are made to swing backward and forward, and, the connection between them and the skirt-board being loose, a sufficient range of adjustment is given the latter for all practical purposes. The height of the posts L is such that the arms K may be swung back underneath the table I, which is turned back into the position shown in Fig. 3 of the drawings. The skirt-board is lifted from its supporting-arms, and the latter turned back into the position shown on Fig. 2 of the drawings, when the board I is to be used.

When either board is used it is evident that by operating the foot-lever G the iron D will be brought down upon the article lying on the ironing-board, and, being reheated rapidly at the same time, it will smooth and polish the article between it and the board, for the accomplishment of which result I have found the indentations in the face of the iron of great service.

Although this machine is designed especially for ironing purposes, it may also be used for pressing, whenever required—for instance, in pressing the seams in the manufacture of various articles of clothing.

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

1. A pinion, *c*, turning in a fixed bearing on the frame B, combined with the shaft C, which slides in its bearing and through said pinion, and a polishing-iron, D, attached to the lower end of said shaft, all substantially as and for the purpose set forth.

2. The rigid curved supporting-frame B, provided with a bearing for the pinion *c* and the sliding shaft C, which slides through said pinion and carries a polishing-iron, D, upon its lower end, in combination with a foot-lever, G, forcing-spring *g*, and a device for connecting the foot-lever with the sliding shaft and a movable ironing-table, substantially as and for the purpose set forth.

3. The ironing-board I, attached to the standard B by a double hinged support, in combination with the vertically-adjustable polishing-iron D, substantially as and for the purpose set forth.

4. The standard B, in combination with the arm H, hinged thereto, and the ironing-table I, mounted upon an arm hinged to the piece H, substantially as and for the purpose set forth.

5. An ironing-board, I, in combination with a swinging support, upon which it is mounted, and which is constructed to permit the table to be swung back to the rear of the machine to give place for the attachment of a skirt-board, substantially as and for the purpose set forth.

6. The frame and operative mechanism of an ironing-machine and the skirt-board J, in combination with swinging supports K, to which it is detachably connected, substantially as and for the purpose set forth.

7. The swinging arms K, provided with slots *k* at their outer ends, in combination with the skirt-board J, having pins *j* projecting from its under side, substantially as and for the purpose set forth.

8. The frame and operative mechanism of an ironing-machine, provided with two arms, K, supported on the posts L, one on either side of the machine, by pivots, which permit the arms to be removed, in combination with the detachable skirt-board J, whereby the board may be readily adjusted when in use or entirely removed, and the arms swung back out of the way of the ironing-board or entirely removed from the supporting-posts, substantially as and for the purpose set forth.

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