

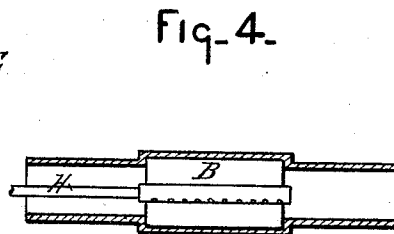
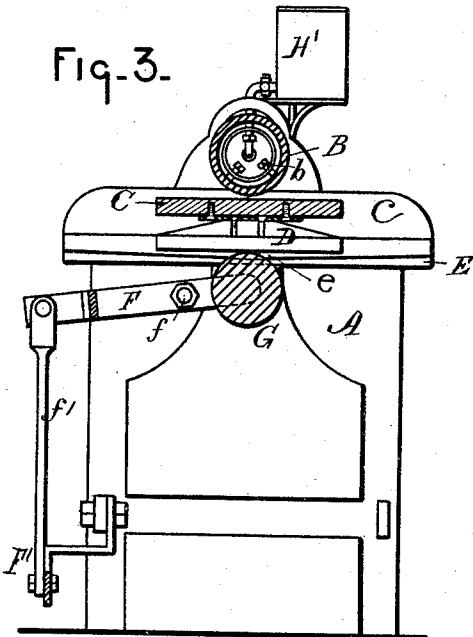
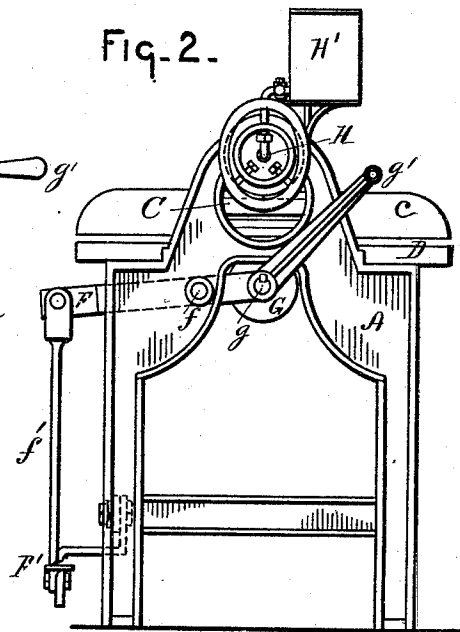
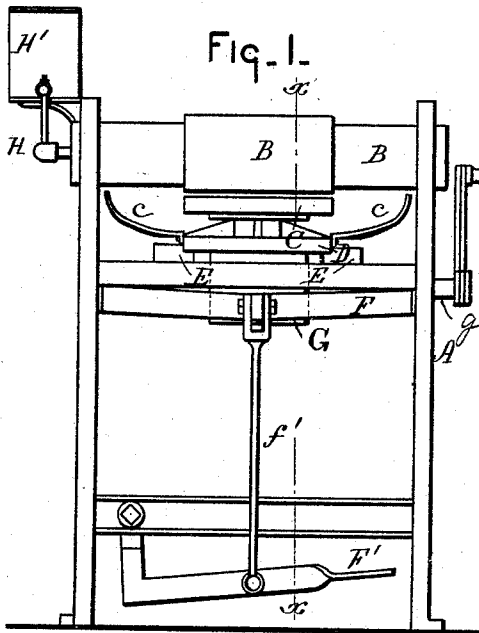
(No Model.)

3 Sheets—Sheet 1.

F. D. ADAMS.
IRONING MACHINE.

No. 482,607.

Patented Sept. 13, 1892.



WITNESSES

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(No Model.)

3 Sheets—Sheet 2.

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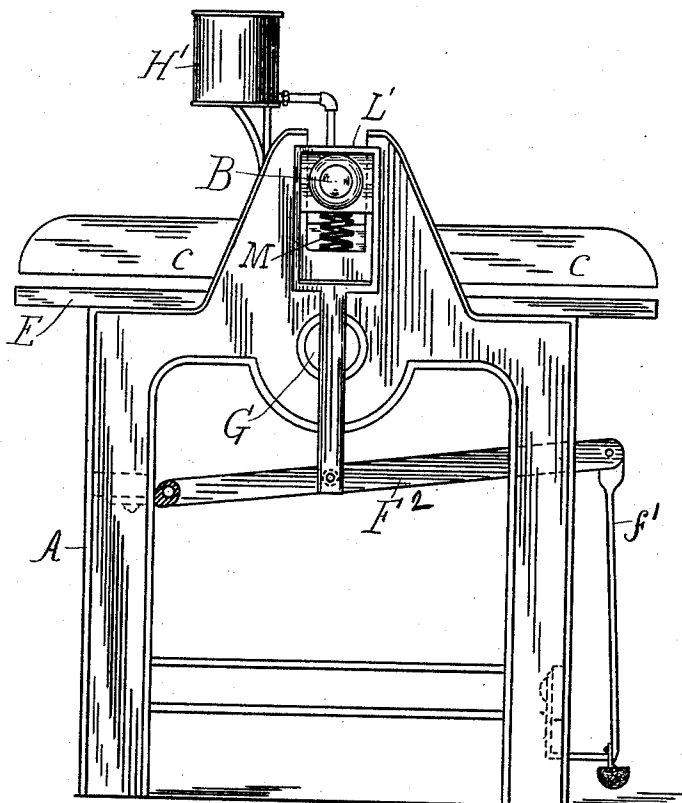


Fig. 5.

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3 Sheets—Sheet 3.

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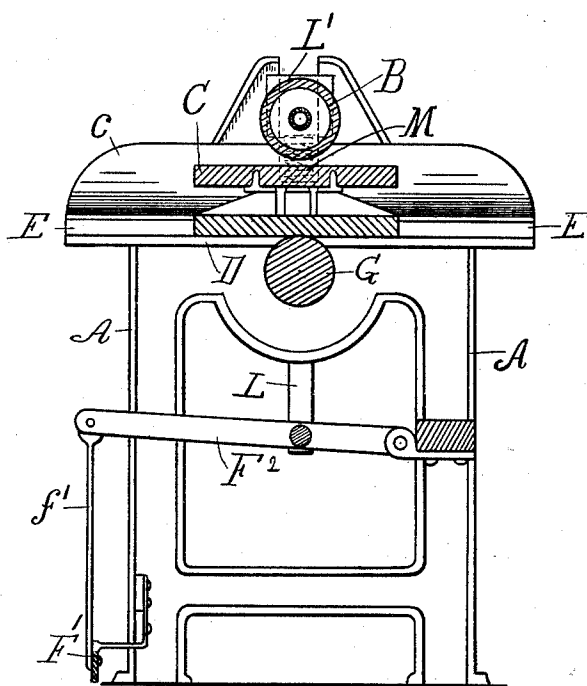


Fig. 6.

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UNITED STATES PATENT OFFICE.

FRANK D. ADAMS, OF NORTHVILLE, MICHIGAN.

IRONING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 482,607, dated September 13, 1892.

Application filed January 19, 1891. Serial No. 378,264. (No model.)

To all whom it may concern:

Be it known that I, FRANK D. ADAMS, a citizen of the United States, residing at Northville, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Ironing-Machines; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

In the drawings, Figure 1 is a front elevation of an ironing-machine embodying my invention. Fig. 2 is a side elevation of the same. Fig. 3 is a vertical section on line *xx*, Fig. 1, the support of the ironing-board being shown in full. Fig. 4 is a sectional view of the polishing-iron, showing its heating mechanism. Fig. 5 is a view of a modification of my machine in which the polishing-iron has a vertical movement and the friction-roller is mounted in fixed bearings. Fig. 6 is a longitudinal vertical section of the modification shown in Fig. 5.

It is the purpose of my invention to produce a convenient, simple, and easily-operated manual-power ironing-machine, and the particular features of my improvement will be hereinafter described in the claims.

In carrying out my invention, A represents a suitable frame.

B is my polishing-iron.

C is the ironing-board.

D is a support upon which the ironing-board is mounted.

E represents suitable guides upon the frame for the support D.

F represents a frame pivoted at *f* and actuated by a foot-lever *F'* through the medium of a connecting-rod *f'*.

G represents a friction-roller mounted on a crank-shaft *g* and supported by said frame F. A crank *g'* serves to actuate the said friction-roller.

H is a perforated gas-pipe whereby the polishing-iron may be heated, and this may be supplied in any way with gas—as, for instance, by means of a gasoline-tank *H'* and any ordinary vapor-generator.

The operation of the primary parts of my

machine will now be understood. The article to be ironed is adjusted upon the ironing-board and the ironing-board shifted beneath the polishing-iron. Pressure is then applied by the foot-lever *F'* to force the board up snugly against the polishing-iron by the pressure of the friction-roller G. Then by turning the crank *g'* back and forth this friction-roller causes the ironing-board to reciprocate back and forth beneath the polishing-iron until the article is suitably ironed and polished. The ironing-board is properly padded with rubber and cloth in the usual way or in any suitable manner. The guides E are depressed somewhat along their middle portions beneath the polishing-iron at *e*. The purpose of this depression is to permit the forward end of the ironing-board to enter under the polishing-iron a sufficient distance to allow the cloth to pass under with it without the liability of being crimped back upon itself, the guides at their extremities serving to hold the rear end of the board as it starts forward and serving to hold the forward end of the board as it starts backward beneath the iron. The support D is provided at its sides with wings *c*, which confine those portions of the article that are not being acted upon by the polishing-roll and prevent the same from becoming soiled or torn by dragging over any parts of the machinery. When the foot is not upon the treadle *F'*, the weight of the frame and friction-roller causes the friction-roller to drop away from the ironing-board support, leaving it free to be shifted back and forth by hand. The polishing-iron B at its extremities is housed within the framework and is held in any desired position by providing its housing in an oval form, permitting vertical adjustment and holding the same in adjustment by the use of three set-screws—one above and two below—operating from within the iron against the housing. By this means the polishing-surface may be adjusted to any desired level and regulated properly with respect to the ironing-board and prevented from revolving as well.

While I show a simple arrangement of elements for reciprocating the board by means of which the ironing-board is raised against the polishing-iron by the same friction-roll

used to reciprocate it, the same result may be accomplished by drawing the non-revoluble iron down against the board and in turn pressing it against the friction-roll to secure friction to reciprocate the board, and I would have it understood that my claims cover such a construction as an equivalent of that shown in the first sheet of the drawings. Fig. 5 shows this modification, in which the table may rest on the roller and within its guides, while the polishing-iron may be depressed by the tilting frame and foot-lever. I prefer the construction where the friction-roller is elevated; but this modification may be used.

In Fig. 5 the friction-roller G is mounted in fixed bearings, while the non-revoluble polishing-iron B is mounted in boxes having a vertical movement in the frame. These boxes may be connected in any way desired with the frame F², so that the operation of the tilting frame by the means of a foot-lever will depress the polishing-iron onto the ironing-board, and thus increase the pressure of the traveling support on the friction-roller G sufficiently to induce frictional contact between the support and the roller for operating the support when the roller is revolved. This modification is also shown in section in Fig. 6. In this form of device the treadle F' and connecting-rod f' are as those heretofore described. I, however, secure to the center of the frame or lever F² the actuating-arms L, having on their upper ends yokes L', which project above rectangular bearing-blocks for the iron B. Interposed between the frame A and the lower face of the bearing-blocks are the coiled springs M, which normally tend to force the iron B up when the pressure on the lever is removed.

What I claim is—

1. In an ironing-machine, the combination, with a frame, of a non-rotatable hollow polish-

ing-iron, means for interiorly heating the iron, a friction-roll below the iron, means for rotating the roll, a traveling support between the iron and roll, actuated by the roll, an ironing-board on the support, normally out of contact with the iron, and levers for forcing the iron and board into engagement, substantially as described.

2. The combination, with a non-revoluble polishing-iron, of an ironing-board mounted upon a support, and a friction-roller for actuating the same and pressing the ironing-board into contact with the polishing-iron, and depressions *e* along the middle portions of the guides for said support, substantially as and for the purposes described.

3. In an ironing-machine, the combination, with a frame having bearings at its upper edges, of a cylindrical polishing-iron non-rotatable in operation, adjustably held in said bearings, means for heating the iron interiorly, a reciprocating ironing-table mounted upon the frame, a revoluble friction-roll below the table, and a lever for forcing the polishing-iron and table into engagement, substantially as described.

4. In an ironing-machine, the combination, with a frame having elongated bearings at its upper end, of a polishing-iron immovable in operation adjustably located in said bearings, means for heating the iron interiorly, a reciprocating ironing-table mounted on the frame, a friction-roll below the table, means for actuating the roll, and a lever for forcing the polishing-iron and table into engagement.

In testimony whereof I sign this specification in the presence of two witnesses.

FRANK D. ADAMS.

Witnesses:

WELLS W. LEGGETT,
DELL J. BROWNE.