(No Model.)

H. E. SMITH.

IRONING MACHINE.

No. 457,676. Patented Aug. 11, 1891.

Fig. 1.

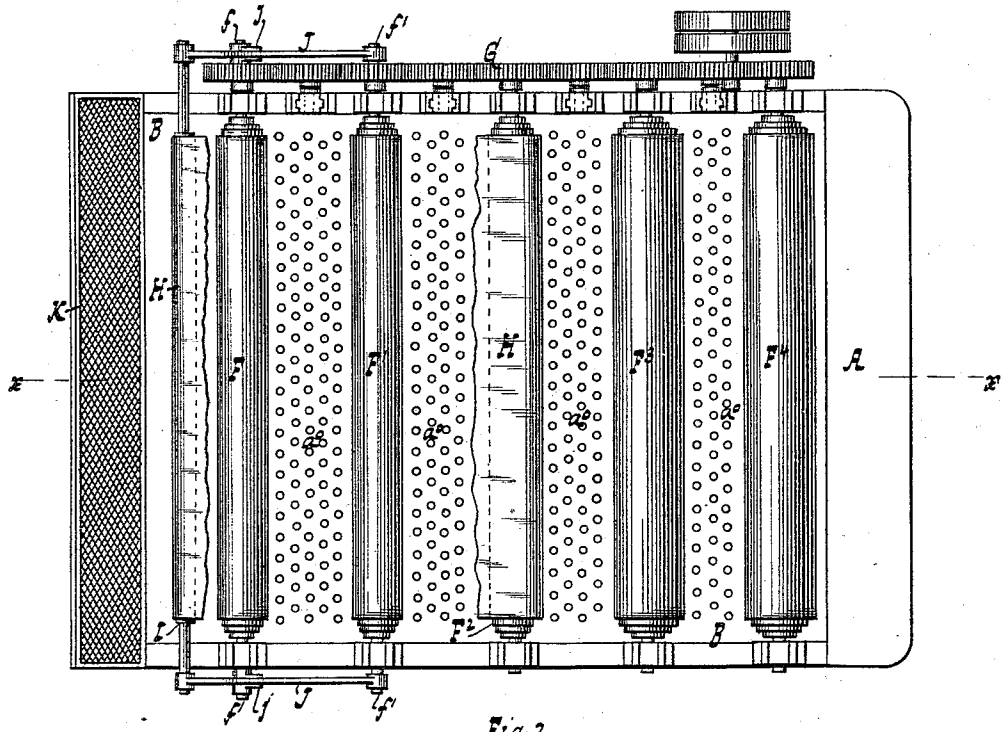


Fig. 2.

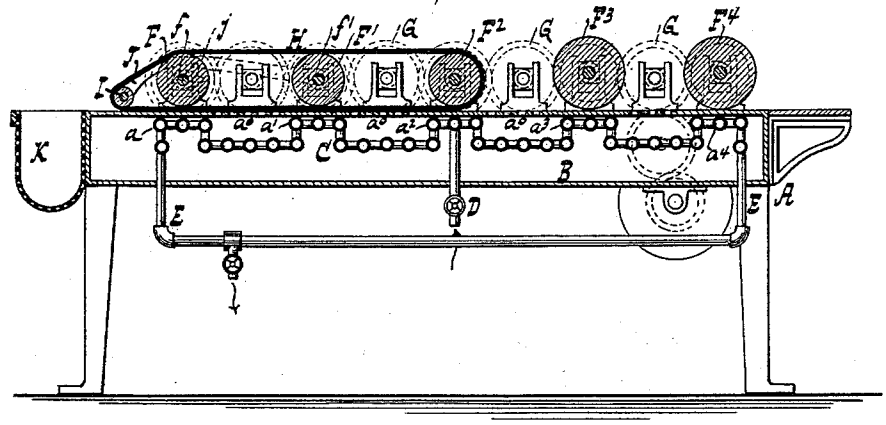


Fig. 3.



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UNITED STATES PATENT OFFICE.

HAMILTON E. SMITH, OF NEW YORK, N. Y.

IRONING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 457,676, dated August 11, 1891.

Application filed April 11, 1891. Serial No. 388,579. (No model.)

To all whom it may concern:

Be it known that I, HAMILTON E. SMITH, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Ironing-Machines, of which the following is a specification.

This invention relates to an ironing-machine, the peculiar construction of which is pointed out in the following specification and claims, and illustrated in the accompanying drawings, in which—

Figure 1 represents a plan or top view. Fig. 2 is a longitudinal vertical section on line x x, Fig. 1, and Fig. 3 is a detail side view of one of the swinging arms and its actuating-cam.

In the drawings, the letter A designates a frame, in which is firmly secured a box B, the top of which is divided into solid sections $a\ a'\ a^2\ a^3\ a^4$, with intermediate perforated sections a^0. In the interior of the box B are situated the heating-pipes C, which are supplied with steam through a pipe D, and from which the condensed water flows off through the pipes E E. Over the top of the box B are situated a series of apron-supporting rollers F F′ F^2, and polishing-rollers F^3 F^4, all of which rollers are geared together by cog-wheels G, and over the rollers F F′ F^2 is stretched the endless apron H. These rollers are so placed that the lower branch of the endless apron bears upon the top of the heating-box B, and said apron is kept taut by the gravitating feed-roller I, which is mounted in the ends of two arms J J, swinging on the ends of the shaft f' of the roller F′. On the ends of the shaft f of the roller F are mounted cams $j\ j$, which act upon the arms J J, so that during each revolution of the shaft f the feed-roller I is raised up for a short time and the articles to be ironed can be placed beneath it. The rollers F F′ F^2 hold the apron H in close contact with the solid sections $a\ a'\ a^2$ of the top of the heating-box, so that the articles to be ironed in being carried along by the apron are pressed and prevented from wrinkling, and during the time when said articles are carried over the perforated sections a^0 of the top of the heating-box they are exposed to currents of heated air, so that they become gradually dry. The rollers F^3 F^4 are made to move with a greater superficial velocity than the apron H, so that they exert a polishing action upon the articles to be ironed. In the example shown in the drawings this effect is produced by making the polishing-rollers F^3 F^4 of greater diameter than the rollers F F′ F^2, which carry the apron; but they can be of any desired diameter and geared with said rollers in any suitable manner, so that they move with a greater superficial velocity than the apron.

The articles to be ironed are taken from the basket K.

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

1. The combination, with the heating-box having a top divided into solid sections and perforated sections, of an endless apron H, a series of rollers arranged to hold said apron close upon the solid sections of the top of the heating-box, and a gravitating feed-roller I, substantially as described.

2. The combination, with the stationary heating-box B, of a series of apron-supporting rollers journaled above the top surface of the stationary heating-box, an endless apron stretched over the rollers and arranged to travel in close contact with the top surface of the box, a gravitating feed-roller, a polishing-roller journaled over the top surface of the heating-box, and means for revolving the polishing-roller with a greater superficial velocity than the endless apron, substantially as described.

3. The combination, with the heating-box B, of an endless apron H, a series of rollers arranged to hold said apron down upon the top of the heating-box, a gravitating roller I, and a cam acting to raise the gravitating roller, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

HAMILTON E. SMITH.

Witnesses:
J. VAN SANTVOORD,
E. F. KASTENHUBER.