(No Model.)

H. E. SMITH.

IRONING MACHINE.

No. 457,734. Patented Aug. 11, 1891.

Fig. 1.

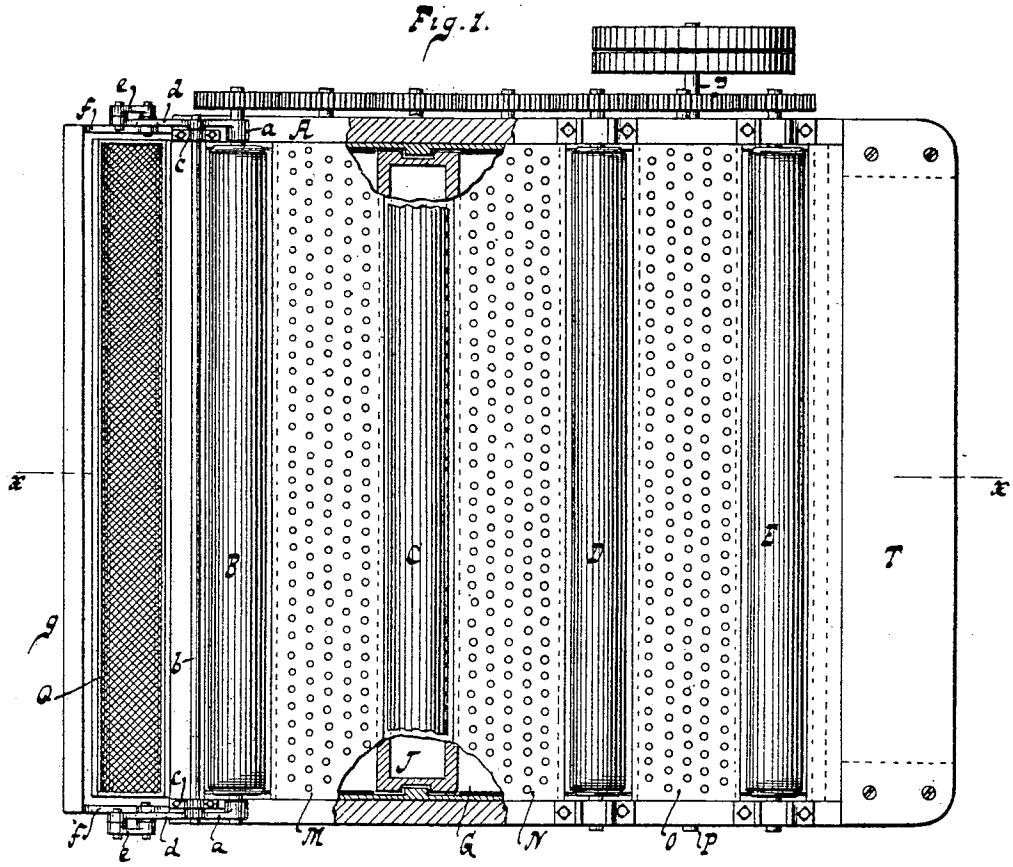
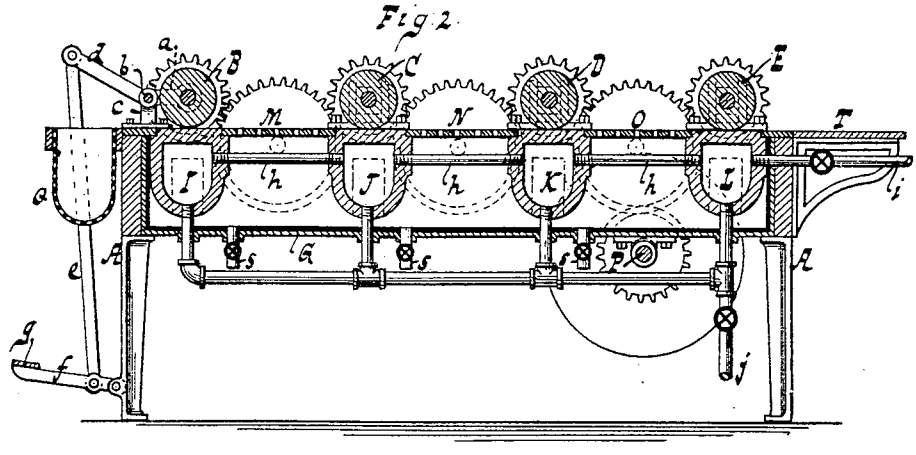


Fig. 2.



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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. 457,734, dated August 11, 1891.

Application filed December 11, 1890. Serial No. 374,347. (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 with parts broken away. Fig. 2 is a longitudinal vertical section along line *x x*, Fig. 1.

In the drawings, the letter A designates a frame which supports the bearings for a series of rollers B C D E, and in said frame is secured a hot-air box G, which is covered at the top, as will be presently explained. In the interior of the box G are situated the heating-chambers I J K L, which are connected to each other by the pipes *h* and supplied with steam or other heating medium through the pipe *i*. A pipe *j*, which connects with the several heating-chambers, serves to draw off the condensed water if steam is used as a heating medium. The heating-chambers are situated directly beneath the rollers B C D E, and their tops are solid, while the spaces between the heating-chambers are occupied by perforated plates M N O. The rollers B C D E are geared with each other and with the driving-shaft P, so that a positive motion is imparted to them from the driving-shaft.

The clothes to be ironed are taken from a basket Q, and in order to be able to introduce the same conveniently between the roller B and the top of the first heating-chamber I the roller B is raised up by means of a treadle sufficiently to allow the goods to be passed under the roller B. By the action of the rollers the clothes or goods are carried over the heating-chambers and over the perforated plates M N O, and in being carried over the perforated plates they are dried by the dry hot air and are polished while in their passage over the solid tops of the heated chambers, and by this alternate drying and polishing the best results are obtained and the labor and expense of previous drying of the clothes can be dispensed with. After the clothes have been carried over the last heating-chamber they pass upon a table T in a condition fit to be folded and put away.

The supply of fresh air for the hot-air box G is obtained through the openings *s* in the bottom of the box, and by providing said openings with valves the inflow of air into the box can be regulated as desired.

The bearings of the roller B are formed in arms *a a*, which extend from a rock-shaft *b*. This rock-shaft has its bearings in standards *c*, which rise from the frame A, and it connects by arms *d*, rods *e*, and levers *f* with the cross-bar *g*, so that when this cross-bar is depressed the roller B is raised. The roller B need not be raised so high as to lift it out of mesh with its driving-gear; but if said roller should be raised to an excessive height, such excessive rise is of no moment, since on the descent of the roller it will again come into mesh with its driving-gear.

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

1. The combination of a series of rollers B C D E, the hot-air box G, and the heating-chambers situated in said box, substantially as described.

2. The combination of a series of rollers B C D E, the hot-air box G, the heating-chambers situated in said box directly beneath the rollers B C D E, and the perforated plates M N O intermediate between the heating-chambers, substantially as described.

3. The combination, with a series of rollers B C D E, of a series of heating-chambers I J K L, one beneath each of the rollers, connecting-pipes *h* between the heating-chambers, and perforated plates M N O, substantially as described.

4. The combination, with a series of rollers B C D E, of the hot-air box G, having inlets *s*, the heating-chambers in said box, and the perforated plates or covers M N O for the box, substantially as described.

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

HAMILTON E. SMITH.

Witnesses:
W. C. HAUFF,
E. F. KASTENHUBER.