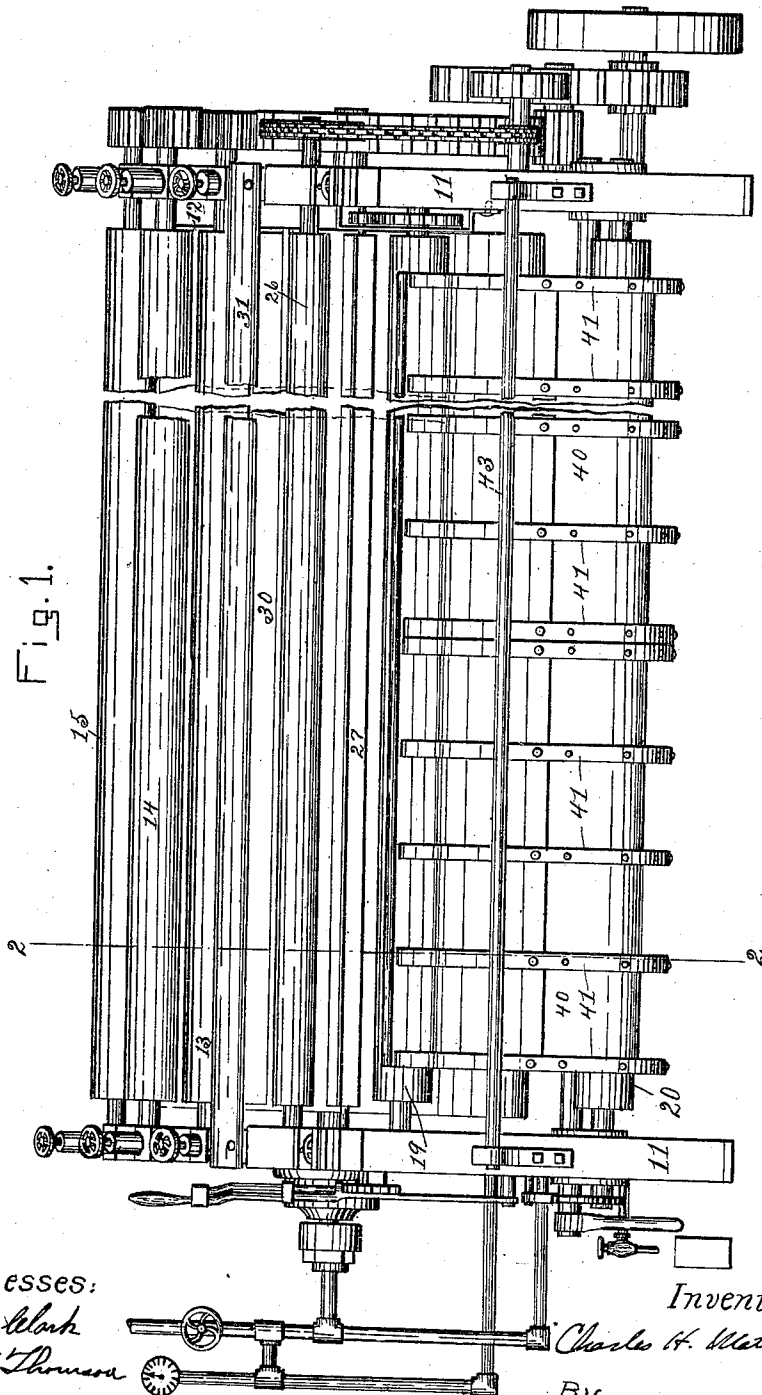


C. H. MATTICE.
IRONING MACHINE.
APPLICATION FILED AUG. 3, 1910.

996,104.

Patented June 27, 1911.

2 SHEETS—SHEET 1.



Witnesses:

J. B. Clark
H. E. Thomson

Inventor

Charles H. Mattice

By

John Cooper

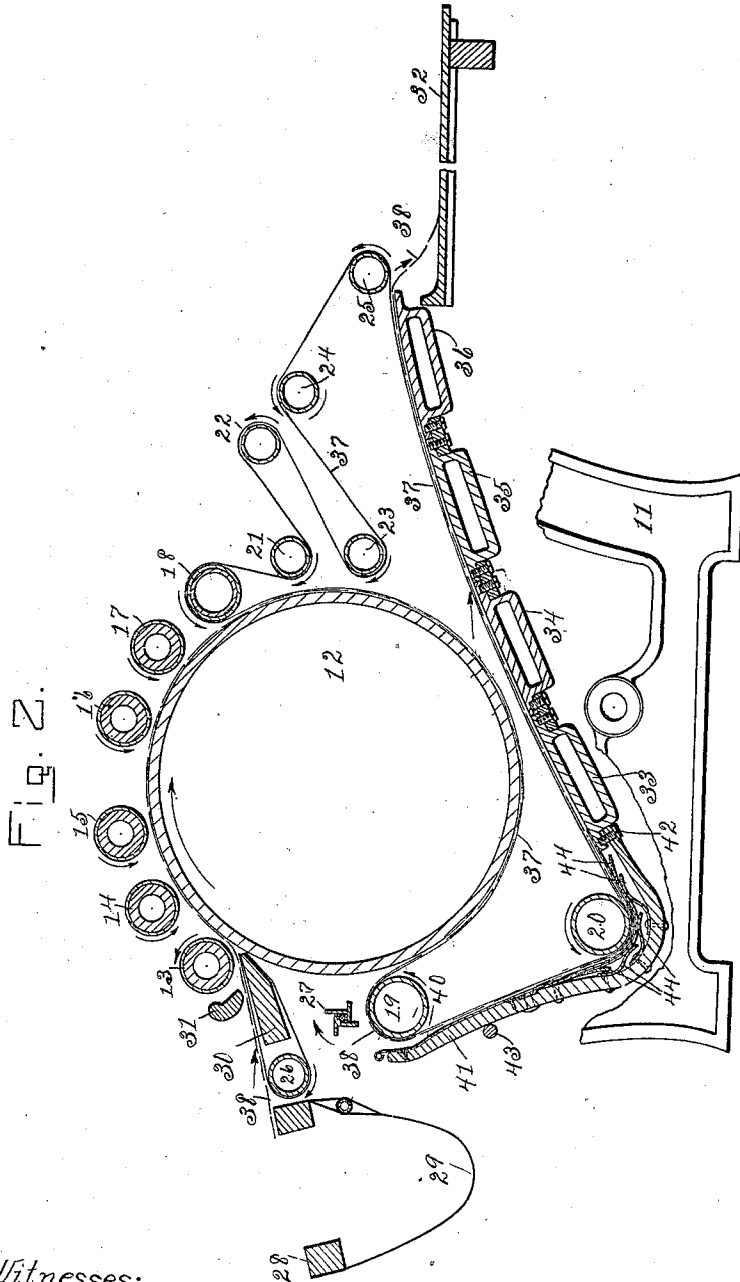
Attorney.

C. H. MATTICE.
IRONING MACHINE.
APPLICATION FILED AUG. 3, 1910.

996,104.

Patented June 27, 1911.

2 SHEETS—SHEET 2.



Witnesses:

J. B. Black
H. E. Thomson

Inventor

Charles H. Mattice

By

W. L. Cooper
Attorney.

UNITED STATES PATENT OFFICE.

CHARLES H. MATTICE, OF TROY, NEW YORK, ASSIGNOR TO ADAMS LAUNDRY
MACHINERY COMPANY, OF TROY, NEW YORK, A CORPORATION OF NEW
YORK.

IRONING-MACHINE.

996,104.

Specification of Letters Patent. Patented June 27, 1911.

Application filed August 3, 1910. Serial No. 575,283.

To all whom it may concern:

Be it known that I, CHARLES H. MATTICE, a citizen of the United States, and a resident of Troy, Rensselaer county, New York, have invented certain new and useful Improvements in Ironing-Machines, of which the following is a specification.

My invention relates to ironing machines, and particularly to such machines as are used for "flat work," as bed and table linen, napery and the like. Its object is to provide a new and improved support for the work during its travel through the machine, and in addition to materially increase the heating and drying surface. I attain these objects by the means, or the equivalents of the means, described in this specification and particularly pointed out in the claims.

In the drawings, Figure 1 is a front view of a machine containing a preferred embodiment of my invention; Fig. 2 is a partly diagrammatic transverse section thereof through the plane 2—2, Fig. 1.

11 designates the frame or standard of the machine, in which is mounted for rotation the steam cylinder 12, as well as the padded pressure rolls 13, 14, 15, 16 and 17, the apron drive roll 18, the apron carrying rolls 19 and 20, the spreader roll 21, the tightener roll 22, the idler rolls 23, 24 and 25, the tape feed roll 26, and the guide roll 27. The frame also supports the bar 28 for the hopper 29, the feed table 30, over which run the tapes carried by roll 26, the finger guard 31, the delivery table 32, and a plurality of steam chests 33, 34, 35 and 36. The goods carrying apron 37 passes around rolls 18 to 25 inclusive, around the lower surface of steam cylinder 12, and along the upper faces of steam chests 33, 34, 35 and 36. The path of the articles to be dried and ironed, as they pass through the machine, is indicated by the dash line 38. The direction of movement of all the moving parts and articles is indicated by arrows, Fig. 2. Fig. 1 of the drawings also shows parts of the steam connections, driving mechanism, etc., which, together with the parts already described and numbered, form no part of the present invention, being well known in the art, and require no further description.

It will be noted that the work, *i. e.*, the pieces to be ironed, is positively supported in its entire path of travel through the machine, except between the carrying rolls 19

and 20, where it tends to fall away from the apron 37. Here the goods tend to fall away from the apron; and here it has formerly been customary to support them by a series of parallel tapes, which I have found in practice to be both ineffective and troublesome, as permitting the corners or edges of the articles to pass between them and as being easily torn or broken. My invention consists in substituting for these tapes or the like a substantially rigid sheet 40, preferably of metal, and advantageously of zinc, by reason of its heat conducting capacity. This sheet extends the entire width of the apron 37, and in its other dimension approximately from the upper carrying roll 19 down to and around the lower surface of roll 20, and overlaps the edge of the proximate steam chamber 33. It is secured to and supported by a series of curved bars 41, which are screwed at 42 to the flange of the chest 33, and are further supported by a rod 43 bracketed to the frame 11 of the machine. A plurality of leaf springs 44, secured to each of the bars 41, serve to hold the lower curved end of the sheet 40 bearing against the roll 20, the apron 37 and the articles to be ironed of course passing therebetween. By slightly separating the upper edge of the sheet 40 from the periphery of the roll 19, as shown in Fig. 2, the goods pass easily between the sheet and the apron.

The operation of the machine is apparent from an inspection of the drawings. The goods to be ironed are dropped loosely in the hopper 29. They are then taken, one by one; by the operator, who spreads out the forward edge of each piece on the feed table 30, where it is carried forward by the tapes, past the finger guard 31, and around the steam cylinder 12, first, under the series of heated pressure rolls 13 to 17, then around the lower portion of the cylinder, being held thereto by the apron 37. Each piece then passes over the roll 19, being prevented from displacement by the guide 27, between the inwardly inclined portion of the apron and the sheet 40, by which it is supported and guided until it begins its travel over the upper faces of the steam chests 33 to 36, over which it is dragged by its frictional contact with the apron, until it finally lands on the delivery table 32.

The apron 37 and the goods being both highly heated by contact with the steam cyl-

inder 12, communicate a large part of this heat to the sheet 40, which thus forms an additional drying surface. In the old construction, where the tapes were employed, this heat was permitted to radiate into the room and against the limbs of the operator. The sheet 40, therefore, serves three purposes, a screen for the operator, an added drying surface, particularly preventing the goods from being chilled while passing from the hot cylinder to the hot steam chests, and a complete support for the goods during this part of their travel. When therefore in the claims I designate the guide sheet as "unprovided with heating means", I intend to distinguish it from such parts, as the cylinder, rolls and steam chest, as are positively heated by steam, gas, electric resistance, or the like, the sheet being of course heated secondarily by the apron and the goods, as already stated.

It will be understood that my invention is not limited to the particular material named, nor to the mechanical construction shown and described. It is also clear that, while I have described the cylinder, pressure rolls and chambers as being steam heated, gas or any other practicable heating agent may be employed as desired.

What I claim is:

1. In an ironing machine, a heated cylinder; pressing rolls; an apron; two apron carrying rolls separated from each other and one above the other; and a guide sheet unprovided with heating means extending between said last named rolls, said guide sheet being approximately of the width of said apron and adapted to support the work carried thereby.

2. In an ironing machine, a heated cylinder; pressing rolls; an apron; two apron carrying rolls separated from each other and one above the other; and a guide sheet un-

provided with heating means extending between said last named rolls and curved at its lower end to embrace the lower portion of the lower of said rolls, said guide sheet being approximately of the width of said apron and adapted to support the work carried thereby.

3. In an ironing machine, a heated cylinder; pressing rolls; an apron; two apron carrying rolls separated from each other and one above the other; and a spring supported guide sheet extending between said last named rolls, said guide sheet being approximately of the width of said apron and adapted to support the work carried thereby.

4. In an ironing machine, a heated cylinder; pressing rolls; an apron; two apron carrying rolls separated from each other and one above the other; a heated chest beneath said cylinder; and a guide sheet unprovided with heating means extending between said last named rolls, around the lower portion of the lower of said rolls and overlapping the proximate edge of said chest, said guide being approximately of the width of said apron and adapted to support the work carried thereby.

5. In an ironing machine, a heated cylinder; pressing rolls; a work carrying apron; two apron carrying rolls separated from each other and one above the other, said rolls having such relative position that the work on that portion of said apron passing between said rolls tends to fall therefrom; and a guide sheet unprovided with heating means extending between said last named rolls and bearing against said apron, whereby the work is retained thereon.

CHARLES H. MATTICE.

Witnesses:

GEO. L. COOPER,
M. SLATER.