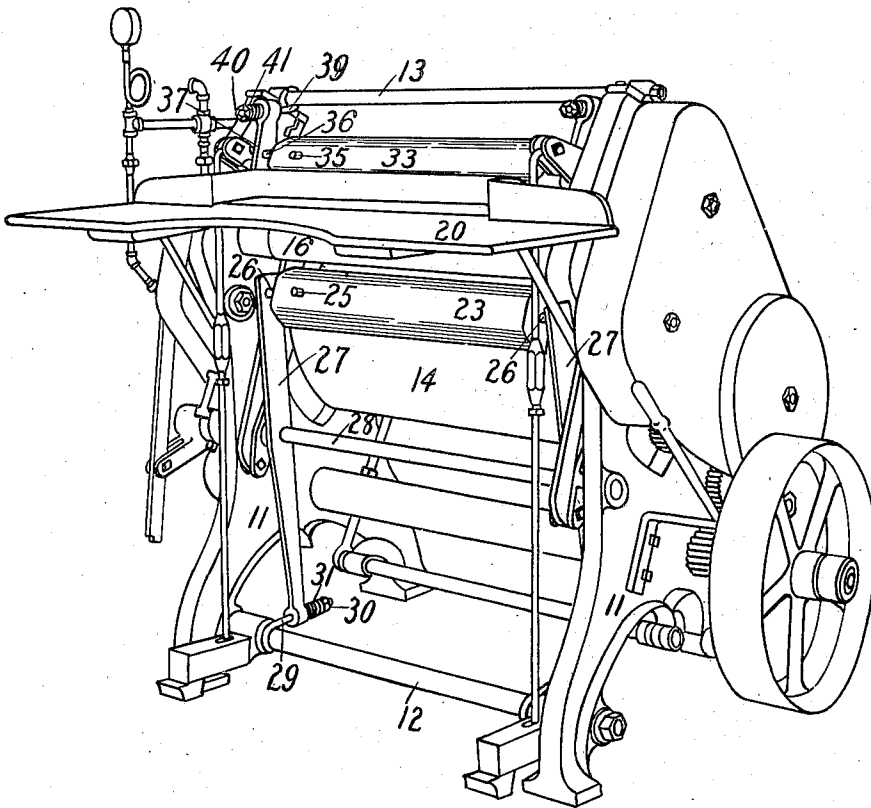


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Patented Mar. 14, 1911.
2 SHEETS—SHEET 1.

Fig. 1.



Charles H. Mattice
INVENTOR

WITNESSES:

Arthur J. Glass

John J. Brice

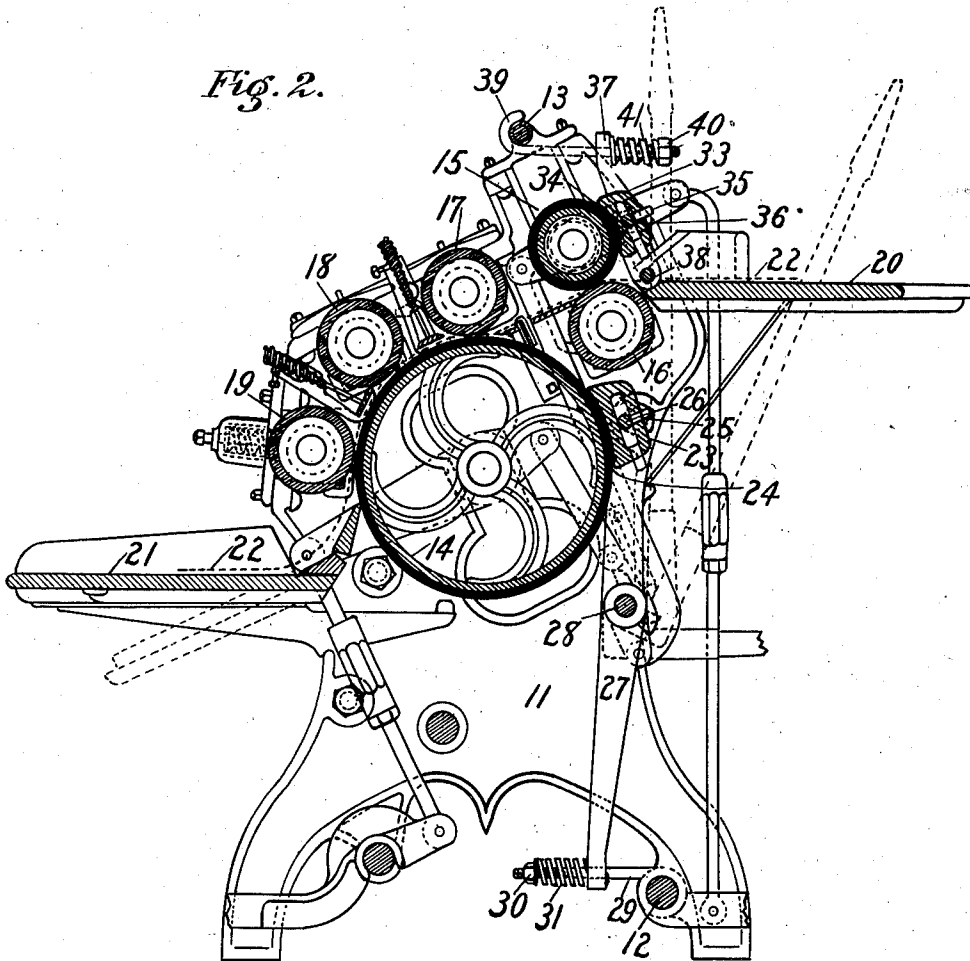
BY *Geo. L. Dyer*
ATTORNEY

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WITNESSES:
Arthur J. Glass.
John J. Birge

Charles H. Mattice

INVENTOR

BY *John J. Birge*
ATTORNEY

UNITED STATES PATENT OFFICE.

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

IRONING-MACHINE.

986,729.

Specification of Letters Patent. Patented Mar. 14, 1911.

Application filed February 3, 1910. Serial No. 541,862.

To all whom it may concern:

Be it known that I, CHARLES H. MATTICE, a citizen of the United States, residing at No. 3 George street, in the village of Green Island, Albany 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 or mangles, such as are used for ironing collars, cuffs and other laundried articles. It is intended to increase the efficiency and capacity of such machines by providing novel, additional heating means to the padded rolls against which the articles to be ironed are forced during the operation.

Other objects and features of my invention will be described in this specification and pointed out in the claims.

In the drawings, Figure 1 is an elevation in perspective and Fig. 2, a mid-length, transverse, vertical section of a machine embodying my invention.

The old and well known parts of the machine, including the frame standards 11, 11, cross rods 12, 13, and others, main or lower padded roll 14, upper padded roll 15, hot rolls 16, 17, 18, 19, feed table 20, delivery table 21, means for rotating the rolls, means for heating the hot rolls by the introduction of steam or otherwise, means for adjusting the presser of the rolls, form no part of the present invention and for that reason require no elaborate description. It is understood that the path of travel of the articles to be ironed, indicated by the dotted line 22, leads from the feed table 20, between the rolls 15 and 16, thence between the padded roll 14 and the hot rolls 17, 18 and 19 to the delivery table 21; and that the rolls 14 and 15 are covered with several thicknesses of cloth or felt, which acts to absorb the moisture driven from the articles by the heat of the rolls 16 to 19. By the evaporation of this moisture from the exposed parts of the surface of the rolls 14 and 15, *i. e.*, from the padding or covering thereon, they are considerably chilled.

My invention consists in providing means for directly heating this covering on one or both of the rolls 14 and 15, whereby, by reason of the additional moisture evaporated therefrom and of the higher temperature at which they are maintained, the efficiency of the machine and the rapidity of

its operation is greatly increased. The preferable means for securing this result consists of a heated body maintained in constant contact directly with the surface of the padded roll. This body should extend for the entire efficient length of the roll, and may be heated by steam, gas, or otherwise as desired. Its particular shape is non-essential to my invention, but it is advantageous to provide a considerable contacting surface with the roll.

I will proceed to describe the particular example of my invention illustrated.

23 is a hollow metal body or shoe, having a concave face 24, the arc of which corresponds to that of the padded roll 14, with which it is adapted to contact. It is provided with an opening 25 for connecting with a steam pipe, not shown, which pipe preferably has a flexible connection or universal joint to permit the movement of the shoe as hereafter described. The shoe 23 is mounted on end trunnions 26, each of which engages in a bar 27 pivotally mounted on a cross rod 28 of the machine frame. Through an eye at the lower end of each bar 27 passes freely a bent rod 29, which hooks over a cross rod 12 of the machine, and is threaded at its free end to engage with a nut 30, between which and the end of each bar 27 is a spring 31, so that the shoe 23 may be both yieldingly and adjustably pressed against the roll 14. It will be noted that the heating body or shoe 23 is placed as near as the conformation of the machine, *i. e.*, the position of the hot roll 16, will permit to the beginning of the path of travel of the articles to be ironed; so that, as far as possible, the heat applied is conserved to its useful purpose.

As shown, a second heating body or shoe 33 is applied to the upper padded roll 15, the shoe having a suitably concaved face 34, steam connection 35 and end trunnions 36, each of which engages in a bar 37, the lower end of each of which is pivoted on a cross rod 38, while its upper end has an eye through which passes a hooked rod 39 engaging with a cross rod 13 and being provided with a nut 40 and a spring 41, as before described and for a like purpose.

The operation of the device will be readily understood from the description already given and from an inspection of the drawings.

It will be seen that the padded covering of the roll, in the present instance two of such rolls, over or under which the work passes, is provided with an external source of heat maintained in constant contact therewith; that, as shown, this source of heat is a heated metal body adapted to cover a considerable segment of the roll; that this body may be supplied with steam or other heating agent from the same source as the hot rolls of the well known machine; and that this body may be yieldingly pressed against the roll covering to any desired extent.

By the phrase "constant contact," as used to express the relation of the external heated bodies, as 23 and 33, with the padded roll or rolls, I of course intend a contact uninterrupted during the operation of the machine by the passage between the roll and the body of any of the articles which are being ironed. Such heated body, one or more, is entirely independent of the hot ironing rolls, *e. g.*, those marked 16, 17, 18 and 19, well known in the art, and has no direct ironing function.

It is obvious that many mechanical changes may be made in the device without departing from my invention.

What I claim is:

1. In an ironing machine, a padded roll; an ironing roll and a heated metal body independent of said ironing roll and having a concave face fitting against a substantial segment of said padded roll and in constant contact therewith.

2. In an ironing machine, a padded roll; an ironing roll; and a non-rotatable heated metal body independent of said ironing

roll and in constant contact with said padded roll; said heated body being outside of the path of travel in which the articles to be ironed pass over said padded roll, but adjacent to the beginning of such path of travel.

3. In an ironing machine, a padded roll; and a heated metal body having a concave face fitting against a substantial segment of said roll and in constant contact therewith, said body being positioned adjacent the beginning of the path of travel of the articles to be ironed over said roll.

4. In an ironing machine, a padded roll; an ironing roll; a heated non-rotatable metal body independent of said ironing roll and outside of the path of travel in which the articles to be ironed pass over said padded roll; and means for holding said body in yielding contact with said padded roll.

5. In an ironing machine, a padded roll; an ironing roll; a heated non-rotatable metal body independent of said ironing roll and outside of the path of travel in which the articles to be ironed pass over said padded roll; and adjustable means for holding said body in contact with said padded roll.

6. In an ironing machine, a plurality of padded rolls; and a plurality of heated metal bodies, at least one for each of said rolls, each of said bodies having a concave face fitting against a substantial segment of the roll and in constant contact therewith.

CHARLES H. MATTICE.

Witnesses:

GEO. L. COOPER,
JOHN T. BIRGE.