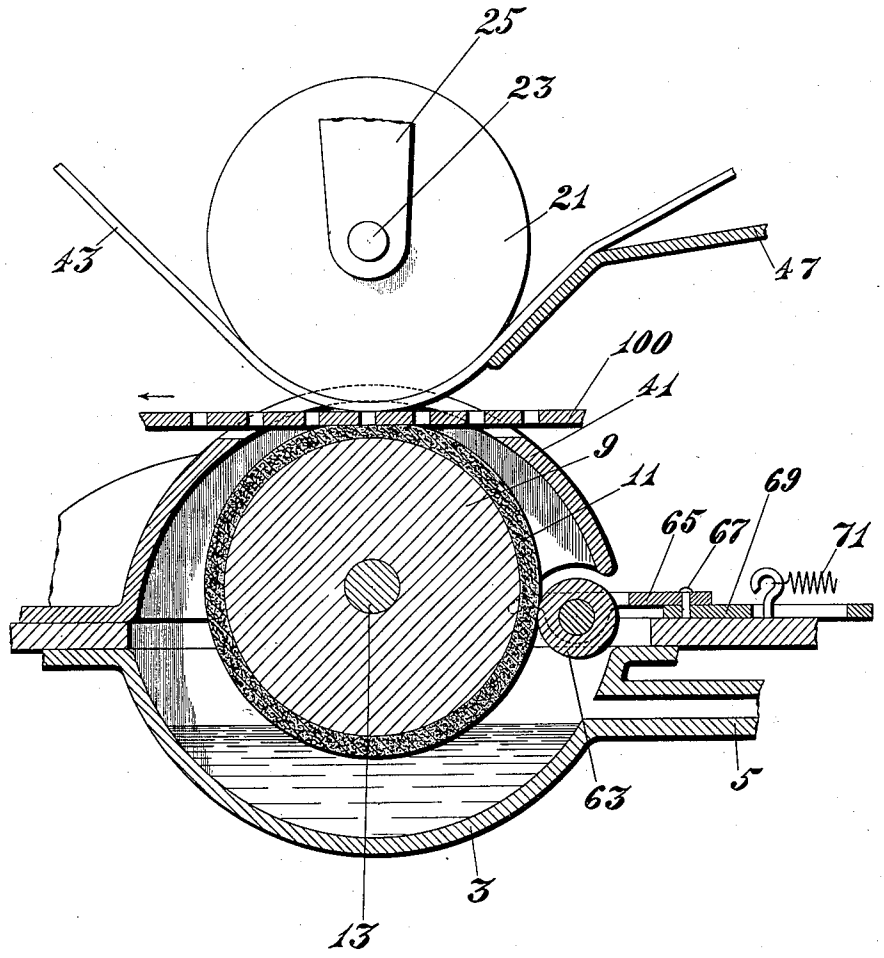
L. J. BAZZONI.

METHOD OF INKING PARTS OF UPPERS OF BOOTS AND SHOES.

APPLICATION FILED NOV. 1, 1917.

1,285,903. Patented Nov. 26, 1918.



INVENTOR.

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METHOD OF INKING PARTS OF UPPERS OF BOOTS AND SHOES.

1,285,903. Specification of Letters Patent. Patented Nov. 26, 1918.

Original application filed March 16, 1916, Serial No. 84,621. Divided and this application filed November 1, 1917. Serial No. 199,658.

To all whom it may concern:

Be it known that I, LEWIS J. BAZZONI, a citizen of the United States, residing at Swampscott, in the county of Essex and State of Massachusetts, have invented certain Improvements in Methods of Inking Parts of Uppers of Boots and Shoes, of which the following description, in connection with the accompanying drawings, is a specification, like reference characters on the drawings indicating like parts in the several figures.

This invention relates to a method adapted for use in the manufacture of boots and shoes, and is herein described as practised in applying coloring matter, referred to in the trade as "ink", to the edges of pieces of upper leather and to the edges or walls of perforations in pieces of upper leather which are to be used in the manufacture of boots and shoes. For convenience the invention will be described in connection with the application of ink to certain parts of shoe tips.

It is customary to form along that edge of a shoe tip which is to be stitched to the vamp a row of ornamental perforations. Since leather is commonly colored by a dye or ink which does not thoroughly permeate it, the edges or walls of these perforations are of a different color from the display side of the leather. For example, in a tip which is black on the display side, the walls of the perforations are often light colored. It has been customary heretofore to dip the perforated margin of the tip in an ink of the color of the display side of the leather and then to wipe off from said display side the surplus ink. Again, although in the higher priced shoes the edge of the tip along which it is stitched to the vamp is commonly folded to present a finished appearance, in the cheaper grades of shoes this folding operation is not carried out. The tip, therefore, has a raw edge which should be colored to match the display side of the leather; and the same dipping and wiping operations, which have been referred to above in connection with the perforations, have been employed to color this raw edge.

There is no objection to the application of coloring matter or ink to the flesh side of the tip since it is concealed in the finished shoe, but it is desirable to prevent the ink from reaching the display side.

The general object of the present invention is to devise an improved method of applying ink or other coloring material to selected surfaces of stock, such as unfinished edges or unfinished walls of perforations in the stock, for any desired purpose of which that explained above will serve as an example.

In one of its aspects the invention comprises pressing the portion of the stock adjacent to the selected surfaces to be colored into a spongy, liquid-carrying member in such manner that the ink or other coloring matter is directed to the selected surfaces. By this procedure the ink is caused to rise and coat the edge of the stock or the walls of the perforations or other surfaces which it may be desired to coat.

In another of its aspects the invention comprises applying to one side of the stock a surplus of liquid and forcing the surplus toward the other side of the stock to coat the selected surfaces. As has been explained above, it is desirable to prevent the liquid from reaching the display side of the stock; and accordingly the further step of protecting the display side of the stock from the application of liquid may be carried out if desired. Conveniently the stock may be pressed between a spongy, liquid-carrying member and a pressing member which is protected by impervious or absorbent sheet material.

Although the invention may be practised by the aid of hand tools, it is advantageous in making commercial use of the method to practice it by means of a machine such, for example, as that illustrated in the drawing.

Referring now to the accompanying drawing,—

The figure is a sectional view of a portion of a machine by which the present method may be carried out.

Carried by a suitable base is a receptacle 3 which may be filled through a pipe 5, the outer end of which is connected with a wide mouthed member, not shown, into which the ink may readily be poured. An applying roll 9 having a layer of felt 11 or other yielding bibulous material on its periphery is fast to one end of the shaft 13 which may be ro-

tated by any suitable mechanism. A presser in the form of a roll 21 is rotatably mounted on a shaft 23 carried between the arms of a yoke 25 and is forced down toward the roll by a spring, not shown. The tendency of this spring is to force the presser roll into contact with a portion of the periphery of the applying roll 9 which is exposed by reason of an opening in a guard 41.

In order to prevent the presser roll from coming into contact with the applying roll 9 a strip of material impervious to ink, such as heavy paper 43, runs from an idle spool, not shown, down over a guide 47, beneath the presser roll 21 and up to any suitable mechanism for winding it up and thereby continually presenting a fresh portion in operative position.

It is desirable that the proper amount of ink shall be presented to the stock by the applying roll 9; and to this end a regulating roll 63 is carried by a yoke 65 which is pivoted at 67 to a slide 69 said slide being urged continually toward the applying roll 9 by a spring 71. With this construction the regulating roll will exert an approximately uniform pressure to remove the surplus ink from the felt cover of the roll 9.

In the operation of the machine the roll 9 is rotated and the paper strip 43 is caused to travel slowly toward the left. The operator presents the tips or other pieces of stock one by one to the machine whereupon these pieces are carried through by the rotating applying roll. In the figure a perforated tip 100 is shown passing through the machine. The felt cover 11 of the applying roll is saturated with ink, and as the tip passes between the presser roll and the applying roll the effect of the pressure is to press the tip more or less into the spongy covering of the roll 9 thereby immersing the tip up to the plane of the upper side and to squeeze the ink from said cover and force it up into the perforations to color the walls thereof, the paper strip 43 preventing the ink from reaching the upper or display surface of the tip. The effect is practically the same when it is desired to apply ink to the raw edge of a piece of leather, the piece being forced more or less into the saturated yielding cover 11. A certain amount of ink is applied to the under side of the strip 43 but the moving strip prevents this ink from being transferred to the upper surface of the next piece of stock.

In the appended claims the expression "edge or edges" is intended to cover the walls of perforations as well as the true edge of a piece of stock, and the word "ink" is intended to cover coloring matter, stain or other liquid.

The apparatus for carrying out the method is not claimed herein but is claimed in application Serial No. 84,621, filed March 16, 1916, of which the present application is a division.

Having described the invention, what I claim as new and desire to secure by United States Letters Patent is:

1. A method of applying ink to selected localities only on a piece of stock which comprises pressing one surface of the stock against a spongy ink-carrying member to cause the ink to be squeezed from said member in such manner as to coat a surface which lies at an angle to that of the first-named surface.

2. A method of applying ink to selected localities only on a piece of stock which comprises pressing one surface of the stock against a spongy ink-carrying member to cause the ink to be squeezed from said member in such manner as to coat a surface which lies at an angle to that of the first-named surface and at the same time protecting a surface opposite to the first named surface from application of ink.

3. A method of applying ink to edges of a piece of stock which comprises applying to one side of the stock a surplus of ink and forcing the surplus toward the other side of the stock to coat said edges.

4. A method of applying ink to edges of a piece of stock which comprises applying to one side of the stock a surplus of ink, forcing the surplus toward the other side of the stock to coat said edges, and protecting said other side from application of ink.

5. A method of applying ink to the unfinished edge or edges of a piece of stock comprising passing the stock between a spongy, ink-carrying member and a pressing member which is protected from application of ink.

In testimony whereof I have signed my name to this specification.

LEWIS J. BAZZONI.