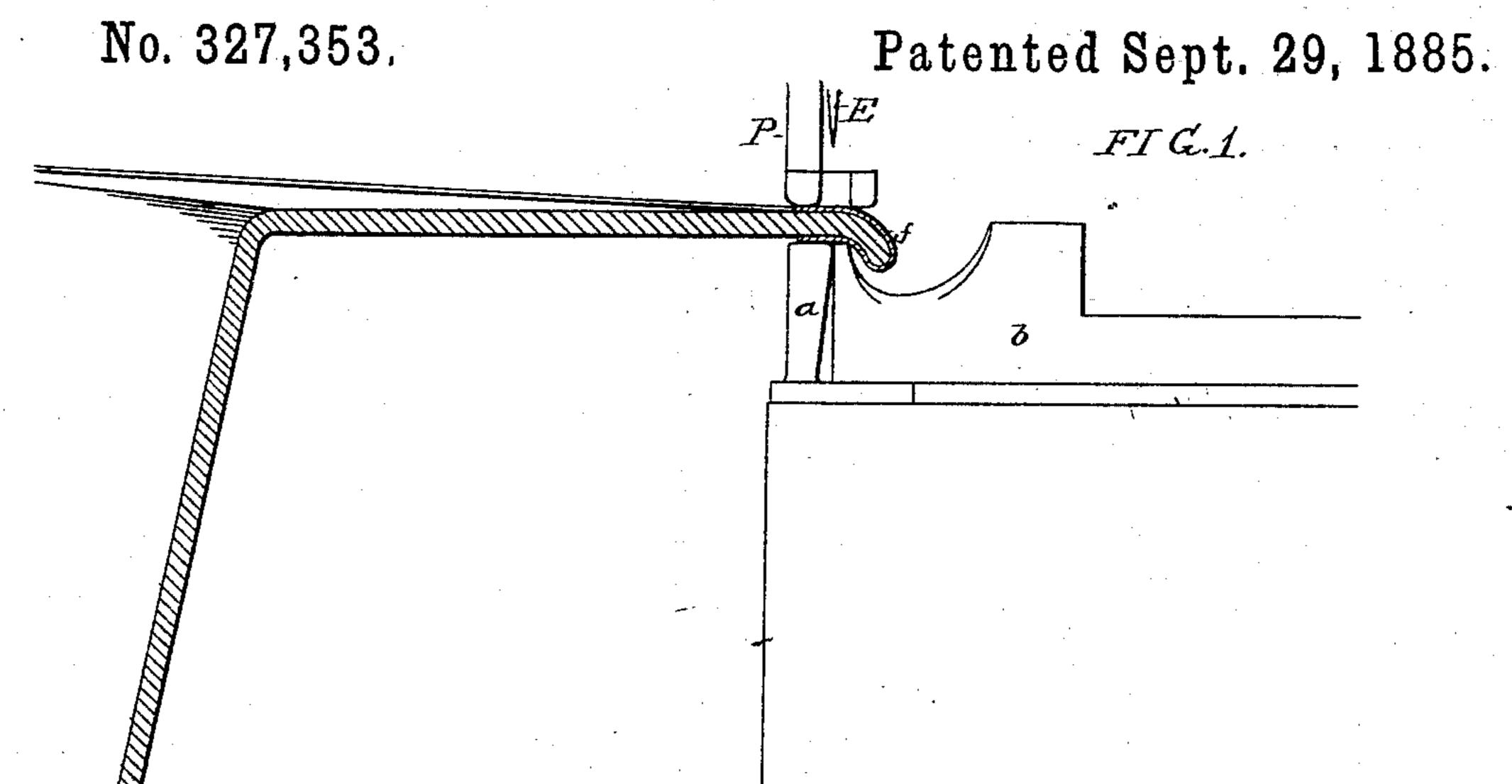
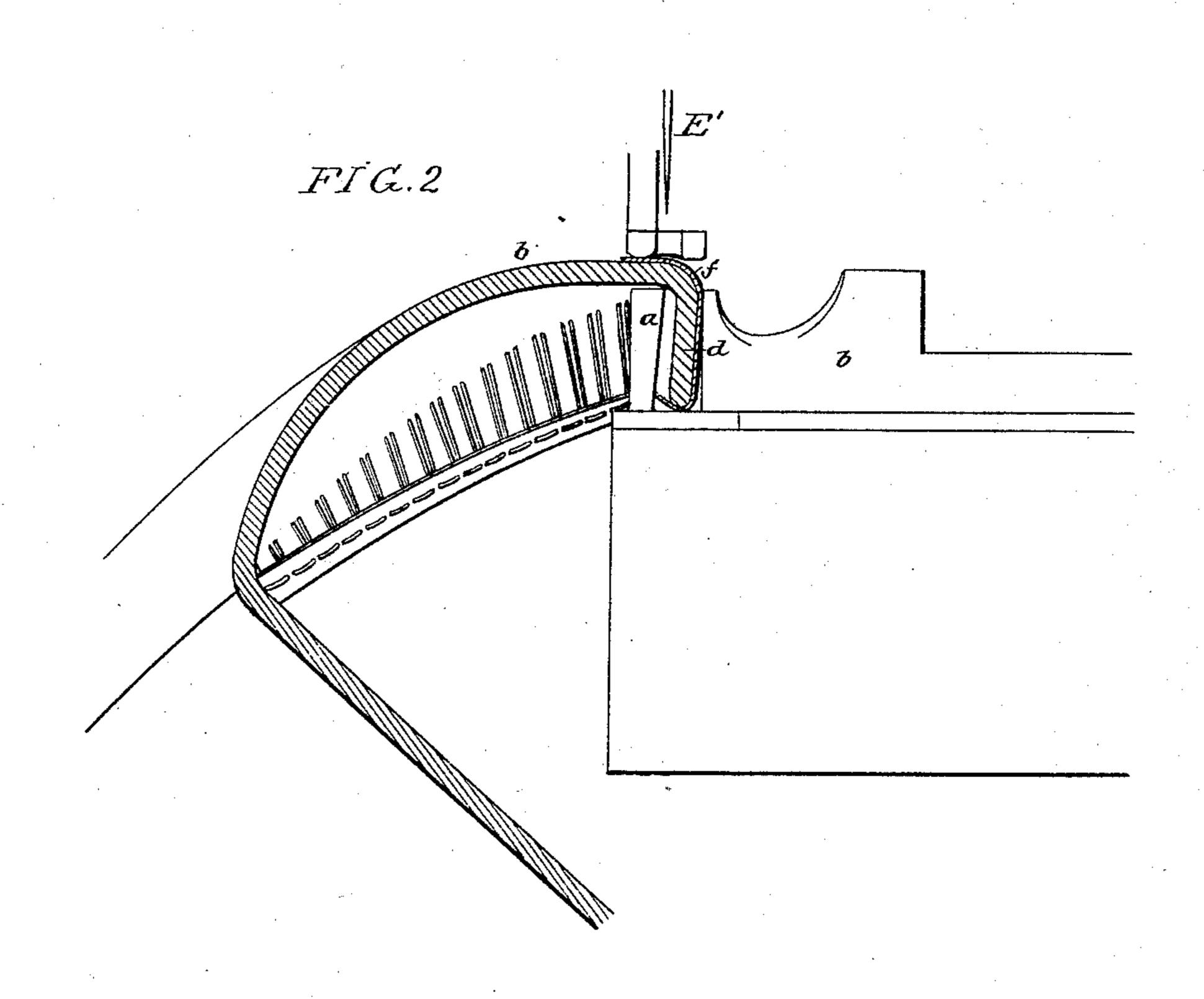
(No Model.)

J. THOMAS.

ART OF FINISHING OR BINDING THE EDGES OF HAT BRIMS.





Hitnesses: Henry Bossert Harry Drury John Thomas by his assyst Howan Song

United States Patent Office.

JOHN THOMAS, OF BRISTOL, ENGLAND, ASSIGNOR TO LEWIS FAIRBURN MARSH, OF SAME PLACE.

ART OF FINISHING OR BINDING THE EDGES OF HAT-BRIMS.

SPECIFICATION forming part of Letters Patent No. 327,353, dated September 29, 1885.

Application filed February 3, 1885. (No model.) Patented in England June 17, 1884, No. 9,074.

To all whom it may concern:

Be it known that I, John Thomas, a subject of the Queen of Great Britain and Ireland, and a resident of Bristol, England, have insented certain Improvements in the Art of Finishing or Binding the Edges of Hat-Brims, (for which I have obtained Letters Patent numbered and dated as follows: In England, dated the 17th day of June, 1884, and numbered 9,074,) of which the following is a specification.

The object of my invention is to secure the binding upon the curled or turned edge of a hat-brim more expeditiously and effectively than it can be done by hand; and this object I attain by sewing the binding upon the curled brim by means of a row of connected stitches, such as can be produced by a sewing-machine.

In the accompanying drawings, Figures 1 and 2 are diagrams illustrating my invention, Fig. 1 showing the method of sewing the binding upon the flat front and rear portions of the hat-brim, and Fig. 2 the method of sewing the binding upon the curled side portions of said brim.

The plan now generally adopted in securing the binding upon the brim of a hat is to first curl the brim and then apply the binding thereto and stitch it on by hand. The binding is usually of such a width that it will come over the top of the curl and slightly overlap the inner and outer edges of the same, there being an even overlap of the binding at the front and rear edges of the brim. No attempts have been made to sew such a binding with close connected stitches, the opposite edges of the binding being simply tacked or basted down by short stitches formed first on one edge and then on the opposite edge.

In some hats the binding overlaps more at the top of the brim than at the bottom at the front and back of the hat, and in this case two rows of stitches are required, one for each edge; but in this case, also, the stitches are merely tacking or basting stitches, and made by hand.

Another plan which has been adopted is to apply the binding to the edge of the brim before the latter is curled, the line of stitches passing directly through the brim and through the opposite edges of the binding; but this plan is objectionable, because it necessitates the use

of a very wide binding, and because the appearance of the binding is materially impaired by the subsequent operations incident to the curling and setting of the brim of the hat. I 55 discard both of these plans and sew the binding to the brim after the same has been "curled," the sewing being by connected stitches, instead of by the ordinary tacking or basting.

In a separate application for a patent, Serial No. 154,786, bearing even date herewith, I have described and claimed a machine for carrying out the process forming the subject of my present application; hence in the draw-65 ings I have shown only such parts of the machine as are necessary to a proper understanding of my invention, these parts being the needle E', presser-foot feed P, and the raised work-plate a b, the part a being fixed and the 70 part b movable.

The binding f evenly overlaps the flat front and rear edges of the brim of the hat; but at the sides, where the brim has its edge curled or bent, the greater portion of the width of 75 the binding is required to cover the top of the curl, leaving only a slight overlap at the inner and outer edges of the curl.

In sewing the binding upon the flat portions of the brim the latter rests upon the 80 upper edges of the portions a and b of the work-plate, and the stitches pass directly through the brim and through the upper and lower edges of the strip of braid which overlaps the same, as shown in Fig. 1.

On approaching the curled portion of the brim at the side of the hat, the portion b of the work-plate is retracted, and as the forward feeding of the hat-brim proceeds, owing to the action of the vibrating presser-foot, the body 90 of the hat is lowered so as to laterally tilt the brim and permit the $\operatorname{curl} d$ of the same to pass between the plates a and b, the needle then passing through the upper edge of the binding f through the "roll" b of the brim, just 95 below the upper or outer edge of the curl. and thence through the opposite edge of the binding which projects beyond the lower or inner edge of the curl, as shown in Fig. 2, the plate b, during this portion of the sewing op- 100 eration, bearing upon the curl and serving as a presser-foot.

The lateral tilting of the brim is a gradual one, first in one direction as the sewing proceeds from the end of the curl toward the center of the same, and then in the opposite discretion as the sewing proceeds from the center of the curl to the opposite end, the tilting being governed by the shape of the curl, and being such that the opposite edges of the binding will always be presented for penetration by the point of the needle, which moves in a straight path.

After the binding has been secured to one curled side of the brim the bar b is restored to the position shown in Fig. 1, and the sewing of the binding to the opposite flat edge of the brim is proceeded with, the parts being again changed from the position shown in Fig. 1 to that shown in Fig. 2, when the opposite curled side of the brim is being bound.

In preparing the binding for application to the hat, I prefer to take a piece of the proper length, and after securing its opposite ends together to apply the continuous strip thus formed to the edge of the brim and adjust it properly thereon before commencing the sewing operation.

The stitch forming mechanism may include, besides the needle and feeding presser-foot, a shuttle, looping-hook, or other well-known device for completing the formation of the stitch, the sewing being effected with either a single or double thread as the character of the stitch-forming devices demands.

In contradistinction to the usual plan of tacking or basting the binding upon the edge of the brim, my improved process effects the sewing of the binding by a row of connected stitches—that is to say, the thread or threads extend from one stitch to another upon the outer face of the binding.

The binding may be applied to the brim after the edge of the same has been curled, but be-

fore the side "roll" and front and rear "set" or depression have been formed therein, the latter operations being effected after the sew- 45 ing on of the binding.

The hat having the edge of the brim finished in the manner herein set forth is claimed as a new article of manufacture in a separate application, Serial No. 154,788, bearing even 50 date herewith.

I claim as my invention—

1. The mode herein described of imparting the finish to the edge of a hat-brim, the said mode consisting in first curling the edge of 55 the brim and then securing the binding material upon said edge by means of a row of connected stitches, substantially as specified.

2. The mode herein described of imparting the finish to the edge of a hat-brim, said mode 6 consisting in first curling the edge of the brim, then applying thereto an endless strip of binding, and finally securing the binding by a row of connected stitches, substantially as set forth.

3. The mode herein described of sewing the binding material upon the curled brim of a hat, said mode consisting in supporting the brim, feeding it forward to a reciprocating needle, and laterally tilting the brim as it is 7 being thus fed forward, as set forth.

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

JOHN THOMAS.

Witnesses:

W. E. PARRY,

Bristol Chambers, Nicholas Street, Bristol, England, Solicitor of the Supreme Court of Judicature in England.

W. R. Parry,
Bristol Chambers, aforesaid, Articled Clerk to
the said W. E. Parry.