

(No Model.)

C. G. IVES.

DEVICE FOR ATTACHING REEDS AND FLANGING HAT SWEATS.

No. 532,276.

Patented Jan. 8, 1895.

Fig. 1.

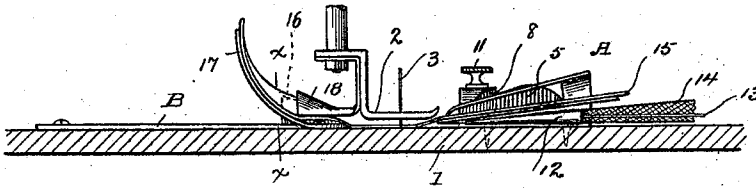


Fig. 2.

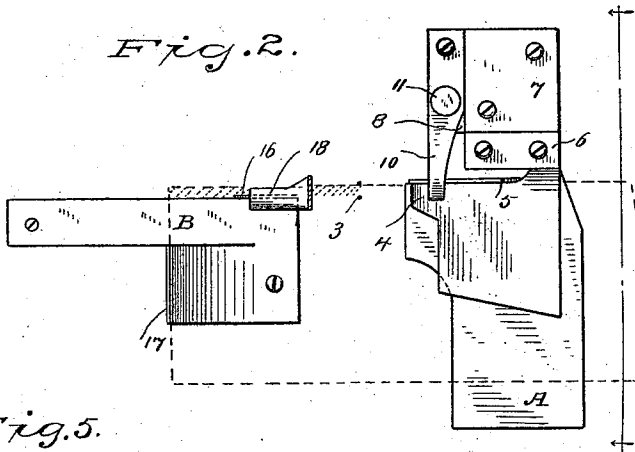


Fig. 3.

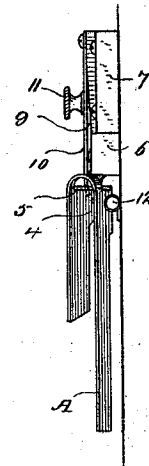


Fig. 5.

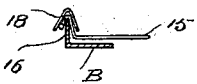


Fig. 4.

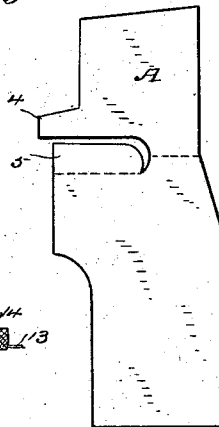


Fig. 6.

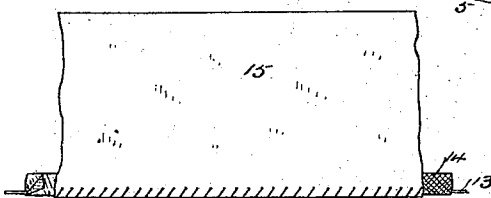
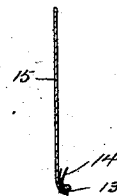


Fig. 7.



WITNESSES

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DEVICE FOR ATTACHING REEDS AND FLANGING HAT-SWEATS.

SPECIFICATION forming part of Letters Patent No. 532,276, dated January 8, 1895.

Application filed January 2, 1894. Serial No. 495,343. (No model.)

To all whom it may concern:

Be it known that I, CHARLES G. IVES, a citizen of the United States, residing at Danbury, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Devices for Attaching Reeds and Flanging Hat-Sweats; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to provide a device for covering reeds and attaching them to hat sweats and simultaneously therewith stretching the edges of the sweats and giving to them the necessary curvature to adapt them for attachment to hats, or as it is called in the art flanging the sweats, thereby combining the functions of two independent machines in one and dispensing entirely with the use of flanging machines. With this end in view, I have constructed the novel device which I will now describe, referring by numbers and letters to the accompanying drawings forming part of this specification, in which—

Figure 1 is a section of the bed plate of a sewing machine showing the entire device, also the presser foot and one needle of the sewing machine in elevation; Fig. 2, a plan view corresponding therewith; Fig. 3, a view as seen from the right in Fig. 2; Fig. 4, a plan view of the plate which when bent to shape forms a guide for the sweat and stretches the edge thereof; Fig. 5, a section on the line xx in Fig. 1 looking toward the right showing the manner in which the edge of the completed sweat is curved; Fig. 6, an elevation of a portion of a completed sweat, and Fig. 7 is a section corresponding therewith.

1 denotes the bed plate of the machine, 2, the presser foot and 3 the needles.

As the stitching mechanism forms no portion of my present invention I have not deemed it necessary to illustrate stitching mechanism in detail. In fact any ordinary or preferred stitching mechanism may be used. Heretofore in addition to the stitching mechanism for covering the reeds and attaching

them to hat sweats, another operation has been required, either by an independent machine or by hand to curve the lower edges of the sweats to adapt them to fit in hats, it being of course understood that the reed in use lies partially under the brim of the hat, that is, at the intersection of the brim and the crown, the sweat itself lying within the crown of the hat.

My novel device covers the reed in the ordinary manner and attaches it to the sweat, but previous to the attachment of the covered reed the edge of the sweat is stretched, and after the attachment of the covered reed the sweat is flanged, that is, the edge of the sweat has imparted to it the required curvature to adapt it to fit a hat perfectly without the loss of an instant's time in curving or shaping.

A denotes a plate which is blanked out from sheet metal as shown in Fig. 4. The essential features of this plate are a portion 4 which in the completed device acts as an edge stretcher for the sweat, and a portion 5 which acts as a guide to the sweat. It will of course be apparent that the exact shape of this plate is not of the essence of my invention. The plate is blanked out to approximately the shape shown in Fig. 4 and then curved over as clearly shown in Figs. 2 and 3 and is attached obliquely to a block 6 which is itself secured to the bed.

I have indicated plate A as secured to block 6 by means of solder but it may be secured thereto by screws or in any preferred manner. Block 6 is shown as secured to the bed plate by screws. In connection with block 6 I have shown blocks 7 and 8 which are also secured to the bed plate by screws. These blocks may if preferred be made in a single piece. Block 8 is preferably provided with an incline 9. See Fig. 3. At the rear end of this block I attach a spring 10 which bears upon edge stretcher 4, see Figs. 1 and 2, the pressure of the spring upon the edge stretcher being adjusted by means of a thumb screw 11 which passes through the spring and engages block 8.

12 denotes a tube through which the reed and cover pass and by which the cover is

closed about the reed before it is stitched to the sweat. This tube is attached to the bed plate by screws or in any suitable manner.

The position of the needles relatively to the parts just described is clearly shown in Figs. 1 and 2.

13 denotes the reed, 14 the cover therefor and 15 the sweat. It will be seen that the sweat passes over the lower portion of plate A and that the edge stretcher, see Fig. 1 in connection with Fig. 2, bears upon the upper side of the sweat at the edge and stretches said edge as it is drawn through, the reed and its cover passing through the tube which lies under plate A. Portion 5 is bent upward at right angles to the bed of the machine and serves as a guide for the edge of the sweat. When the sweat, reed and cover reach the needles the cover is stitched to the reed and the reed and cover are attached to the sweat in the ordinary manner. Just back of the presser foot is a plate B which is attached to the bed plate by screws. The special feature of this plate is a lip 16 the rear edge of which is highest and which runs out and intersects with the front edge of the plate. I also preferably provide this plate with a curved guide 17 the action of which is to curve the completed sweat upward and forward as indicated in Fig. 1. Acting in connection with lip 16 is a V shaped hood or former 18 which folds the edge of the completed sweat over the lip as clearly shown in Fig. 5, so that the sweat is perfectly flanged by the machine and left ready for attachment to the hat, it being simply required to cut the sweat to the required length to fit the hat in which it is to be placed.

When the sweat is placed in the hat the reed will lie at just the required position at the intersection of the brim and the body, and the sweat will lie smoothly within the body. Guide 17 curves the sweat upward and forward so that the operator in addition to attending to the feeding of the sweat, reed and cover is also enabled to clip the completed

sweats so that they may be fitted to hats of different sizes with but very little waste.

It will of course be understood that the details of construction are not of the essence of my invention and may be greatly varied within reasonable limits without departing from the principle of my invention.

I claim—

1. In combination with suitable stitching mechanism, a plate A having a bent over portion between which and the plate the sweat band is fed, an edge stretcher adapted to bear on the band, a spring bearing on the edge stretcher and a guide plate 5 extending at right angles to the plate A to guide the edge of the band, substantially as described.

2. In combination with suitable stitching mechanism, a plate A having a bent over portion between which and the plate the sweat band is fed, an edge stretcher, a spring bearing above on the edge stretcher, a guide plate 5 extending at right angles to the plate A to guide the edge of the band, and a tube 12 for the cover and reed, substantially as described.

3. In combination with suitable stitching mechanism, a V shaped hood 18 attached to the presser foot, a plate B, a lip thereon extending into the V of the hood and a curved guide 17 whereby the sweat is flanged and guided upward and forward after it leaves the stitching mechanism, substantially as described.

4. The combination with suitable stitching mechanism, a guide for the sweat and a tube for the reed and cover, of edge stretcher 4 by which the edge of the sweat is stretched before the reed is attached thereto, and an inclined lip 16, and V shaped hood 18 by which the completed sweat is flanged ready for attachment to a hat.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES G. IVES.

Witnesses:

F. W. HODGE,
L. BOGARDUS.