METHOD OF MAKING BOUND BUTTONHOLES

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This invention relates to a method of making bound buttonholes.

An object of the invention is to provide an improved and novel method of making bound buttonholes which is efficient, simple and which can readily be practiced by one furnished with clear, simple and easily understood instructions.

Another object is to provide an improved and novel method for producing bound buttonholes, the practice of which results in bound buttonholes of improved quality and wherein the buttonholes are properly formed, are completely bound and reinforced and present a finished and neat appearance.

Further and additional objects and advantages residing in the invention will become apparent hereinafter during the detailed description which is to follow of a preferred embodiment of the invention, said description being considered with reference to the accompanying drawings forming a part of the description and disclosure of the present application and wherein.

Fig. 1 represents the first step of the method which includes cutting and positioning on the right or front side of the material to be provided with the buttonhole a reinforcing piece or strip of bias of the same or different material and attaching the reinforcing piece to the material by straight stitching which also marks the location of the buttonhole.

Fig. 2 illustrates the second step in the method and wherein a rectangular outline of the buttonhole is stitched by zigzag stitches on the reinforcing piece and material in the location of the buttonhole using the straight stitching of step 1 as a guide.

Fig. 3 illustrates the third step of the method which also is a stitching operation and includes straight stitching a rectangle around the zigzag stitches of Fig. 2.

Fig. 4 illustrates the fourth step of the method which is a cutting or slitting step.

Fig. 5 represents the fifth step of the method wherein the entire reinforcing piece is turned through the slit formed in the fourth step of the back side of the material and is taken looking at the front or right side of the material.

Fig. 5a is a view similar to Fig. 5 but is taken looking at the back or wrong side of the material after the reinforcing piece has been pushed through the slit to the back side from the front side of the material.

Fig. 6 illustrates the sixth step of the method wherein the reinforcing piece on the back side of the material is folded.

Figs. 7 and 8 are sectional views on an enlarged scale and taken, respectively, on lines 7—7 and 8—8 of Fig. 6 looking in the direction of the arrows.

Fig. 9 illustrates the seventh step of the method and is a view looking at the back or wrong side of the material and shows the folded reinforcing piece as stitched in the folded condition provided by step No. 6.

Fig. 10 is a view similar to Fig. 9 but looking at the front or right side of the material.

Fig. 11 shows the material or facing as folded over the buttonhole and basted in place and then cut or slit as was done for the right side of the buttonhole, and Fig. 12 illustrates the final step of folding the raw edges under and hand sewing the same in place around the buttonhole.

The material in which the bound buttonhole or buttonholes are to be formed is represented in the drawings at 15. The first step of the method includes cutting a strip of bias or reinforcing piece 16 approximately one and a half inches wide and approximately one inch longer than the desired buttonhole and then placing and pinning it upon the right or front side of the material 15 in the location wherein the buttonhole is to be formed. The reinforcing piece or strip of bias 16 may be of the same material as the material 15 or it may be of a different type of material than the material 15 but of the same color or it may be of a different color than the color of the material 15 so as to provide a bound buttonhole having a decorative contrasting color appearance. The right or front side of the strip of bias or reinforcing piece 16 is placed against the right or front side of the material 15. Then as indicated in Fig. 1, by dash lines 17 the location of the buttonhole is marked by straight stitching or basting the reinforcing piece or strip of bias 16 to the material 15.

Reference should now be had to Fig. 2 of the drawing wherein the second step of the method is illustrated looking at the right or front side of the material. This second step consists in using the straight line stitching 17 of step No. 1 as a location guide and then stitching or working rectangular outline smaller than the buttonhole with the usual narrow width zigzag stitches 18 which can be formed by a sewing machine using a buttonhole attachment for this purpose or by a sewing machine having built-in provision for zigzag stitching or by any other means usable for this purpose.

Step No. 3 of the method is shown in Fig. 3 looking at the right or front side of the material and consists of sewing with plain or straight stitches 19 a rectangular around the worked stitches 18. When this step has been completed step No. 4 illustrated in Fig. 4, looking at the front or right side of the material, is performed. This latter step consists of cutting in the strip of bias or reinforcing piece 16 and the material 15 a slit 20 extending longitudinally of the rectangular outline formed by the worked stitches 18. Step No. 4 also includes slitting the reinforcing piece 16 and the material 15 with diagonal slits 21 extending from each end of the longitudinal slit 20 diagonally outwardly to the corners of the rectangle defined by the plain stitches 19.

The next or fifth step of the method consists in pushing the entire reinforcing piece 16 through the slits 20 and 21 from the right or front side of the material 15 to the back or wrong side thereof. This condition is illustrated in Fig. 5 which is looking at the right or front side of the material 15 and wherein the reinforcing piece 16 is now located on the back or wrong side of the material 15, is shown in dash lines. The material between the slits 20 and 21 and the outline 19 also is moved to be positioned against the wrong or back side of the material 15. It is also illustrated in Fig. 5a where it is taken looking at the back or wrong side of the material 15 and wherein the reinforcing piece 16 is shown in full lines.

It will be understood that in pushing the reinforcing piece 16 through the slits 20 and 21 to the back side of the material 15 a rectangular opening 23 is produced in the material 15 and in the reinforcing piece 16 with the portions of the material 15 and of the reinforcing piece 16 having the zigzag stitches 18 and 19 also providing corded type welts in between the material 15 and the reinforcing piece 16. The welts adjacent to the lon-
3. The longitudinal sides of the opening 22 are of truncated conical configuration while the welts adjacent the ends of the opening 22 are of triangular configuration, all as indicated by the dash line 23 in Figs. 5 and 5a.

The reinforcing piece 16 which has been pushed through the central line 24 of the folded portions, as indicated by the dot and dash lines of Fig. 6, is now folded to provide two longitudinally extending portions 16a and 16b as indicated in Fig. 6. The folded portions 16a and 16b are turned over the longitudinally extending welts that are located on the opposite sides of the center line 24 of the folded portions. It is preferable to then baste the buttonhole closed at the center and thereafter machine stitch the triangular welts and the reinforcing piece together at each end of the buttonhole. The machine stitching just referred to is indicated in Fig. 9 by the stitch lines 25 as well as in Fig. 10 which is taken looking at the front of the material 15.

As indicated in Fig. 11, the material 15 is folded over the buttonhole on the wrong side to provide a facing 15a. This facing is then basted in place as indicated at 26. Then the facing 15a is cut in the same way as was the right or front side of the buttonhole to provide a center longitudinal cut 27 corresponding to the cut 20 and short diagonal cuts 28 at the ends of the cut 27 corresponding to the diagonal cuts 21.

The final step is illustrated in Fig. 12 and includes turning under the raw edges of the cuts 27 and 28 and hemming by hand sewing these edges in place around the buttonhole. The buttonhole is now finished neatly and can be pressed and the bastings removed and the wrong side will closely simulate the appearance of the right side of the buttonhole.

Although a preferred procedure for practicing the invention has been described and illustrated it will be understood that the invention is susceptible of such variations therefrom as come within the scope of the appended claims.

Having thus described my invention, I claim:

1. The method of making bound buttonholes in materials which comprises securing a reinforcing piece upon the right side of the material in the approximate desired location of the buttonhole, then marking the location of the buttonhole by straight stitching or basting the piece to the material, then employing the straight line stitching or basting as a location guide and zigzag stitching or working a rectangular outline smaller than the desired buttonhole, thenplain stitching a rectangle around the worked zigzag stitched outline, then cutting in the piece and the material and within the worked zigzag stitched rectangular outline a slit extending longitudinally and centrally of said outline and diagonal slits extending from the ends of the first slit to the corners of the plain stitched rectangle, then pushing the piece through the slits to the wrong side of the material, then folding the piece to provide two longitudinally extending portions separated along the longitudinal center line of the buttonhole and turned over the previously worked portions, and then stitching the worked portions and the reinforcing piece together at each end of the buttonhole.

2. The method of making bound buttonholes in materials which comprises securing a reinforcing piece upon the right or front side of the material in the approximate desired location of the buttonhole, then marking the location of the buttonhole by straight stitching or basting the piece to the material, then employing the straight line stitching or basting as a location guide and zigzag stitching or working a rectangular outline smaller than the desired buttonhole, then plain or straight stitching a rectangle around the worked zigzag stitched outline, then cutting in the piece and the material and within the worked zigzag stitched rectangular outline a slit extending longitudinally and centrally of said outline and diagonal slits extending from the ends of the first slit to the corners of the plain stitched rectangular outline, then pushing the piece through the slits to the wrong side of the material, then folding the piece to provide two longitudinally extending portions separated along the longitudinal center line of the buttonhole and turned over the previously worked portions, then stitching the worked portions and the reinforcing piece together at each end of the buttonhole, then folding the material over the buttonhole on the wrong side to provide a facing, then basting the facing in place, then cutting the facing to provide therein slits corresponding to the previously formed slits, and then turning under the edges of the slits in the facing and sewing or hemming the turned under edges so the wrong side of the buttonhole will simulate the front side thereof in appearance.

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