June 9, 1953 R. T. HANNA 2,641,388

DEVICE FOR USE IN MAKING BOUND BUTTONHOLES

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Fig. 1.

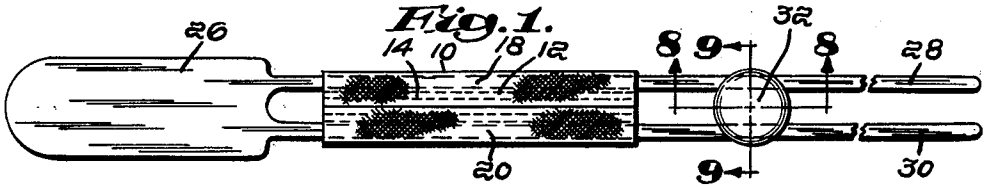


Fig. 2.

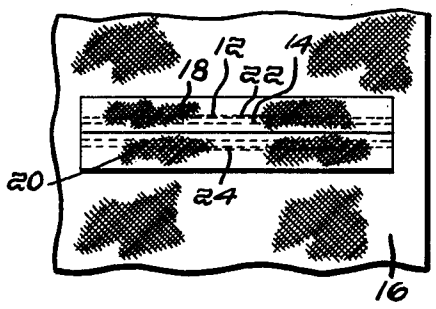


Fig. 3.

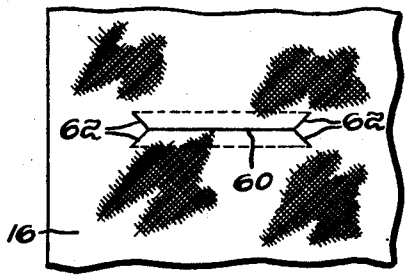


Fig. 4.

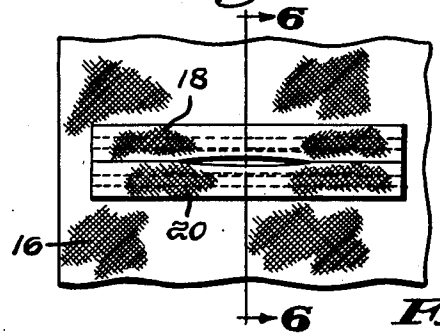


Fig. 5.

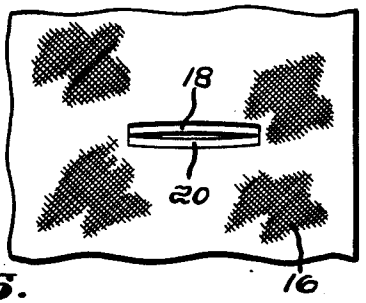
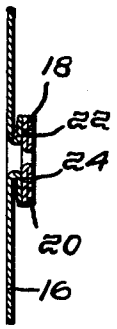


Fig. 6.



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Fig. 7.

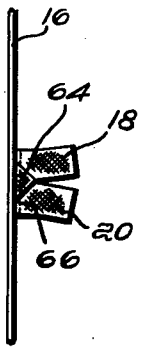


Fig. 8.

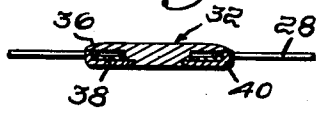


Fig. 9.

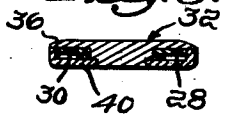


Fig. 10.

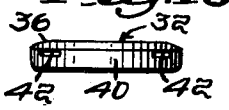
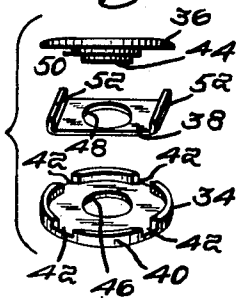


Fig. 11.



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DEVICE FOR USE IN MAKING BOUND BUTTONHOLES

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Application August 1, 1950, Serial No. 177,020

3 Claims. (Cl. 223—1)

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This invention relates to improvements in a device for use in making bound buttonholes.

My invention is particularly directed to a device which may be used in the home to assist in making perfectly formed bound buttonholes, or piped buttonholes, as they are sometimes called, usually made by the two-piece method. A long piece of the fabric strip is folded and stitched along its length parallel to and spaced from the folded edge. The long strip is then cut into pieces. The two pieces which are then stitched to the garment must be very accurately placed and stitched before the cut is made to form the buttonhole.

An object of my invention is to provide a tool or device which may be used to hold the fabric strips or the pieces of piping fabric in position as they are stitched to the garment in which a bound buttonhole is to be formed.

It is a further object of my invention to provide a tool which may be termed a divider having a pair of relatively long flexible fingers, each finger being relatively narrow in width so that it may be readily slid into the opening between the stitching and the folded edge of the pieces of piping, and the fingers being accurately spaced so that the pieces of piping will be set in correct position, and further to provide a locking slider which will hold the fingers against spreading.

Further objects and advantages of my improvements will be more readily apparent from the following description of a preferred embodiment thereof as illustrated in the accompanying drawings, in which:

Fig. 1 is a plan view of the tool used and showing a pair of fabric strips held in position by the tool;

Fig. 2 is a plan view of the outer face of a portion of a garment with the fabric strips to form the buttonhole attached;

Fig. 3 is a plan view from the reverse side of the fabric and showing the cuts which are made in the garment fabric;

Fig. 4 is a plan view from the reverse side of the fabric after the fabric strips have been turned through the opening;

Fig. 5 is a plan view from the front face of the garment fabric;

Fig. 6 is a transverse section taken on the plane indicated 6—6 in Fig. 4;

Fig. 7 is an end elevation showing the ends of the fabric strips turned up for the transverse stitching;

Fig. 8 is a vertical section taken on the plane indicated 8—8 in Fig. 1;

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Fig. 9 is a transverse section taken on the plane indicated 9—9 in Fig. 1;

Fig. 10 is a side elevation of the button; and

Fig. 11 is an exploded perspective view showing the parts which make up the buttonhole.

The first step in making my two-piece buttonhole is the stitching of a long narrow strip of folded piping material. The folded strip material is indicated 10 with a line of stitching 12 parallel to the folded edge. The line of stitching 12 should be accurately spaced from the folded edge. This portion of the strip from the stitched line 12 to the folded edge will be termed the lip. After making the line of stitching 12 a second line 14 may be stitched near the raw edge. This second line of stitching is an aid for trimming the raw edge of the strips and holds the edge better when the pieces are turned through the buttonhole opening. The strip material 10 is cut into short length pieces somewhat longer than the size of the buttonhole. The position of the buttonhole should be marked on the outer face of the garment fabric 16 in which the buttonhole is to be formed. A pair of strips 18 and 20 are stitched to the fabric 16 but the stitched lines 22 and 24 terminate short of the strips 18 and 20. It should also be noted that the folded edges of the strips 18 and 20 face outwardly.

One of the most important steps in forming a buttonhole in this manner is the accurate placing of the strips in position. I have devised a tool for this purpose, as shown in Fig. 1. The tool 26, which may be made of metal or plastic, has a pair of long flexible fingers 28 and 30 and the short sections of the folded strip material, such as the pieces 18 and 20, may be slipped on the fingers 28 and 30 and held in correct position as they are stitched to the garment fabric. In order to hold the fingers in exact parallel position, a button slider 32 is provided.

The fingers 28 and 30 are formed with a suitable width to be freely received in the lips of the pieces 18 and 20. The fingers 28 and 30 are spaced apart a distance approximately equal to twice the width of the lip. That is, the spacing is double the width of the stitched line 12 to the folded edge. It will be understood that the same tool may be used for making long or short buttonholes but in order to make buttonholes with larger lips a larger size tool will be required.

Figs. 8, 9 and 10 show the construction of the button slider 32. The button slider comprises a base plate 34, a cap 36 and an insert 38. The base is formed with a circular flange 40 having the openings 42 cut therein to receive the fingers

28 and 30. The cap is formed with a circular stud 44 which is press-fitted into the circular opening of the base member 34. Before assembling a cap on the base, the insert 38 is assembled having the opening 48 which is press-fitted on the circular disc 50 of the button 36. The insert has the turned up ends 52 which act as spacers and guides for the tongues 28 and 30.

Returning to the steps of forming the buttonhole, it will be understood that the pair of strips 18 and 20 are held on the tool 26 in exact parallel position as they are placed on the outer face of the garment. After the stitched lines 22 and 24 have been made, the garment 16 is turned and the cuts are made as shown in Fig. 3. A straight cut 60 is made to make the buttonhole and the diagonal cuts 62 are made at each end. The two folded strips 18 and 20 are then turned through the cut or slit 60 to the position shown in Fig. 4. Fig. 5 shows the front face of the fabric after the pieces have been turned through the opening 60 and it will be noted that the folded edges of the pieces 18 and 20 are visible. The stitched lines 22 and 24 are concealed by the folded edge of the garment 16. The sectional view of Fig. 6 shows more clearly the position of the parts after they are turned through the opening.

The next step involves making the transverse stitch across the ends of the strips 18 and 20 and through the triangular piece 64 which has been formed by the diagonal cuts 62. Fig. 7 shows the manner of turning up the ends and forming the transverse stitch 66.

It will be understood from the foregoing description that the tool or device which may be termed a bound buttonhole divider enables the accurate placement of the pieces of piping and therefore there is no fear of damaging the garment when the cuts are made. It is believed to be new, in making buttonholes, to provide a tool for holding the two buttonhole pieces in the correct position as they are stitched to the garment.

I claim:

1. A tool for use in making bound buttonholes comprising a handle, a pair of flat flexible fingers rigidly attached to and extending from said handle, said fingers being adapted to be received in and firmly hold strips of piping fabric, and a button slidably received on said fingers and adapted to hold said fingers in exact parallelism.

2. A tool for use in making bound buttonholes comprising a handle, a pair of flat fingers extending from said handle, each of said fingers having a width substantially equal to the lip of the buttonhole, said fingers being spaced apart a distance double the width of the buttonhole lip, said fingers being adapted to be received in and firmly hold the lips of the fabric pieces used to make the buttonhole.

3. A tool for use in making bound buttonholes which may be used to hold the buttonhole lips in place as they are sewed to the fabric of the garment comprising a flat member having a relatively short flat handle at one end and a pair of relatively long flat fingers extending from the handle, said fingers being of a suitable width to receive and firmly hold in position a pair of buttonhole lips, the space between the fingers being approximately double the width of one finger and a slide which may be slipped over the ends of the fingers after the buttonhole lips have been positioned on the fingers, whereby the tool may be held by the handle and the slide while the buttonhole lips are stitched to the fabric of the garment.

ROSE T. HANNA.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
928,424	Betts	July 20, 1909
1,082,333	Hughes	Dec. 23, 1913
1,129,415	Morgan	Feb. 23, 1915
2,091,922	Hamalainen	Aug. 31, 1937
2,318,804	Shannon	May 11, 1943
2,581,703	Reilly	Jan. 8, 1952