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BUTTONHOLE CONSTRUCTION

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8 Claims. (Cl. 24—202)

Present day buttonhole constructions comprise a coarse foundation thread or gimp that is laid around the edge of the buttonhole and is secured to the fabric by a fine overcast stitched covering thread. Such a buttonhole construction has several serious disadvantages. It permits longitudinal sliding movement of the foundation thread or gimp through the fine overcast covering thread, thereby distorting the buttonhole; and the fine covering thread is liable to break due to the wear thereon during the buttoning and unbuttoning operation and permit the gimp to be displaced and the edge of the buttonhole to become frayed and present an unsightly appearance. The object of the present invention is to devise a simple and easily constructed buttonhole construction that will overcome all of the above noted disadvantages of the present day buttonhole construction. The invention consists in the improved gimp and buttonhole construction and in the construction, combinations and arrangements of parts hereinafter described and claimed.

In the accompanying drawing, which forms part of this specification and wherein like symbols refer to like parts wherever they occur,

Fig. 1 is a face view of a piece of material provided with a buttonhole construction embodying my invention,

Fig. 2 is an enlarged fragmentary longitudinal section on the line 2—2 in Fig. 1 through one edge of the buttonhole construction,

Fig. 3 is an enlarged transverse section on the line 3—3 through one edge of the buttonhole construction,

Fig. 4 is a part side elevational and part longitudinal sectional view of a length of the foundation thread or gimp; and

Fig. 5 is a similar view of a modified form of foundation thread or gimp.

My buttonhole construction comprises a piece of fabric 1 having a buttonhole 2 cut therein, a coarse foundation thread or gimp 3 laid around the edge of said opening with its ends brought together and anchored at the small end of the buttonhole to said material by suitable stitching 4, and a fine overcast stitched covering or buttonhole thread 5 that is looped around said foundation thread or gimp and around the edge of the buttonhole opening and through said material.

According to the present invention, the foundation thread or gimp 3 is formed throughout the length thereof with a multiplicity of circumferential grooves 6 in which the thin overcast covering or buttonhole thread 5 is laid. By this arrangement, the overcast stitches of the fine

buttonhole thread 5 are interlocked with the coarse foundation thread or gimp 3 and thus prevent longitudinal sliding movement of said gimp through said overcast buttonhole stitches and wear and breakage of the thin buttonhole thread due to such movement. The overcast stitches of the buttonhole thread 5 seat in the circumferential grooves 6 in the foundation thread or gimp 3 preferably flush with or slightly below the level of the tops of said grooves, whereby the coarse, more wear resisting gimp relieves the fine buttonhole thread of the wear due to the buttoning and unbuttoning operations, thereby preventing breakage of the buttonhole thread, displacement of the gimp and the resulting distortion and fraying of the buttonhole. The circumferential buttonhole thread holding grooves 6 of the gimp 3 also serve to space the overcast buttonhole stitches 5 equal distances apart along the gimp, thus improving the appearance of the buttonhole construction. The gimp is further anchored to the material during the operation of pressing the same, which operation forces the portions of the material into the grooves of the gimp and thus provides an interlocking connection therebetween.

As shown in Fig. 4, the circumferentially grooved gimp or foundation thread 3 is preferably formed by helically winding alternately relatively thin and thick threads 7 and 8 around a central core member 9, the thin thread forming the bottom of the groove and the thick thread forming the sides thereof. As shown in Fig. 5, the gimp may be formed with longitudinally spaced annular grooves 6a that are impressed therein. The gimp or foundation thread 3 and the covering or buttonhole thread 5 may be made of any desired substance.

The phrase "multiplicity of circumferential grooves," as used in some of the claims, is intended to mean either the several turns or convolutions of the helical groove, or the separate longitudinally spaced annular grooves.

What I claim is:

1. A buttonhole construction comprising a piece of material having a buttonhole therein, a coarse foundation thread extending around the edge of said buttonhole and having a multiplicity of circumferentially grooved portions therein, and a thin buttonhole thread extending over said foundation thread and seating in the grooved portions thereof and securing the same to said material.

2. A buttonhole construction comprising a piece of material having a buttonhole therein, a

coarse foundation thread seating on said material around the edge of said buttonhole and having a multiplicity of circumferentially grooved portions therein, and thin overcast stitches extending over said foundation thread and seating in the grooved portions thereof and securing the same to said material.

3. A buttonhole construction comprising a piece of material having a buttonhole therein, a coarse foundation thread seating on said material around the edge of said buttonhole and having a multiplicity of circumferentially grooved portions therein, and thin overcast stitches extending over said foundation thread and seating in the grooved portions thereof and securing the same to said material, said stitches being disposed substantially flush with the tops of said grooved portions.

4. A buttonhole construction comprising a piece of material having a buttonhole therein, a coarse foundation thread extending around the edge of said buttonhole and having a helical groove therein, and a buttonhole thread extending over said foundation thread and seating in the groove thereof and securing the same to said material.

5. A buttonhole construction comprising a piece of material having a buttonhole therein, a coarse foundation thread extending around the

edge of said buttonhole and having a helical groove therein, and a buttonhole thread extending over said foundation thread and seating in the groove thereof and securing the same to said material, said foundation thread comprising a central core and alternate thick and thin threads wound helically around said core.

6. A buttonhole construction comprising a piece of material having a buttonhole therein, a coarse foundation thread extending around the edge of said buttonhole and having a helical groove therein and a buttonhole thread extending over said foundation thread and seating in the groove thereof substantially flush with the periphery thereof and securing the same to said material.

7. A non-metallic buttonhole foundation thread or gimp having a series of longitudinally spaced annular grooves pressed therein adapted to accommodate an overcast securing thread for said foundation thread or gimp.

8. A non-metallic buttonhole foundation thread or gimp comprising a central core and helically wound alternately arranged thick and thin threads that cooperate to form a peripheral helical groove adapted to receive an overcast securing thread for said foundation thread or gimp.

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