

(No Model.)

DE VER H. WARNER.
BUTTON STRIP.

No. 453,381.

Patented June 2, 1891.

Fig. 1.

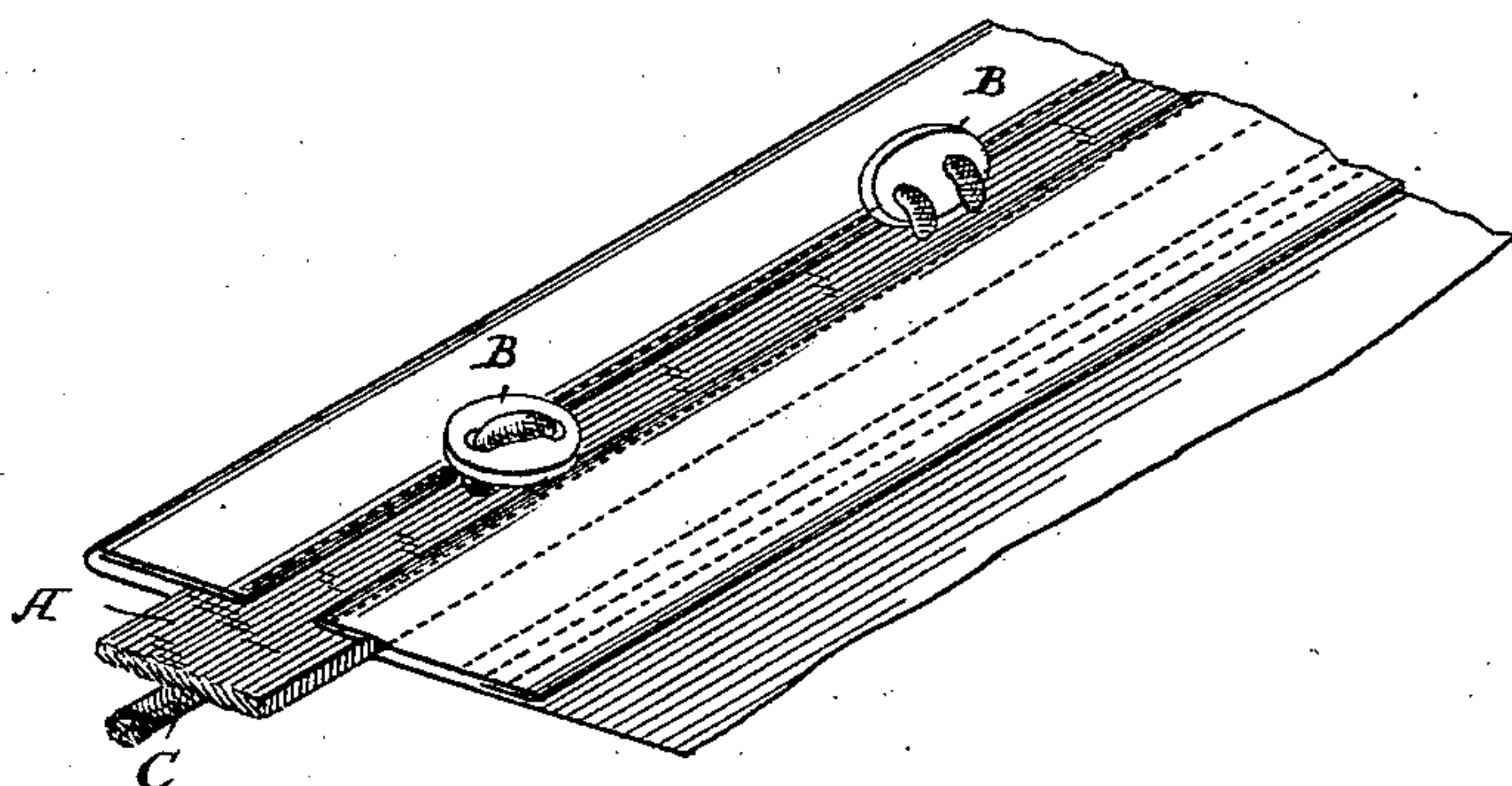


Fig. 2.

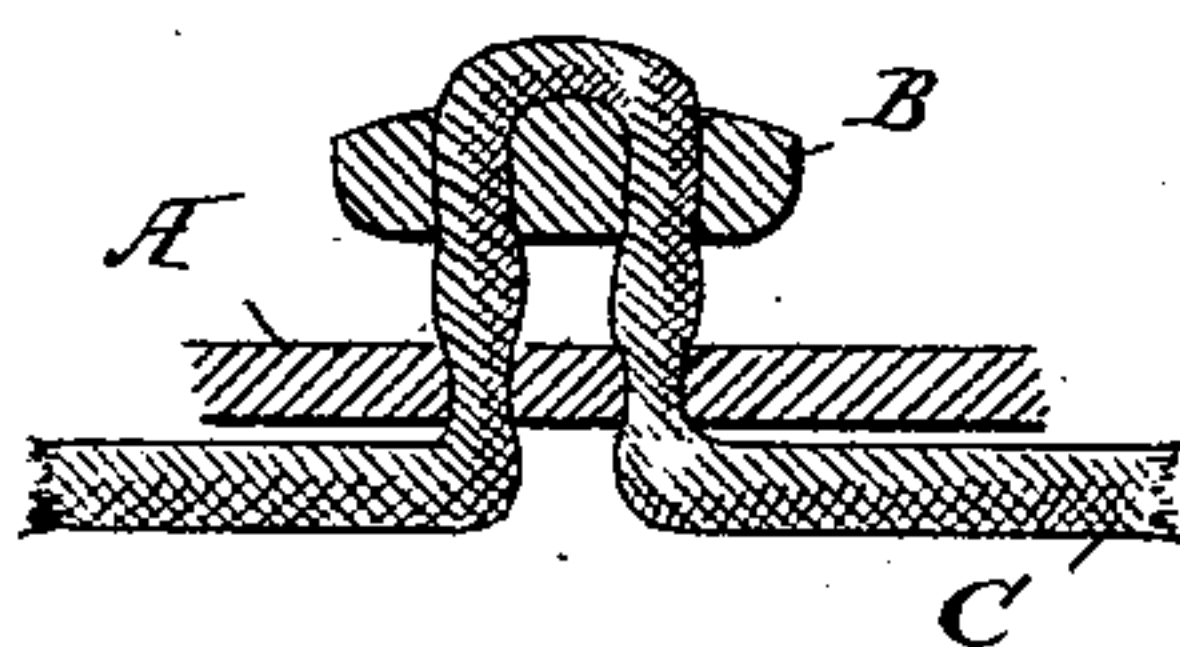
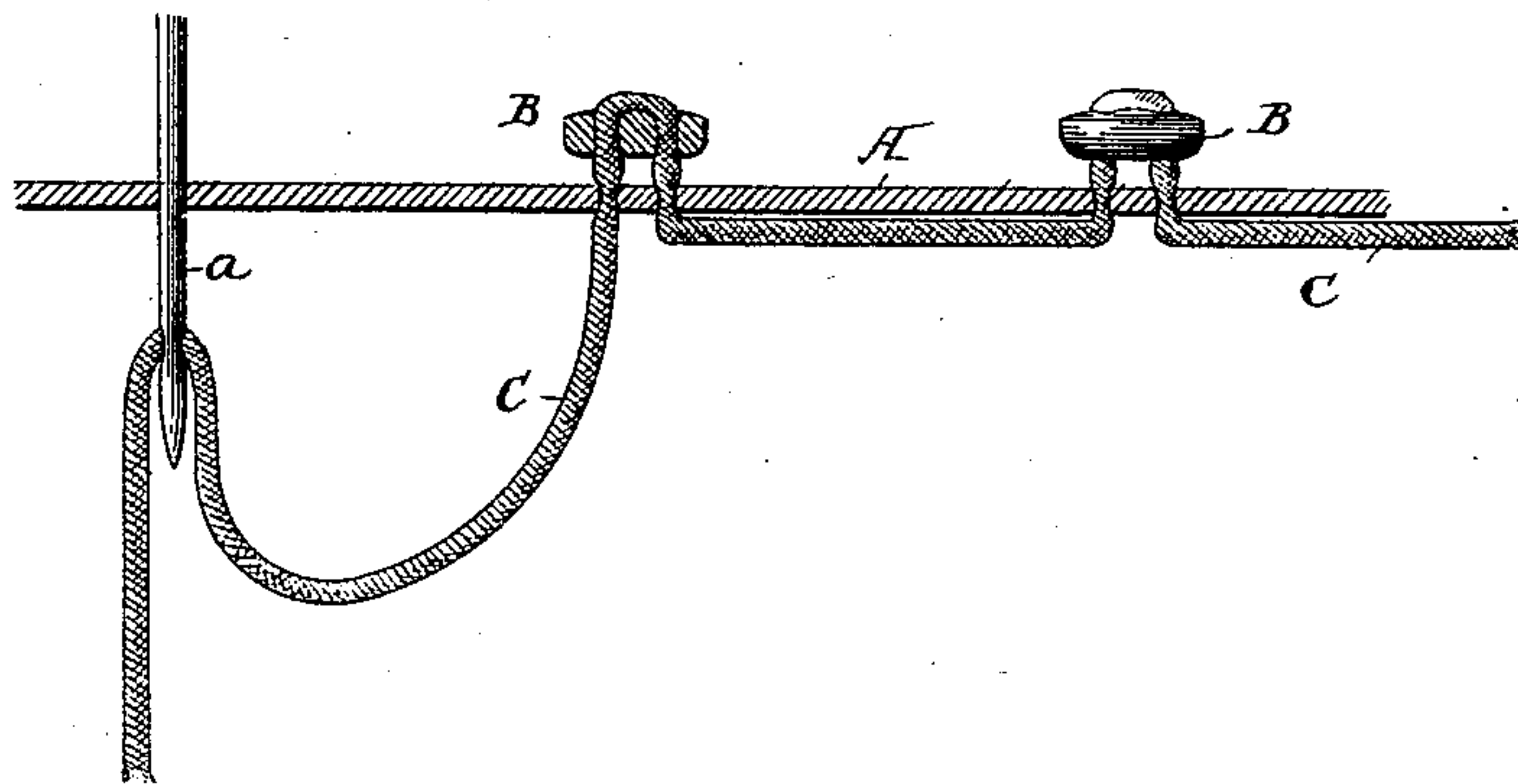


Fig. 3.



Witnesses

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BUTTON-STRIP.

SPECIFICATION forming part of Letters Patent No. 453,381, dated June 2, 1891.

Application filed February 3, 1890. Serial No. 338,972. (No model.)

To all whom it may concern:

Be it known that I, DE VER H. WARNER, a citizen of the United States, residing at Bridgeport, Fairfield county, State of Connecticut, have invented certain new and useful Improvements in Button-Strips, of which the following is a specification.

It is common in some classes of wearing-apparel and other articles to connect series of buttons to the fabric of which the garment or article is made by means of tapes or cords running generally below the fabric, but passing through the fabric in the form of loops at points where the buttons are to be connected, said loops passing through eyes of the buttons. Heretofore in using this method of fastening buttons the fabric has been cut for the passage of the loops, the cutting of the strands weakening the fabric at such points, so that the pull upon the loops resulting from the draft upon the buttons enlarges the openings, distorts the fabric, frequently tearing the same, so that the loops are spread and the buttons are no longer held in proper position. Attempts have been made to remedy this difficulty by inserting eyelets behind the edges of the openings; but the eyelets frequently work loose, leaving the openings liable to be enlarged, as before, while the expense is increased and the tape or cord is allowed to drag readily through the openings, so that an unusual draft upon one of the buttons will draw out its loop to an undue length, while the loops of the adjacent buttons are drawn in tightly. In order to obviate these difficulties, I connect the buttons to the fabric in the manner fully set forth hereinafter, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view showing a part of a corset or body with two buttons of a series connected in accordance with my improvement, one of the buttons turned to one side to illustrate the position of the loop. Fig. 2 is a longitudinal section through the fabric and through one of the buttons. Fig. 3 is a view illustrating the manner of passing the cord or tape through the fabric.

A represents the fabric, to which the buttons B are to be attached through the medium of the cord or tape C. The fabric A may be of any suitable character constituting part

of the fabric of a garment, or, as shown, consisting of a thick and strong strip of tape or other strong inelastic fabric. The buttons are provided with eyes either extending through the same, as shown, or at the back, or otherwise suitably constructed and arranged, while the tape C may be a flat tape, but as shown is a thick compressible cord similar to a corset-cord.

Instead of cutting the fabric A by slitting the same or by punching sections therefrom, as usual, I perforate the same at the points where the cord is to pass by means of a pointed instrument, as a stylus or needle *a*, the point of which will pass between the adjacent strands or threads constituting the fabric without breaking the same, the body of the implement spreading the strands apart until they are sufficiently separated for the passage of the cord C, and when the cord has been drawn through the fabric the strands will tend to assume their original position and contract upon and compress the cord at the point where it passes through the fabric, as illustrated in Fig. 2. I prefer to thus separate the strands and pass the cord through the fabric back and forth at two adjacent points, rather than to draw a doubled loop through the fabric at one point, as thereby each loop is compressed and held at two points adjacent to each button, as shown in Fig. 2.

The above-described method of connecting the buttons to the fabric is attended with advantages which effectually obviate the difficulties heretofore experienced. Thus if the fabric is not cut there is no tendency for the openings to become enlarged, any draft upon the loops simply dragging the threads of the fabric to one side temporarily until such draft ceases. Further, the cord is bound by the contraction of the fabric upon it, so that the draft upon any button is resisted to such an extent that the loop of said button cannot be drawn outward or those of the adjacent button contracted. A further advantage connected with my improvement is the reduction in the cost, as no dies, eyeleting-machines, or other like devices are required.

Without limiting myself to the character of buttons or other character of fastenings employed, I claim—

The combination of a piece of fabric, a series of buttons arranged at intervals along said fabric, and a thick compressible cord for fastening the buttons to the fabric, said cord at
5 each button passing successively through the fabric between adjacent strands thereof, through the button, and again through the fabric at an adjacent point between adjacent strands thereof, the button, cord, and fabric
10 being held together by the gripping action of

the fabric and the tendency of the cord to expand, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DE VER H. WARNER.

Witnesses:

CLARA E. WHITE,
WILLIAM P. LONDON.