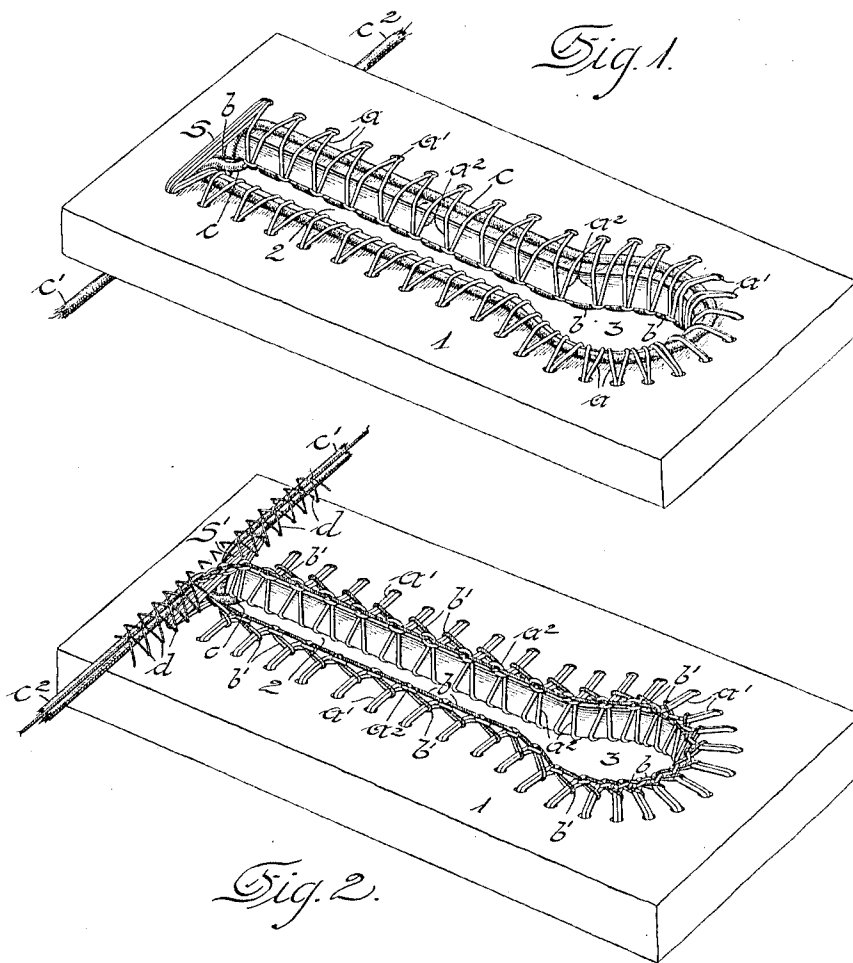


E. B. ALLEN.
 STITCHED BUTTONHOLE.
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Patented Oct. 8, 1912.



WITNESSES:
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STITCHED BUTTONHOLE.

1,040,840.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, EDWARD B. ALLEN, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Stitched Buttonholes, of which the following is a specification, reference being had therein to the accompanying drawings.

In certain classes of work, it has long been common to introduce within the marginal overseam of the buttonhole a cord upon either or both the upper and under faces of the fabric, but owing to the protrusion from one end of the buttonhole of the cut ends of a cord embraced by the overseam on the face of the work, which has seriously marred its appearance, a single cord has been commonly applied only to the under face of the fabric, notably in shoe work, a continuous cord being led successively around the buttonholes of a series upon the under face and the part of the cord intermediate the buttonholes stitched down to the fabric by a blind-stitch overseam, the cord so stitched to the fabric serving to stay the buttonhole in the part engaging the button or its attaching stitches.

The present invention has for its object to provide the buttonhole with a cord embraced by the overseam upon the face of the fabric and anchored beyond the end of the buttonhole in such manner as to strengthen the same at its eyed end or at the end which engages the button. To this end, the buttonhole slit is provided with the usual marginal overseam which embraces upon the face of the fabric a cord having its opposite extremities led through the slit to the opposite face of the fabric, and preferably crossed within the slit and led in opposite directions upon the under face of the fabric and secured thereto by suitable covering stitches. By this means, the overseam is given a bead-like appearance around the margin of the slit, the ends of the cord are not left visible upon the face of the fabric, and the sections of cord adjacent the buttonhole, and in practice connected with the sections of cord embraced by the adjacent buttonholes, are secured to the fabric so that the cord within the overseam serves to reinforce or strengthen the buttonhole at the point subjected to the greatest strain thereon.

The invention will be understood by reference to the accompanying drawings, in which—

Figures 1 and 2 are perspective views representing respectively the upper and lower faces of a portion of fabric with a buttonhole formed therein embodying the present invention.

As represented in the drawings, the fabric 1 is provided with a buttonhole slit 2 with enlarged or eyelet portion 3 whose margins are covered by the overseam, formed in the present instance of interlooped upper thread *a* and lower thread *b*. The overseam illustrated is produced by a stitch-forming mechanism comprising a jogging needle in conjunction with threaded and non-threaded loopers. The needle makes an initial descent through the fabric carrying with it a depth-stitch loop *a'* of its thread which is detained while the needle rises and descends through the slit to pass an edge-stitch loop *a''* of its thread through the previous depth-stitch loop *a'*, the edge-stitch needle-thread loop being entered by the threaded looper which passes through the same a loop *b'* of lower thread which is distended for passage of the needle in its next depth-stitch thrust in which it carries the succeeding depth-stitch loop through the fabric. The buttonhole is herein represented as of the eyelet end type, with long barring stitches *s* arranged across the narrow end with the extremities of the stitches in alinement with the depth needle-punctures of the side-stitches.

The upper or needle-thread *a* overlies the margin of the fabric around the buttonhole slit, and interposed between the same and the upper face of the fabric is the cord *c* which follows the contour of the buttonhole slit. The initial portion *c'* of the cord is shown led along the under face of the fabric to, through and across the narrow end of the buttonhole and along the margin of the slit upon the face of the fabric, and the terminal portion *c''* of the cord is led through the final edge-covering overseam stitches through and across the slit and across the initial portion *c'* of the cord and in the opposite direction therefrom upon the lower or inner face of the fabric, as represented in Fig. 2, the portions of the cord emerging from the slit being partially covered by the barring stitches

s in case the buttonhole is stayed by such means.

While, by the means just described and the attachment of the cord sections c' and c'' to the sections embraced by the overseam stitches of the adjacent buttonholes, each buttonhole will be materially strengthened at the eyelet end by the provision of the cord, the sections of cord intermediate the buttonholes are in practice housed within a blind-stitch overseam d which serves not only to protect the same but to secure it firmly to the lower face of the fabric so that the section within each buttonhole is still more securely anchored.

In my application Serial No. 634,284 filed simultaneously herewith a buttonhole is shown with a short section of cord entirely covered and concealed by the overseam upon the face of the fabric and with a section of a continuous cord connecting and embracing the slits of adjacent buttonholes and inclosed within the overseam upon the lower face of the fabric. By this means, the covering overseam is given a beadlike appearance around the margin of the slit upon the face of the fabric and the buttonhole is strengthened by the continuous cord upon the under side. By the present invention, substantially the same result is produced by the employment of a single cord the body of which lies within the overseam upon the upper face with its extremities concealed within

the narrow end of the slit and securely anchored upon the opposite face of the work.

The edge-covering stitches are shown in the drawings spaced farther apart than they would be in actual practice, for the purpose of illustration, but as actually applied, they may be much more widely spaced than is possible in the ordinary buttonhole construction without detriment to the appearance of the work. The covering stitches are herein shown and described as of the two-thread chain-stitch type, but the specific character of the overseam and the method of making the same and of introducing the cord therein are obviously immaterial to the present invention.

Having thus set forth the nature of the invention, what I claim herein is:—

A fabric having a stitched buttonhole formed with a slit having an overseam extending along both edges thereof, and a cord embraced within said overseam upon one face of the fabric and having its opposite extremities drawn through said slit and anchored upon the opposite face of the fabric.

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

EDWARD B. ALLEN.

Witnesses:

HENRY J. MILLER,

HENRY A. KORNEMANN, Jr.