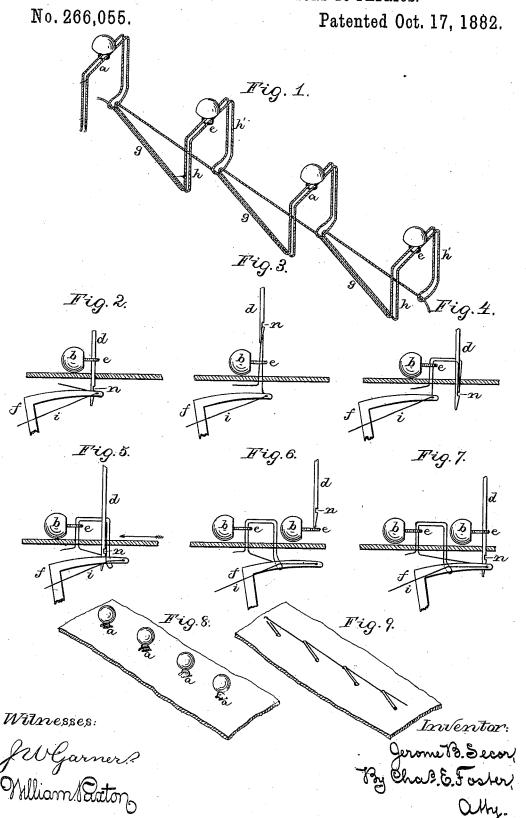
J. B. SECOR.

ART OF CONNECTING BUTTONS TO FABRICS.



UNITED STATES PATENT OFFICE.

JEROME B. SECOR, OF BRIDGEPORT, CONNECTICUT.

ART OF CONNECTING BUTTONS TO FABRICS.

SPECIFICATION forming part of Letters Patent No. 266,055, dated October 17, 1882. Application filed August 15, 1881. (No model.)

To all whom it may concern:

Be it known that I, JEROME B. SECOR, of Bridgeport, Fairfield county, Connecticut, have invented an Improvement in Connecting But-5 tons to Fabrics, of which the following is the specification.

My invention relates to that class of articles—as shoes and gaiters—in which a series of buttons are connected to a fabric by means 10 of fastenings passing through the loops or eyes of the buttons; and my invention consists in the means hereinafter fully described, whereby the said buttons are connected to the leather or other fabric.

In the drawings, Figure 1 is a perspective view, illustrating the course of the thread in connecting a series of four buttons to a strip of leather or other fabric. Figs. 2 to 7 are diagrams illustrating the progressive formation 20 of the stitch; Fig. 8, a perspective view showing the upper face of the fabric and buttons attached; Fig. 9, a perspective view showing the lower face of the fabric and line of stitching.

My invention consists in connecting a series 25 of buttons to the supporting fabric by a single thread, so laid as to form on the outer face of the fabric a series of detached stitches or loops, a, Figs. 1 and 8, each loop consisting of two parallel threads, and at the under surface a chain 30 of substantially the character represented in Fig. 9, the main objects being, first, to use but one thread, and, second, to expose only so much thread on the outer surface as will make a loop sufficient to pass through the eye e of 35 each button b. Different modes of arranging or laying the thread to effect these results may be adopted, and different mechanisms—as needles, loopers, shuttles, &c.—may be employed. In the drawings I have represented 40 the formation of successive loops of one thread by means of a needle, d, and looper f, which will be used in connection with any suitable feed and actuating devices. (Nothere described or shown, as they form no part of this inven-45 tion, and will constitute the subject of a separate application for Letters Patent.) The looper carries the single thread i beneath the fabric, and the needle has a side notch, n. The nee-

dle may first catch the thread below the fabric

the button, fed automatically and held in place in any manner; or it may descend first through the eye, as shown in Fig. 2, then catch the thread and draw up a loop thereof through the button-eye, as shown in Fig. 3, after which the 55 needle or the fabric moves sidewise prior to the needle descending, as shown in Fig. 4, but at one side of and not in advance of the button, the diagrams illustrating the movements and not the actual relative positions of the 60 parts of the thread. The looper then passes close to the needle through the loop held by the needle and carries the loop out of the notch n, as shown in Fig. 5, when the needle ascends and the fabric is carried forward the length of 65 one stitch in the direction of the arrow, Fig. 5, bringing the parts to the position shown in Fig. 6. The needle now again descends through the eye e of another button b, placed as shown in Fig. 6, catches the thread at the side of the 70 looper, as shown in Fig. 7, and then ascends, when the above-described operations are repeated. The fabric is thus perforated at two points adjacent to each button-eye, and the doubled thread is carried from one point to the 75 other through the eye in the same manner as in hand-sewing. The manner in which the single thread is laid to thus connect the buttons is shown in the perspective view, Fig. 1, where a represents the doubled thread extend- 80 ing over the face of the fabric through the button-eye; g, the chain on the under face; h, the portions of thread carried up by the needle, and h' the portions carried downward.

This mode of securing the buttons has the 85 important advantages of but a single stitch on the face of the fabric to secure each button, and but a single row of chain-stitches upon the opposite face, affording a secure hold with

but little thread.

1. The process herein described of securing buttons to fabrics, the same consisting in doubling a thread, passing the loop thus formed through the fabric in one direction laterally 95 above the fabric through the button-eye, and then through the fabric in the opposite direction, and then passing through the looped end another doubled portion of the thread, form-50 and rise and then descend through the eye of | ing a loop of the latter to make another stitch 100 on the face of the fabric, and repeating the above-described operations with such second portion, all substantially as set forth.

2. The combination, with the fabric and with the buttons secured thereto, of a single thread formed into a series of loops on the face of the fabric, each loop on said face passing crosswise to the line of the stitching through one of the button-eyes, and forming at the back of the fabric a single line of stitches, as specified.

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

JEROME B. SECOR.

Witnesses: V. R. C. Giddings, Alfred B. Beers.