

UNITED STATES PATENT OFFICE.

RAYMOND L. PLUMLEY, OF WILMINGTON, DELAWARE, ASSIGNOR TO THE TRUMP BROTHERS MACHINE COMPANY, OF SAME PLACE.

OVERSEAM FOR SEWED ARTICLES.

SPECIFICATION forming part of Letters Patent No. 585,939, dated July 6, 1897.

Application filed August 8, 1896. Serial No. 602,197. (No model.)

To all whom it may concern:

Be it known that I, RAYMOND L. PLUMLEY, a citizen of the United States, residing in Wilmington, in the county of New Castle and State of Delaware, have invented certain new and useful Improvements in Overseams or Buttonholes, of which the following is a true and exact description, reference being had to the accompanying drawings, which form a part thereof.

My invention relates to the formation of an overseam, and has especial reference to the stitching of buttonholes, my object being to provide a seam having what is known as the "purl" effect on both sides or edges of the seam.

The right side of the buttonhole I form in the same way and with the same appearance as is now generally practiced, the novel features of my invention being apparent only on the "wrong" side, so to speak, of the buttonhole.

The nature of my improvement will be best understood as described in connection with the drawings, in which it is illustrated, and in which—

Figure 1 is a view of the under or wrong side of a buttonhole stitched in accordance with my invention and therefore presenting substantially the same appearance as is presented by the right side of the ordinary buttonhole, and Fig. 2 is an enlarged diagrammatic perspective view showing a portion of a seam stitched or seamed in accordance with my invention.

A indicates the goods, A' indicating the raw edge or buttonhole-slit to be stitched.

B, Fig. 2, indicates the upper needle of an ordinary sewing-machine, C C C, &c., indicating holes formed by this needle B and through which it passes through the goods.

D is the upper needle-thread, which passes backward and forward through the holes C, forming on the top of the goods loops $d^6 d^7 d$ and on the bottom of the goods loops $d^2 d^3 d^4$, d' and d^5 indicating portions of the thread passing through and lying in the goods A.

E indicates the lower thread, which is carried upward and downward in front of the edge A' of the goods to be seamed, forming loops $e e'$ e^2 , which engage the upper loops of the thread

D, and loops $e^2 e^3 e$, which engage the lower loops of the thread D. The engagement of the loops of the upper and lower threads along the lower edge of the goods, as indicated in Fig. 2, takes place substantially along the edge of the goods, forming what is called the "purl" on this edge. Heretofore, however, the loops $e e' e^2$ of the lower thread have been drawn over to the line of the hole C, the portions $d^6 d$ of the loops $d^6 d^7 d$ practically disappearing, and the portions d^7 of these loops extending practically in a straight line from one hole C to the next hole C, the effect being on the wrong or upper side of the goods, as shown in Fig. 2, that of whip-stitching extending from the purl G to the holes C C, &c. I have ascertained, however, that the purl effect may be produced on the wrong or upper side of the goods, as shown in Fig. 2, as well as on the right or lower side of the goods by drawing out and forward the loops $d^6 d^7 d$ and correspondingly shortening the loops $e e' e^2$, as is shown in Fig. 2 of the drawings, and these results can readily be secured by drawing out a portion of the thread D as the upper needle passes through the goods, so as to leave considerable slack between adjacent holes C C, the tension of the lower thread E being adjusted so that it will take up this slack, as is indicated at the right hand of Fig. 2. I also use in forming the purl, as above described, on the wrong side of the goods a third thread F, this thread F being twisted around the thread D once for each complete stitch formed and in such a manner that the thread F will turn around the loop portion d^7 , as indicated in Fig. 2 of the drawings. This thread F is not only a convenient device for drawing out the desired slack in the thread D between adjacent holes C C, but it serves also as a tightening device, drawing the threads taut along the new purl, which I have indicated at G', and adding to the tightness of this purl G'.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The improved overseam comprising a piece of goods and upper and lower threads D and E, of which the upper thread passes back and forth through the goods a short distance from

the edge, and is formed into loops extending
from said needle-holes to the edge of the
goods on each side so as to lie flush or nearly
so with the upper edges, and the lower of
5 which threads passes back and forth across
the edge but not through the goods, first up
through one of the lower loops into and
through an upper loop, then down through
the adjacent upper loop into and through the
10 same lower loop, then up through the next
adjacent lower loop into and through the up-
per loop down which it first passed, and so
on, leaving the portion of said thread between

contiguous loops lying lengthwise along and
flush or nearly so with each edge of the goods, 15
and acting to hold said upper and lower loops
distended at their ends and to form a purl on
both edges of the goods, and a drawing and
tightening thread F twisted around each of
the upper loops and across the ends of the 20
lower loops, and serving to draw and anchor
the loops at or near the edge of the goods.

RAYMOND L. PLUMLEY.

Witnesses:

GEO. R. HOFFECKER,
EDWARD G. COOK.