No. 681,670. Patented Sept. 3, 1901.

E. B. ALLEN.

OVERSEAM FOR SEWED ARTICLES.

(Application filed Jan. 15, 1898.)

(No Model.)

Fig. 1.

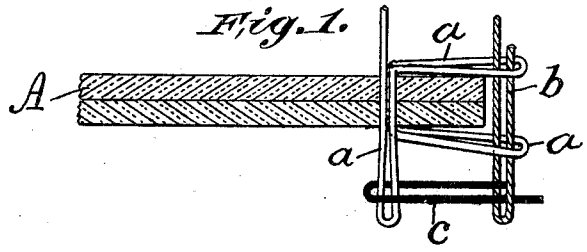


Fig. 2.

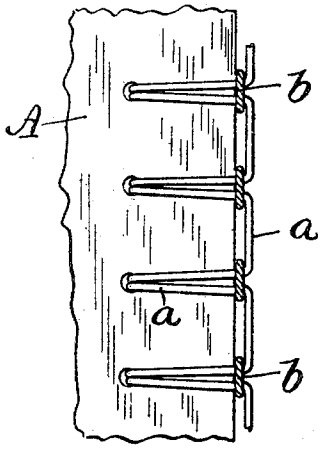
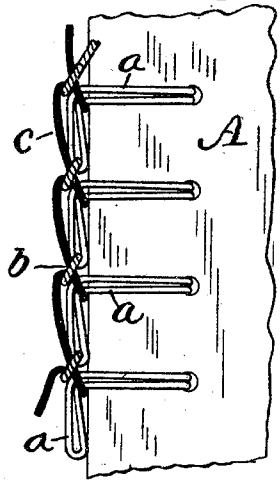


Fig. 3.



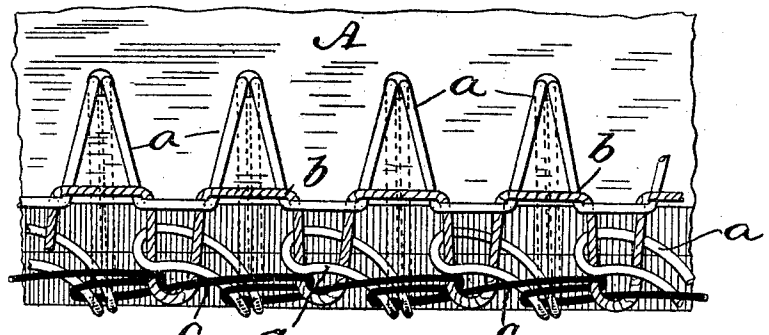


Fig. 4.

WITNESSES:

C. W. Benjamin

C. M. Sweeney.

INVENTOR:

Edward B. Allen

BY

Henry Calvert

ATTORNEY.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

EDWARD B. ALLEN, OF ELIZABETH, NEW JERSEY, ASSIGNOR TO THE SINGER MANUFACTURING COMPANY, OF NEW JERSEY.

OVERSEAM FOR SEWED ARTICLES.

SPECIFICATION forming part of Letters Patent No. 681,670, dated September 3, 1901.

Application filed January 15, 1898. Serial No. 666,808. (No specimens.)

To all whom it may concern:

Be it known that I, EDWARD B. ALLEN, a citizen of the United States, residing at Elizabeth, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Overseams, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention has for its object to provide an improved overedge or buttonhole seam having purled edges on both sides of the work, so that a buttonhole which has been overstitched thereby will present a finished appearance on both faces of a garment into which it is worked, the seam being of such a character that the raw or cut edges of the fabric will be well covered and the threads of the seam being so concatenated or interlooped that the stitches will not unravel at the end of a seam or if a thread should break.

The improved overseam is composed of three threads, two of which will be supplied by two needles and the third by a looper. The two needles will be so arranged that one (the overedge-stitch needle) will pass down by the edge of the work or material, while the other (the depth-stitch needle) will pass down through the material back from but near the edge to be overseamed. The overedge-stitch needle is timed to make its reciprocating movement about a quarter of a revolution of the driving-shaft of the sewing-machine in advance of the reciprocation of the depth-stitch needle, each needle making one reciprocation at each revolution of the said driving-shaft, and said overedge-needle as it passes down by the edge of the material will pass its thread through loops of the thread of the depth-stitch needle, which have been carried over to the edge of the work both above and below the material, and a loop of the looper-thread will then be passed through a loop of the thread of the edge-stitch needle, and as the latter rises the looper-loop is carried into position to be entered by the depth-stitch needle, which carries its loop through the looper-loop, and this depth-stitch loop is then carried to the edge of the lower side of the material by a suitable loop carrier or spreader, and before the edge-stitch needle again descends a second loop of the depth-stitch-needle thread is carried to the edge of the upper side of the material, so that these two loops of the depth-stitch-needle thread will be entered by the edge-stitch needle on its next descent. The loops referred to are properly tightened, and the operations described are repeated in the production of the improved overseam.

In the drawings, Figure 1 is a diagrammatic view illustrating the interlooping of the threads in the production of the new overseam. Fig. 2 is a top and Fig. 3 a bottom diagrammatic view of the overseam; and Fig. 4, a diagrammatic perspective view of the same, and in which, for clearness of illustration, the threads are represented as thrown up more from the bottom edge than they would be in practice.

In forming the improved overseam a loop of depth-stitch thread *a* is carried to the edge of the material A on the upper side of the latter, and a loop of edge-stitch thread *b* is now passed at the edge of the material through the upper loop of depth-stitch thread and also through a lower loop of depth-stitch thread of the last previously-formed stitch and which had been extended to the edge of the material on the lower face of the latter. A loop of looper-thread *c* is now passed through the loop of edge-stitch thread from the edge of the material inward, and a second loop of depth-stitch thread is next passed through the material and through the loop of looper-thread, and said second or lower loop of depth-stitch thread is then carried or drawn to the edge of the material in readiness to be entered by the next edge-stitch loop. These several loops are so tightened by applying proper tension to the different threads that both of the depth-stitch loops will remain extended to the edge of the material and a purl will be formed on the upper side edge of the work by the interlooped depth-stitch and edge-stitch needle threads and on the lower side edge of the work by all three of the interlooped depth-stitch, edge-stitch, and looper threads, thus providing a buttonhole or overedge seam presenting a finished or purled appearance on both faces of the work.

Having thus described my invention, I claim and desire to secure by Letters Patent—

The herein-described overseam comprising the combination with suitable fabric or material, of a depth-stitch thread *a* passing through the material and having loops extended to the edge of the fabric on both faces of the latter, an edge-stitch thread *b* having loops passed through both of the said loops of depth-stitch thread, and a third or looper thread *c* looped through the loops of edge-stitch thread and around the lower loops of the depth-stitch thread.

In testimony whereof I affix my signature in the presence of two witnesses.

EDWARD B. ALLEN.

Witnesses:
HENRY J. MILLER,
HAROLD W. BROWN.