July 8, 1941. F. LUTZ 2,248,907

FABRIC SEAM

Filed June 26, 1940

FIG. I.

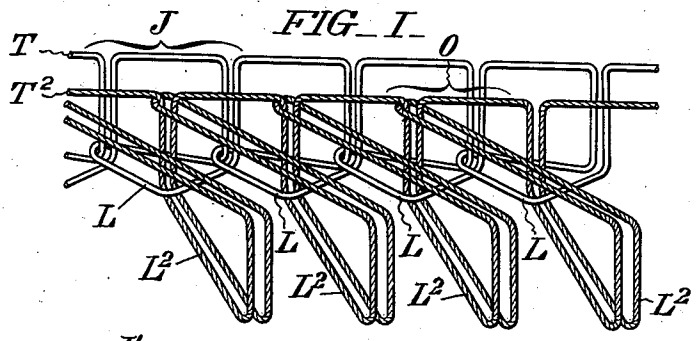


FIG. II.

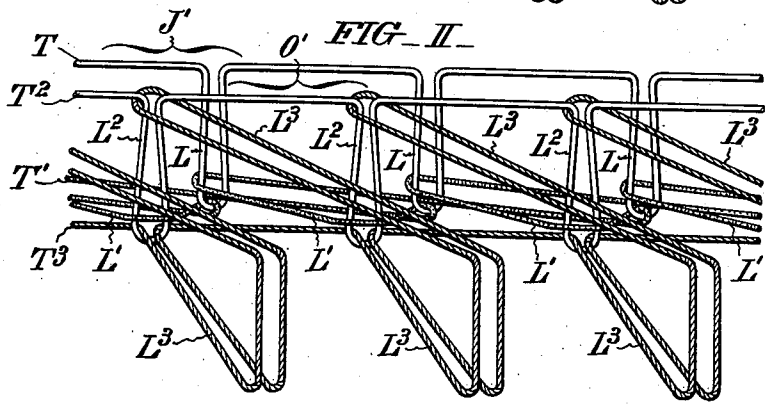
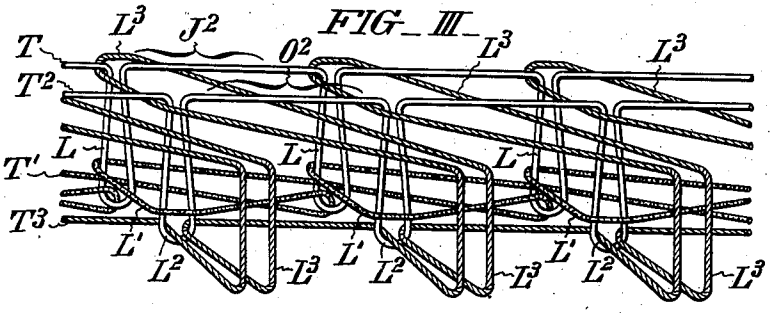


FIG. III.



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2,248,907

FABRIC SEAM

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Application June 26, 1940, Serial No. 342,519
In Germany December 30, 1938

6 Claims. (Cl. 112—269)

This invention relates to seams for fabrics, particularly seams of the chain stitch type, and is concerned wtih double or compound seams involving an over-edge binding seam and a parallel joining seam for uniting multiple superposed fabric layers.

The chief aim of my present invention is to provide a compound seam of the kind referred to embodying a component main seam which is complete in itself and comprises a row of fabric penetrating thread loops and a component over-edge seam which is likewise complete in itself and also comprises fabric penetrating loops, wherein threads of the two component seams are interlocked in such manner that if one seam is removed or destroyed, the other will remain intact.

A further aim of my present invention is to secure the foregoing advantage in a compound seam in which the two component seams are individually formed from single or multiple threads, and in which the interlocking may occur at either one or both faces of the fabric pile.

In the attached drawing, Fig. I is a diagrammatic view in perspective showing a two thread compound locked seam conveniently embodying my invention formed from two threads.

Fig. II is a view like Fig. I showing a four-thread locked compound seam also conveniently embodying my invention; and

Fig. III shows an alternative form of the seam shown in Fig. II.

The seam illustrated in Fig. I is a compound one comprising a component main or joining seam J and a component over-edge seam O, which extend side by side in parallel relation, and which are made respectively from single threads designated by the characters T and T^2. The serial loops L formed from the thread T pass down through the fabric (not shown) and are engaged one with another at the underside of the fabric. The serial loops L^2 of the second thread T^2 also pass down through the fabric and also through the horizontal portions of the loops L of the first thread, and then extend upward around the fabric edge and interengage one with another at the top side of the fabric. As a consequence of the passage of the over-edge loops L^2 through the loops L at the under side of the fabric it will be apparent that the seams J and O are effectively interlocked at the under side of the fabric.

The seam illustrated in Fig. II is likewise a compound one comprising a component main or joining seam J' and a component over-edge seam O' each made from two threads respectively designated T, T' and T^2, T^3. The serial loops L of the thread T of the main seam J' pass down through the fabric and are interconnected at the underside of the fabric after the manner of a chain stitch seam, by horizontal serial loops L' formed from the thread T'. The serial loops L^2 formed from the thread T^2 in the over-edge seam O' also pass down through the fabric as well as through the loops L' of the thread T' at the underside of the fabric. The serial loops L^3 of the fourth thread T^3 extend through the loops L^2 of the thread T^2 at the underside of the fabric, then pass upward around the fabric edge and engage said loops L^2 at the top of the fabric. In the last described embodiment of my invention, the interlocking of the two seams results from the embracement of the loops L^2 of the over-edge seam O' by the loops L' of the joining seam J'.

The seam illustrated in Fig. III is also a compound one comprising a component main chain stitch seam J^2 and a component over-edge seam O^2, and like the compound seam of Fig. II, is made from four threads T, T', T^2 and T^3. The seam of Fig. III, however, differs from the seam of Fig. II in that the over-edge loops L^3 of the thread T^3 are extended so as to embrace the fabric penetrating loops L of the main seam J^2 at the face of the fabric with the result that the two seams are mutually interlocked, that is to say, one locking the stitches of the other at the underside of the fabric, and conversely at the opposite side of the fabric.

The interlocked joining and over-edge seams of the embodiments of my invention illustrated in Figs. I—III are concurrently producible upon the sewing machine constituting the subject matter of the copending application Serial No. 342,520 having two simultaneously-actuated laterally spaced needles both of which penetrate the fabric adjacent its edges, and cooperating instrumentalities which determine interloopment of the threads as shown.

In all three illustrated examples, it will be seen that the rupture or removal of either of the component seams will not affect the integrity of the other.

Having thus described my invention, I claim:

1. A compound seam comprising a main seam formed from a single thread with fabric penetrating chain loops which are interconnected with each other at the back of the fabric; and an over-edge seam likewise formed from a single thread with loops which penetrate the fabric, which interlock with the loops of the main seam at the back of the fabric, and which extend

around the edge of the fabric and interengage with each other at the fabric face.

2. A compound chain-stitch fabric-connecting seam wherein a component main or joining seam, complete in itself, has thread loops which penetrate the fabric, wherein a component overedge seam, likewise complete in itself, has fabric-penetrating thread loops in parallel relation to those of the main or joining seam; and wherein threads of the two component seams are interlocked so that the destruction or removal of either one of such component seams will not affect the integrity of the other.

3. A compound chain-stitch seam according to claim 2, in which the component main or joining seam and the component overedge seam are each formed from single threads.

4. A compound chain-stitch seam according to claim 2, in which the component main or joining seam and the component overedge seam are each formed from plural threads.

5. A compound chain-stitch seam according to claim 2, wherein the interlocking occurs at one face of the fabric.

6. A compound chain-stitch seam according to claim 2, wherein the interlocking occurs at both faces of the fabric.

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