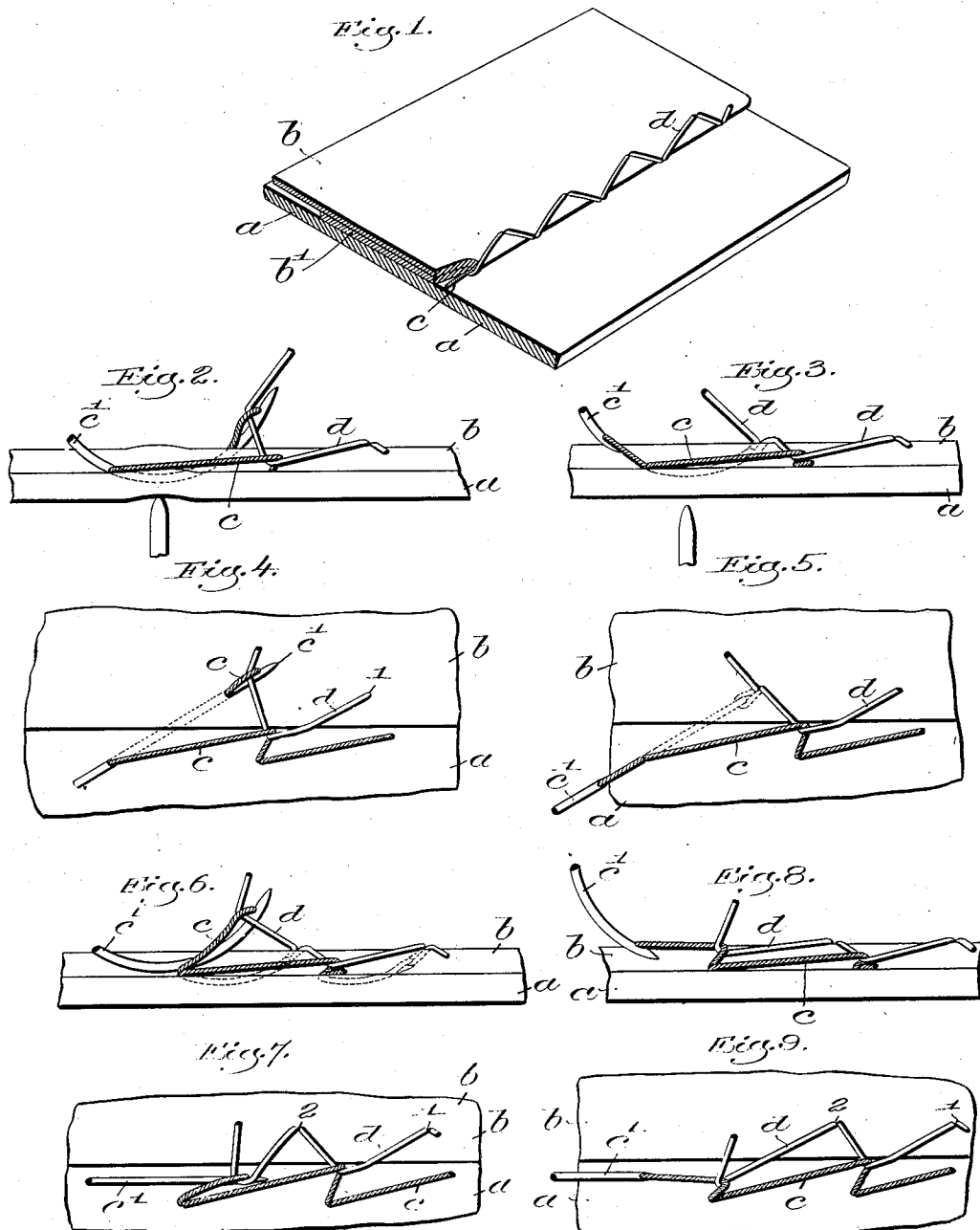


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SEAM FOR SEWED ARTICLES.
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1,012,791.

Patented Dec. 26, 1911.



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SEAM FOR SEWED ARTICLES.

1,012,791.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WOLF ARBETTER, a citizen of the United States, residing in Chelsea, county of Suffolk, and State of Massachusetts, have invented an Improvement in Seams for Sewed Articles, of which the following description, in connection with the accompanying drawing, is a specification, like letters on the drawing representing like parts.

This invention consists in a novel seam or hem for sewed articles in which a main layer of textile or similar material is united to a superimposed layer presenting an edge thereon by stitches formed of two interlocked threads, one thread lying beneath the said edge on the main layer and formed at intervals into loops, the said loops entering and emerging from the upper surface of the main layer in a direction diagonal to and beneath the said edge, a second or locking thread lying in a zig-zag course on the top of said edge and presenting at intervals loops extending down into the superimposed layer and interlocking with the loops of the first thread, the said locking thread intermediate its said loops extending over the edge and interlocking with the first thread between its loops.

Figure 1 shows a main layer of textile or body material with a superimposed layer thereon and stitched thereto to form a seam in accordance with my invention; Fig. 2 a main and superimposed layer of material with the needle occupying a position in the main layer and the superimposed layer; Fig. 3 shows the needle retracted, its thread drawing a bight of locking thread through the superimposed layer; Fig. 4 is a top or plan view of Fig. 2; Fig. 5 a top or plan view of the parts shown in Fig. 3; Fig. 6 shows part of a main and superimposed layer with the needle wholly without the material and occupying a position above the main layer, the locking thread being shown as passed through a loop of the needle thread; Fig. 7 is a top or plan view of Fig. 6; Fig. 8 is a view like Fig. 6 but with the needle retracted so that its thread acts upon the locking thread between one and its next bight to draw the same over the edge of the superimposed layer, and Fig. 9 is a top or plan view of Fig. 8.

Referring to the drawing, *a* represents part of a main layer of material, and *b* part

of a superimposed layer laid thereon, preferably of different material and preferably having its edge infolded or inturned as at *b'*. The superimposed material may be silk or thin costly fabric, while the main layer may be of heavier and thicker material as wool, as for instance the main layer may be part of a coat and the superimposed layer part of the lining.

The seam to be herein described is for uniting the edge of the superimposed layer *b* to the main layer *a*. The seam is composed of two threads, one *c* being a thread carried by a needle *c'* shown as curved and eye-pointed, while the bobbin or interlocking thread *d* in practice is delivered from a loop-taker, such as shown in United States Patent No. 830,699, granted to me September 11, 1906. For the production of this stitch, the needle *c'* will enter the main layer at its upper side and emerge therefrom at the same side in a direction diagonal to the edge of the superimposed layer, as represented in Fig. 2, and as it emerges from the upper side of the main layer, it continues its movement and passes through the superimposed layer from its under to its upper side; the point of the needle attacking the superimposed layer back of its edge whether a raw edge or an inturned edge. The needle having emerged from the upper side of the superimposed layer has its loop entered by the locking thread, and thereafter the needle is retracted from the position Figs. 2 and 4 into the positions Figs. 3 and 5, the needle thread drawing a bight of the locking thread into the upper side of the superimposed layer and downward according to the tension, as represented in Figs. 3 and 5. A stitch, which I will designate as the first stitch, having been made, the material will be fed and the needle will again make a thrust to place its point and loop in proper coactive relation to a loop-taker such as shown in said United States patent, said needle at its second thrust, however, passing entirely without said materials and above the body material without entering either the main material or the superimposed layer, and at the completion of its forward thrust the needle will be slightly retracted to throw out a loop, as shown in Fig. 6, through which loop will be passed the locking thread, as shown in Figs. 6 and 7, and thereafter the needle will be retracted

to its starting position, as shown in Figs. 8 and 9, drawing a part of the locking thread between the bights 1 and 2, across the edge of the superimposed layer *b* and thereafter after the material has been again preferably fed, the needle will again enter the material, as shown in Figs. 2 and 4, this operation being continued, leaving a stitch in which bights of locking thread are drawn through the superimposed layer from its upper side downwardly, portions of said locking thread between successive bights drawn through the superimposed layer, being acted upon by the needle thread which serves to draw the locking thread across the edge of the superimposed layer where said locking thread is held by the needle thread, the latter being substantially concealed, see Fig. 1, by the edge of the superimposed layer, said needle thread occupying a position more or less close to a straight line due to the tension exerted thereon. If the main layer and the superimposed layer should be of the same color and the threads used of substantially the same color, the needle thread will be so laid as to practically undistinguishable showing only the locking thread across the edge of the superimposed layer. The stitch, however, may be made of threads of differing color, as for instance, the main layer may be of black material and the superimposed layer of white, in which case a white locking thread will be used and a dark or black needle thread, and in this condition the black or needle thread is substantially concealed at or under the edge of the superimposed layer so that it is scarcely discernible, the closer to the edge that the needle emerges from the upper side of the superimposed layer, the less locking thread will be exposed and the tension on the locking thread may be such as to draw the needle thread underneath the edge of the superimposed layer more or less, so that the needle thread is practically concealed by the edge of the superimposed layer.

In Figs. 2 to 9 inclusive, I have shown the needle as thrust into the main layer at a greater distance from the edge of the superimposed layer than is done in practice, this being done more readily to show the construction of the seam or hem.

The foregoing description of the particular manner of forming the seam embodying this invention is to be taken as for

purpose of illustration and not for purpose of limitation. It is obvious that either thread may be laid by the needle and the other thread by the bobbin; that the locking point between the two threads may be embedded in the fabric at any point between the ends of the stitch, depending upon the tension and the manner of formation of the stitch; and that the needle in forming the same may enter in either direction. The essential features of the seam reside in the structure wherein one thread is substantially concealed beneath the edge of the superimposed layer; the two threads are interlocked to form stitches; the stitches, that is, the embedded portions of the thread, are all inclined to the edge and all lie in a single line parallel with the edge; that is to say, all the stitches have substantially the same position with respect to the edge; the thread lying on the superimposed layer is pulled over the edge and interlooped with the concealed thread on the face of the material so that only this one thread is exposed and lies in a generally zigzag path on the face of the fabric.

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

A hem or seam for sewed articles, comprising a main layer of textile or similar material, a superimposed layer presenting an edge thereon, and two threads, one thread lying beneath the said edge throughout its entire length and formed at intervals into loops, the said loops entering and emerging from the upper surface of the main layer in a direction diagonal to and beneath the said edge, a second thread lying in a zigzag course on the top of said edge and presenting at intervals loops extending down into the superimposed layer and interlocking with the loops of the first thread to form a series of stitches all in a single line parallel with the edge, the said second thread intermediate its said loops extending over the edge and interlocking with the first thread on the face of the material.

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

WOLF ARBETTER.

Witnesses:

GEO. W. GREGORY,
EVANGELINE C. BROWN.