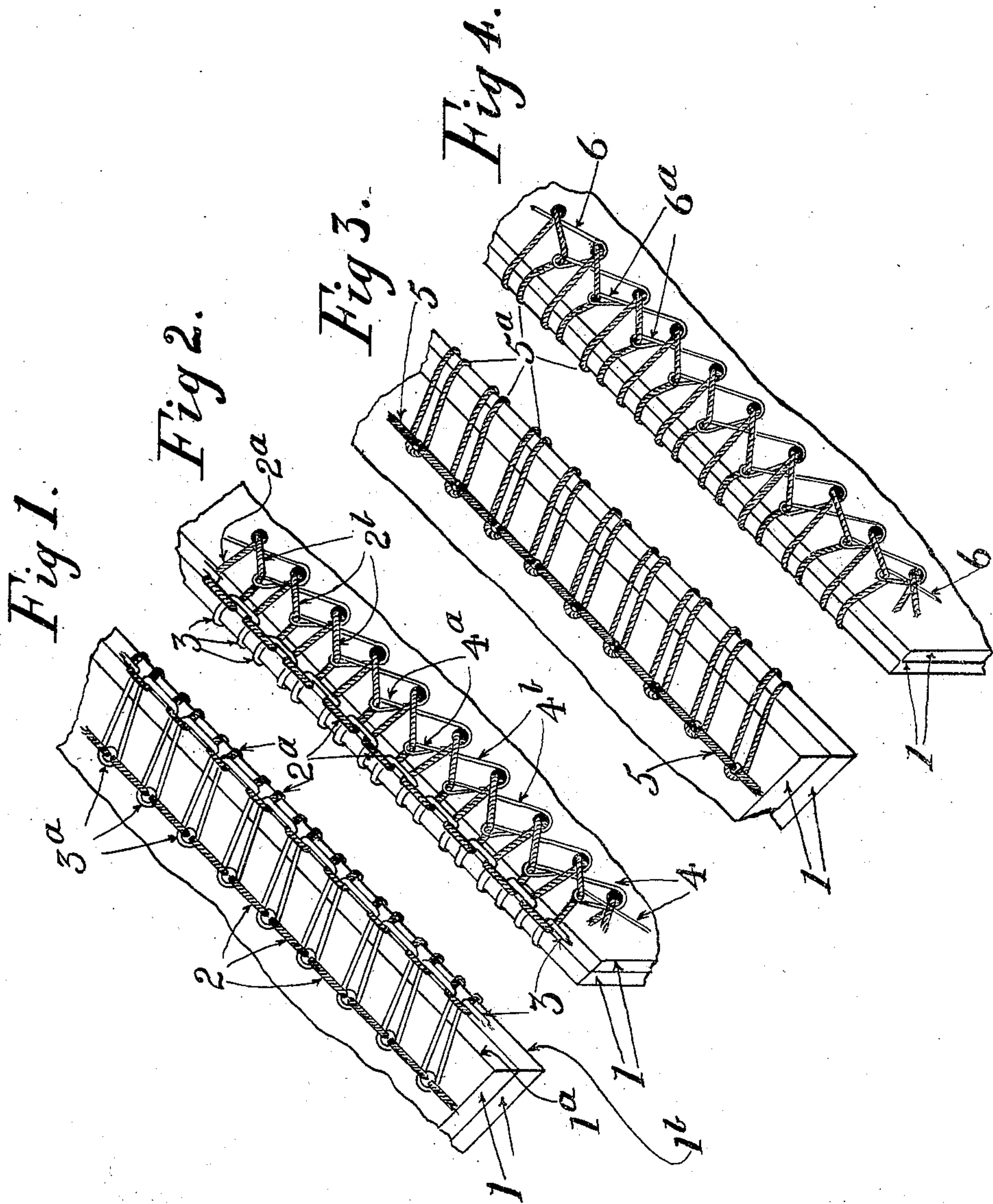


No. 877,275.

PATENTED JAN. 21, 1908.

J. P. WEIS.  
SEAM FOR SEWED ARTICLES.  
APPLICATION FILED MAR. 16, 1903.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOHN P. WEIS, OF BROOKLYN, NEW YORK, ASSIGNOR, BY MESNE ASSIGNMENTS, TO METROPOLITAN SEWING MACHINE COMPANY, A CORPORATION OF NEW YORK.

## SEAM FOR SEWED ARTICLES.

No. 877,275.

Specification of Letters Patent.

Patented Jan. 21, 1908.

Application filed March 16, 1903. Serial No. 147,947.

*To all whom it may concern:*

Be it known that I, JOHN P. WEIS, a citizen of the United States, residing in Brooklyn, county of Kings, and State of New York, have invented a new and useful Improvement in Seams for Sewed Articles, of which the following is a description.

This invention relates to seams for sewed articles, and has special reference to seams which are made over the edge, or edges, of pieces of fabric.

An object of my invention is to produce a seam for sewed articles containing a plurality of threads and concatenated into a chain-stitch which will not rip, "run", or pull out.

Another object of my invention is to provide a chain-stitch for overedging which cannot be ripped, drawn, or pulled out, and which will produce, or provide, an effective and ornamental selvage, binding, edging, or finish for fabrics.

With these objects in view, my invention consists in the features and combinations hereinafter described and claimed.

In the drawings: Figure 1 is a perspective view showing the top and edge of two pieces of fabric having a three-thread stitch applied thereto in accordance with my invention; Fig. 2 is a perspective view showing the edge and bottom of two pieces of fabric having my three-thread stitch applied thereto; Fig. 3 is a view similar to Fig. 1, having a two-thread stitch applied thereto in accordance with my invention; and Fig. 4 is a view similar to Fig. 2, showing my two-thread stitch.

1, indicates the fabric, which may be a single piece, or may be two pieces superposed.

2, indicates the first, or main, thread; 3, the second, or edge, thread; and 4, the third, or locking, thread.

The main thread is passed down through the fabric at successive points in loop form, thus making a straight line of stitching, and at each of said points forming a main loop 2<sup>a</sup> which is given a twist or half turn and carried to the edge of the fabric. At this point, a loop 3<sup>a</sup>, of the edge-thread is passed up through the main loop 2<sup>a</sup>, and carried to and on the surface of the fabric into position to be, and is in turn, entered by a succeeding main-loop 2<sup>a</sup>. The main-loop 2<sup>a</sup>, has passed about one of its strands 2<sup>b</sup>, a loop 4<sup>a</sup>, of the locking-thread, both strands of which latter are passed between a succeeding loop 2<sup>a</sup>, of the main-thread and the fabric. The lock-

ing-thread loop 4<sup>a</sup>, in passing around the strand 2<sup>b</sup>, of a main-loop, is also given a twist, or half-turn; that is to say, after having engaged the first main-loop, the strand 4<sup>b</sup>, of locking thread passes over a second main-loop, then around and over a third main-loop,—viz., between said loops and the fabric,—then forward to the second main-loop, entering the same from below, passes around the strand 2<sup>b</sup>, thereof, between it and the fabric, and then back under and crossing its own strand and over the third main-loop. This manipulation of the threads completes a stitch-making cycle.

The amount of tension applied to the respective threads determines the character and general appearance of the seam; that is to say, the main loop 2<sup>a</sup>, may be drawn, by a heavy tension on the second, or edge thread, completely to the upper edge 1<sup>a</sup>, of the fabric, or over said edge, or to any point between the two edges 1<sup>a</sup>, and 1<sup>b</sup>, or to any position on the bottom of the fabric. This is also true with regard to the second, or edge, thread, its disposition on the surface, bottom, or edge of the fabric being dependent upon the degree of tension applied to the main thread. Furthermore, the condition and appearance of the main loops, on the bottom of the work, depends upon the degree of tension applied to the third or locking thread; that is to say, if the tension on the locking thread is heavy, the strand 2<sup>b</sup>, of the main loop 2<sup>a</sup>, will be very much distorted, as shown on the right in Fig. 2, while if the said tension be lighter the said strand will be distorted to a lesser degree, as shown by other main loops on the left in Fig. 2. Hence, it will be seen that the appearance and general effect of the seam can be greatly varied.

In the above description, I have disclosed a seam consisting of three threads; but, a seam of the same nature and having the same characteristics and general appearance may be made of two threads. Such a seam is shown in Figs. 3 and 4, and therein the seam is composed of only a main-thread 5, and a locking thread 6. The loops 5<sup>a</sup>, of the main-thread are passed down through the fabric, given a twist, or half turn, carried up over the edge of the fabric and into position to be, and are, entered by a second, or succeeding, loop of the main thread. The locking thread loops 6<sup>a</sup>, are manipulated and caused to concatenate with the loops of the main-



thread in exactly the manner described in connection with the three-thread stitch of Figs. 1 and 2.

It will be noted that on both faces of the work, along the line of the needle punctures, there is a bead or rib formed, that on one face, Fig. 1, being produced by the continuous run of the thread 2 from puncture to puncture, constituting a straight line of stitching combined with the thread of the loop of the over-edge thread 3, the two thicknesses of thread thus being raised considerably above the face of the work; while that on the other face of the work, Fig. 2, being formed by the twist of the loop of the thread 1 at the punctures and which places one strand upon the other, thus raising the threads considerably above the face of the work. The beading on the face of the work in Fig. 2 is materially accentuated by the locking-thread which runs under the loops of the main thread and also partially surrounds the latter at the needle punctures. Thus it will be seen that an artificial selvage is produced which has substantially three lines of beading or rib effects, one on each face of the work and the other on the edge thereof. In the exaggerated views given in the drawings this beaded effect is not so apparent, but it is obvious to any one skilled in the art that when the stitches are close together, causing the threads to thoroughly cover the edge of the work, the lines of beading and "finish" become quite prominent. Hence, the half-turn or twist given the loops of the main thread produces a wearing rib and finish to the stitch as well as aids in producing an ornamental effect. The half-turn or twist given the locking-thread tends to the same result, in that by passing one of its strands across another and both of them between the loop of main thread and the work, the two threads are lifted prominently on the face of the work adjacent the needle punctures. The ornamental effect of the twist in both threads is obvious.

From the above description it will be clear that I have produced a seam for sewed articles which is impossible of ripping, running, or drawing, and this, at no matter what point the fabric may be cut across the seam, or at what point the thread may be pulled, or which thread may be drawn upon. Moreover, it will be clear that I have produced a seam which is highly ornamental and whose ornate effect has a large range of variation; also

a seam which, as a binding and finish for the edges of fabric and as an artificial selvage, has no equal.

Having thus described my invention what I claim and desire to obtain by Letters Patent is:

1. A seam for sewed articles comprising the fabric and a plurality of threads, one of the latter being passed down through the fabric in loop form, then given a half-turn or twist and carried across one face of the fabric and connected with a succeeding loop of the same thread; and another of said threads, in the form of a half-turned or twisted loop, being engaged with a strand of said first loop of the first thread and passing between the fabric and said succeeding loop of the first thread.

2. A seam for sewed articles comprising the fabric and a plurality of threads, one of the latter being passed down through the fabric in loop form, then given a half turn or twist and carried across one face of the fabric and connected with a succeeding loop of the same thread by a loop of a second thread; and a third thread, in the form of a half-turned or twisted loop, being engaged with a strand of the said first loop of the first thread and passing between the fabric and said succeeding loop of the first thread.

3. A seam for sewed articles comprising the fabric and a plurality of threads, said seam being characterized by having a line of straight stitching on one face of the fabric concatenated with half-turned or twisted loops extending from the other face of the fabric and more or less across the edge thereof, and a locking-thread surrounding and connecting respectively one strand of each of said loops.

4. A seam for sewed articles comprising the fabric and a plurality of threads, said seam being characterized by having a straight line of stitching on one face of the fabric and two series of concatenated half-turned or twisted loops on the other face of the fabric, certain of said loops being carried more or less across the edge of the work and connected with the straight line of stitches.

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

JOHN P. WEIS.

Witnesses:

CHAS. MCC. CHAPMAN,  
M. B. HOARE.