(No Model.)

A. A. CUMING.

ART OF SEWING.

No. 313,063.

Patented Mar. 3, 1885.

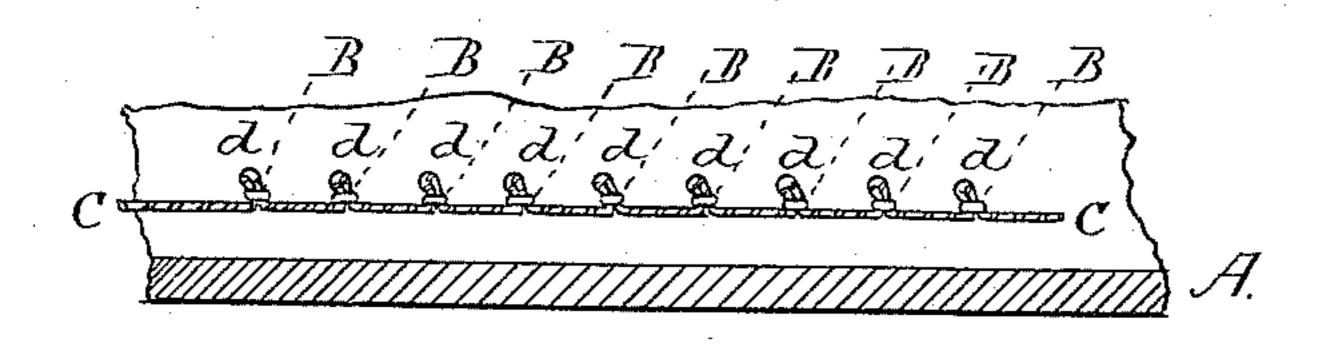


Fig. 1.

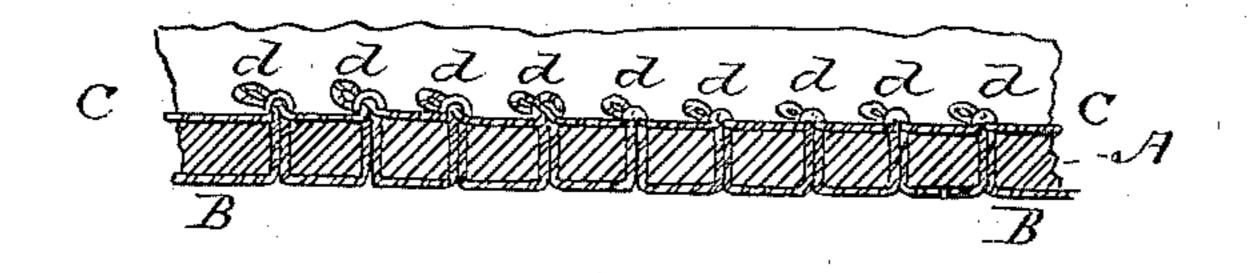


Fig. Z.

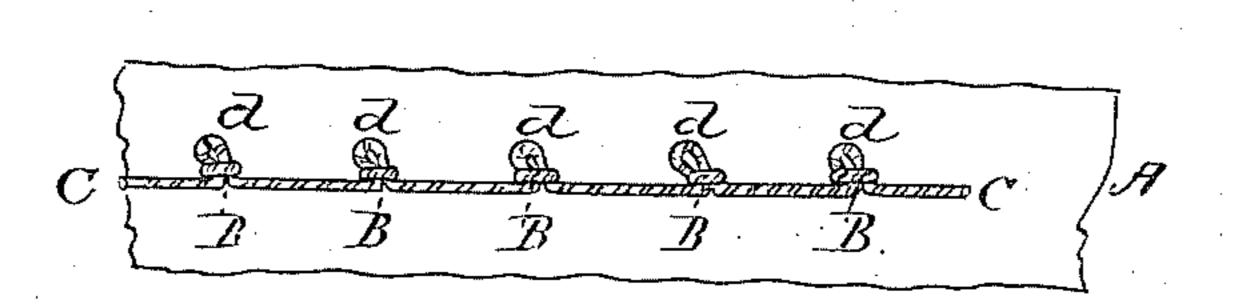


Fig. 3.

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United States Patent Office.

ALFRED A. CUMING, OF HINGHAM, ASSIGNOR OF ONE-HALF TO EDWARD ARNOLD, OF MARBLEHEAD, AND FRANCIS S. WHITMAN, OF CAM-BRIDGE, MASSACHUSETTS.

ART OF SEWING.

SPECIFICATION forming part of Letters Patent No. 313,063, dated March 3, 1885.

Application filed July 23, 1884. (No specimens.)

To all whom it may concern:

Be it known that I, ALFRED A. CUMING, of Hingham, in the county of Plymouth and State of Massachusetts, have invented a new 5 and useful Improvement in the Art of Sewing, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

This invention relates to an improvement in the stitch made by sewing-machines, and is applicable particularly to that class of stitch employed for stiff fabrics—such as leather and closely-woven cloth of hard-twist-15 ed thread—and to such sorts of sewing as require cords or strong thread. It can, however, be used reasonably well upon fine fabrics by employing a strong tension. This stitch is formed of two threads, and is of the 20 class known as the "shuttle-needle stitch," rather than a shuttle or bobbin stitch. One the other from the other side of the fabric.

25 The loops of the first of these threads are either thrust or drawn through the fabric in the ordinary way, either with an eye-pointed or notch-pointed needle working from the same side of the cloth as the thread-supply or 30 by a booked needle working from the opposite

side, as in the ordinary wax-thread mechanism. The loops of the secondary thread are then drawn through the loops of the primary thread and held until the tension draws up 35 and tightens the loop of the primary thread. By this means the primary thread lies double in the fabric, the two branches of it being pressed close together by the cling of the fabric upon it, while the loop or return-bend at

40 the surface of the fabric is spread by the loop of the secondary thread passed through it, and extending as a return-bend over the surface of the fabric in one direction and along the surface of the cloth to the adjacent loop 45 of the primary thread. This is a very satis-

factory stitch for wax-thread sewing, being more flexible than the chain-stitch, and of course more easily sewed than the lock-stitch with a shuttle or bobbin.

The mechanism for forming this stitch will be described in a separate application.

In the drawings, Figure 1 is a perspective plan of the fabric with the stitch. Fig. 2 is a section along the line of the sewing. Fig. 3 is a plan on the secondary-thread or secur- 55 ing-thread side.

Like letters indicate like parts in all the figures.

A is the fabric. B is the primary thread, which is looped through the cloth, and C is 60 the secondary thread, which is looped through the loops of the primary thread; and d are the loops of the secondary thread.

Other sewing-machine stitches formed with two threads and having loops in the secur- 65 ing thread or secondary thread have been heretofore used, notably the Grover & Baker stitch and the Wickersham "plegma-stitch;" but in these instances the loop of the primary thread is moused by the loop of the sec- 70 ondary thread, and the loop of the secondary thread is moused by the next loop of the of the threads is supplied to the stitching | primary thread, so that in both instances mechanism from one side of the fabric and | the secondary thread is three times, at least, the length of the seam, whereas in the pres- 75 ent stitch the length of the secondary thread required is only about one and a half time the length of the seam.

> I claim as my invention and desire to secure by Letters Patent of the United States—

The improvement in the art of sewing which consists in the following steps in the formation of a stitch with two threads: a loop of the first thread is passed through the fabric and slightly opened after it has passed 85 through, a loop of a second thread is passed through the loop of the first thread, the loop of the second thread is positively held from retraction while the loop of the first thread, through which it has been passed, is drawn 90 tight, and the loop of the first thread is drawn tight upon the loop of the second thread before the bight of the loop of the second thread is released, and the bight of the second thread is released after the loop of the first thread 95 has been drawn tight on the loop of the second thread, substantially as described, and for the purpose stated.

ALFRED A. CUMING.

Witnesses:

F. F. RAYMOND, 2d, FRED. B. DOLAN.