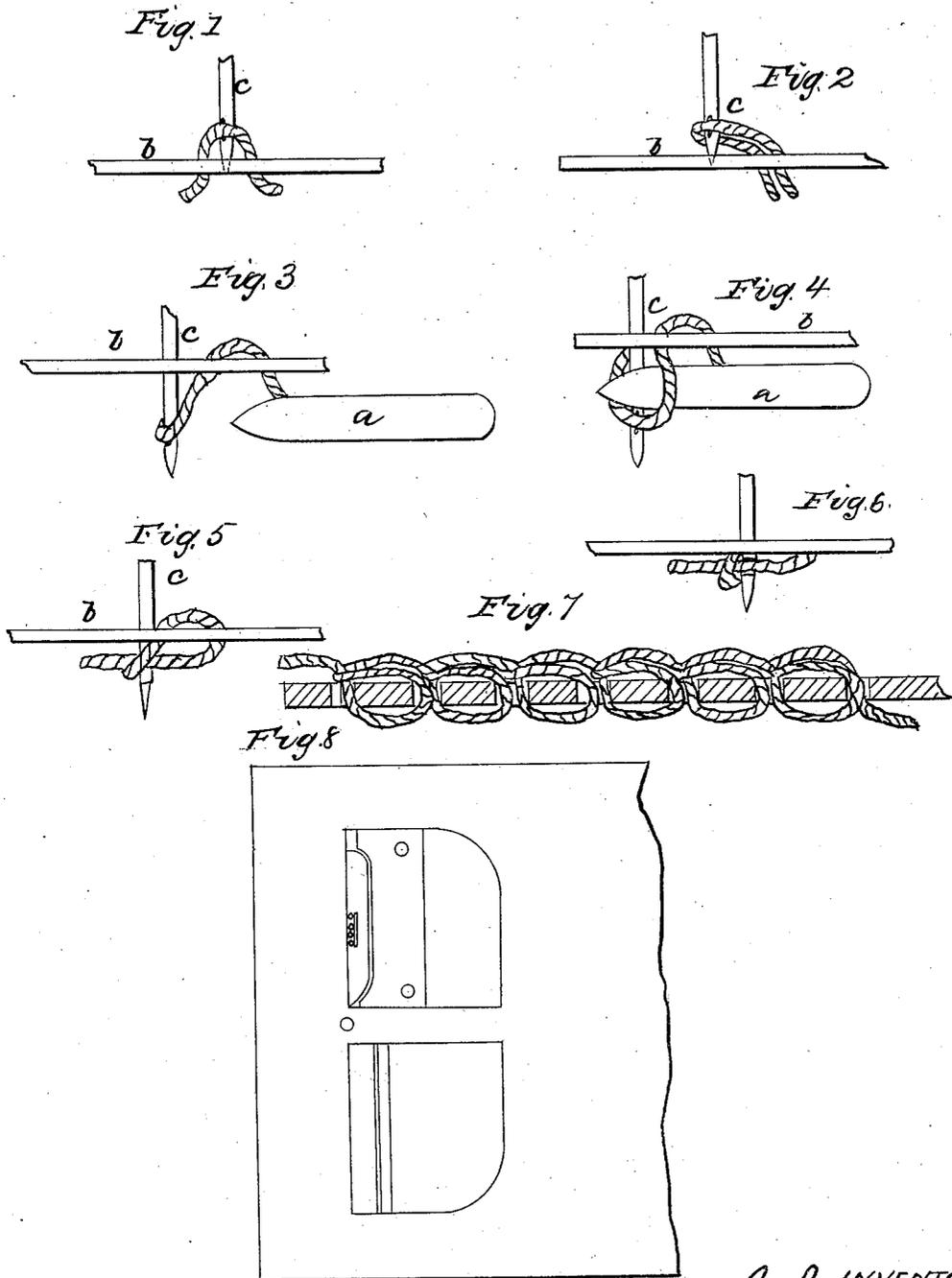


A. F. JOHNSON.
Sewing Machine Stitch.

No. 16,120.

Patented Nov. 25, 1856.



WITNESSES
E. M. Lincoln
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IMPROVEMENT IN STITCHES FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **16,120**, dated November 25, 1856.

To all whom it may concern:

Be it known that I, A. F. JOHNSON, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Stitch for uniting Pieces of Cloth or other Goods in Sewing-Machines; and I do hereby declare that the following description, taken in connection with the accompanying drawings, hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said invention, by which it may be distinguished from others of a similar class, together with such parts as I claim and desire to have secured to me by Letters Patent.

The present invention consists in forming a new stitch which cannot be pulled out, each stitch being tied or knotted by throwing a shuttle and thread through a loop formed from its own thread. In the common chain-stitch, which is formed from a single thread, the stitch is made by passing one entire loop through another loop formed in a similar manner. By my improvements the thread is carried double through the goods to be sewed, both in passing up and down, but in a single strand when carried by the shuttle through the loop. In this stitch both strands of the loop do not pass through the adjacent loops, as in the chain-stitch; but one strand of the loop passes through one loop and the other through the next loop in succession.

In the accompanying plate of drawings, Figures 1, 2, 3, 4, 5, and 6 represent the positions of the thread, needle, &c., at the various stages of the formation of the stitch. Fig. 7 is an enlarged view of the stitch when completed. Fig. 8 is a top view of the shuttle and the track or way in which it travels. In Fig. 1 the thread, which is a single one, supported by the shuttle *a*, is represented as drawn up through the cloth *b* by the barbed needle *c*. Fig. 2 shows the needle in a similar position, with the thread

elongated into a loop form by the backward movement of the shuttle *a*. Fig. 3 shows the entire loop carried down through the cloth by the needle. Fig. 4 is a similar view, representing the shuttle just as it is carrying its single thread through the loop. Fig. 5 shows the single strand after it has been carried through the loop and after the needle has made a quarter-revolution, in order that its barb may catch the loop and carry it up through the goods to be sewed. Fig. 6 is a similar view, showing the loop, &c., just before it is drawn up through the goods.

From this description it will be observed that the thread is carried double or in a loop form by the needle both in passing up through the cloth and down through the same, while the shuttle carries the thread in a single strand through the loop, thereby tying or knotting the thread at each stitch, as shown in Fig. 7, and in such a manner that it cannot possibly be drawn out. The mechanical devices for imparting the necessary revolution to the barbed needle and for throwing the shuttle back and forth at the proper time it is not deemed essential to set forth in the present description, as they will form the subject of a future application.

Having thus described my improvement, I shall state my claim as follows. What I claim as my invention, and desire to have secured to me by Letters Patent, is—

Making a stitch of a single thread by throwing a shuttle and thread through a loop formed from the shuttle-thread, as described, thereby tying or knotting each stitch for the purpose of uniting pieces of cloth or other material to be sewed.

A. F. JOHNSON.

Witnesses:

EZRA LINCOLN,
JOSEPH GAVETT.