W. WEITLING.

Sewing Machine Buttonhole Stitch.

No. 34,454. Patented Feb. 18, 1862.

Fig. 1.

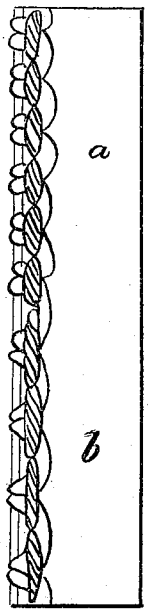

Fig. 2.

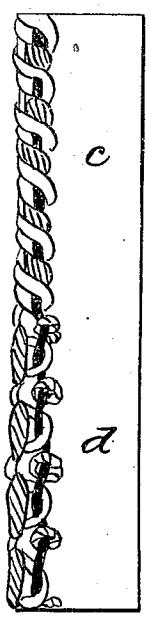

Fig. 3

Witnesses

James Purdy

R. Reichel

Inventor:

William Weisling

UNITED STATES PATENT OFFICE.

WILLIAM WEITLING, OF NEW YORK, N. Y.

IMPROVED STITCH FOR BUTTON-HOLES.

Specification forming part of Letters Patent No. 34,454, dated February 18, 1862.

To all whom it may concern:

Be it known that I, WILLIAM WEITLING, of New York, in the county of New York and State of New York, have invented a new and useful stitch-work (combination of stitches and loops) for edging and for button-holes, which can be made by sewing-machines constructed and operating as shown by the specification and drawings of my (William Weitling's) Patent No. 2,615, whole number 33,619, dated the 29th of October, 1861, or constructed and operating by any other mechanical device having the object of producing the same stitch-work by sewing-machines; and I do hereby declare that—besides the specification and drawings of my patent dated the 29th of October, 1861, showing in general that my stitch-work can be made by sewing-machines, and in special how such sewing-machines may be constructed and operating—the following is a full, clear, and exact description of the combination of loops and stitches of which this stitch-work consists, and of the different forms of stitches it may produce, reference being had to the annexed drawings, making a part of this specification, in which drawings—

Figures 1, 2, and 3 are plans of my stitch-work divided in sections. Fig. 1 represents one side of it in two different forms, and Figs. 2 and 3 represent the other side of it in four different forms.

My stitch-work is composed of three threads. (Marked red, blue, and black in the accompanying drawings.) The red one is stitched through the cloth by the sewing-machine needle. The blue one is carried through the opening of the button-hole by the thread-carrier; but while the needle and the thread-carrier are descending, and before they are stitching through the cloth and through the opening of the button-hole, or before the thread-carrier, in descending, reaches the edge of the cloth, when the operation has the object of edging, the blue thread is laid in loop form before the needle, through which loop form the needle stitches, and which loop form is thus checked on the upper side of the button-hole or edge by the thread of the needle. Thereby a stitch is produced on the one side of the edge of the cloth, or of the button-hole, as shown by Fig. 1, *a* and *b*. *a* shows the stitch narrow and tight, and *b* shows it wide and loose. Both of the threads—that of the needle and that of the thread-carrier—in rising again form loops under the plate, through which loops the shuttle or its equivalent passes, the thread marked black in Figs. 2 and 3, thus checking both of these loops on the lower side of the button-hole or edge, as shown by Fig. 2, *c* and *d*, and Fig. 3, *e* and *f*, *c* and *e* showing the stitch narrow and tight, and *d* and *f* showing it wide and loose. Either one of the three figures may represent the upper side of the button-hole, or of the edging, according to which side of the cloth is laid on the plate when the stitches are to be made. The loops forming below the plate on the lower side of the edge of the cloth or of the button-hole may also be checked in different directions, and thus produce different forms of stitches on this side of the button-hole or edge, according to which of the two lower loops is made to be caught first by the shuttle. If the blue loop is caught first, a stitch is produced as shown by Fig. 2, *c* and *d*. If the red one is caught first, a stitch is produced as shown by Fig. 3, *e* and *f*. The yellow represents the gimp generally used for binding button-holes.

Having thus fully, clearly, and exactly described my invention, what I claim as such, and desire to secure by Letters Patent, is—

A stitch-work for edging and button-holes, this stitch-work being a combination of three threads, by which combination the one thread, when passing through the cloth, loop-checks the other, passing round the edge of the cloth, and both of these being loop-checked on the other side of the cloth by the thread of the shuttle, or of its equivalent, as within set forth.

WILLIAM WEITLING.

Witnesses:

JAMES PURDY,

R. REICHEL.