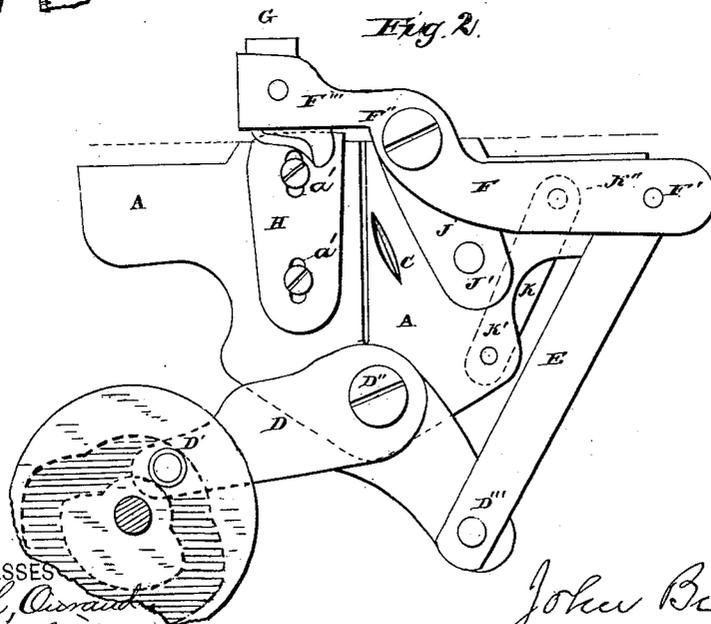
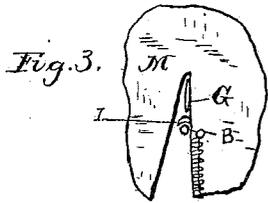
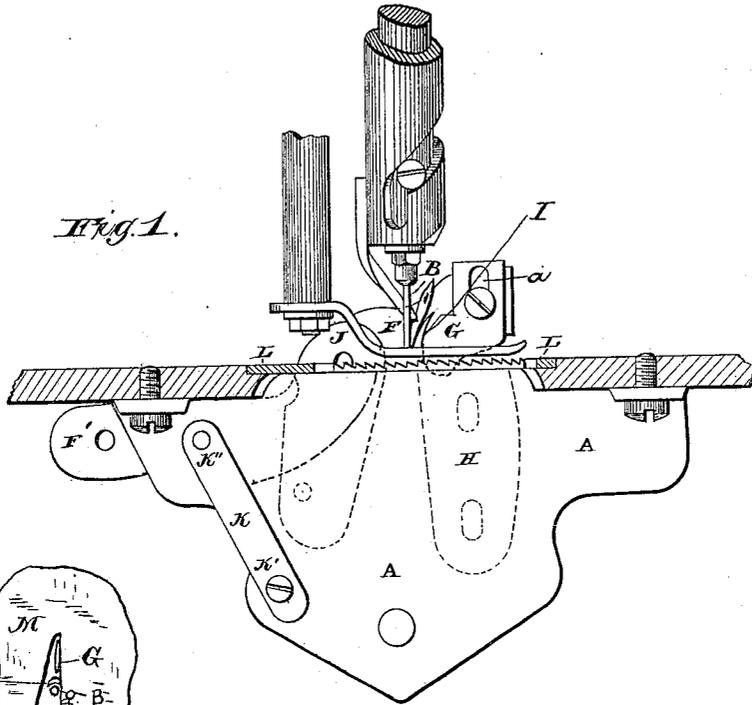


J. BIGELOW.

TRIMMING DEVICE FOR OVEREDGE SEWING MACHINES.

No. 263,467.

Patented Aug. 29, 1882.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

JOHN BIGELOW, OF PHILADELPHIA, PENNSYLVANIA.

## TRIMMING DEVICE FOR OVER-EDGE SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 263,467, dated August 29, 1882.

Application filed June 5, 1879.

To all whom it may concern:

Be it known that I, JOHN BIGELOW, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Trimming Devices for Over-Edge Sewing-Machines, of which the following is a specification.

Figure 1 shows a side view of my trimmer attachment as applied to an "American button-hole machine," so called. Fig. 2 shows a like view from the opposite side. Fig. 3 is a detail in plan to show the needle, knife, &c., in operation.

My invention relates to the application of a trimming attachment to the class of button-hole and zigzag or irregular stitch sewing-machines which make a button-hole or over-edge stitch; and it consists especially in such an arrangement of a trimming device in its relation to the stitch-forming mechanism that it shall operate to prepare in any direction across the fabric or fabrics to be overseamed a suitable edge or edges by trimming said fabric or fabrics in advance of overseaming the same.

To accomplish my purpose I combine with any of the button-hole, over-edge, whip, or glove stitch sewing-machines a trimming device so arranged that the goods shall be trimmed before they are sewed—in other words, the edge to be overseamed shall be prepared by a trimming device which acts in conjunction with the sewing mechanism, but just before or ahead of the stitch-making part.

For the purpose of illustrating before the Office I have combined a trimming device with the mechanism of the "American button-hole overseaming and sewing machine," so called, of which the following is a description.

I secure the rocking lever D by the same stud in the plate A which supports the shuttle attachment for plain sewing on such machines, and engage its stud-roll D' with the cam on the main shaft and heretofore used for actuating said shuttle mechanism. I make no change in the cam except in its position on said main shaft, which I arrange so that it shall act through said rocking lever D on the link E at D'', which connects at F' with the upper shear-blade arm, F, so that the arm F, rocking at F'' on a stud set in the post J, shall be raised and depressed at its end F''', which carries the up-

per shear-blade, G, at such time in relation to the other mechanism as may be desired. This upper shear-blade has an enlarged slot, a, so that it can be vertically adjusted to or from the lower shear-blade, as desired. I attach the lower shear-blade, H, through elongated slots a' a' to the plate A, so that its cutting-edge can engage with the cutting-edge of the upper shear-blade, G, and be capable of vertical adjustment to or from said upper shear-blade.

If desired, a spring, K, can be secured at K' to the plate A and made to act on the upper shear-blade arm at K'', which will serve to keep the cutting-edges together and assist in making a shear cut. By timing the movements of the upper shear-blade with the needle-bar I can have the shear-blades open when the feeding takes place, and, closing, cut or trim the fabric simultaneously with the downward movement of the needle-bar; but this can be varied at pleasure. The line of trimming should be sufficiently at one side of the line of perforation of the fabric by the needle B for the sewing to secure a firm hold, yet not have the edge interfere with the movement of the threads over and around said edge. Of course the trimmer can be made adjustable, so as to leave an edge of any desired width outside of the line of perforations of the needle B. In the present machine I have placed an addition to the front of the feed, so that the work shall be fed into the jaws of the trimmer-blades. The shield or guide I will deflect the trimmed-off strip away from the overseaming mechanism.

The action of the machine is as follows: Placing the superimposed pieces of fabric M to be united beneath the presser-foot, with the surplus edges to be trimmed beyond the line of the trimmer, the material is first fed between the shear-blades and trimmed. The trimmed edge itself is carried along beneath the sewing-needle B and button-hole mechanism and the edges united, while the clippings will be turned away from the sewing mechanism by the shield or guide I. With its edges thus united, the seam can be flattened and pressed out.

I have applied a trimming device similar in principle to the one above described to the Reichenbach horizontal double wheel-feed single-thread over-edge sewing-machine, and it

can be applied to any over-edge machine making button-hole, whip, glove, zigzag, or irregular stitching. By "zigzag or irregular" I mean any other than the ordinary straight sewing.

5 I do not therefore limit the application of my invention to any special over-edge sewing-machine, nor do I limit myself to the special form of trimming device shown, since other well-known devices would answer equally well; neither do

10 I herein claim specifically the patentable elements of the trimming device shown, since I have made them the subject of Division B of this case; but

15 What I do claim as new, and desire to secure by Letters Patent, is—

1. In combination with the stitch-forming mechanism of an over-edgesewing-machine, an automatic trimmer arranged to act in advance of said mechanism and in the line of the seam,

20 so that said mechanism can operate to lay its stitches across or over the edge or edges cut by said trimmer, substantially as described.

2. The combination, with the presser-foot, cloth-plate, and stitching mechanism of an over-edge or irregular-stitch sewing-machine,

25 of a trimmer arranged to act in advance of the sewing mechanism, all substantially as described.

3. The combination, with overseaming stitching mechanism, of a trimmer arranged to act

30 in advance of said mechanism, and a shield or guide for diverting the trimmed-off strip away from said overseaming mechanism, substantially as described.

In testimony that I claim the foregoing as

35 my own I affix my signature in presence of two witnesses.

JOHN BIGELOW.

Witnesses:

S. P. GIDDINGS,  
WILLIAM FITCH.