

W. H. STEDMAN.  
EDGE GUIDE FOR SEWING MACHINES.  
APPLICATION FILED APR. 7, 1909.

1.044,937.

Patented Nov. 19, 1912

Fig-1

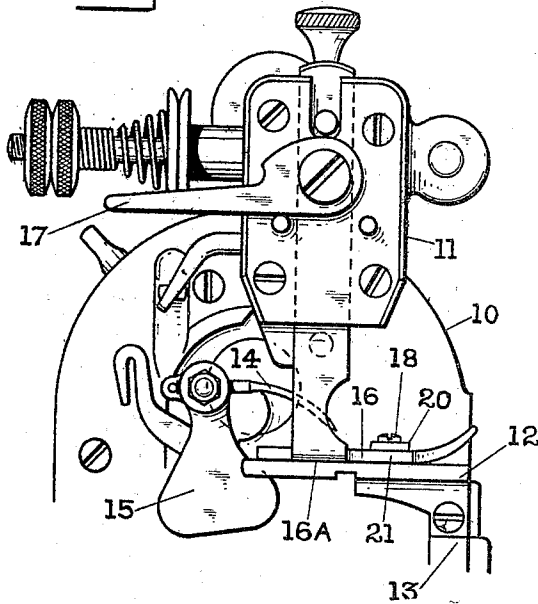


Fig-2

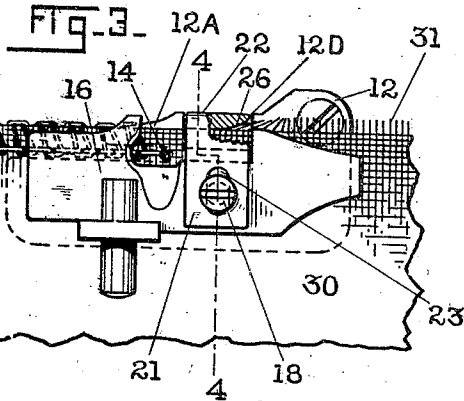
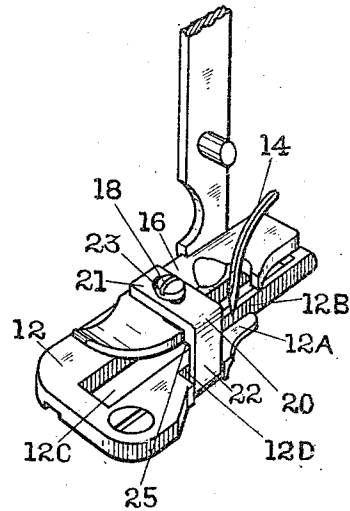


Fig-4

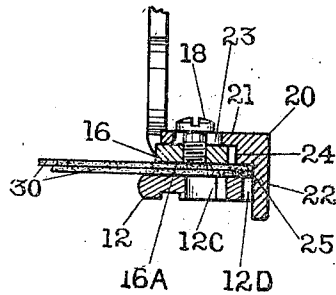
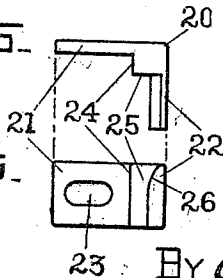


Fig-5



WITNESSES: Fig. 6.

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# UNITED STATES PATENT OFFICE.

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## EDGE-GUIDE FOR SEWING-MACHINES.

1,044,937.

Specification of Letters Patent. Patented Nov. 19, 1912.

Application filed April 7, 1909. Serial No. 488,415.

*To all whom it may concern:*

Be it known that I, WILLIAM H. STEDMAN, a citizen of the United States, residing in the city and county of Hartford, State of Connecticut, have invented certain new and useful Improvements in Edge-Guides for Sewing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the figures and letters of reference thereon.

The guide of the present invention is designed more especially for sewing machines of the overseaming type and is adapted for use in connection with the presser foot or corresponding element of the machine, said guide being mounted upon the foot and adjustable laterally thereon with reference to the direction of the machine's feed in order that the distance between the edge of the goods being overseamed and the point of needle penetration may be varied and the depth of the stitch or width of the covered edge controlled.

The object of the invention is to provide a guide of the type described which, though adjustable on its support, presents no opening between itself and the support into which the ragged or frayed edges (usually thread ends) of the goods can draw or catch and interfere with the feeding of the goods; a further object being to provide a guide capable of causing the said thread ends to lie approximately parallel with the direction of the feed, in advance of the point at which the overseaming is performed, whereby the thread ends may be effectually covered and bound to the body of the goods by the overseam stitches.

For the purposes of illustration, an embodiment of this invention is shown in connection with an overseaming machine of the well known Merrow type.

In the drawings—Figure 1 is an end elevation, showing the guide in connection with a partially illustrated overseaming machine; Fig. 2 is a perspective view of the needle plate, a portion of the presser foot with the guide mounted thereon and part of the needle or stitch forming mechanism, these elements being viewed approximately from the opposite direction from which they are viewed in Fig. 1; Fig. 3 is a view on an enlarged scale, principally in plan, showing

the presser foot and needle plate with goods therebetween, the guide (partly in section) acting on the edge of the goods in advance of the needle to guide the edge for overseaming, the needle (in section) penetrating the goods and the edge of the goods with the overseaming stitches thereon; Fig. 4 is a sectional view taken on the line 4—4 of Fig. 3 with the needle omitted and the presser foot shank broken off; Figs. 5 and 6 are, respectively, a front elevation and an underside plan of the guide.

Throughout the drawings, like characters of reference denote the same parts.

The number 10 denotes the frame of the machine, 11 the head, 12 the needle plate, 13 the needle plate support, 14 the needle, 15 the needle carrier, 16 the presser foot and 17 the presser foot lifter. The presser foot 16 is normally forced down or toward the needle plate 12 by a compression spring (not shown) to cause the foot to bear upon the goods or material on the needle plate. The needle plate 12 has the usual chaining finger 12<sup>a</sup> around which the overseam stitches are formed and from the end of which they slip as the goods are fed forward. The needle carrier 15 is oscillated to cause the needle 14 to reciprocate through the needle slot 12<sup>b</sup> and to cooperate above and below the needle plate with other stitch forming implements (also not shown) to effect the formation of overseam stitches. The needle plate 12 is provided with one or more feed dog openings 12<sup>c</sup> through which the goods are engaged by a suitable feed dog to effect their feeding. The construction and arrangement of the various elements and mechanisms thus far mentioned (excepting the guide) are of the well known Merrow type and need no detailed illustration or description.

The guide is denoted as a whole by the number 20. It is provided with two limbs 21 and 22 integral with and substantially at right angles to each other. It is adjustably secured to the upper side of the presser foot 16, beneath the head of a screw 18, the body of which screw passes through an opening 23 in the supporting limb 21 of the guide, and has its threaded end in a tapped hole in the presser foot. The adjustment of the guide is laterally of the direction of the machine's feed and such adjustment is permissible by reason of the elongated shape of the screw opening 23. The limb 21 is cut

out or reduced on its under side from a point somewhat removed from its junction with the limb 22 to its free end and to a depth approximately equal to the thickness of the presser foot 16, forming a shoulder 24 and a bearing face, denoted by the number 25.

When the guide is in place in the machine, it occupies a position (as seen from the end of the machine) in advance of the needle, and when viewed from the front of the machine that portion of the guide including the surface 25 and the limb 22 projects beyond and to the right of the presser foot. The surface 25 is preferably approximately in the plane of the under or bearing surface 16<sup>a</sup> of the presser foot and the limb 22 extends downwardly at the side of the presser foot and somewhat to the right of the needle. The limb 22 extends preferably below the upper surface of the needle plate 12, and the latter may have an opening or notch 12<sup>b</sup> to receive the limb.

The guide 20 being properly adjusted upon the foot to position the limb 22 in a desired location at the right of the needle 14, the goods or material 30 to be overseamed is introduced between the needle plate 12 and the presser foot 16 with the edge of the goods in engagement with the limb 22. This limb is the guide for the edge, and preferably is of sufficient length to always extend below the surface of the top of the needle plate even upon the introduction of very thick goods. The goods are so manipulated by the operator of the machine that the edge is kept in contact with the limb 22 as the said goods are fed up to the needle, and hence a uniform depth of overseam stitch is maintained throughout the length of the seam. To assist in leading the goods up to the needle the face of the limb 22 which is engaged by the goods may be beveled or rounded at the front edge of the limb as at 26.

The surface 25 of the limb 21, when in the plane of the bottom or bearing surface 16<sup>a</sup> of the presser foot, becomes in reality a part of the said foot and may act as does the foot proper to bear upon the goods between itself and the needle plate 12 as best shown in Fig. 4.

It will be observed that the opening which may occur between the presser foot and the guide, upon adjustment of the guide relatively to the foot, is between the shoulder 24 and the adjacent side of the recess in the presser foot, or at the left (as the machine is viewed from the front) of the surface engaged by the edge of the goods, such opening being so far removed from the edge of the goods as to afford no opportunity for the ragged edge or thread ends 31 to enter and become caught therein, nor can the ragged edge become caught in the angle formed by the junction of the surface 25

and the limb 22 for the reason that the guide limbs are integral as above set forth.

In some instances the guide may be used upon material having comparatively straight edges, or folded edges, when there would be little liability of the catching of the goods, but oftener the material has a cut edge that is more or less ragged or has projecting thread ends such as indicated by the number 31, which as they engage the guide 20 are brushed back in a direction parallel with the feed, and the said guide, being just in advance of the point of overseaming, presents the edges for the overseam stitches with the thread ends brushed back (see Fig. 3) in which position they may be readily covered and secured to the body of the goods by the overseam stitches.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. In combination with a sewing machine presser foot arranged to bear upon the goods, an edge guide coacting with said presser foot and comprising a single element having a surface for engaging and bearing upon the face of the goods at one side of the goods engaging surface of the presser foot and a surface for engaging the edge of the goods, and means for securing the guide to the presser foot.

2. In combination with a sewing machine presser foot, an adjustable edge guide having two limbs integral with each other, one limb having a surface to engage and bear as a presser foot upon the face of the goods at one side of the presser foot and the other limb having a surface to engage the edge of the goods, and means for securing the guide to the presser foot.

3. In combination with a sewing machine presser foot, an adjustable edge guide having two limbs integral with each other, one limb being adapted to be secured to the presser foot and having a surface in substantially the plane of the bearing surface of the foot, said surface being adapted to engage the goods and bear as a presser foot thereon and the other limb being substantially at right angles to said plane, and means for securing the guide to the presser foot.

4. In combination with a sewing machine presser foot, an edge guide adjustably supported on the presser foot, having a surface for engaging the edge of the goods and the opening between the same and the presser foot occasioned by the adjustment of the guide being at a distance from the plane of the surface engaged by the edge of the goods, and means for securing the guide in adjusted position on the presser foot.

5. In combination with a sewing machine presser foot, an edge guide adjustably supported by the presser foot, said edge guide

having a supporting limb and a guiding limb, the supporting limb projecting beyond the presser foot to position the guiding limb at the side thereof and having a shoulder between its free end and the guiding limb between which shoulder and the presser foot occurs any opening occasioned by the adjustment of the guide upon the presser foot, and means for securing the guide in adjusted position on the presser foot.

6. In combination with a sewing machine presser foot, an edge guide adjustably supported on the top of the presser foot, said guide having a guiding limb at substantially right angles to the plane of the bearing surface of the presser foot and a supporting limb integral with the guiding limb, cut out on its under face from its free end to a point adjacent the guiding limb to receive the presser foot and form a shoulder near the guiding limb whereby any opening between the presser foot and the guiding limb due to adjustment is formed between the said shoulder and the side of the presser foot, and means for securing the guide to the presser foot.

7. In combination with a sewing machine presser foot, an edge guide adjustably supported on the top of the presser foot, said guide having a guiding limb at substantially right angles to the plane of the bearing surface of the presser foot and a supporting limb integral with the guiding limb, cut out on its under face from its free end to a point adjacent the guiding limb thereby forming

a shoulder near the latter and a surface in the plane of the bearing surface of the presser foot, and whereby any opening between the presser foot and the guiding limb, due to adjustment is formed between the said shoulder and the side of the presser foot, and means for securing the guide to the presser foot.

8. In combination, a sewing machine presser foot, an edge guide and a needle plate, the edge guide being distinct from the presser foot and having a surface for engaging and bearing upon the face of the goods in proximity to the edge and a surface extending below the needle plate for engaging the edge of the goods and means for securing the edge guide to the presser foot.

9. In combination, a sewing machine presser foot, an edge guide and a needle plate, the edge guide being distinct from the presser foot and having two limbs integral with each other, one limb having a surface to engage the face of the goods in proximity to the edge and one limb having a surface to engage the edge of the goods, the last named limb extending below the needle plate and the needle plate being cut out to receive the said limb and means for securing the edge guide to the presser foot.

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Witnesses:

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