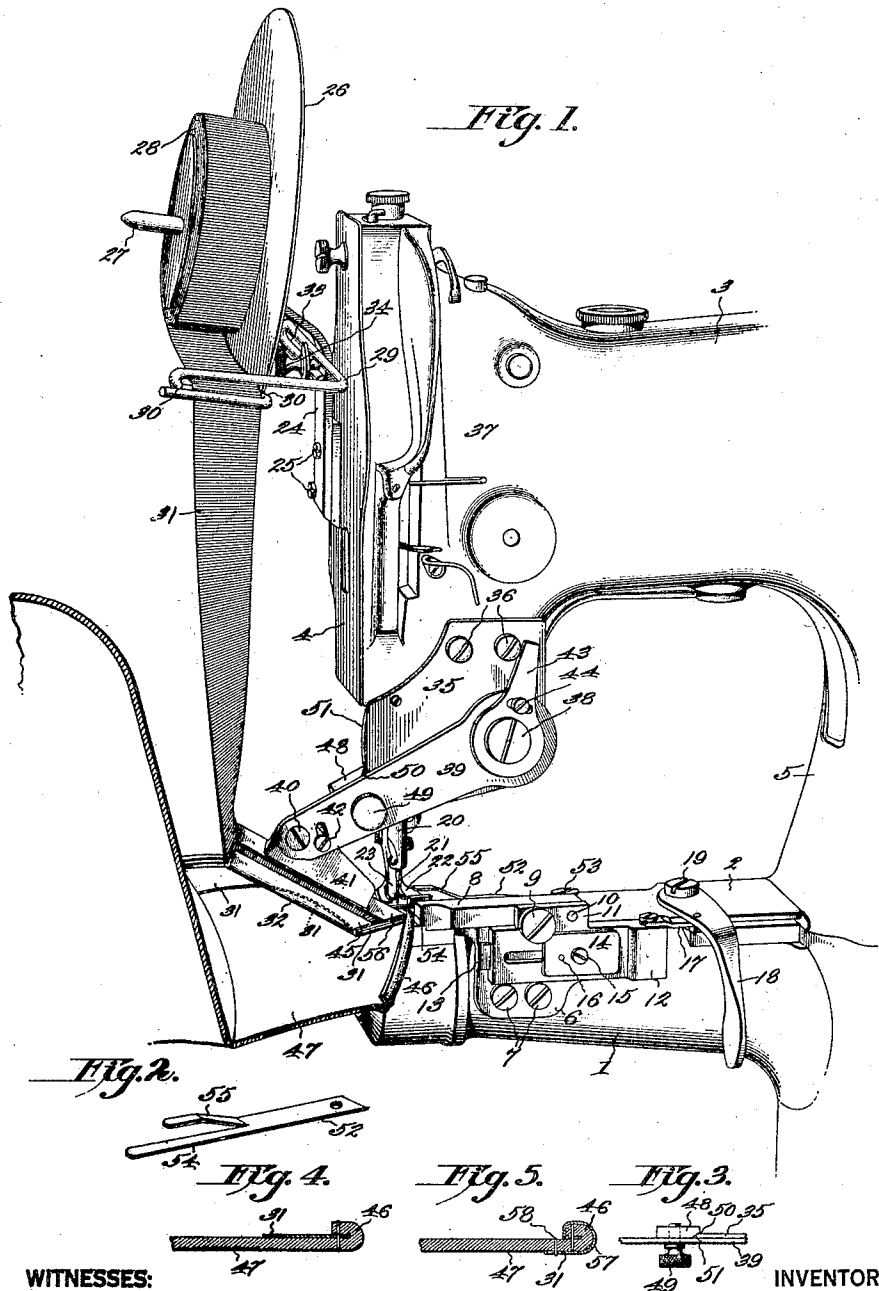


F. T. STRÖBECK.
 BINDING ATTACHMENT FOR SEWING MACHINES.
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1,402,977.

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WITNESSES:
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BINDING ATTACHMENT FOR SEWING MACHINES.

1,402,977.

Specification of Letters Patent.

Patented Jan. 10, 1922.

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To all whom it may concern:

Be it known that I, FRANS T. STRÖBECK, a subject of the King of Sweden, residing at Beachmont, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Binding Attachments for Sewing Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in binding attachments for sewing machines and has for its object to provide improved means for guiding and stitching one of the free edges of a binding braid within an edge-fold, comprising in the present instance the free edge of a hat brim, leaving the opposite free edge of said binding to be stitched to the opposite side of the brim by a second line of stitching located free of said edge-fold.

Referring to the drawings forming a part of the specification, Fig. 1 is a view slightly in perspective in front side elevation of so much of a sewing machine as is essential to an understanding of the construction and application of the present invention. Figs. 2 and 3 are detail views of certain elements, later to be referred to. Fig. 4 is a view in section of a hat brim illustrating the braid secured at one edge within the edge-fold. Fig. 5 is a view similar to Fig. 4 illustrating the finished product.

The sewing machine illustrated is of the type represented by U. S. Patent No. 989,538, April 11, 1911, to A. Rontke with the exception that there is employed a cylinder bed in place of the flat bed of the patented construction.

The present method of laying and securing the binding involves two separate operations and to meet these requirements the cylinder bed is provided with an adjustable edge-guide convenient of adjustment relatively to the free edge of the hat brim and with respect to the line of needle-actuation.

Referring to the drawings 1 represents a cylinder bed provided with the bed-plate 2, 3 the front end portion of the overhanging arm of the sewing machine provided with the usual face-plate 4, and 5 the front wall of the arm standard common to the present machine. 6 denotes an attachment bracket secured by screws, as 7, to the cylinder bed and 8 an edge-guide secured by screw 9 and pin 10 to the flange 11 of the sliding bracket

12 tracking the web 13 of the bracket 6. 14 denotes a spring-plate secured by screw 15 and pin 16 to the web 13 to retain the bracket 12 in its adjusted position. 17 denotes a link connected at one end with the bracket 12 and at its opposite end with the shifting lever 18 pivoted by screw 19 upon the bed-plate 2, said shifting lever acting, at the will of the operator, to adjust through the connections pointed out, the edge-guide 8 relatively to the line of needle-actuation to meet the requirements of the stitching operations. 20 denotes the needle-bar, 21 the needle, 22 the presser-foot and 23 the feeding foot each operated and controlled as in the construction represented by Patent No. 939,538 previously referred to.

24 represents an angle bracket carrying the tape-reel and secured at one end by screws, as 25, to the face-plate 4, its opposite end carrying the disk 26 and reel-pin 27 upon which is loosely mounted the tape-reel 28. 29 denotes a braid-guide having loops, as 30, through which the tape 31 is guided to the braid-leader 32, said braid-guide being provided with a loop 33 through which passes a thumb-screw 34 for securing said guide to the bracket 24.

35 represents an attachment plate depending from and secured by screws, as 36, to the head 37 of the overhanging arm and has pivotally attached to it, by stud-screw 38, a braid-leader adjusting arm 39 whose opposite end has pivotally attached by screw 40, the braid-leader flange 41 held against accidental adjustment by the screw 42 threaded into said flange. The screw 38 serves also as a pivot for an adjustable extension 43 held against accidental movement by the screw 44 threaded into said arm 39. One of the adjusting screws 36 serves under certain conditions of manipulation, to register the delivery end 45 of the braid-leader relatively to the edge-fold 46 of the hat brim 47.

48 represents a brake-shoe adjustably secured, by screw 49, to the rear side of the adjusting arm 39 and provided with a beveled edge 50 cooperating with a beveled edge 51 formed on the attachment-plate 35, the purpose of the employment of such brake-shoe being to make convenient the adjustment of the arm 39 without disturbing the adjustments controlled by the screws 42 and 44 when, for any purpose, it is desired to move the braid-leader 32 out its operative

position with respect to the edge-fold 46. 52 represents a spring-yielding fabric-presser secured to the bed-plate 2 by screw 53 and provided with a fold guiding member 54 and lifting finger 55 the guiding member acting upon the edge-fold 46 and the finger overlying the presser-foot 22 making it convenient to release the pressure on the edge-fold whenever the presser-foot is raised to release the fabrics.

In the practical application of the herein described means preparation of the hat for the binding operation includes the forming of the edge-fold 46, as shown in Fig. 1, when the hat-brim is presented to the action of the needle with the edge-fold in guiding relationship with the front end of the edge-guide 8 and under the fold guiding member 54 with the substantially right angle corner 56 of the braid-leader beneath the upper ply of the edge-fold when the machine is put into operation and the braid secured as shown in Fig. 4. After the completion of the first operation the braid is turned back over the edge-fold as shown in Fig. 5. To effect the second operation the braid-leader is elevated by loosening the screw 49, swinging the arm 39 on its pivot 38 and again tightening the screw, when the edge-gage is adjusted back to bring it into guiding relationship with the rounded edge 57 of the edge-fold, see Fig. 5, when the seam 58 is formed, thus completing the operations.

In connection with the above it is to be understood that the second operation is of a character that may or may not occur subsequent to each first operation and may if desired be accomplished on a separate machine as it comprises a simple operation made convenient in connection with the present construction.

Important to the operations noted above is the construction and control effected by the braid-leader in delivering the flat braid within the edge-fold with an equal tension or pull on the oppositely arranged selvage edges when effecting the first stitching operation, such control being accomplished by the angular relationship of the delivery end of the braid-leader with respect to the direction of seam-formation; making practical the reversing and directing of the braid in a manner to insure that the braid will be advanced to the action of the needle with the same result as is effected by a direct delivery of the braid in a straight line on an exposed flat surface.

Having thus set forth the nature of the invention, what I claim herein is—

1. In a binding attachment for sewing machines, the combination with a stitch-forming and cloth-feeding mechanism and means for actuating the latter, of a braid supply and means for directing said braid between plies of fabric comprising an edge-

fold, said means including a yielding fabric presser and a braid-leader, the latter having its delivery end arranged at an angle to the line of seam-formation to invert the braid and to permit of one corner of said delivery end to enter and guide said braid between said plies.

2. In a binding attachment for sewing machines, the combination with a stitch-forming and cloth-feeding mechanism and means for actuating the latter, of a braid supply and means for directing said braid between plies of fabric comprising an edge-fold, said means including an adjustably secured braid-leader having its delivery end arranged at an angle to the line of seam-formation to invert the braid and to permit of one corner of said delivery end to enter and guide said braid between said plies.

3. In a binding attachment for sewing machines, the combination with a stitch-forming and cloth-feeding mechanism and means for actuating the latter, of a braid supply and means for directing said braid between plies of fabric and comprising an edge-fold, said means including a braid-leader capable of adjustments in substantially transverse directions and normally having its delivery end arranged at an angle to the line of seam-formation to invert the braid and to permit of one corner of said delivery end to enter and guide said braid between said plies.

4. In a binding attachment for sewing machines, the combination with a stitch-forming and cloth-feeding mechanism and means for actuating the latter, of a braid supply and means for directing said braid between plies of fabric comprising an edge-fold, said means including a braid-leader capable of adjustments in substantially transverse directions and means for securing said leader in radially different relationships and normally having its delivery end arranged at an angle to the line of seam-formation to invert the braid and to permit of one corner of said delivery end to enter and guide said braid between said plies.

5. In a binding attachment for sewing machines, the combination with a stitch-forming and cloth-feeding mechanism and means for actuating the latter, of a braid supply and means for directing said braid between plies of fabric comprising an edge-fold, said means including a yielding fabric presser, an edge-guide, a fold guiding member and a braid-leader the latter having its delivery end arranged at an angle to the line of seam-formation to invert the braid and to permit of one corner of said delivery end to enter and guide said braid between said plies.

In testimony whereof I have signed my name to this specification.

FRANS T. STRÖBECK.