F. S. WOODHEAD.

GUIDE FOR SEWING MACHINES.

APPLICATION FILED APR. 2, 1910.

1,048,779. **Patented Dec. 31, 1912.**

Fig. 3

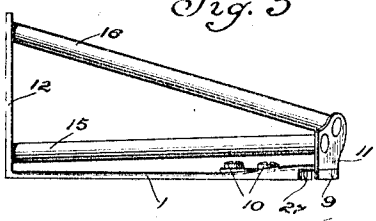


Fig. 4.

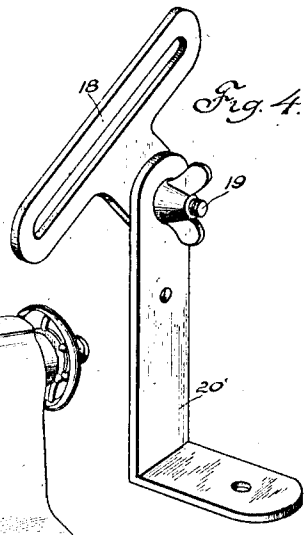
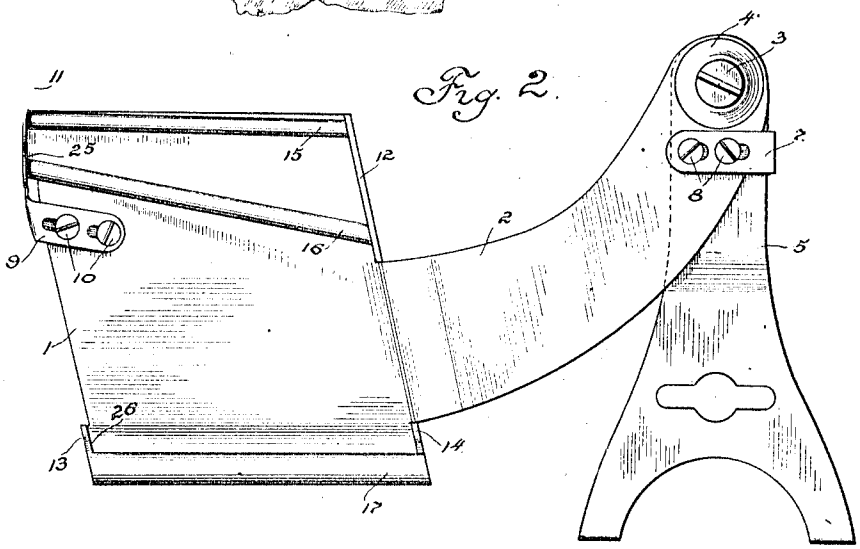


Fig. 1.

Fig. 2.



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GUIDE FOR SEWING-MACHINES.

1,048,779. Specification of Letters Patent. Patented Dec. 31, 1912.

Application filed April 2, 1910. Serial No. 552,947.

To all whom it may concern:

Be it known that I, FRANK S. WOODHEAD, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Guides for Sewing-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in guiding attachments for sewing machines, and has for its object to provide improved means for automatically presenting beadings, edgings, trimmings, etc., to the garment or article to be trimmed, and to this end the invention comprises multiple guiding elements arranged in such relationship that the seam-receiving edge of the trimming will be constantly held in contact with its edge-guiding element.

In the manufacture of certain classes of producti ns it is frequently necessary to apply the trimmings in patterns of irregular design, which requires the manual manipulation of the article, thus making a difficult operation for an inexperienced operator; and when it is also necessary to manually guide the trimming, the skill necessary to effect the required quantity and quality of production is attained only by long continued practice. The employment of the means herein disclosed is intended to materially lessen these difficulties and save a substantial portion of the time which the operator would otherwise require to become proficient in handling the work.

For some productions it is desirable to position the fabrics in abutting relationship and secure them by a line of zigzag stitching, while in other cases it is desirable to overlap the edges of the fabrics and secure them by an ordinary straight line of stitching, and to meet these requirements is a further object of this invention.

The invention is herein shown in connection with one form of commercial zigzag or overseaming machine of well understood construction, and only such elements thereof as are deemed necessary for a proper understanding of the application of the invention have been illustrated.

As the application of the invention to the ordinary sewing machine for effecting single lines of stitching will be evident from an understanding of the present drawings, it has not been thought necessary to illustrate such form of machine.

Referring to the accompanying drawings illustrating the invention, in the several figures of which like parts are similarly designated, Figure 1 is a reduced perspective view of one form of commercial zigzag or overseaming machine equipped with the improved mechanism. Fig. 2 is a full size plan view of the main guide shown in Fig. 1. Fig. 3 is a view in elevation of the delivery end of the main guide. Fig. 4 is a perspective view of the supplemental or bracket arm guide.

1 represents the attachment base-plate having its seam edge arranged at an angle to the line of seam formation, 2 a bracket arm which carries at one end the said base-plate and at its opposite end is frictionally secured by screw 3 and spring washer 4 to a bracket 5, the latter being adjustably secured by a screw 6 to the bed-plate of the sewing machine, a stop 7 adjustably secured by screws 8 to the arm 2 acting to limit the swinging movements of said base-plate in the direction of the feed of the material.

9 represents an adjustable outer edge-guide secured by screws 10 to the seam edge of the base-plate 1. The base-plate 1 is provided with vertically-arranged brackets 11, 12, 13 and 14, the inner walls 25 and 26 of the brackets 11 and 13 acting as edge-guides for the trimming strip. In the bracket 11 are secured the inner ends of the guide rods or guiding elements 15 and 16 inclined at different angles from a horizontal plane, and in the bracket 13 is secured one end of the horizontally arranged guide rod or guiding element 17, the opposite end of the latter rod being secured in the bracket 14 and the outer ends of the rods 15 and 16 being secured in the bracket 12.

To facilitate the delivery of the trimming from the supply to the main guiding device, there is provided a supplemental guide 18 adjustably secured by screw 19 to the guide standard 20, which latter is secured by a

suitable screw (not shown) to the upper surface of the sewing machine bracket arm as shown in Fig. 1, a supply spool 21 being suitably mounted on a rod 22 secured in a base 23, said base being conveniently positioned upon the commonly-employed sewing machine table or stand, at the rear of the sewing machine.

In the operation of the device, supposing it is desired to guide the adjoining edges of the materials in abutting relationship, the edge-guide 9 is adjusted to the position illustrated in the drawings where it acts to guide the edge of the material to which the trimming is to be applied. The trimming 24 is passed from the supply through the guide 18, under the guide bar 17, over the guide bar 16 and out beneath the bar 15, with its inner or abutting edge in contact with the inner walls 25 and 26 of the brackets 11 and 13, the angular relationship of the guides 15, 16 and 17 serving to hold the abutting edge of the trimming in contact with said walls.

From the nature of the construction it will be evident that if the main guide were to be used only in connection with productions wherein the adjoining edges of the fabrics were guided in abutting relationship, the bracket 11 could be extended downward to the lower surface of the base-plate 1 and thus form a permanent edge-guide for the main or body portion of the material; also that if the productions required only an overlapping of the adjoining edges, the guide 9 could be dispensed with and the edge of the main or body portion of the material brought into guiding contact with the edge 27 of said base-plate. To meet the requirements of manufacturers generally, the main guiding device is furnished with or without the guide 9 and with or without the bracket 11 extended downward to the lower surface of the base-plate 1.

Claims:—

1. In a guiding attachment for sewing machines, a base-plate, an inner and an outer edge-guide located at the seam edge of and adjacent to the delivery end of said base-plate, and an inner edge-guide located at the seam edge of and adjacent to the receiving seam edge of and adjacent to the receiving end of said base-plate, in combination with multiple guiding elements carried by said base-plate and inclined with respect to each other and to the line of seam formation for guiding a trimming strip toward the inner edge-guides.

2. In a guiding attachment for sewing machines, a base-plate, and inner and outer edge-guides for guiding the adjacent edges of the fabrics to the action of the stitch-forming mechanism, in combination with multiple guiding elements carried by said base-plate and inclined with respect to each other and to the line of seam formation for guiding a trimming fabric toward the inner edge-guide.

3. In a guiding attachment for sewing machines, a base-plate, inner and outer edge-guides carried by said base-plate, and a horizontally-arranged guiding element located adjacent to the receiving end of and carried by said base-plate, in combination with multiple guiding elements inclined downwardly and upwardly respectively, toward the edge-guides and located at the delivery end of and carried by said base-plate.

4. In a guiding attachment for sewing machines, a base-plate, inner and outer edge-guides located at the seam edge and adjacent to the delivery end of said base-plate, an inner edge-guide located at the seam edge of and adjacent to the receiving end of said base-plate, and brackets extending vertically from the oppositely-arranged edges of said base-plate, in combination with multiple guiding elements mounted in said brackets, said multiple guiding elements being inclined with respect to each other and to the line of seam formation for guiding a trimming fabric toward the inner edge-guides.

5. In a guiding attachment for sewing machines, a base-plate having adjustments into and out of operative relationship with the stitch-forming mechanism and provided with inner and outer edge-guides for guiding the adjacent edges of the fabrics to the action of the stitch-forming mechanism, in combination with multiple guiding elements carried by said base-plate and inclined with respect to each other and to the line of seam formation for guiding a trimming fabric toward the inner edge-guides.

6. In a guiding attachment for sewing machines, a base-plate provided with vertically-arranged inner and outer edge-guides and carrying at its receiving end a horizontally-arranged guiding element located at substantially right angles to the line of the seam, said base-plate at its delivery end being provided with a guiding element inclined downwardly from the vertical plane of said inner edge-guide, and a guiding element carried by said base-plate arranged obliquely with respect to the line of said seam and inclined upwardly from the vertical plane of said edge-guiding surfaces, said obliquely-arranged guiding element being intermediate the guiding element located at the receiving end and the like element located at the delivery end of said base-plate.

7. In a guiding attachment for sewing machines, a base-plate provided at its delivery end with an inner and an outer edge-guide and at its receiving end with an inner edge-guide, the edge of said base-plate nearest the fabric being disposed at an angle to the line of feed to better accommodate the manual

manipulation of the body fabric, and a horizontally-arranged guiding element located at the receiving end of and carried by said plate, in combination with multiple guiding elements inclined downwardly and upwardly respectively, toward the edge-guide and located at the delivery end of and carried by said base-plate.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

FRANK S. WOODHEAD.

Witnesses:
THOMAS CAMPBELL,
ABBIE M. DONIHU.