J. H. TROWBRIDGE.

Sewing-Machine Guides.

No. 166,161. Patented July 27, 1875.

Fig. 1.

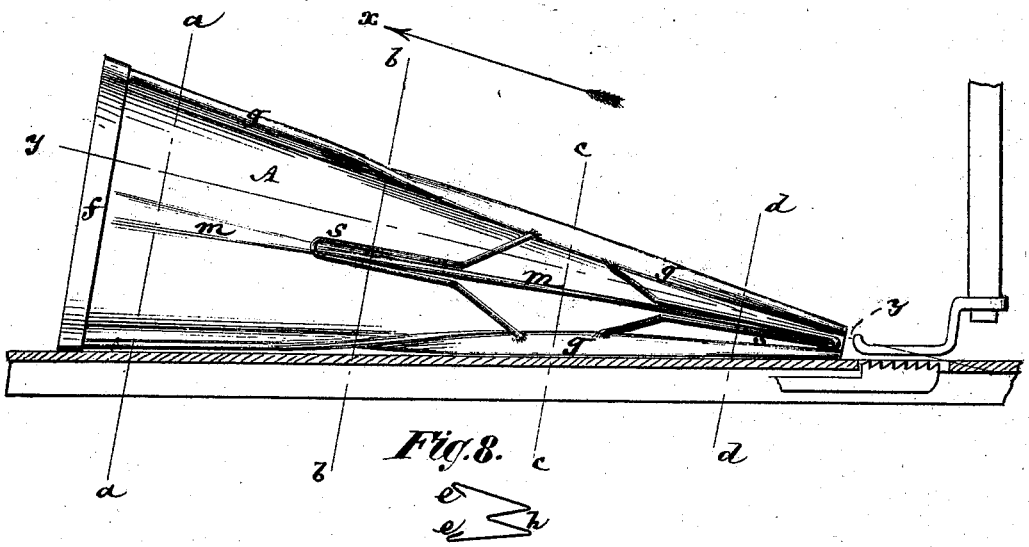


Fig. 8.

Fig. 2.

Fig. 3.

Fig. 6.

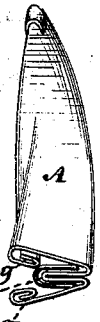


Fig. 4.

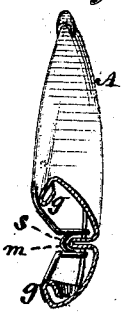


Fig. 5.

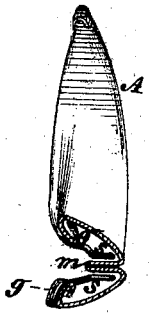
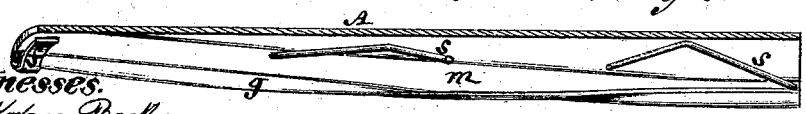


Fig. 7.



Witnesses.

John Becker.

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UNITED STATES PATENT OFFICE.

JOHN H. TROWBRIDGE, OF BROOKLYN, ASSIGNOR TO GEORGE H. WOOSTER, OF NEW YORK, N. Y.

IMPROVEMENT IN SEWING-MACHINE GUIDES.

Specification forming part of Letters Patent No. **166,161**, dated July 27, 1875; application filed February 3, 1874.

To all whom it may concern:

Be it known that I, JOHN H. TROWBRIDGE, of the city of Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Sewing-Machine Guides for making bands for ruffling and other trimmings, of which the following is a specification:

This invention relates to the production, by sewing machinery, of a band for ruffling, fluting, plaiting, insertion, and other trimmings, and which is not merely formed of a double band, with or without its raw edges turned in, and holding the ruffling or other trimming between them, but in which the double band is also turned in at its folded or doubled-back edge, so that the band presents at such part four thicknesses of cloth—that is, two thicknesses on either side to receive between them the edge of the garment or article the ruffling is designed to be applied to, whereby the band, when so applied, presents a hem finish on both sides of the article or garment, substantially as described in another application for patent made by me simultaneously with this.

This invention consists in a guide of a novel construction for attachment to sewing-machines, whereby the strip of cloth of which the band is made is not only doubled and prepared to receive the trimming in between it, but is turned in at its folded or doubled back edge.

In the accompanying drawing, Figure 1 represents a front elevation of my improved guide as applied to a sewing-machine table, and in its relation with the presser-foot and feeding-dog of the machine. Figs. 2, 3, 4, and 5 are vertical sections of the guide, taken respectively and consecutively, as indicated by the line *a a*, *b b*, *c c*, and *d d*, looking in each case in direction of the arrow *x*—that is, in an opposite direction to the feed of the cloth. Fig. 6 is an end view of the guide, also looking in the direction of the arrow *x*; Fig. 7, a nearly horizontal section on the line *y y*; and Fig. 8, a diagram in illustration of the form given to the band as it issues from the guide and before its passage under the presser-foot.

Similar letters of reference indicate corresponding parts.

A is the guide for folding the strip of cloth to form the band for a ruffle or other trimming, and constructed, if desired, to turn in the edges *e e*, Fig. 8, of the band, as said strip is fed in or through the guide from the broadest to and through the narrowest end of it, the strip being first entered between the back of the guide and a front cross-plate or bar, *f*, and with its edges in turned-over portions *g g*, which gradually assume, toward the delivery or narrowest end of the guide, a shape that turns in the edges of the strip, as clearly shown in Figs. 2, 3, 4, and 5. Another guide is or may be used for guiding the strip of cloth forming the ruffle or other trimming into the band between the edges *e e* of the latter, also a plaiting or ruffling attachment, substantially as described in Letters Patent No. 46,424, issued to E. C. Wooster as assignee of Thomas Robjohn, February 14, 1865; but such devices are not shown here, as the present invention includes no improvement on them, but consists in a novel construction of the band doubling or forming guide A, whereby it may be made, if desired, not simply to turn in the edges *e e* of the strip by the turned-over portions *g g* of the guide, but also operates to turn in the band at its folded or doubled-back edge, as shown at *h*, in Fig. 8, in order that the band may present at such part four thicknesses of cloth—that is, two thicknesses on either side—to receive between them the edge of the garment or article the ruffling or trimming is designed to be applied to, in order that the band, when applied, shall present a hem finish on both sides of the article or garment. To this end the guide A is constructed with a crease in and along its back, shaped to produce a longitudinal rib, *m*, which may either be of uniform or gradually increasing projection toward the forward or delivery end of the guide, but preferably of gradually increasing projection until it reaches a doubled or close U-shape at the delivery and narrowest end of the guide, as represented in Fig. 5 of the drawing, whereby the strip is turned in, as shown at *h*, in Fig. 8. To keep the strip of cloth down to its

place against the back of the guide A, and over the rib *m*, any suitable means—as, for instance, wire springs S—may be attached to the guide to bear against the strip. It is not absolutely necessary that the rib *m* should be continuous, as it might be broken, forming separately projections of increasing prominence toward the delivery end of the guide. This I regard as the equivalent of the continuous rib; nor is it absolutely necessary that the rib *m* should be of gradually increasing projection, as it might be of equal projection from one end to the other, but the form which I have here described is the most desirable.

I claim—

A band-folding guide, substantially as described, the guiding-surface or channel-way of which is constructed to fold or turn in the back or doubled edge of the band in the form of a groove to receive the edge of the garment or article to which the band is designed to be applied, as specified.

JOHN H. TROWBRIDGE.

Witnesses:

HENRY T. BROWN,

MICHAEL RYAN.