R. F. BEARDSLEY.

EDGE FOLDING ATTACHMENT FOR SEWING MACHINES.

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1,282,026. Patented Oct. 22, 1918.

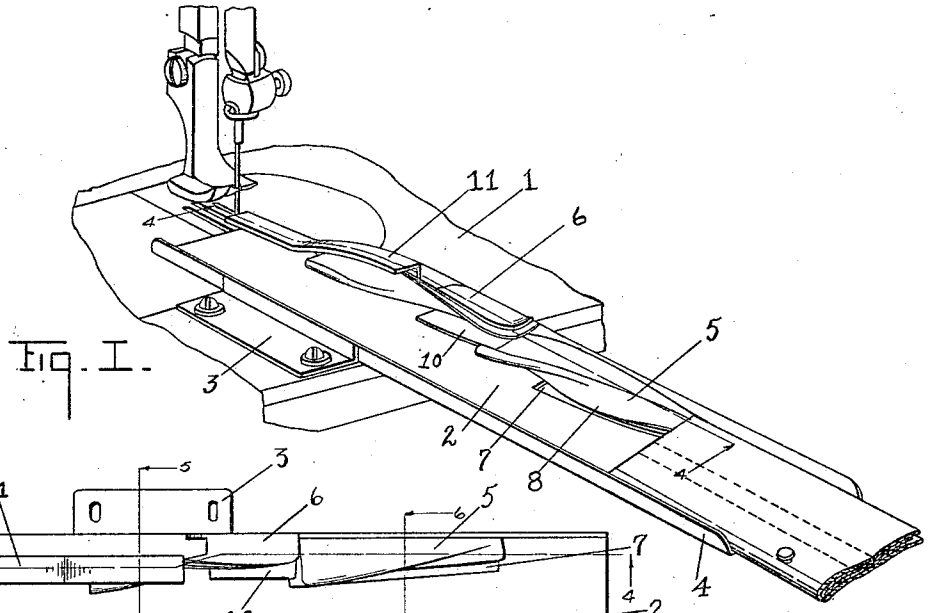


Fig. I.

Fig. II.

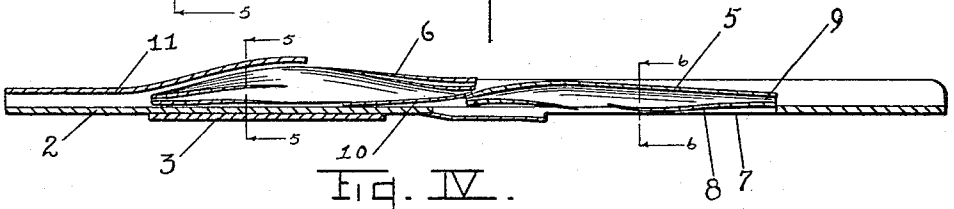


Fig. IV.

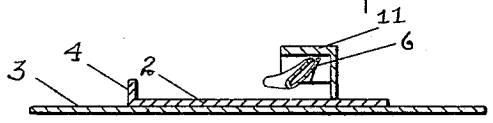


Fig. V.

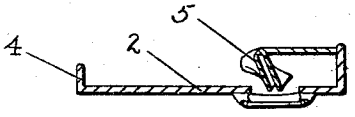


Fig. VI.

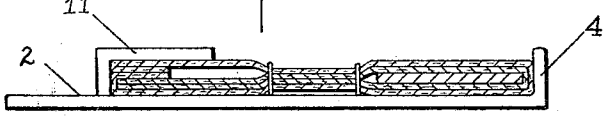


Fig. III.

Witnesses

M. Louise Thurston

Lenn Gilman

Inventor

Robert F. Beardsley

By Chappell Dean

Attorneys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ROBERT F. BEARDSLEY, OF KALAMAZOO, MICHIGAN, ASSIGNOR TO KALAMAZOO CORSET COMPANY, OF KALAMAZOO, MICHIGAN.

EDGE-FOLDING ATTACHMENT FOR SEWING-MACHINES.

1,282,026. Specification of Letters Patent. Patented Oct. 22, 1918.

Application filed June 24, 1918. Serial No. 241,565.

To all whom it may concern:

Be it known that I, ROBERT F. BEARDSLEY, a citizen of the United States, residing at the city and county of Kalamazoo, State of Michigan, have invented certain new and useful Improvements in Edge-Folding Attachments for Sewing-Machines, of which the following is a specification.

This invention relates to improvements in edge folding attachments for sewing machines.

The main objects of this invention are:

First, to provide an improved edge folding attachment for sewing machines whereby double edges may be folded inwardly in a smooth and regular manner and delivered to the sewing machine superimposed one upon the other.

Second, to provide an improved sewing machine attachment having these advantages in which the edges to be folded may be conveniently engaged with said folder members.

Further objects, and objects relating to structural details, will definitely appear from the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification. The invention is clearly defined and pointed out in the claims.

A structure which is a preferred embodiment of my invention is clearly illustrated in the accompanying drawing, forming a part of this specification, in which:

Figure I is a detail perspective view of a sewing machine with my improved attachment mounted thereon.

Fig. II is a plan view of my folding attachment.

Fig. III is a rear end view showing the folded material as it issues from the folder.

Fig. IV is a detail longitudinal section on a line corresponding to the line 4—4 of Figs. I and II.

Fig. V is a transverse section on a line corresponding to line 5—5 of Figs. II and IV.

Fig. VI is a transverse section on a line corresponding to line 6—6 of Figs. II and IV.

In the drawing similar reference characters refer to similar parts throughout the several views, and the sectional views are taken looking in the direction of the little arrows at the ends of the section lines.

Referring to the drawing, 1 represents the sewing machine generally, only such parts thereof being illustrated as seem to be desirable to illustrate the application of my improvements.

My improved folder attachment comprises a bed or supporting plate 2 carried by a bracket 3 adapted to be attached to the bed of the sewing machine as shown in Fig. I. The bed plate is provided with a longitudinal guide 4 preferably in the form of a flange on the rear edge of the plate.

I provide a pair of folder members 5 and 6, the members being substantial duplicates and being formed of pieces of sheet metal folded to a U cross section and then given a half twist so that their entrance and exit ends are horizontal and face in opposite directions.

The bed plate is cut away at 7 so as to permit the lower edge 8 of the folder member for the bottom edge to be folded to lie in approximately the plane of the bed so that the fabric sliding along on the bed will conveniently enter the entrance or mouth 9 of the folder member. As the material is carried along on the bed its edge engaged in the folder member 5 is, owing to the half twist thereof, folded inwardly upon the fabric.

The rear folder member 6 is disposed with its entrance above the rear of the front folder member so that the upper edge to be folded may be entered into the rear folder after the bottom edge to be folded has been entered into the front folder, thus giving the operator an opportunity to enter the edges of the fabric while the work is being fed along.

At the rear of the front folder 5 the folded bottom edge passes under the guide finger 10 which retains the folded edge until it passes under the rear end of the rear folder member which is supported in a spaced relation to the bed, as shown in Fig. IV, so that it constitutes a retainer for the folded bottom edge.

At the rear of and projecting above the rear folder member is a guide and retainer 11 which engages and retains the folded edges as they pass to the needle of the sewing machine, the upper fold being superimposed upon the lower or bottom fold as the upper fold passes from the rear folder and the folds are retained, as stated, in this relation as the work passes to the machine.

My improved folder attachment is especially designed by me for use in the manufacture of strips used in the manufacture of corsets, although it is desirable and readily adapted for use in other relations. By arranging the guide and folder member as I have illustrated the strips are folded to the desired width and a uniform product may be rapidly produced or manufactured.

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

1. A folder attachment for sewing machines comprising a bed plate having a longitudinal guide, a pair of folder members U-shaped in cross section and having half twists therein disposed with their front ends facing said guide to permit the entrance of the edges of the fabric to be folded, the front end of the upper edge folder being disposed above the rear end of the bottom edge folder, a guide finger extending rearwardly from the rear end of the bottom edge folder whereby the folded bottom edge is retained and guided under the rear portion of the upper edge folder which constitutes a retainer therefor, and a retainer disposed at the rear of the upper edge folder in a spaced relation to the bed plate to retain the folded edges one upon the other as they pass to the sewing machine.

2. A folding attachment for sewing machines comprising a bed plate having a longitudinal guide, a pair of folder members U-shaped in cross section and having half twists therein disposed with their front ends facing said guide to permit the entrance of the edges of the fabric to be folded, the front end of the upper edge folder being disposed above the rear end of the bottom edge folder, and a retainer disposed at the rear of the upper edge folder in a spaced relation to the bed plate to retain the folded edges one upon the other as they pass to the sewing machine.

3. A folding attachment for sewing machines comprising a bed plate having a longitudinal guide, a pair of folder members U-shaped in cross section and having half twists therein disposed with their front ends facing said guide to permit the entrance of the edges of the fabric to be folded, the front end of the upper edge folder being disposed above the rear end of the bottom edge folder, and a guide finger extending rearwardly from the rear end of the bottom edge folder whereby the folded bottom edge is retained and guided under the rear portion of the upper edge folder which constitutes a retainer therefor.

4. A folding attachment for sewing machines comprising a bed plate having a longitudinal guide, and a pair of folder members U-shaped in cross section and having half twists therein disposed with their front ends facing said guide to permit the entrance of the edges of the fabric to be folded, the front end of the upper edge folder being disposed above the rear end of the bottom edge folder.

5. A folding attachment for sewing machines comprising a bed plate having an upturned guiding flange at its rear longitudinal edge, and a pair of folder members U-shaped in cross section and having half twists therein disposed with their front ends facing said guiding flange to permit the entrance of the edges of the fabric to be folded, the front end of the upper edge folder being disposed above and at the rear of the entrance of the bottom edge folder, said bed plate having a guiding flange on its front longitudinal edge in front of the first folder.

6. A folding attachment for sewing machines comprising a bed plate having a longitudinal guide, and a pair of folder members U-shaped in cross section and having half twists therein disposed with their front ends facing said guide to permit the entrance of the edges of the fabric to be folded, the front end of the upper edge folder being disposed above and at the rear of the entrance of the bottom edge folder.

In witness whereof, I have hereunto set my hand and seal in the presence of two witnesses.

ROBERT F. BEARDSLEY. [L. S.]

Witnesses:

JANE VER SLUIS,

ROBERT L. WALTON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."