March 27, 1951 G. E. SMITH 2,546,172

L-TYPE BINDING GUIDE

Filed May 13, 1948

Fig. 1.

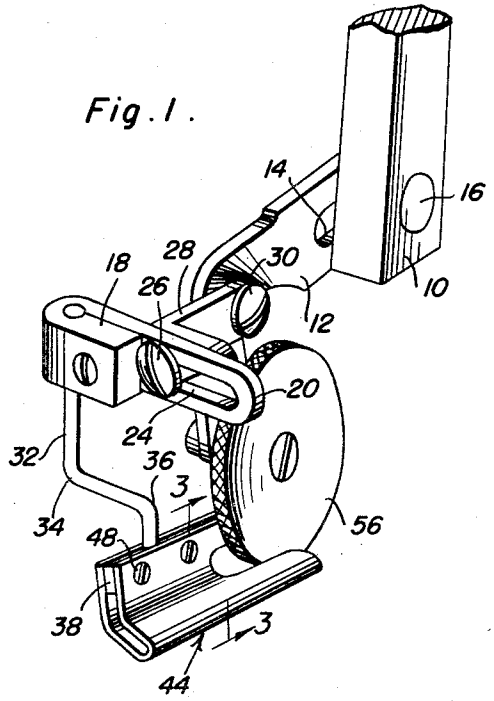


Fig. 3.

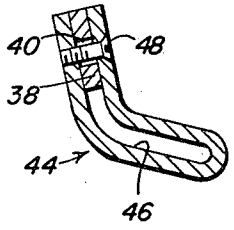
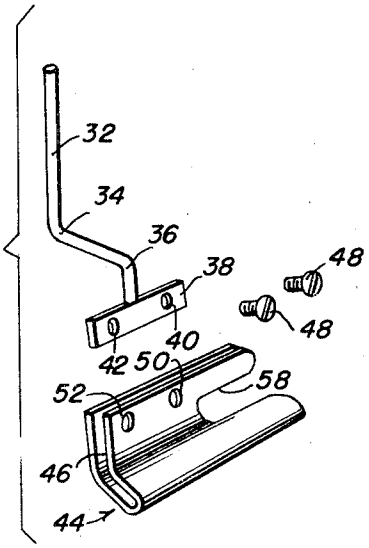


Fig. 2.



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L-TYPE BINDING GUIDE

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2 Claims. (Cl. 112—137)

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This invention relates to improvements in attachment for sewing machines.

An object of this invention is to guide a binding in a selected manner for ready attachment to shoe components and the like such as insole.

Another object of this invention is to support a substantially L-shaped hollow housing on a sewing machine component, said hollow housing being capable of receiving and guiding a tape therethrough and simultaneously folding the tape slightly in order that it may be sewed more readily.

Another object of this invention is to adjustably support the housing whereby slight adjustment may be effected in order to compensate for various widths of binding, which binding may be slightly irregular in size.

Another object of this invention is to supply a recess in the housing for accommodation of a roller which presses the tape as it is extended through the housing.

Another object of this invention is to provide an extremely simplified device for rendering sewing operations relatively simple.

Ancillary objects and features of novelty will become apparent to those skilled in the art, in the following the description of the preferred form of the invention, illustrated in the accompanying drawings, wherein:

Figure 1 is a perspective view of the preferred form of the invention;

Figure 2 is an exploded perspective view of the important elements forming the invention; and

Figure 3 is a sectional view taken on the line 3—3 of Figure 1 and in the direction of the arrows.

This invention has been developed to provide a device for more effectively folding and guiding a piece of binding as it is being sewed to an insole or the like, particularly in the making of open-toe shoes and other environments wherein such binding is found desirable and when a good and rapid job is necessitated.

A sewing machine component 10 is illustrated with a substantially L-shaped arm 12 secured thereto through the medium of a slot 14 and pin 16 connection.

A bearing block 18 having an opening (unnumbered) in one end thereof is supplied. This bearing block has an arm 20 integral therewith which is supplied with a slot 24. Seated in the said slot is an adjustment screw 26 which is threadedly received in a substantially right angular bracket 28. This right angular bracket is, in turn, attached to the substantially L-shaped

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arm 12 through the medium of another screw or the like 30.

Attached to the bearing block 18 and in the provided recess is an arm 32 having successive right angular bends 34 and 36, respectively. At the end of one of the right angular bends 36 is a plate 38 having a pair of spaced apertures 40 and 42, respectively, formed therein.

The said plate 38 is received in the hollow of a substantially L-shaped housing generally indicated at 44. This housing is formed of a single piece of material folded at substantially 180° and slightly spaced to form a hollow 46. This hollow receives the plate 38 therein and it is attached firmly through the medium of countersunk screws 48. These countersunk screws are received in the apertures 40 and 42 and are also received through a pair of apertures 50 and 52, respectively, formed in the said housing adjacent the upper portion thereof.

As is seen in Figure 3, the screws 48 fit rather loosely in the apertures 40 and 42 in order to permit a slight amount of adjustment of the plate 38 within the hollow 46. This adjustment is necessary due to the varying width of binding tape. This adjustment is not primarily for use in various standard size tape but rather for use primarily in adjusting for varying widths (in the order of .010 of an inch) of tape which is alleged to be a predetermined width.

Positioned adjacent the end of the substantially L-shaped bracket 12 is a wheel 56 having a serrated periphery. This wheel depends within a recess 58 formed at one end of the substantially L-shaped housing 44 and formed longitudinally thereof. Of course, the wheel is adapted to press the tape as it is urged through the binding guide and is adapted to engage the work being sewed. It is understood that the present device is for attachment to purely conventional sewing machines and, of course, the needle assembly therein is utilized for its intended purpose.

While there has been described and illustrated but a preferred form of the invention it is apparent that variations may be made without departing from the spirit thereof.

Having described the invention, what is claimed as new is:

1. In a binding guide for use in association with sewing machines, a curved hollow housing having a passage therein adapted to guide a tape therethrough, said passage being closed on the top, bottom, and both sides thereof by parts of said housing, an arm having a plate at one end thereof, means for attaching the opposite end

of the arms to a sewing machine component, means for attaching the plate in the hollow housing at one end thereof in selected position to adjust the size of passage in the hollow housing, said last-mentioned means including a plurality of screws extending at least partially through said housing, said plate having enlarged apertures therein and said screws extending through said enlarged apertures whereby the plate may be slidably adjusted and fixed greater and lesser degrees within the hollow of the hollow housing, said attaching means including a bracket, a roller having a scored periphery attached to said bracket and disposed adjacent said housing to direct the tape as it passes into said housing.

2. An attachment for a sewing machine comprising a substantially L-shaped housing formed of a single piece of sheet stock folded so as to form a passageway therethrough, the ends of said housing being open and one side of said housing being open, said housing being provided with a longitudinal recess opening through one of said open ends, means for attaching said housing to a part of the sewing machine, said means including a bracket, a roller carried by the bracket and a part of said roller being disposed in said recess to guide the tape as it passes through said passage, said means also including an arm which has a plate at one end, said plate having apertures therein and said housing having apertures therein adjacent the open side thereof, fastening elements disposed in said apertures and the apertures in said plate being considerably larger than the diameter of said fastening elements, whereby slight adjustment of said housing with respect to said plate is possible, and said plate and housing being retained assembled by the clamping action of the parts of said housing pressing against the said plate and held in pressing engagement therewith by said fastening elements.

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