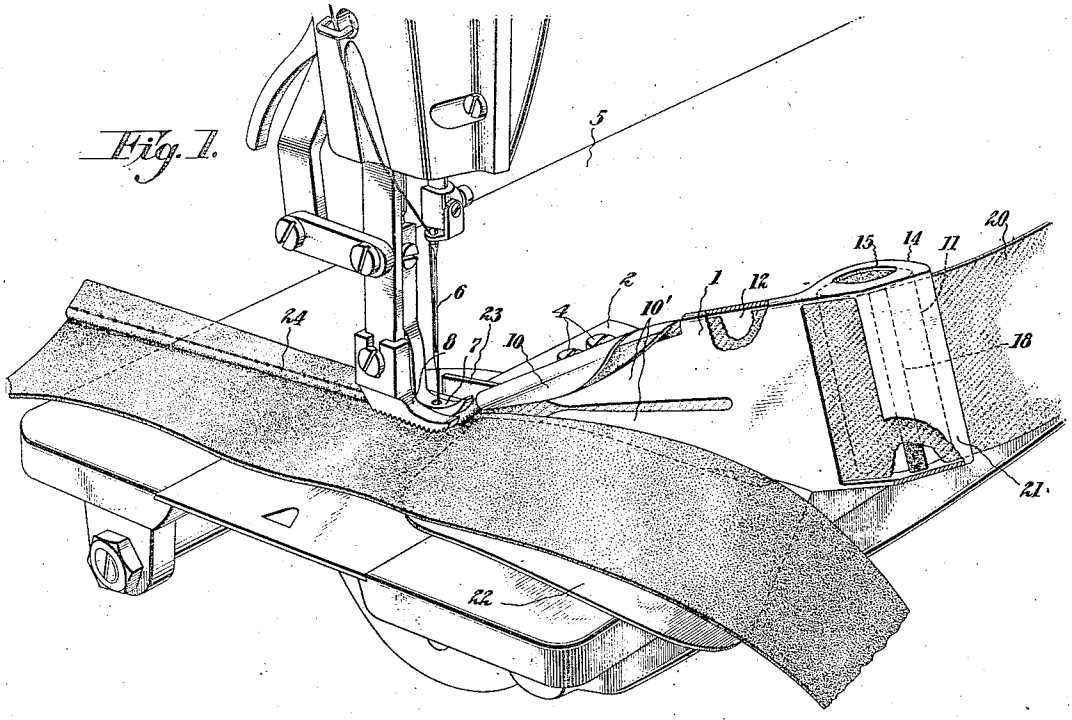
Jan. 22, 1924. 1,481,329

C. R. ROSS

FOLDER FOR SEWING MACHINES

Filed Oct. 31, 1922

Fig. 1.



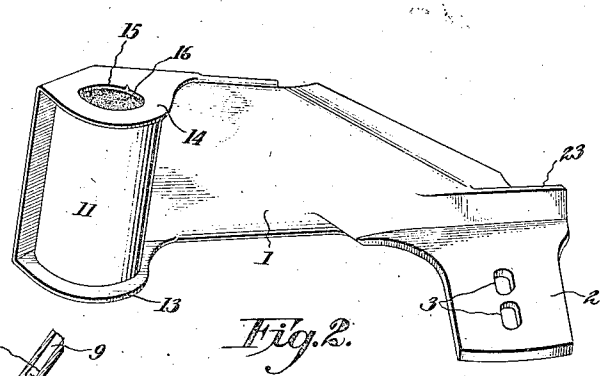


Fig. 2.

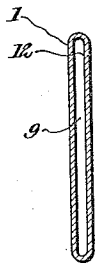
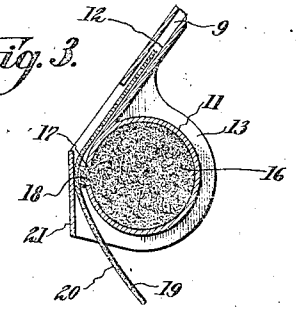


Fig. 5.

Fig. 3.



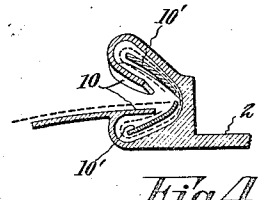


Fig. 4.

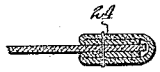


Fig. 6.

WITNESSES:
Godfrey Cicinas
John F. Hering.

INVENTOR
Carlos Reginald Ross
BY Henry J. Miller
ATTORNEY

Patented Jan. 22, 1924. 1,481,329

UNITED STATES PATENT OFFICE.

CARLOS RAGNVALD ROSS, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE SINGER MANUFACTURING COMPANY, OF ELIZABETH, NEW JERSEY, A CORPORATION OF NEW JERSEY.

FOLDER FOR SEWING MACHINES.

Application filed October 31, 1922. Serial No. 598,074.

To all whom it may concern:

Be it known that I, CARLOS RAGNVALD ROSS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Folders for Sewing Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to strip-guides and, more particularly, to strip-folding guides or binders for sewing machines. The invention has for an object to provide a strip-guide and, more particularly, a binder which will satisfactorily handle coated materials or fabrics, such as pantasote, customarily used in the manufacture of automobile tops. Another object of the invention is to provide a folding attachment for sewing machines which will satisfactorily handle pantasote or similar coated materials.

To these ends, the attachment having a guiding passageway is provided adjacent its receiving end with a lubricant receptacle having an opening adjacent and in communication with the guiding passageway. Lubricant from the receptacle is applied to the coated side of the work by means of a wiper during the passage of the work through the attachment. Preferably the lubricant receptacle is filled with an oil saturated packing which protrudes through a slot formed in the side wall of such receptacle and wipes over the coated face of the material, thus depositing thereon a film of oil serving to prevent sticking or excessive drag of the material in the attachment.

In the accompanying drawings, Fig. 1 is a perspective view of a sewing machine attachment embodying the invention. Fig. 2 is a perspective view of the attachment from another view-point showing the lubricant receptacle. Fig. 3 is a horizontal section through the receiving end of the attachment. Fig. 4 is a vertical section through the delivery end of the attachment. Fig. 5 is a vertical section through the device adjacent its receiving end, and Fig. 6 is a section through the seam produced by the attachment.

In the specific embodiment of the invention chosen for the purpose of the present disclosure 1 represents the body of a strip-folder in the form of a binder adapted to fold in the raw edges of a strip of material and apply the folded strip as a binding to the raw edge of a body-fabric. Projecting laterally from the binder body 1 is the usual horizontal shank 2 which is slotted at 3 for reception of the fastening screws 4 whereby the attachment may be secured to the bed 5 of a sewing machine. The sewing machine may be of any usual type and may comprise a reciprocating eye-pointed needle 6 cooperating with a lower loop-taker (not shown). The feed may include the usual alternating presser 7 and upper feed-foot 8 adapted to cooperate with the usual lower feed-dog (not shown).

The attachment or binder is preferably formed of sheet metal bent up to provide a strip passageway 9 which at its receiving end is substantially vertical in cross section as shown in Fig. 5 and progressively merges into a U-form toward its delivery end; folding wings or scrolls 10 and tongues 10′ being provided to fold in the raw edges of the binding strip in the usual manner.

Secured to or formed integral with the attachment body 1 is the lubricant receptacle 11 which is stationed adjacent the receiving end of the passageway 9 and is preferably of cylindrical form, being disposed with its axis substantially vertical and its outer wall substantially continuous with the inner guiding wall 12 of the attachment. The lubricant receptacle 11 is closed at its ends by means of the lateral ears 13, 14; the latter having an opening 15 through which the lubricant may be applied to an absorbent packing 16 filling the receptacle. The ears 13 and 14 are rigidly connected to or formed integrally with the walls of the binder body 1.

In order to provide for the application of the lubricant in the receptacle 11 to the coated side of a strip passing through the attachment, the cylindrical wall of the receptacle is formed with an opening or slot 17 through which projects a tongue 18 of the packing 16; said tongue being adapted to wipe over the coated surface 19 of the binding strip 20. A guide-wall 21, connected at its opposite ends to the ears 13, 14 and opposed to the tongue 17, insures contact of the strip 20 with such tongue. The attachment may be formed with a work-support 22 for the body-fabric to be bound and an edge-guide 23 to guide the edge of the assembled work a fixed distance at one side of the needle. The ears 13, 14 act as edge-guides for the strip 20 at

the receiving end of the attachment and insure an application of lubricant across substantially the entire width of the strip 20. Of course the space between the guard 21 and the receptacle 11 is, to all intents and purposes, a continuation or part of the passageway 9. So far as I am aware, it is broadly new to provide a sewing machine work-guiding attachment of the type customarily stationed in advance of the presser-foot with a lubricating device adapted to facilitate the passage of the work therethrough.

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

1. A folding attachment for sewing machines having a guiding passageway and a lubricant receptacle in communication with said passageway.

2. A folding attachment for sewing machines having a folder body formed with a passageway for the work, and a lubricant applying device disposed at the receiving end of said passageway.

3. A folding attachment for sewing machines having a folder body formed with a passageway for the work, and a lubricant applying device carried by said folder body at the receiving end of said passageway.

4. A folding attachment for sewing machines having a folder body formed with a passageway for the work, a lubricant applying device carried by said folder body at the receiving end of said passageway, and an attaching shank secured to the folder body.

5. A folding attachment for sewing machines having a folder body formed with a passageway and one or more folding scrolls, and a lubricant receptacle carried by said folder body and in communication with said passageway in advance of said scroll or scrolls.

6. A folding attachment for sewing machines having a folder body formed with a work-guiding passageway and curved folding walls, and means on said attachment in advance of said curved walls for lubricating the work.

7. A folding attachment for sewing machines having a strip folding passageway, a lubricant receptacle in communication with said passageway, and a lubricant absorbent material disposed in said receptacle and having a tongue projecting into said passageway.

8. A folding attachment for sewing machines having a strip folding passageway, a lubricant receptacle in communication with said passageway, a lubricant absorbent material disposed in said receptacle and having a tongue projecting into said passageway, and a guide-wall opposed to said tongue.

9. A folding attachment for sewing machines comprising a folding scroll, a lubricant receptacle disposed in advance of said scroll and formed with an opening, a lubricant absorbent material disposed in said receptacle and extending through said opening, and a guide opposed to said opening.

10. A work guiding attachment for sewing machines comprising a body having a work guiding passageway and a horizontally disposed attaching shank adapting said attachment to be secured to the bed of a sewing machine to function in advance of the sewing machine presser-foot, and a lubricant receptacle carried by said attachment and in communication with said passageway.

11. A work guiding attachment for sewing machines comprising a body having a work guiding passageway and a horizontally disposed attaching shank adapting said attachment to be secured to the bed of a sewing machine to function in advance of the sewing machine presser-foot, and a lubricant receptacle carried by said attachment and in communication with said passageway substantially at the receiving end of the latter.

12. A strip-guide for sewing machines having a strip guiding passageway, a lubricant receptacle extending widthwise of said passageway, said receptacle being formed in its side-wall with a slot extending widthwise of and in communication with said passageway, and means in said receptacle for applying lubricant through said slot to one face of the strip passing through said guide.

13. A strip guide for sewing machines having a strip guiding passageway, a lubricant receptacle of substantially uniform cross-section throughout its length disposed cross-wise of said passageway, said receptacle having a slot in its side wall extending longitudinally of said receptacle and crosswise of said passageway, and means in said receptacle for applying a lubricant to one face of a strip through said slot.

14. A strip guide for sewing machines having a strip guiding passageway, a lubricant receptacle of substantially uniform cross-section throughout its length disposed cross-wise of said passageway, said receptacle having a slot in its side wall extending longitudinally of said receptacle and cross-wise of said passageway, and a lubricant absorbent packing disposed in said receptacle and including a tongue projecting through said slot into said passageway.

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

CARLOS RAGNVALD ROSS.