

(No Model.)

J. G. GREENE.
WELT GUIDE FOR SEWING MACHINES.

No. 507,119.

Patented Oct. 24, 1893.

Fig. 1.

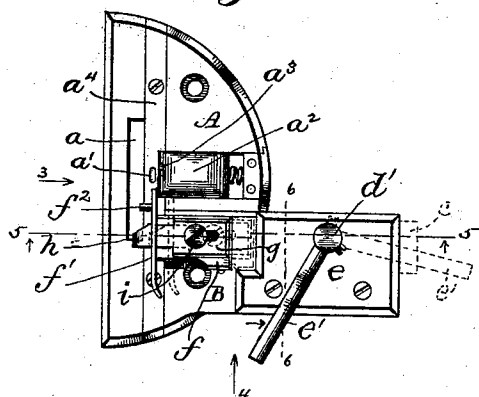


Fig. 2.

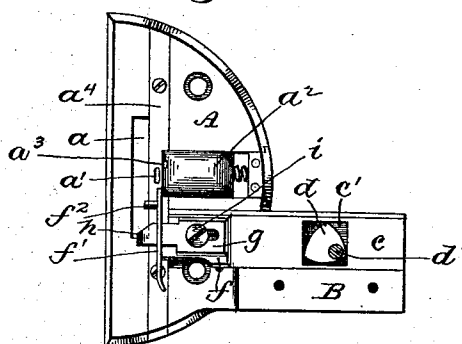


Fig. 3.

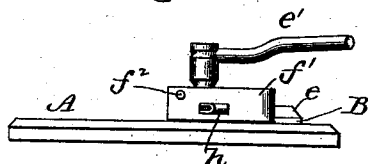


Fig. 4.

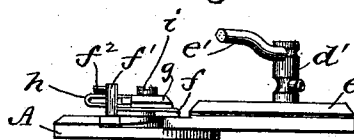


Fig. 5.

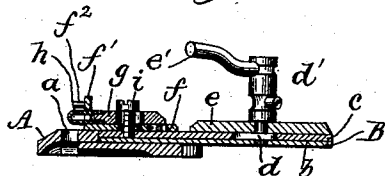
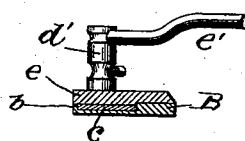


Fig. 6.



Witnesses:
A. Lushman.
G. M. Sweeney.

Inventor:
James G. Greene,
by *Thos. L. Carter*
Att'y.

UNITED STATES PATENT OFFICE.

JAMES G. GREENE, OF ELIZABETH, NEW JERSEY, ASSIGNOR TO THE SINGER MANUFACTURING COMPANY OF NEW JERSEY.

WELT-GUIDE FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 507,119, dated October 24, 1893.

Application filed July 6, 1891. Serial No. 398,477. (No model.)

To all whom it may concern:

Be it known that I, JAMES G. GREENE, a citizen of the United States, residing at Elizabeth, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Welt or Piping Guides for Sewing-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to that class of sewing machine attachments adapted to present a welt or piping strip to the stitch-forming mechanism of a sewing machine in such relation to two pieces of leather or other material that it may be stitched in between them; the construction of my welt or piping guide attachment being preferably such that the welt may be quickly withdrawn laterally from the strips between which it is guided, without stopping the machine, when it is desired that the welt or piping strip should not appear in the finished work.

My improved welt or piping guide is preferably mounted on the throat plate of the sewing machine so that it may be attached to or removed from the machine with the said throat plate; the latter being preferably adapted to co-operate with a trimming knife so that the edges of the welt or piping strip and of the pieces of material between which it is stitched may be neatly trimmed off simultaneously with the operation of sewing.

In the accompanying drawings, Figure 1 is a plan view of my improved attachment and of the throat plate to which it is secured. Fig. 2 is a similar view of the same with the cover plate, which retains the sliding welt-guide carrying-plate, removed and showing the shaft, which carries the cam to actuate the said sliding plate, in horizontal section. Figs. 3 and 4 are edge views of my improved attachment looking from the left and from the bottom of Fig. 1, respectively, as denoted by the arrows 3 and 4. Fig. 5 is a section on line 5-5 of Fig. 1, and Fig. 6 is a section on line 6-6 of Fig. 1.

A denotes a sewing machine throat plate provided with an opening *a* for the feed dog of the machine, and with a slot *a'* for the passage of the needle. This throat plate, as herein shown, is adapted for use with a trimming

knife and for this purpose is provided with a yielding or spring-pressed plate *a*² having in its end a notch *a*³ for the reception of a finger on a trimming knife of ordinary construction; said spring-pressed plate holding the cutting edge of the knife in proper contact with a knife bar *a*⁴ which is preferably made removable from the throat plate so that it may be replaced by another similar bar when it becomes worn.

The throat plate A is provided with a lateral extension B which may be formed integral therewith or be secured thereto in any suitable manner, said extension being preferably removably attached to the said throat plate by one or more screws and dowel pins. The extension B is provided with a longitudinal groove *b* which receives a sliding guide-carrying plate *c*, said plate being provided with a rectangular opening *c'* to receive a cam *d* mounted on a small vertical shaft *d'* journaled in a cover-plate *e* and provided with a suitable operating handle *e'*. To the sliding plate *c* is adjustably secured a plate *f* provided with an edge guide *f'*, said edge guide being preferably provided with a horizontally extending pin *f*². To the said sliding plate is also adjustably secured a plate *g* provided with a welt or piping guide *h* extending outward through an opening in the edge guide, said opening being above the bottom and below the top of the said edge guide, so that the latter may serve as a gage for strips of material passing both below and above the piping guide. The plates *f* and *g* are provided with suitable slots for the reception of a set screw *i* by which they are secured to the sliding plate *c*, and as the said plates *f* and *g* are thus rendered adjustable on the sliding plate *c* they may be moved laterally independently of each other; when the set screw *i* is loosened, to vary the position of the edge guide on the sliding plate and also to permit the welt or piping guide *h* to be projected more or less through the said edge guide, for the reception of welts or piping strips of different widths.

It will be noted that the welt or piping guide *h* is elevated above the throat-plate a sufficient distance to permit a strip of leather or other material to pass beneath it, but is a

sufficient distance below the top of said edge guide to permit the latter to serve as a gage for the edge of a strip of material above the piping guide. The horizontally projecting pin f^2 on the edge guide f' is elevated slightly above the said welt or piping guide so that the strip of leather or other material passing above the said piping guide will be properly held down, to insure its accurate presentation to the needle.

In the use of my invention the pieces of material between which the welt or piping strip is to be stitched are placed with their edges against the edge guide f' and the welt or piping strip is held between them in the inclosed loop of the welt or piping guide h . The machine is then started and the sewing progresses stitching the welt or piping strip between the two other pieces of material, the trimmer, where one is employed, smoothly shearing off the edges of the work as it is sewed. When a sufficient length of work with the welt or piping strip therein has been sewed and it is desired to do plain stitching without the welt or piping strip, the handle e' is turned from the position shown by full-lines in Fig. 1 to the position denoted by dotted lines in said figure, thus turning the cam d in the rectangular opening of the sliding plate c and thereby moving the said sliding plate to the right and with it the edge guide and the welt or piping guide carried thereby. This lateral movement of the piping guide withdraws the piping strip from the line of sewing without stopping the machine, and the two pieces of material between which the welt or piping strip had previously been sewed may then be stitched together without the said welt or piping strip between them.

Having thus described my invention, I claim and desire to secure by Letters Patent—

1. The combination with the throat plate A provided with the lateral extension B hav-

ing the groove b , of the sliding plate c fitting said groove, and provided with a rectangular opening, an edge guide, and a welt or piping guide both carried by said sliding plate, a cam fitting in said opening, and a hand lever by which said cam is operated.

2. In a sewing machine attachment, the combination with an edge guide provided with an opening, and a plate by which said edge guide is carried, of a welt or piping guide projecting outward through said opening above the bottom of said edge guide, and a pin on said edge guide above the said welt or piping guide and forward of the same.

3. The combination with the throat plate A having the extension B provided with a suitable groove, of a sliding plate c fitting in the said groove and having a rectangular opening, a cam fitting in said opening, a shaft for operating said cam, a cover-plate in which said shaft is journaled, and an edge guide and a welt or piping guide carried by the said sliding plate, said piping guide extending outward through an opening in said edge guide.

4. The combination with the throat plate A provided with the extension B, of the sliding plate c fitting in a groove in said extension and having a rectangular opening, a cam e fitting in said opening, a shaft d' by which said cam is carried, and which is provided with a suitable operating handle, a cover-plate in which said shaft is journaled, the plate f provided with an edge guide f' having the pin f^2 , and the plate g carrying the welt or piping guide h projecting outward through an opening in the said edge guide and slightly elevated above the level of the said throat plate, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES G. GREENE.

Witnesses:

L. B. MILLER,
L. L. BURRITT.