(No Model.)

L. LEVY.

STAY GUIDE FOR SEWING MACHINES.

No. 560,296. Patented May 19, 1896.

Fig. 1.

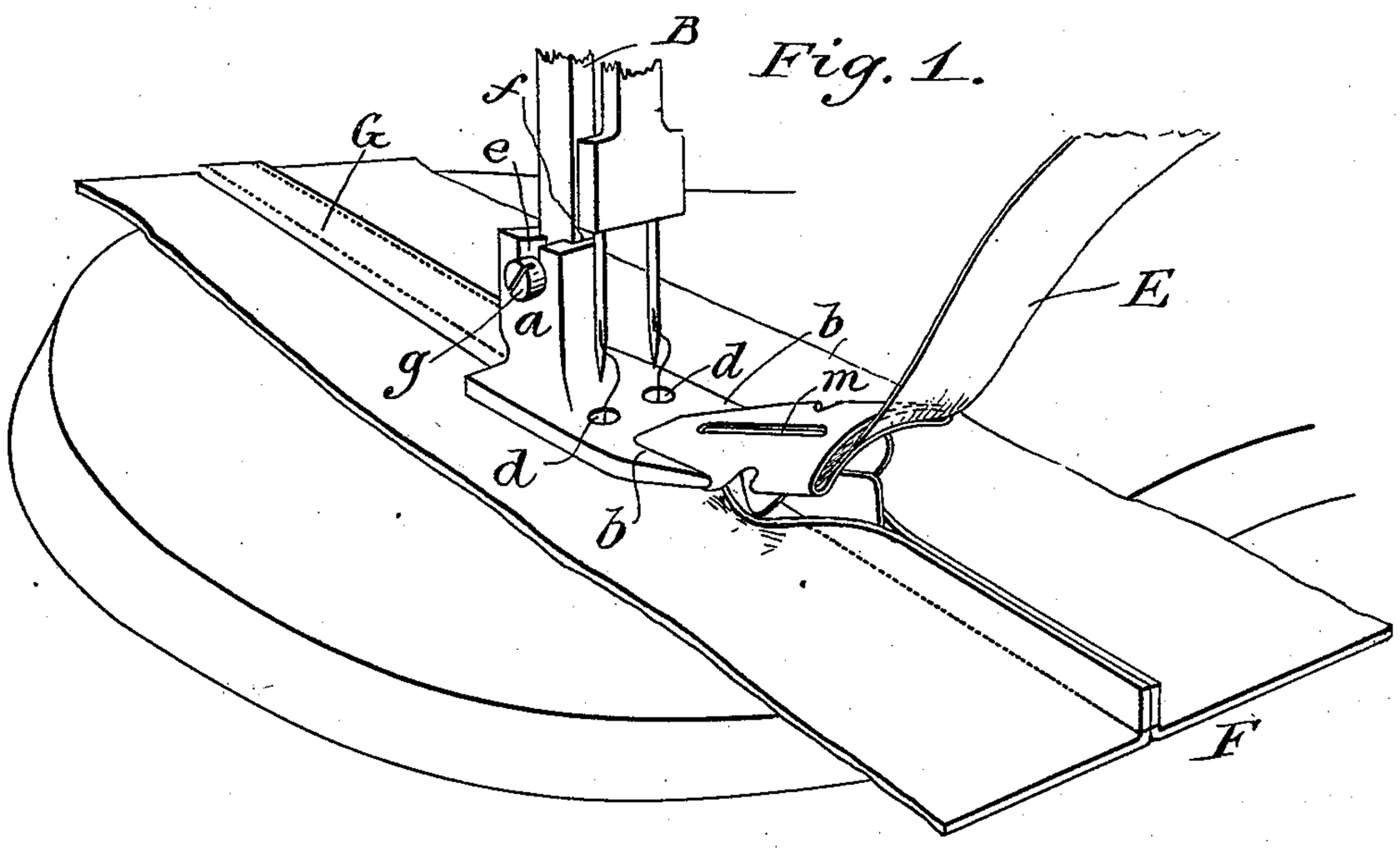


Fig. 2.

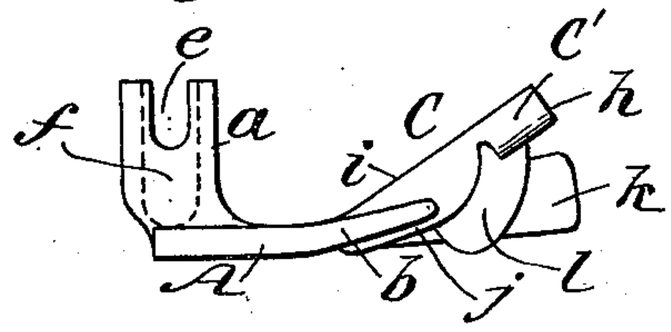


Fig. 5.

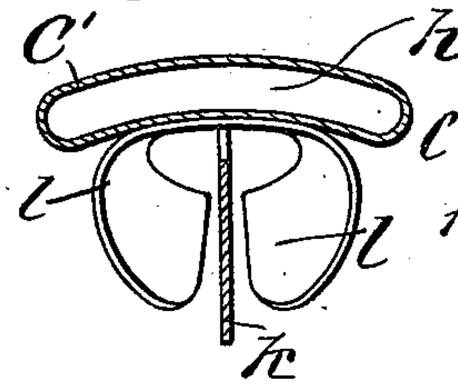


Fig. 3.

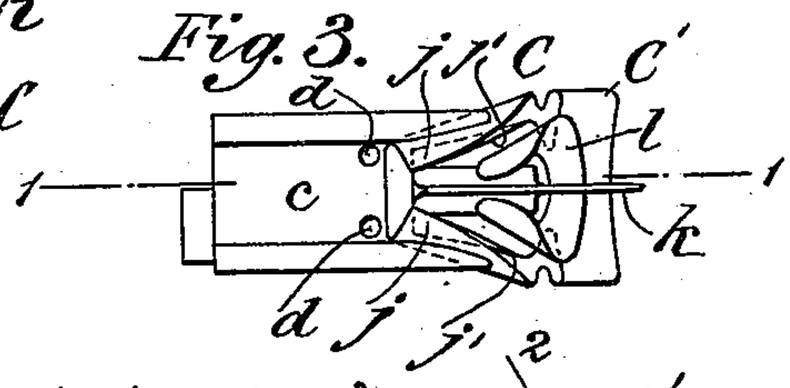


Fig. 6.

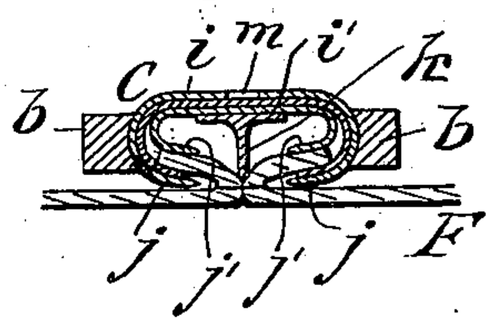


Fig. 4.

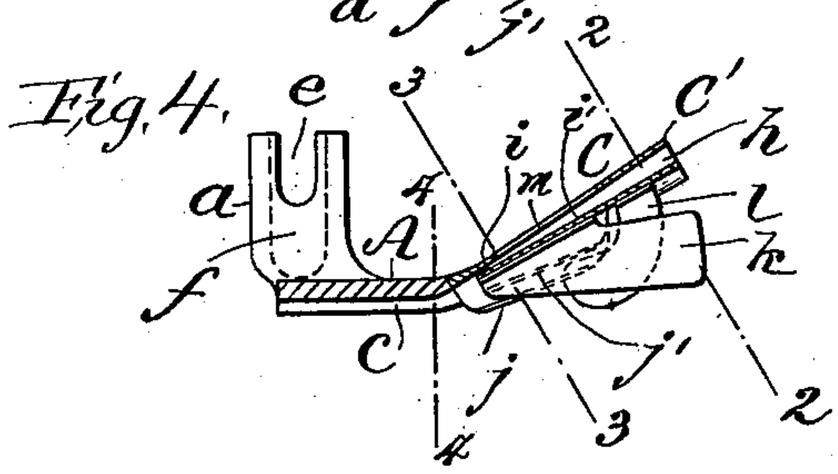
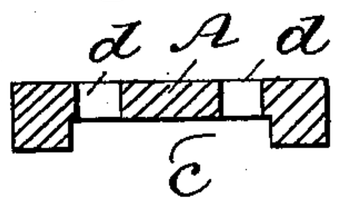


Fig. 7.



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UNITED STATES PATENT OFFICE.

LOUIS LEVY, OF NEW YORK, N. Y.

STAY-GUIDE FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 560,296, dated May 19, 1896.

Application filed July 23, 1894. Serial No. 518,312. (No model.)

To all whom it may concern:

Be it known that I, LOUIS LEVY, a citizen of the United States, and a resident of the city of New York, county of New York, and State of New York, have invented certain new and useful Improvements in Sewing-Machine Attachments, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts in all the figures.

This invention relates to sewing-machine attachments adapted to adjust a binding to the seams of garments or other articles composed of two or more pieces of textile material.

The object of the invention is to provide a sewing-machine, comprising a two-needle stitch-forming mechanism, with an attachment so constructed that when properly secured to the presser-bar of the sewing-machine a piece of binding material may be folded over the two flaps of a seam and stitched thereto on both sides thereof, thereby producing a perfectly-bound seam, having the raw edges of its flaps effectually covered and bound.

Various novel details of construction contribute to the efficiency of the device and facilitate quick and accurate work, all as will be hereinafter fully described, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of my improved sewing-machine attachment, showing the same adjusted to the lower end of the presser-bar of a sewing-machine as it will appear when in use. Fig. 2 is a side elevation of the same detached from the presser-bar. Fig. 3 is an inverted plan view. Fig. 4 is a longitudinal section taken on line 1 1, Fig. 3. Fig. 5 is a detail section on line 2 2, Fig. 4; Fig. 6, a detail section on line 3 3, Fig. 4; and Fig. 7, a detail section on line 4 4, Fig. 4.

In constructing the device forming the subject-matter of this application I provide a presser-plate A, having on its upper surface at its rearward end a boss *a*, and terminating at its forward end in a forked portion *b*, which is bent slightly upward. The bottom of the presser-plate A is provided with a continuous groove or channel *c*, adapted to receive the seam of a garment or other article being bound. Through the plate A, immediately rearward of its forked portion, I drill two holes *d*, through which the needles pass during the operation of sewing. The boss *a* of presser-plate A is provided at its upper end with a slot *e*, through which a screw *g* may pass to secure the device to any suitable presser-bar B, as shown clearly in Fig. 1. Said boss *a* is also provided with a socket *f*, which engages the lower end of the presser-bar B, thereby securing a firm attachment when the screw *g* is tightened. By the use of said slot *e* and socket *f* I admit of vertical adjustment of my device on the presser-bar B without interfering with its secure attachment when the screw *g* is turned home.

To the forked portion *b* of plate A, I weld or attach in any suitable manner an auxiliary downwardly-tapering channel-formed guide C, through which the tape or other binding material must pass when the machine is in operation. Said downwardly-tapering channel-formed guide C extends upwardly from the plate A at any suitable angle and terminates at its upper end in a flattened tube C′, bent into a segmental shape, through the mouth *h* of which the binding material is introduced. Extending from the lower end of tube C′ and formed integral with the same are two plates *i* and *i′*. The top plate *i* is flattened out to the width of the groove *c* of plate A at its point of intersection and is then bent or curved inwardly to form two guiding-lips *j*, which said lips guide the binding material and fold the same into proper shape. The plate *i′* is bent in a similar manner, and the lips *j′* formed thereon, in conjunction with aforesaid lips *j*, form a channel and guide for the material being bound. The plate *i′* does not take a parallel direction with the plate *i*, but meets the same at its lower extremity and bears upon it to the width of its flattened portion. This maintains a desirable tension on the tape or other binding material as it passes through. To the bottom of plate *i′* is attached a tongue *k*, adapted to open the seam of an article to be bound and to guide the operator during process of binding. To the under side of the plate *i′* I also attach a guide *l*, which forces the two flaps of the seam

which have been separated by said tongue *k* into the channels formed by the two lips *j* and *j'*, before referred to.

The sides of the channels formed by the bending of the lips *j* and *j'* of the respective plates *i* and *i'* are tapered from a point where the segmental tube C' ends, and the space within the same grows gradually narrower until it meets the groove *c* in the presser-plate A, which represents the minimum width I desire to attain.

The top plate *i* is provided with a slot *m*, through which a pointed instrument may be inserted to start the tape or other binding material.

In practice my improved attachment is adjusted to the lower end of a presser-bar B by means of the adjusting-screw *g*, and it must be so constructed that when placed in position the holes *d* in the presser-plate A will be in a vertical line with the needles, so as to admit of free upward and downward movement of the same in a manner common to all sewing-machines. The end of a suitable piece of tape or other binding material E is then introduced into the wide opening or mouth *h* of the segmental tube C' and is forced down through the same until its edges by contact with the tapering and rounded sides of the channel formed by the bending of the plate *i* commence to fold under and adhere to the inner surface of the lips *j*, as clearly shown in Fig. 6 of the drawings. The seamed material F is then introduced, and the two flaps of its seam are opened by the guiding-tongue *k*, which tongue not only opens the seam, but acts as a guide to the operator, who must keep the same directly over the center of the seam during the process of sewing. The flaps of the seam are then forced under the guide *l*, whose inwardly-tapering sides force them within the channels formed by the lips *j* and *j'* and over the two folds of the tape previously referred to and clearly illustrated in Fig. 6. The materials are now in position for sewing, and they are collectively fed forward until they come under the needles and within the influence of the ordinary feed mechanism common to all sewing-machines, when the operation of sewing goes on in the usual way, and a perfectly-bound seam is produced, which is utterly devoid of all raw edges and presents a neat and finished appearance, as clearly shown at G, Fig. 1.

I do not confine myself to the exact construction hereinbefore shown and described, as it will be obvious to any one familiar with the art of constructing sewing-machine attachments that slight mechanical changes of construction may be advisable and consistent with the claims hereinafter set forth.

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

1. The combination of a presser-foot having a longitudinal recess, a channel-formed guide attached to said presser-foot and tapering downwardly, the plates *i*, *i'* extending from the lower end of the said guide, the top plate *i* being flattened at its intersection with the guide and presser-foot, and having the curved guiding-lips *j*, the lips *j'* on the plate *i'* and forming with the lips *j* a guide for the binding material, a guide *l* secured to the under side of plate *i'* and a tongue *k*, substantially as shown and described.

2. The combination of a presser-foot having a longitudinal recess, a downwardly-tapering channel-formed guide attached to said presser-foot, a tongue *k*, lips *j*, *j'* forming guiding-channels for the seam-flaps and a guide *l* having inwardly-tapering sides to direct the flaps into the channels formed by said lips, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 20th day of July, 1894.

LOUIS LEVY.

Witnesses:
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C. GERST.