Aug. 27, 1957 J. CONNORS 2,804,037

PRESSER FOOT ATTACHMENT FOR SEWING MACHINES

Filed Aug. 4, 1955

Fig. 1.

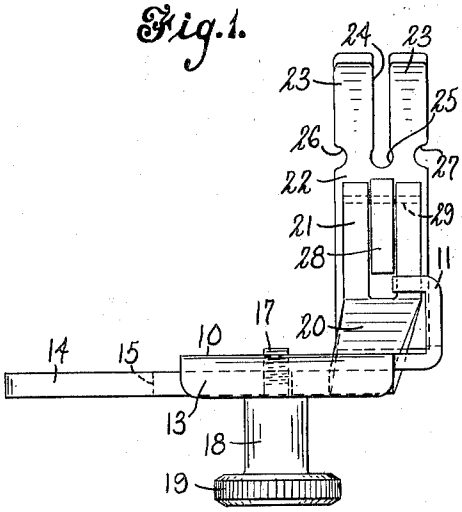


Fig. 2.

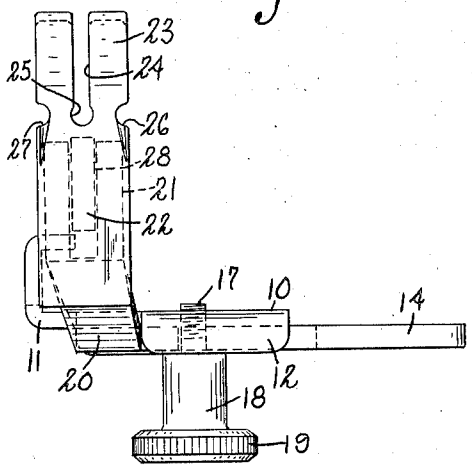


Fig. 3.

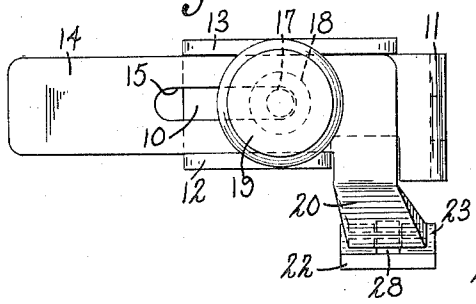


Fig. 4.

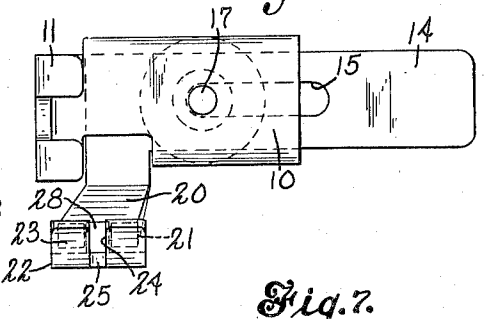


Fig. 5.

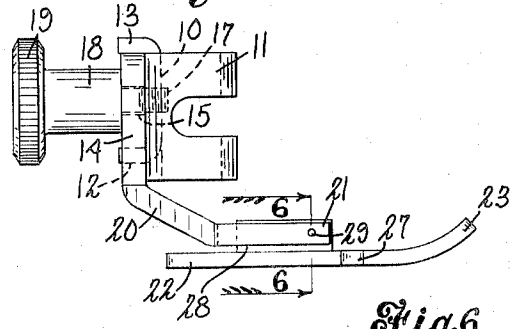


Fig. 7.

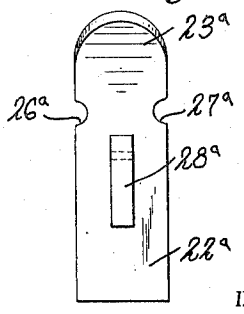
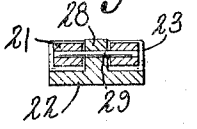


Fig. 6



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PRESSER FOOT ATTACHMENT FOR SEWING MACHINES

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5 Claims. (Cl. 112—235)

This invention relates to sewing machine attachments and more particularly to a presser foot for the ordinary household sewing machine which is adapted to do special kinds of work.

In the stitching of some materials together, it is desirable to make the line of stitching close to the edge of a raised portion or other obstruction which the presser foot cannot straddle, and hence the line of sewing should be close to the edge of the presser foot. An example of this is the stitching of a zipper element to a piece of fabric. The metal elements of the zipper are relatively thick compared to the cloth and cannot conveniently be straddled by the presser foot, while at the same time it is desirable to have the line of stitching as close to the metal locking elements of the zipper as is possible.

The usual presser foot is, therefore, not adapted to such use as in the usual presser foot the needle opening or slot is provided intermediate the side edges of the foot so that the latter straddles the line of stitching. Therefore, if it is attempted to use the usual presser foot and place the line of stitching close to the metal elements of the zipper, one portion of the presser foot would have to ride over the metal elements and satisfactory work could not be accomplished.

For this reason it is desirable to provide a special form of presser foot for this type of work wherein recesses or notches are provided at the side edges of the foot through which the needle may pass. As the line of operation of the needle is thus close to the edge of the foot, the line of stitching will also be close to this edge, and as the edge of the presser foot may be made to abut the metal elements of the zipper, the line of stitching can be effected at a position close to the latter.

It is also desirable in this type of stitching for the presser foot to be pivoted to the shank or frame member upon which it is carried, and it is contemplated by the present invention to provide a presser foot attachment having a shank member which may be adjustably secured to the presser bar of the sewing machine to which shank member the presser foot is pivoted, and to provide the latter with a recess adjacent the edge thereof to receive the needle. If desired, a recess may be provided at each edge of the pivoted presser foot so that stitching operations can be performed adjacent either edge of the same, and the presser foot may also, if desired, be provided with the usual intermediate slot or opening for the needle so that it may be used for ordinary sewing as well as for the special types of sewing referred to above.

One object of the present invention is to provide a new and improved presser foot attachment for sewing machines.

A further object of the invention is to provide a new and improved presser foot attachment for sewing machines wherein a shank member is adapted to be secured to the presser bar of a sewing machine and a presser foot is pivoted to the lower end of this shank member, the presser foot being provided with a recess on one or each lateral edge thereof to receive the sewing machine needle.

A further object of the invention is to provide a presser foot attachment of the character described wherein the shank member which pivotally supports the presser foot is secured to the presser bar of a sewing machine for adjustment laterally of the plane of stitching, the presser foot being provided with a lateral recess at one or at each side thereof and also provided with an intermediate or central slot or opening to receive the needle so that it may be used for ordinary stitching as well as special types of stitching.

To these and other ends the invention consists in the novel features and combinations of parts to be hereinafter described and claimed.

In the accompanying drawings:

Fig. 1 is a top plan view of a presser foot attachment embodying my invention;

Fig. 2 is a bottom plan view thereof:

Fig. 3 is a rear elevational view of the attachment;

Fig. 4 is a front elevational view thereof;

Fig. 5 is a side elevational view;

Fig. 6 is a sectional view through the pivot of the presser foot on line 6—6 of Fig. 5; and

Fig. 7 is a view of a presser foot of modified form.

To illustrate a preferred embodiment of my invention, I have shown in the drawings a presser foot comprising a supporting or frame member 10 provided at one end thereof with the usual adaptor 11 adapted to be secured to the presser bar of a sewing machine in the usual manner. The body portion 10 of this frame is of substantially U-shaped form in vertical cross section, it being provided with flanges 12 and 13 along its upper and lower edges.

These two flanges provide a guideway within which is slidably received a carrying arm or bar 14 upon which the presser foot is carried as will be hereinafter explained. The carrier bar 14 is provided with an elongated slot 15 through which extends a screw 17 adapted to be threadedly received in the frame member 10. The screw is provided with an enlarged body portion 18 and a knob 19 by which it may be screwed firmly into place so as to clamp the bar 14 in any slidably adjusted position within the frame 10 as permitted by the length of the slot 15. It will be understood that the bar 14 will be clamped between the enlargement 18 and the bight portion of the frame member 10. This permits lateral adjustment of the presser foot with respect to the line of stitching.

Secured to the carrier bar 14 or (as shown) formed integrally therewith, is a shank member 20 which is downwardly and forwardly inclined and which is provided with a substantially horizontally disposed bifurcated forward end 21 so that an open ended slot is provided between the bifurcations of this member.

The presser foot, as illustrated, consists of a substantially flat body portion 22 having upturned forward ends 23 disposed one upon each side of a central slot 24 having the needle-receiving opening 25 adjacent its rear end. The foot member is also provided with needle-receiving recesses 26 and 27 adjacent its lateral edges so that when these recesses are employed, the needle may effect a line of stitching close to the edge of the presser foot and close to any portion of the material which the edge of the presser foot abuts.

It is desirable that the presser foot be pivotally carried by the shank or supporting member 20, and to this end it is provided with a centrally disposed upstanding lug 28 (Figs. 1, 5 and 6) which lug is adapted to be received between the bifurcations 21 of the shank, as shown in the drawings. A pivot pin 29 is then passed through the members 21 and the member 28 so as to hinge or pivot the presser foot to the shank for rocking movement about

the pivot pin 29 which is obviously about an axis transverse to the line of sewing.

In Fig. 7 of the drawing, I have shown a slightly modified form of presser foot wherein the body portion 22a is provided with an upturned end portion 23a. In this case the upturned end portion is not slotted or bifurcated but laterally disposed needle-receiving openings 26a and 27a are provided. This presser foot is, of course, adapted to be used only when it is desired to sew along the edge thereof and is not adapted to straddle the line of stitching as is the presser foot shown in Figs. 1 to 5 of the drawing.

As shown in Fig. 7, the modified form of presser foot is also provided with an upstanding lug 28a which may be pivoted to the portions 21 of the shank 20 as previously explained in connection with the modification of the invention shown in Figs. 1 to 5.

While I have shown and described some preferred embodiments of my invention, it will be understood that it is not to be limited to all of the details shown, but is capable of modification and variation within the spirit of the invention and within the scope of the claims.

What I claim is:

1. A sewing machine attachment comprising a frame member having means by which it may be fixedly secured to the presser bar of a sewing machine, a carrier bar, means for securing said carrier bar slidably and adjustably to said frame member, a shank member secured to the carrier bar and extending downwardly therefrom, said shank member having a substantially horizontally and forwardly extending portion at its lower end, and a presser foot pivotally secured to said forwardly extending portion for rocking movement with respect thereto, and said presser foot having a recess formed in each lateral edge thereof and opening outwardly through said edge to receive the sewing machine needle.

2. A sewing machine attachment comprising a frame member having means by which it may be fixedly secured to the presser bar of a sewing machine, a carrier bar, said frame member being provided with a guideway to slidably receive said carrier bar, means to secure said carrier bar to the frame member for sliding adjustment with respect thereto, a shank member secured to said carrier bar and extending downwardly therefrom, said shank member having a substantially horizontally and forwardly extending portion at its lower end, and a presser foot pivotally secured to said forwardly extending portion for rocking movement with respect thereto, and said presser foot having a recess formed in each lateral edge thereof and opening outwardly through said edge to receive the sewing machine needle.

3. A sewing machine attachment comprising a frame member having means by which it may be fixedly secured to the presser bar of a sewing machine, a carrier bar, said

frame member being provided with a guideway to slidably receive said carrier bar, means for securing said carrier bar to the frame member in slidably adjusted positions, said last-named means comprising an elongated slot in said carrier bar, and a fastening element passing through said slot and secured to said member, a shank member secured to said carrier bar and extending downwardly therefrom, said shank member having a substantially horizontally and forwardly extending portion at its lower end, and a presser foot pivotally secured to said forwardly extending portion for rocking movement with respect thereto, and said presser foot having a recess formed in each lateral edge thereof and opening outwardly through said edge to receive the sewing machine needle.

4. A sewing machine attachment comprising a frame member having a body portion with flanges along its upper and lower edges to provide a guideway, means adjacent one end of said member by which it may be fixedly secured to the presser bar of a sewing machine, a shank member having a carrier bar member at its upper end from which the shank member depends, said bar being slidably received in said guideway, a presser foot pivoted to the lower end of the shank member having a needle-receiving recess opening through each side edge thereof, and means for securing said carrier bar member to said frame member in adjusted positions comprising an elongated slot in one of said members, and a fastening element passing through said slot and secured to the other member.

5. A sewing machine attachment comprising a frame member having a body portion with flanges along its upper and lower edges to provide a guideway, means adjacent one end of said member by which it may be fixedly secured to the presser bar of a sewing machine, a shank member having a carrier bar member at its upper end from which the shank member depends, said bar being slidably received in said guideway, a presser foot pivoted to the lower end of the shank member having a needle-receiving recess opening through each side edge thereof, and means for securing said carrier bar member to said frame member in adjusted positions comprising an elongated slot in the carrier bar, and a screw threaded into said frame member and extending through said slot.

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