(No Model.)

A. RAUSSEN.

SEWING MACHINE PRESSER FOOT AND EMBROIDERING ATTACHMENT.

No. 587,233. Patented July 27, 1897.

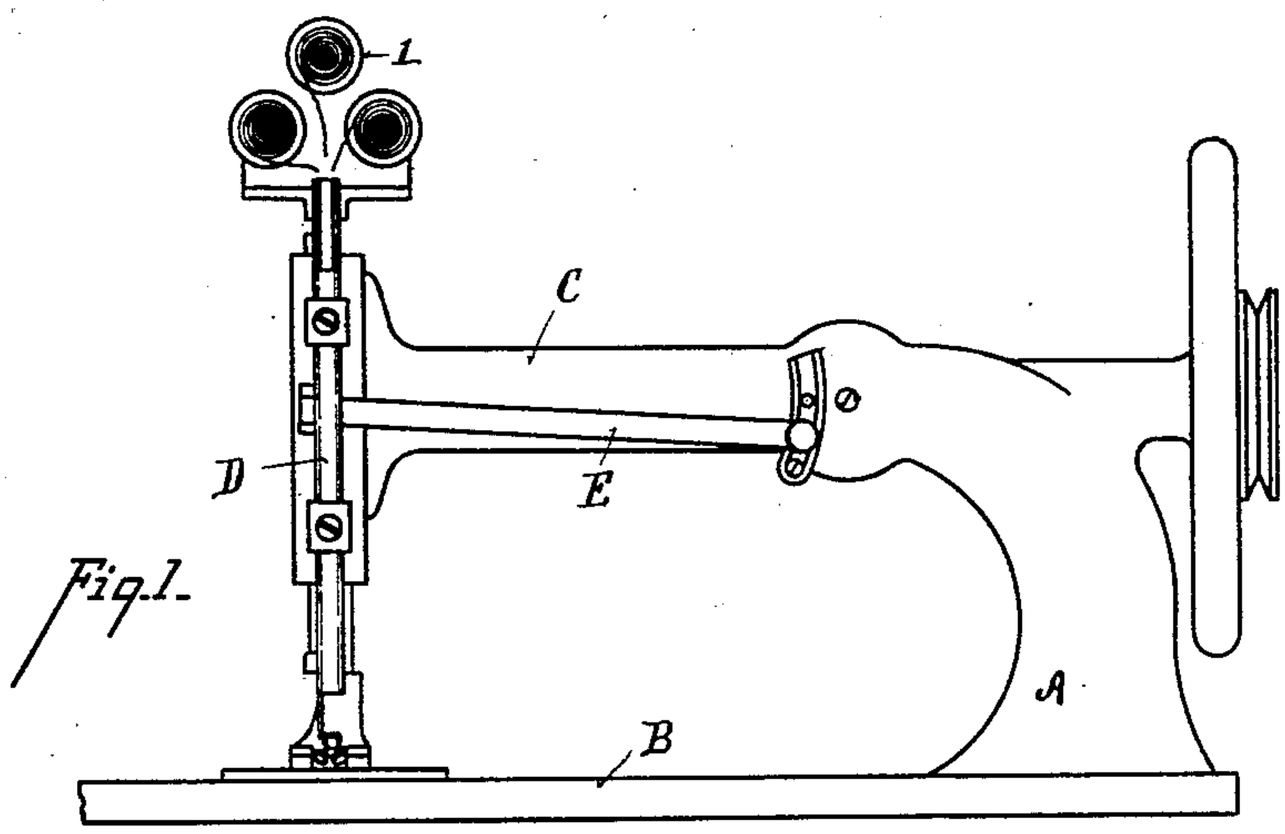

Fig. 1.

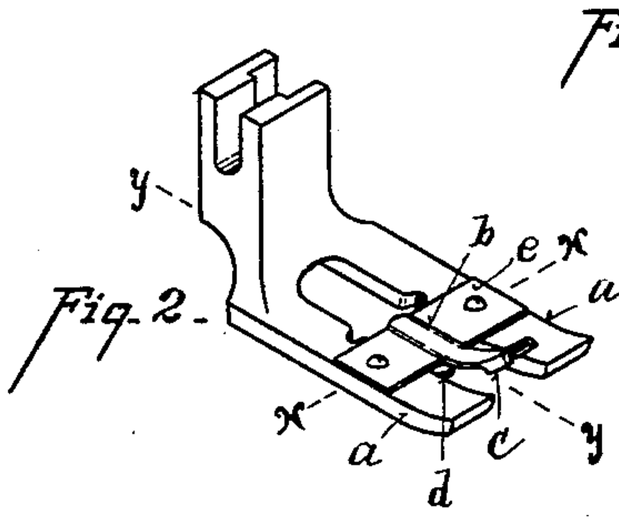

Fig. 2.

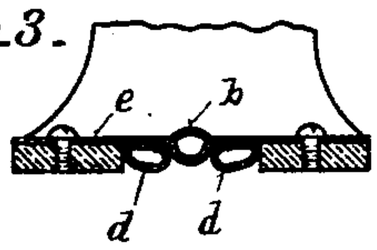

Fig. 3.

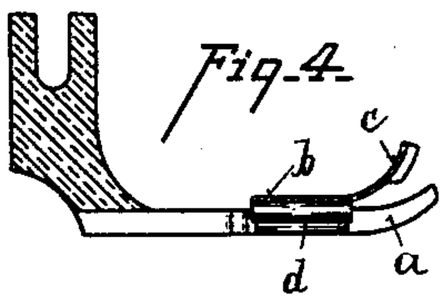

Fig. 4.

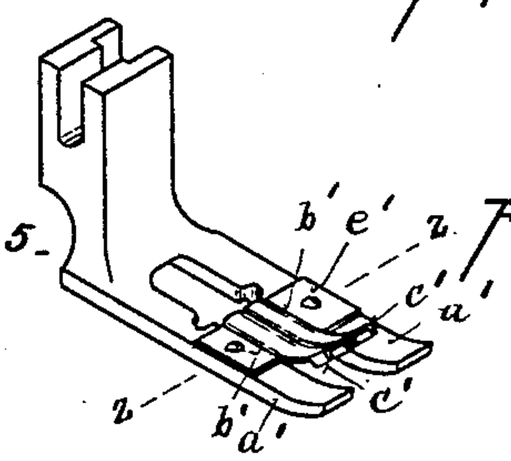

Fig. 5.

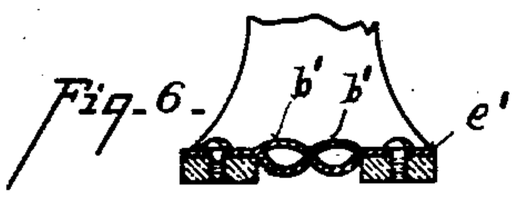

Fig. 6.

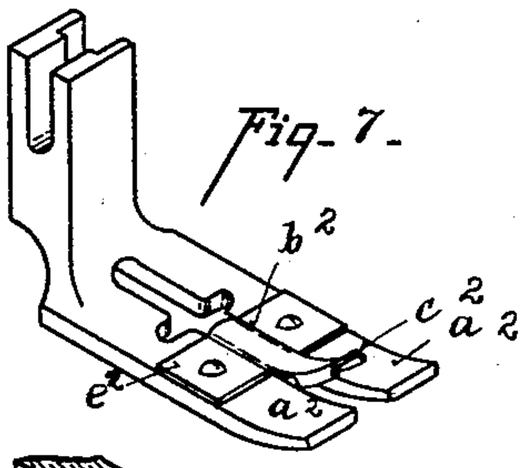

Fig. 7.

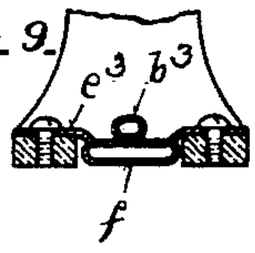

Fig. 9.

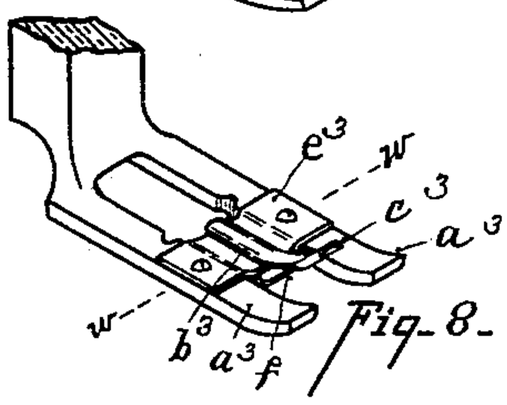

Fig. 8.

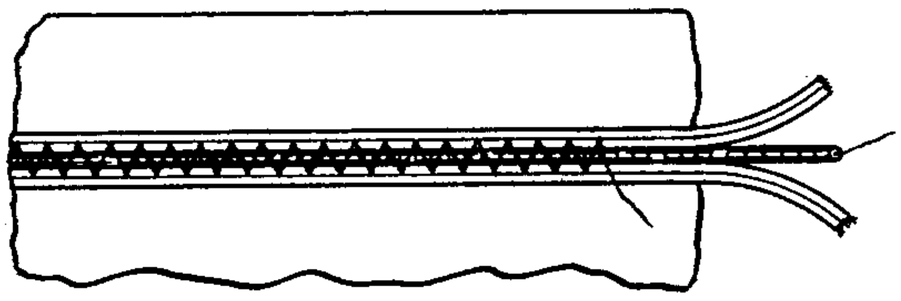

Fig. 10.

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UNITED STATES PATENT OFFICE.

AUGUST RAUSSEN, OF COVINGTON, KENTUCKY.

SEWING-MACHINE PRESSER-FOOT AND EMBROIDERING ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 587,233, dated July 27, 1897.

Application filed July 15, 1895. Serial No. 556,030. (No model.)

To all whom it may concern:

Be it known that I, AUGUST RAUSSEN, residing at Covington, in the county of Kenton and State of Kentucky, have invented certain new and useful Improvements in a Sewing-Machine Foot and Embroidering Attachment, of which the following is a specification.

The object of my invention is to provide means for sewing on bead-cord in embroidering by an attachment to a sewing-machine which employs a needle which sews two lines of stitches alternately each side of the bead-cord.

Another object of my invention is to provide a presser-foot for a sewing-machine which will hold two or more braids in proper position for laying the same upon cloth in embroidering and to allow the braid or beading to be laid to any desired curve or angle-lines in embroidering, the attachment being so constructed that two or more braids or beading-cords can be attached to the cloth by the side-step stitches of the needle.

The features of my invention will be more fully set forth in the description of the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side elevation of the machine with my improvement attached thereto in position for use. Fig. 2 is a perspective view of the presser-foot containing my improvement. Fig. 3 is a section on line *x x*, Fig. 2. Fig. 4 is a section on line *y y*, Fig. 2. Fig. 5 is a modification of Fig. 2. Fig. 6 is a section on line *z z*, Fig. 5. Fig. 7 is another modification of Fig. 2. Fig. 8 is a perspective view of a modification of Fig. 2. Fig. 9 is a section on line *w w*, Fig. 8. Fig. 10 is a diagram showing the method of stitching a bead-cord between two braids.

In the preferred form of construction of my improvement it is attached to a sewing-machine presser-foot, so that the different forms of attachment devices may readily be used on one and the same presser-bar, they being interchangeable one for the other.

A represents the frame of the machine; B, the table; C, the overhanging arm of the frame.

D represents the presser-bar, which steps alternately each side of the central line of the needle carried by the needle-bar when it is operated by well-known mechanisms.

E represents the adjusting-bar for varying the degree of side-step movement.

In Fig. 2 I have shown the attachment adapted to sew beading and a braid attachment each side thereof, as illustrated in Fig. 10. To make accurate work in embroidering, it is necessary to hold the bead-cord and braiding exactly in the line or plane which is to be stitched and yet allow the cloth to be moved laterally under the foot to make curves of any desired configuration and to allow the work to be turned at either very acute or very oblique angles. The smallest variation of the cord or beading from the true line of the pattern is very noticeable to the eye and mars the beauty of the work.

My invention avoids the difficulty of holding the cord-bead and braid to the true pattern-line.

In sewing bead-cord it is very essential that it shall set in smoothly without kinking or catching. In the form shown in Figs. 2, 3, and 4 the bead-cord guide is shown centrally attached between the jaws *a* of my bifurcated foot.

b represents the bead-cord guide, which consists of a tubular eye lying centrally along the longitudinal axis of the foot. It has a horn extension *c*, curved upward and terminating in a vertical line. The wings and curves of the horns form a guide to direct the bead which is fed off of the spool 1 and turn it from the vertical to a horizontal line in position to be stitched. The rear end of the tubular eye terminates just in front of the needle, so as to hold the bead in an exact position to receive the stitch.

d d represent tubular eyes upon each side of the bead-guide *b* and lying between the jaws of the foot, the said eyes *b d d* being rigidly secured to the fastening-plate *e*.

It is not essential to provide curved horns for the tubular braid-guides, but they may be employed, if desired.

In the modification Figs. 5 and 6 the bifurcated presser-foot is shown provided with two braid-guides *b'*, arranged side by side and forming part of or otherwise provided on the fastening-plate *e'*. The bifurcation of the

presser-foot forms the two jaws a' a', the same as the jaws a a in Figs. 2, 3, and 4, and the braid-guides b' b', which are arranged side by side in the same horizontal plane, are provided with horns c' similar to the horn c described with reference to Figs. 2, 3, and 4. The tubular front ends of the horns c' terminate immediately in front of the needle-path.

It is sometimes desirable to sew a very large-sized bead-cord or braid-cord, such as gold or silver, and ordinarily this is accomplished by sewing the cord on by hand, but with an attachment of the construction shown in the modification Fig. 7 such gold or silver cord can be sewed by a sewing-machine. For this purpose the cord or braid guide b^2, forming a part of the fastening-plate e^2, which is secured to the jaws a^2 of the bifurcated presser-foot, is provided with a curved horn c^4, suitably enlarged, so that it will receive the gold or silver cord or braid.

In the heel of my improved presser-foot, as best seen in Fig. 4, I provide a guide composed of a channel of sufficient size to receive the embroidery-work which slides through said channel. The sides of this channel are vertical, or nearly vertical, and the width of this channel must be sufficient to allow the embroidery-work to slide freely through. By making the sides vertical, or nearly so, they serve as a rear guide to the stitched work and prevent the tendency of its being drawn under the foot and of lifting the foot, so that by my construction of attachment I have a guide for the unstitched embroidering material in front of the needle and a rear guide in the heel of the foot thereof. Sometimes it is desirable to sew a bead-cord or a braid on top of a wider braiding. Figs. 8 and 9 show this form of attachment, the curved horn c^3 directing the braids of the tubular guide b^3 and the elongated eye f feeding and holding the braid vertically under the guide b^3.

In the modification Figs. 8 and 9 the jaws a^3 of the bifurcated presser-foot, the horn c^3, and the fastening-plate e^3 are all substantially the same as described with reference to Figs. 2, 3, 4, 5, 6, and 7.

By means of my attachment embroidering can be laid much more accurately and a greater variety of work can be accomplished. By supporting one or more tubular guides between the jaws of a bifurcated foot terminating just in front of the needle-path and rigidly attached thereto a firm guide is employed, and this guide feeds the braid or cord uniformly and smoothly to the needle at the point where the needle does its work.

I claim—

1. The combination with a bifurcated presser-foot, of a centrally-supported tubular guide, and a secondary tubular guide located at the side of the central tubular guide, both of said guides being rigidly secured to and arranged between the members of the bifurcated foot, substantially as described.

2. The combination with a bifurcated presser-foot, of a central tubular guide, and a curved horn, both rigidly secured to and arranged between the members of the bifurcated foot, substantially as described.

In testimony whereof I have hereunto set my hand.

AUGUST RAUSSEN.

Witnesses:
N. F. BECKER,
W. R. WOOD.