(Model.) 2 Sheets—Sheet 1.

E. J. TOOF.

CORDING ATTACHMENT FOR SEWING MACHINES.

No. 410,618. Patented Sept. 10, 1889.

Fig. 1.

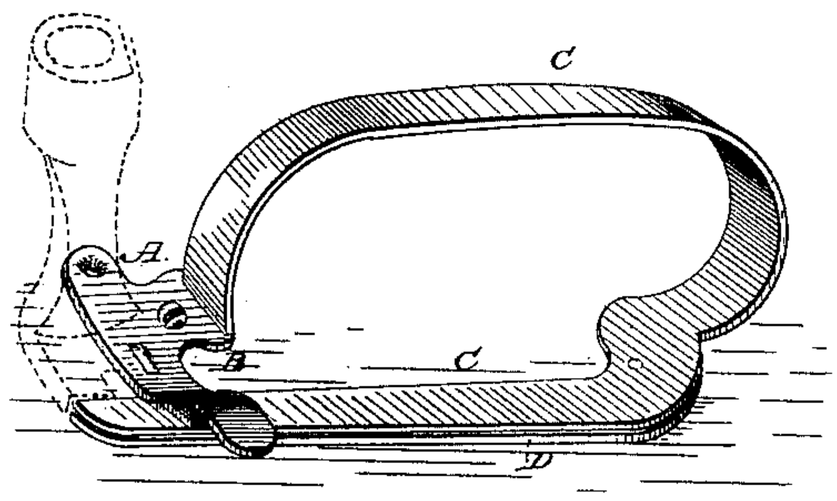
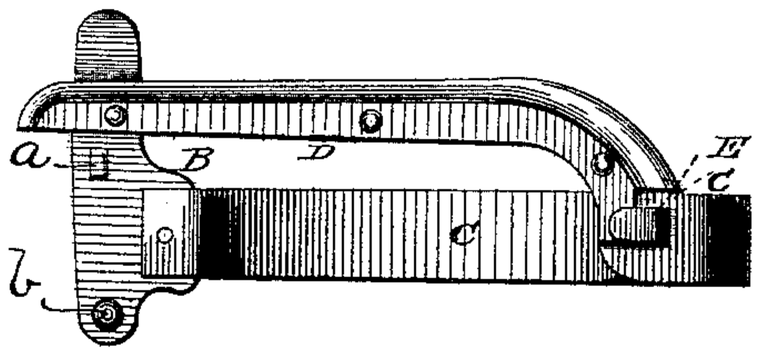


Fig. 2.



WITNESSES

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Joseph M. Crane

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(Model.) 2 Sheets—Sheet 2.

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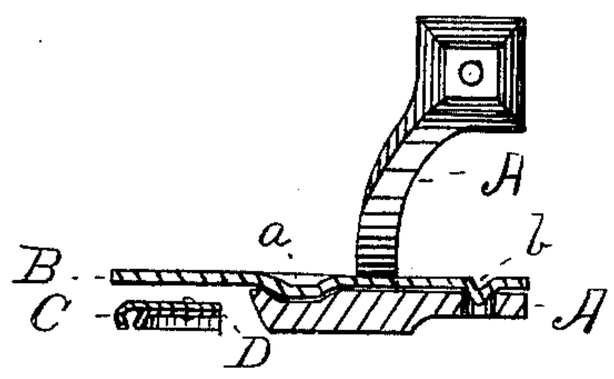

Fig - 3 -

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UNITED STATES PATENT OFFICE.

EDWIN J. TOOF, OF NEW HAVEN, CONNECTICUT.

CORDING ATTACHMENT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 410,618, dated September 10, 1889.

Application filed July 22, 1881. Serial No. 38,404. (Model.) Patented in England March 11, 1882, No. 1,192.

To all whom it may concern:

Be it known that I, EDWIN J. TOOF, a citizen of the United States, and a resident of the city of New Haven, in the State of Connecticut, have invented certain new and useful Improvements in Cording Attachments for Sewing-Machines, of which the following is a specification.

My invention relates to that class of attachments adapted for use in combination with sewing-machines; and it consists of a cording-guide adapted to direct cord and braid to the needle to be sewed upon fabric for trimming, &c. The channel-way which forms the guide for the cord is so constructed as to admit the cord through a flexible opening at its side without passing its end through its entire length; and it also consists in the peculiar construction of the attachment and the attachment-holder or presser-foot at their point of connection, whereby the said attachment may be held rigidly in position without the use of screws, &c., and for which I have obtained Letters Patent in Great Britain, dated March 11, 1882, No. 1,192, the object of the open-sided flexible channel-way being to produce the proper tension to the cord while being fed through the channel or guide, and to permit quick adjustment and placing of the cord in position while the machine is in operation.

Referring to the drawings, Figure 1 represents a perspective view of my improved corder attached to a presser-foot. Fig. 2 represents a bottom view of the same, showing the bottom or lower part of the deflected channel-way. Fig. 3 represents a section of the foot and tongue of the attachment in position, showing the slit, recesses, and counterparts.

A is a presser-foot serving as a holder, constructed to rigidly support the guide in position without the use of screws; and to this end, therefore, the holder is provided with a transverse slit in one side of the lower portion of the shank thereof at its junction and parallel with the foot, as clearly shown in Fig. 3. A recess and an aperture are provided in the foot portion to assist, in connection with said slit, in securing the two parts of the device together, the guide having a shank of construction complemental thereto, as hereinafter described, being held detachably upon said presser-foot or holder, as will be more fully explained hereinafter.

The guide to be attached to said holder is provided with a tongue B, having two small projections *a* and *b* on its under side to engage the recess and aperture, respectively, in the said foot. The projections are formed in this instance by deflecting the metal outwardly, as shown in Fig. 3.

The method of attaching the guide to the holder is as follows: The operator should take the guide in the right hand, enter the projection *b*, formed upon the short end of the tongue, as shown, into the opening provided for it at the heel of the foot of the holder, and then by a swinging movement of the guide toward the left enter the same into the slit in the shank A and slightly spring the tongue upward. The second projection is then made to enter the recess provided for it at or near the toe of said foot of the holder, into which it springs by the elasticity of the tongue B, where it is securely held for operation.

C represents the bow or bridge part of the attachment, one end of which is secured to the said tongue B. The said bow or bridge forms the support for the parts which form the lengthened channel-way or guide proper, which channel-way consists of the arm C′, the said arm being a continuation of the bow C, and another piece of metal (represented at D) provided with a groove or channel, formed in this instance by bending or depressing one edge of the metal into a groove larger at one end and gradually narrowing at the opposite or delivery end. The piece D is then riveted to the arm C′, although it is obvious that it may be soldered or otherwise secured thereon. When the piece D is secured to the arm C′, that edge or side provided with the groove is placed even with the outer edge of the arm C′, leaving an opening along the front edge, forming a mouth widest at the end near the bow, and gradually narrowing toward the point of delivery adjacent the foot when in position, as shown in Fig. 1. This opening is formed by the edge of the piece D being

bent or depressed, forming a groove or channel-way, as hereinbefore described, and the outer edge of the groove not being bent or brought back to the same level with the body of the piece. The edge is below the level of the body of the said piece D to a greater degree near the mouth of the groove, and gradually tapers toward the delivery end till it is quite on the same level with the body of the piece D, thus forming the said opening in the lengthened channel-way or guide proper.

By the construction of the parts and the thinness of the metal (as combined) an elasticity of the opening is secured, which permits of ready and easy application of the cord to its position. The easiest manner of placing the cord in position is to enter the cord at the widest opening of the mouth—about, say, two inches (more or less) from the end—and then by the end draw it forward and into the entire opening into and through the delivery end, and then draw back, as may be required, leaving enough projecting from the delivery end for the needle to act upon, so that it may be fed automatically.

Having thus set forth my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

The improvement in cording attachments for sewing-machines herein described, the same consisting in the combination, with the presser-foot or holder having a transverse slit in one side of the lower portion of the shank at its junction with the foot and parallel therewith, and having a recess at the front and an aperture at the rear in the upper surface of said foot portion, of a cord-guide having a guiding channel-way therein and provided with a spring-metal shank having projections complemental to the recess and aperture in the foot, whereby the said shank may be sprung within the transverse slit in the presser-foot or holder and firmly seated by the engagement of the said projections upon the shank, with the recess and opening at the front and rear portions, respectively, of the foot, as set forth.

EDWIN J. TOOF.

Witnesses:
JOSEPH M. CRANE,
JOHN DANE, Jr.