April 24, 1951 D. L. WEBSTER, III 2,550,628

ATTACHMENT FOR THE TAKE-UP BAR OF A SEWING MACHINE

Filed Nov. 10, 1949

Fig. 1.

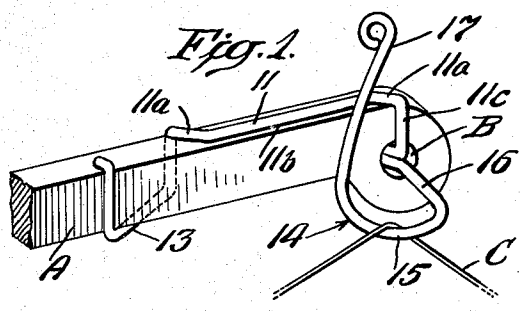


Fig. 2.

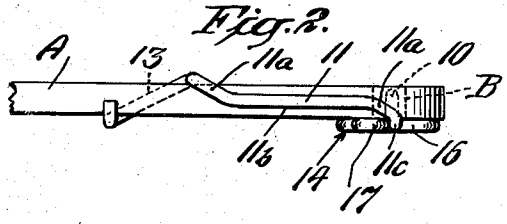


Fig. 3.

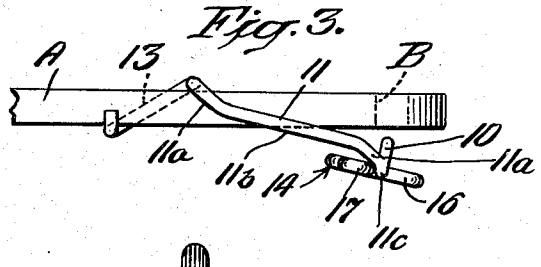
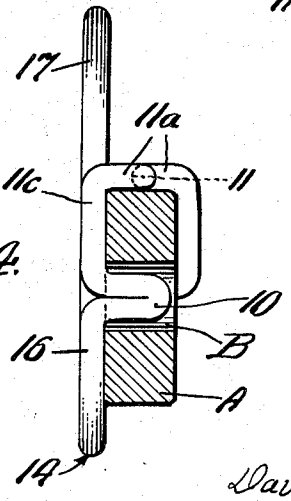


Fig. 4.



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ATTACHMENT FOR THE TAKE-UP BAR OF A SEWING MACHINE

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4 Claims. (Cl. 112—241)

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This invention relates to an attachment for the take-up bar of a sewing machine.

The take-up bars of most domestic sewing machines are provided with closed eyes through which the end of the thread must be passed in threading the machine. Nearly half the time required to thread such a sewing machine and much annoying manipulation of the thread can be saved by providing an eye on the take-up bar into which the thread can be slipped laterally. The object of my invention is to provide an attachment for a take-up bar providing such an eye.

The take-up bar attachment which I have invented may be manufactured at small cost, as it consists entirely of a single piece of resilient wire and may be quickly, easily and firmly applied to the conventional take-up bar to provide an open eye for the bar. The piece of wire, of which the attachment is formed, has a close bight forming a prong entering the thread hole in the take-up bar. The portion of the wire extending at one side of this bight is formed to engage the bar and urge the prong into the hole, while the portion of the wire at the other side of the bight is formed to provide an eye for the thread.

An embodiment of my invention is shown in the accompanying drawings, in which:

Fig. 1 is a perspective view showing the attachment applied to a take-up bar with the thread passed through the eye of the attachment;

Figs. 2 and 3 are top views of the take-up bar and attachment showing the attachment in a preliminary position and in its final position as it is applied to the bar; and

Fig. 4 is a front end view of the attachment showing the bar sectioned on the axis of the thread hole.

The attachment consists of a single piece of resilient wire, an intermediate portion of which is formed into a close bight 10 which serves as a prong.

The portion of the wire extending from one side of the prong provides a spacing piece 11 and a rectangular open socket 13 for embracing a take-up bar A. The socket 13 has a width considerably greater than the thickness of an ordinary take-up bar so that its upright portions may engage two longitudinally-spaced parts of the bar. The normal form of the socket and spacing piece is such that, when the socket engages a take-up bar of any of the various thicknesses in common use, the resiliency of the wire urges the prong 10 into the thread hole B of the bar. The shape of the spacing piece 11 is most desirably such as to enable it to lie close to the spacing bar so as not

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to interfere with other parts of the sewing machine. In the preferred form shown in the drawings, the spacing piece includes two short inclined portions 11*a* which place the longer portion 11*b* of the piece directly over the top of the take-up bar. At the end of one of the short portions 11*a* is a downwardly bent portion 11*c* which extends radially toward the center of the hole B when the device is applied to the take-up bar. This radial portion 11*c* is held close against the side of the take-up bar by the resiliency of the wire.

The portion of the wire at the other side of the bight 10 forms an open thread guide 14. The bottom part 15 of the thread guide lies below the prong 10 and has the form of an arc whose center is on the axis of the prong 10. The thread guide has a radial portion 16 extending from the prong to one end of the arc 15 and an end portion 17 extending upwardly from the other end of the arc 15 so that it terminates above the spacing piece 11 and above the top surface of the take-up bar to which the device is applied. All parts of the thread guide lie in a common plane containing the part 11*c* of the spacing piece, so that the thread guide may lie flat against one side of the take-up bar.

The use of the attachment is as follows: It is applied to the take-up bar A by placing the socket 13 around the bar. The prong 10 is then pulled back from its normal position against the resiliency of the wire and slid along the outer portion of the bar as shown in Fig. 2 until it snaps into the thread hole B. This holds the attachment firmly in position on the bar by virtue of its engagement with the thread hole and two longitudinally spaced parts of the bar against all of which it is urged against its own resiliency.

After the attachment has been placed on the take-up bar, it can easily be threaded by merely passing a bight of thread C clockwise around the top end of the upwardly extending portion 17 of the thread guide and pulling it down so that it lies across the arcuate bottom 15 of the thread guide. During the operation of the take-up bar, the thread C is free to slide along the arcuate bottom 15 of the thread guide and therefore draws in the same direction as though it had been passed through the thread hole B. The operation of the bar, therefore, results in taking up just the same length of thread as would be taken up if the thread had been passed through the thread hole B of the bar.

What I claim is:

1. An attachment for the take-up bar of a sewing machine consisting of a single piece of

resilient wire comprising a close bight forming a prong, a portion extending from one side of the bight and formed to engage the take-up bar so as to force the prong into the thread hole of the bar and a portion extending from the other side of the bight to provide a thread guide and consisting of a portion extending away from the prong, a bottom portion lying in an arc whose center is at the axis of the prong, and an upwardly extending portion having a length greater than the height of the thread bar.

2. An attachment for the take-up bar of a sewing machine consisting of a single piece of resilient wire comprising a close bight forming a prong, a socket piece consisting of a spacing piece extending from one side of the bight and at the end of the spacing piece an open socket having a bottom and two spaced side pieces for engaging the opposite sides of the take-up bar so as to urge the prong into the thread hole of the bar, and an open loop extending from the other side of the bight to form a thread guide.

3. An attachment for the take-up bar of a sewing machine consisting of a single piece of resilient wire comprising a close bight forming a prong, a socket-shaped bar-engaging element

extending from one side of the bight, and an open thread guide extending from the other side of the bight and consisting of a bottom portion below the prong and lying in an arc whose center is at the axis of the prong and side portions extending upwardly from the ends of the bottom portion.

4. An attachment for the take-up bar of a sewing machine consisting of a single piece of resilient wire comprising a close bight to provide a prong for entering the thread hole of the bar, a spacing piece extending from one side of the prong, an open socket at the end of the spacing piece and consisting of a bottom portion and spaced side portions for engaging the opposite sides of the bar and urging the prong into the thread hole, an open loop forming a thread guide extending from the other side of the bight and adapted to lie against one side of the take-up bar, and an end piece extending upwardly from the thread guide to a point above the top of the spacing piece.

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No references cited.