Nov. 12, 1946. J. A. MORABITO 2,411,102

CLOTH GUIDE FOR SEWING MACHINES

Filed May 30, 1945

Fig. 1.

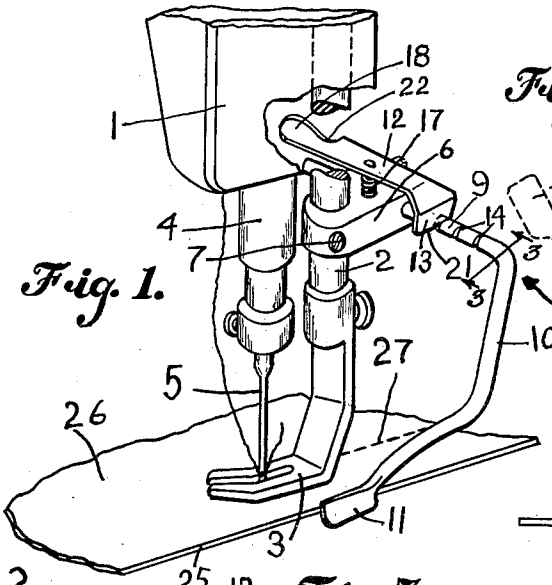


Fig. 2.

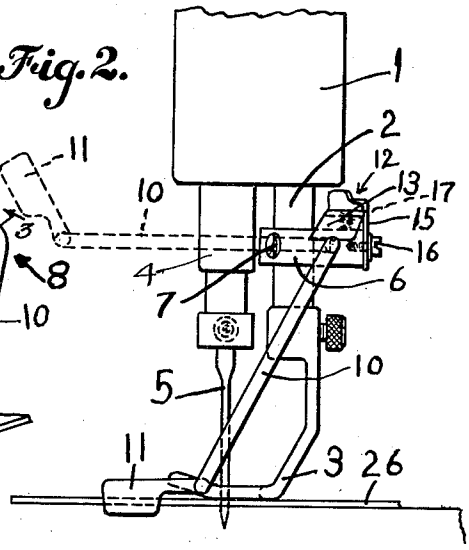


Fig. 3.

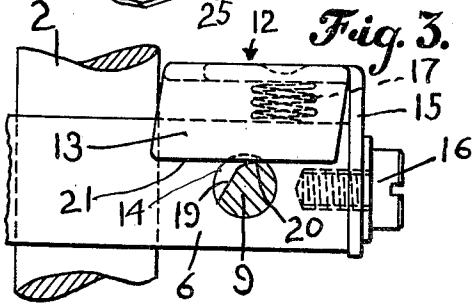


Fig. 4.

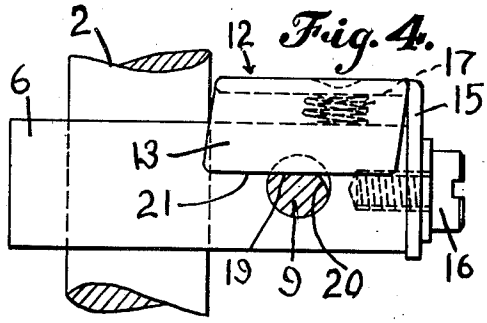


Fig. 5.

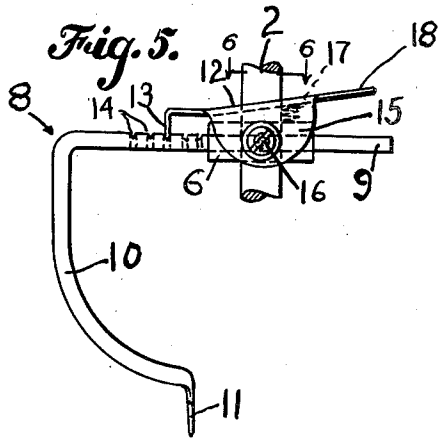
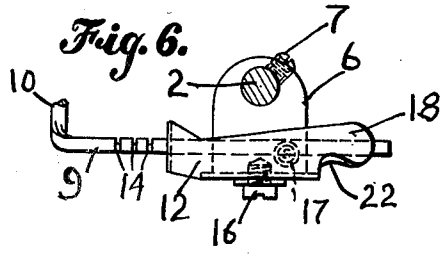


Fig. 6.



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UNITED STATES PATENT OFFICE

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CLOTH GUIDE FOR SEWING MACHINES

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Application May 30, 1945, Serial No. 596,639

2 Claims. (Cl. 112—151)

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This invention relates to cloth guides for sewing machines, and it has for its object to provide a cloth guide which is simple in construction and inexpensive to manufacture, which can be readily adjusted without the use of a screw driver or other tools, and also be readily moved from an operative to a raised inoperative position without the use of such tools.

In order to give an understanding of my invention, I have illustrated in the drawing a selected embodiment thereof which will now be described, after which the novel features will be pointed out in the appended claims.

In the drawing Fig. 1 is a fragmentary, perspective view of a part of a sewing machine illustrating my improvements. Fig. 2 is a side view of Fig. 1; Figs. 3 and 4 are enlarged sections on the line 3—3 Fig. 1, Fig. 3 showing the position of the parts when the cloth guide is in its operative position, and Fig. 4 showing the position of the parts when the cloth guide is in its raised, or inoperative position. Fig. 5 is a view of the cloth guide looking from the rear. Fig. 6 is a section on the line 6—6 Fig. 5.

In the drawing 1 indicates a part of the head of a sewing machine, 2 represents the presser bar having the presser foot 3 at its lower end, and 4 represents the needle bar carrying the usual needle 5.

My improved cloth guide is constructed to be attached to, or mounted on the presser bar 2. The cloth guide comprises a supporting block 6 which is mounted on the presser foot bar 2 and is held in adjusted position thereon by a set screw 7.

The cloth guide element is indicated generally at 8 and it comprises a stem portion 9 which extends through an aperture formed in the supporting block 6, and an arm portion 10 extending laterally from one end of the stem portion 9 and terminating in its free end in a cloth-guiding portion 11 which forms a guide for the edge 25 of the cloth, or work piece 26, that is being stitched as shown in Fig. 1, wherein 27 represents the line of stitching being made in the cloth 26.

The stem 9 can be adjusted in the block 6 so as to bring the cloth guide portion 11 nearer to, or further from, the line of stitching, and said stem can also be turned in the block so as to permit the cloth-guiding portion 11 to be swung upwardly in to a raised, inoperative position such as shown in dotted lines in Fig. 2, or to be lowered into its operative position shown in full lines in Figs. 1 and 2.

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My improvements also include a novel means for holding the cloth guide in any adjusted position. Such means is in the form of a locking lever 12 which is pivotally mounted on the block 6 and which has at one end a depending locking flange 13 which is adapted to engage in any one of a series of notches 14 with which the stem portion 9 is provided. The locking lever 12 is shown as having a flange 15 depending from its back edge, which flange overlies the rear end of the block 6 and is pivotally connected thereto by means of a pivot screw 16. 17 indicates a spring interposed between the block and the lever 12, which spring acts to yieldingly hold the flange, or nose, 13 against the stem. The locking lever 12 is formed at its free end with a thumb piece 18, the construction being such that when pressure is applied to the thumb piece 18 the lever will be turned about its pivot thereby disengaging the nose 13 from one of the notches in the stem 9. When the nose has been thus disengaged, the stem can be adjusted in the block 6 so as to place the cloth-guiding portion 11 nearer to, or further from, the needle 5.

Each notch 14 is so formed that it co-operates with the nose 13 not only to hold the cloth-guiding element in any adjusted position nearer to, or further from the needle, but also to hold the cloth-guiding arm in its raised position shown in dotted lines Fig. 2.

For this purpose each notch is so cut that it presents a flat bottom portion 19 of considerable length which merges into the curved end portion 20. Each notch is so positioned circumferentially of the stem 9 that when the cloth guide is in its operative position shown in Fig. 1, the end portion of the notch 14 having the curve bottom 20 will be on the upper side of the stem and will be the portion of the notch which receives the nose 13. This is the position of the notch indicated in Fig. 3.

When the cloth guiding member is raised or swung upwardly into its inoperative position shown in dotted lines in Fig. 2, the resultant turning motion of the stem 9 about its axis will bring the notch 14 into such position that the flat bottom portion 19 thereof registers with the straight edge 21 of the nose 13 as seen in Fig. 4. The action of the spring 17 holds the straight edge of the nose 13 in engagement with the flat bottom 19 of the notch with sufficient pressure to retain the cloth guide in its raised inoperative position.

The cloth guide can therefore be moved from its operative to its inoperative position merely by swinging the arm 10 upwardly, and this operation

can be performed without the necessity of using a screw driver or any other tool.

The adjustment of the cloth guide toward and from the needle can also be accomplished without the use of any tools, all that is necessary being for the operator to press downwardly on the finger piece 18 so as to disengage the nose 13 from the notch and then to slide the stem 9 in the block 6 thereby to bring the cloth-guiding portion 11 into its desired position.

If desired, I may make the finger piece 18 so that one edge 22 thereof will present a sharp cutting edge. This cutting edge can be used for cutting the thread.

I claim:

1. A cloth guide for sewing machine comprising a supporting block adapted to be mounted on the presser foot bar of the sewing machine, a cloth guiding member having a stem portion extending transversely through said block and provided with a plurality of notches, and also having an arm portion extending laterally from the stem portion and terminating in a cloth-guiding portion, a locking arm pivoted to the block and having a nose portion adapted to engage in any one of the notches and thereby hold the cloth guiding member in adjusted position, and a spring acting on the locking arm and yieldingly holding the nose portion thereof in operative position, said nose portion having a straight edge and each notch being formed so that its bottom presents a straight portion and a shorter curved portion, said straight and curved portions being so disposed that when the cloth guiding member is in its operative position, the nose of the locking arm rests on the curved portion of the notch bottom, while when the stem is turned to place the cloth guiding member in its raised inoperative position, the straight edge of the nose portion rests on the straight portion of the notch bottom and thereby holds the cloth guiding member in such raised position.

2. A cloth guide for sewing machines comprising a supporting block adapted to be mounted on the presser foot bar of a sewing machine, a cloth guiding member having a stem portion extending transversely through said block and also having an arm portion extending laterally from one end of the stem portion and terminating in a cloth-guiding portion, said stem portion being adjustable in the direction of its length in said block for shifting the position of said cloth-guiding portion and also being turnable in said block to swing the cloth-guiding portion from an operative position to a raised inoperative position, said stem portion being provided with a plurality of notches, the bottom of each notch presenting a straight section extending from one end thereof well toward the other end, which straight section merges into a section of the notch that extends to the other end thereof and has a curved bottom, a locking arm pivoted to the block and having a depending nose portion adapted to engage in any one of the notches and having a straight edge, and a spring acting on the locking arm and yieldingly holding the nose portion thereof in engagement with any slot, the engagement of said nose portion with any slot holding the cloth guide in adjusted cloth-guide position, and when the cloth guide is turned to place the cloth-guiding portion in elevated position the engagement of the flat edge of the nose with the flat section of the notch bottom serving to hold the cloth guide in its raised position.

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