

TRIMMING ATTACHMENT FOR STITCHING MACHINES.

929,653.

FIG. 1

FIG. 2

FIG. 3

FIG. 4

FIG. 5

FIG. 6

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UNITED STATES PATENT OFFICE.

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TRIMMING ATTACHMENT FOR STITCHING-MACHINES.

No. 929,653.

Specification of Letters Patent.

Patented Aug. 3, 1909.

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To all whom it may concern:

Be it known that I, CHARLES A. BONNEY, a citizen of the United States, and resident of St. Louis, Missouri, have invented certain new and useful Improvements in Trimming Attachments for Stitching-Machines, of which the following is a specification.

This invention relates to improvements in a trimming attachment for stitching machines, and has for its object to provide a rotary adjustable cutting disk in proper relation with the needle of a stitching machine so that the edge of the material is simultaneously cut off during the act of stitching.

In the drawings—Figure 1 is a side elevation of a sewing machine with a part broken away and in section, showing the application of my invention thereon. Fig. 2 is an enlarged detail sectional view of the lower portion of the same in which the rotary cutting disk is supported. Fig. 3 is an end view of the same showing in dotted lines the cutting disk in a tilted position. Fig. 4 is a detail perspective view of the cutting disk and shuttle plate showing the same in their relative operative position. Fig. 5 is a detail view of the adjusting plate made use of in connection with my invention. Fig. 6 is a detail perspective view of a strip of material in the act of being stitched and the cutting plate for trimming the edge of the same.

Referring to the drawings in detail, 7 indicates the head of an ordinary stitching machine in which is supported and operatively mounted the needle chuck 8. On the head is a projecting lug 9 to which is pivotally connected an arm 10 carrying a guide roller 11.

On the bottom of the head 7 is suitably attached a bracket 12 on which is supported a shaft 13 the upper end of said shaft being provided with the beveled pinion 14 which is arranged to mesh with a bevel gear 15 mounted upon the shaft 16 carried in the head of the machine and operated by the usual belt passing over the sheave 17. The bottom end of the shaft 13 is provided with a beveled pinion 18 which meshes with a beveled pinion 19 supported on a short shaft 20. This shaft is rotatably mounted in a bearing 21 and on the outer end of said shaft is suitably attached a rotary cutting disk 22. This cutting disk may be attached to the end of the shaft by a screw thread or keyed

thereon as found most desirable on the shaft 20. Between the bearing 21 and the rear surface of the cutting disk is located an expansive coil spring 23 which permits the shaft 20 to which the cutting disk is attached to have sufficient lateral movement in the bearing 21, depending upon the width and the position of the throat-plate 24.

The bearing 21 is provided with a projecting frame 25 which is hingedly attached at the point indicated by the numeral 26 to the casing 27 forming part of the bracket 12 and to the said frame 25 and the bracket 12 is connected a spring 28 by which the cutting disk together with its shaft and bearing may be placed in a position as shown by dotted lines in Fig. 3 when it is desired to place the same out of use. In order to support the cutting disk, its shaft and bearing in an operative position, I place a locking bolt 29 on the rear end of the casing 27, the head of said bolt projecting into the frame 25 while the opposite end of said bolt is attached to a finger lever 30 which by pressing rearwardly will release the head of the bolt from the recess in the casing, permitting the entire cutting disk and its mechanism to rise in a position as shown by dotted lines in Fig. 3. The plate 31 which is located on the rear side of the casing 25 is provided with a pair of diagonal elongated slots 32 through which are passed the cap screws 33 and this arrangement is for the purpose of permitting the shaft 20 and its cutting disk to be tilted at an angle found desirable and most operative.

On the cloth plate 34 and to one side of the throat-plate is pivotally mounted a presser-plate 35 having a flattened surface 36 which is arranged to come in contact with the rear edge of the cutting disk (see Fig. 4), the said presser-plate being held in position by a spring 37 located between the throat plate and the presser-plate so that the presser-plate exerts a constant pressure upon the cutting-disk 22, to hold the lower cutting edge of said disk 22 in constant contact with the upper edge of the knife-blade 38.

On the throat-plate 24 is attached a knife blade 38 with which contacts the cutting edge of the cutting disk 22. This blade is constructed of chilled material so as not to wear during the continuous contacting of the rotary cutting disk.

Having fully described my invention, what I claim as new and desire to have secured to me by the grant of Letters Patent, is:

1. A cutting attachment for stitching machines comprising a stitching machine provided with a cloth-plate; a throat-plate mounted on said cloth-plate; a knife blade vertically secured to said throat-plate; a presser-plate pivotally mounted on said cloth-plate; a rotary cutting disk seated between said knife blade and said presser-plate; and means for revolving said rotary cutting disk, substantially as described.

2. In a cutting attachment for stitching machines, the combination of a rotary cutting disk; a shaft carrying said disk; a bevel gear mounted on said shaft; a second bevel gear fixedly mounted; means for rotating said second bevel gear; a pivotally mounted bracket whereby said gears are brought into or out of contact with each other; a cloth-plate; a throat-plate mounted on said cloth-plate; and a knife blade vertically mounted

on said throat-plate, substantially as described.

3. A cutting attachment for stitching machines comprising a stitching machine provided with a cloth-plate; a throat-plate mounted on said cloth-plate; a knife blade vertically secured to said throat-plate; a presser-plate pivotally mounted on said cloth-plate; a rotary cutting disk normally seated between said knife blade and said presser-plate; means for revolving said rotary cutting disk; and means for throwing said rotary cutting disk out of its normal position between said knife blade and said presser-plate, substantially as described.

In testimony whereof, I have signed my name to this specification, in presence of two subscribing witnesses.

CHARLES A. BONNEY.

Witnesses:

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