

July 11, 1933.

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1,917,889

CLOTH CUTTING MACHINE

Filed Aug. 31, 1931

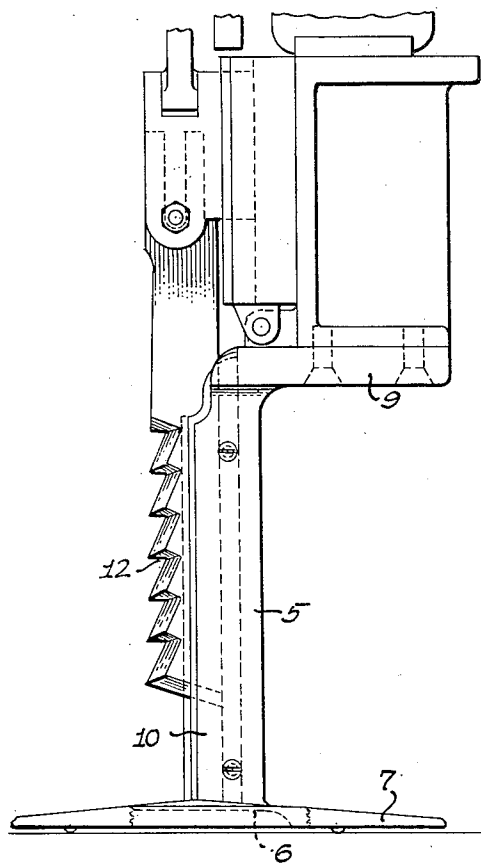


Fig. 1.

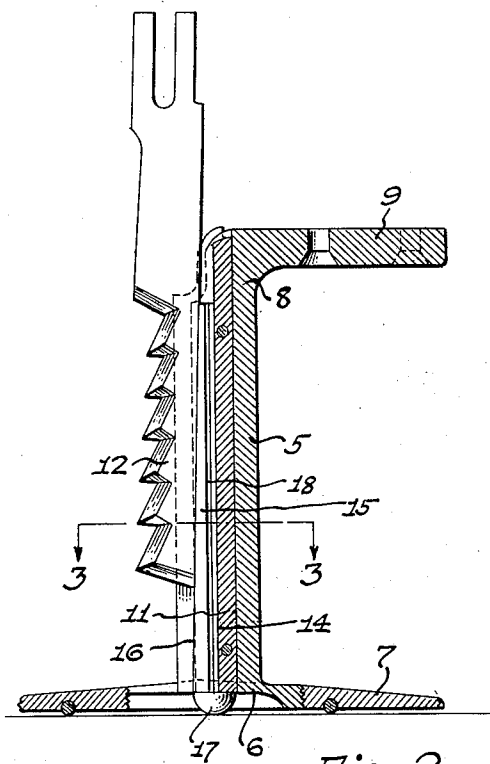


Fig. 2.

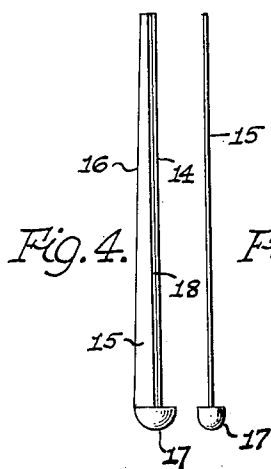


Fig. 4.

Fig. 5.

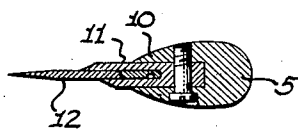


Fig. 3.

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CLOTH CUTTING MACHINE

Application filed August 31, 1931. Serial No. 560,265.

This invention relates to cloth cutting machines and more particularly to that type embodying a motor operated reciprocating cutting blade which travels in a vertical guide.

After the blade has been ground a few times its stock is reduced to such an extent that the cutting edge of the blade will not project from the guide. Hence the blade is rendered useless and a new one arranged in its place.

With this difficulty in mind, it is the principal object of the present invention to provide a guide for the blade having means for causing the same to project a relatively great distance out of the guide even though the stock is considerably reduced, thus permitting the blades to be used until substantially the entire stock is worn out.

Another object of the invention is to provide a knife blade guide having a shim or spacer element removably arranged therein to cause the knife blade to project the required distance from the guide and which is readily removable when it is desired to employ a new blade.

The invention also contemplates a device of this character which may be used in conjunction with any type of cloth cutting machine now in use which embodies a stationary guide in which a knife blade is mounted for reciprocation.

With the preceding and other objects and advantages in mind, the invention consists in the novel combination of elements, construction and arrangement of parts to be herein specifically referred to, claimed and illustrated in the accompanying drawing wherein—

Figure 1 is a side elevation of a cloth cutting machine embodying my invention;

Fig. 2 is a view partly in vertical section and partly in elevation;

Fig. 3 is a transverse sectional view taken on line 3—3 of Figure 2;

Fig. 4 is a side elevation of the spacer or shim; and

Fig. 5 is an edge elevation of the same.

Referring to the invention in detail, a vertical shank or standard 5 having the usual throat plate 6 attached to its lower end and engaged with the usual base plate 7 is provided. On its upper end 8 the shank or standard is formed with a laterally extending motor supporting bracket 9. The shank or standard is provided with a longitudinal bifurcation 10 in which the conventional chan-

nel shaped knife guide 11 is removably mounted and which is adapted to guide the reciprocating knife blade or cutter 12.

After the blade has been ground or re-sharpened a few times, the stock from which the knife blade is formed becomes reduced to such an extent that the cutting edge of the blade will not project sufficiently from the guide as to be effective. To overcome this condition, I have provided a flat shim or bar 15 having a straight inner longitudinal edge 14 and a tapered outer longitudinal edge 16 which coincides with the beveled inner longitudinal edge of the knife blade.

As disclosed in Figure 1, the shim or spacer bar is interposed between the inner edge of the knife and the rear wall of the knife guide. With the device interposed between the rear wall of the knife guide and the knife, the latter will project from the knife guide substantially the same distance as a new blade so that the entire cutting edge will lie beyond the outer edge of the guide.

In order to hold the shim or spacer bar against longitudinal displacement in the guide, it is formed with laterally extending stop or hook element 17 at its lower end which engages the lower end of the knife guide and the table upon which the machine rests.

In order to insure proper positioning of the device in the knife guide, the stop 17 is enlarged transversely so that it will snugly fit within the throat of the throat member 11.

For the purpose of supplying lubricant to the knife, one face of the shim or spacer is provided with a longitudinally extending lubricant groove or duct 18.

What I claim is:—

As an article of manufacture, a device to compensate for the reduction of the stock of the cutting blades of cloth cutting machines, a longitudinal element of substantially the same thickness as the stock of the blade and adapted to be confined within the knife guide in position to be engaged by the rear edge of the blade, the outer longitudinal edge of the element being beveled in the same plane as the beveled inner edge of the blade, and a rearwardly extending lug engageable with one end of the guide to hold the bar against longitudinal shifting therein.

In testimony whereof I affix my signature.

HENRY E. JACQUES. 110