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H. MYER & M. KOENIGES.

TWINE AND THREAD CUTTER.

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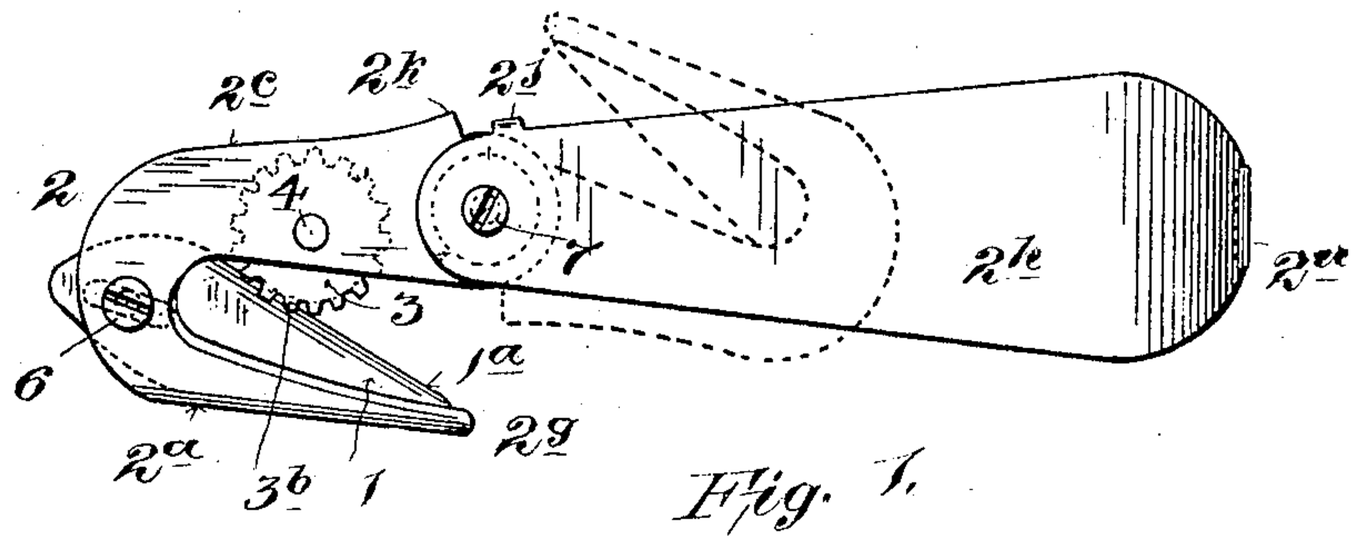

Fig. 1.

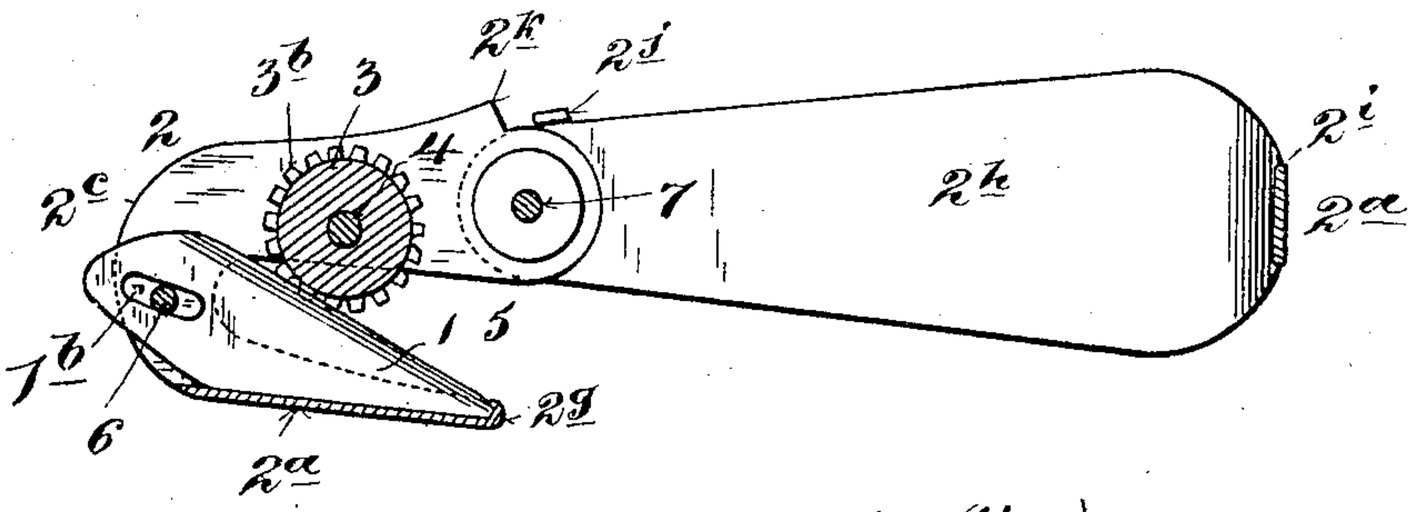

Fig. 2.

Fig. 3.

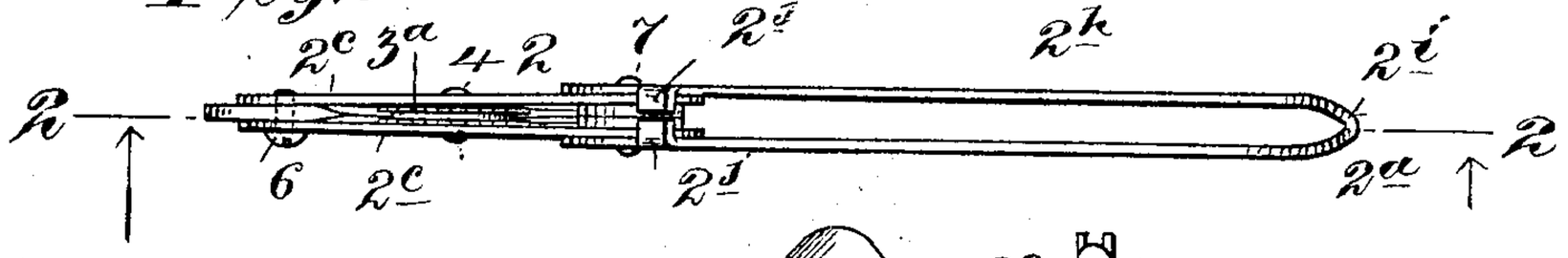

Fig. 8.

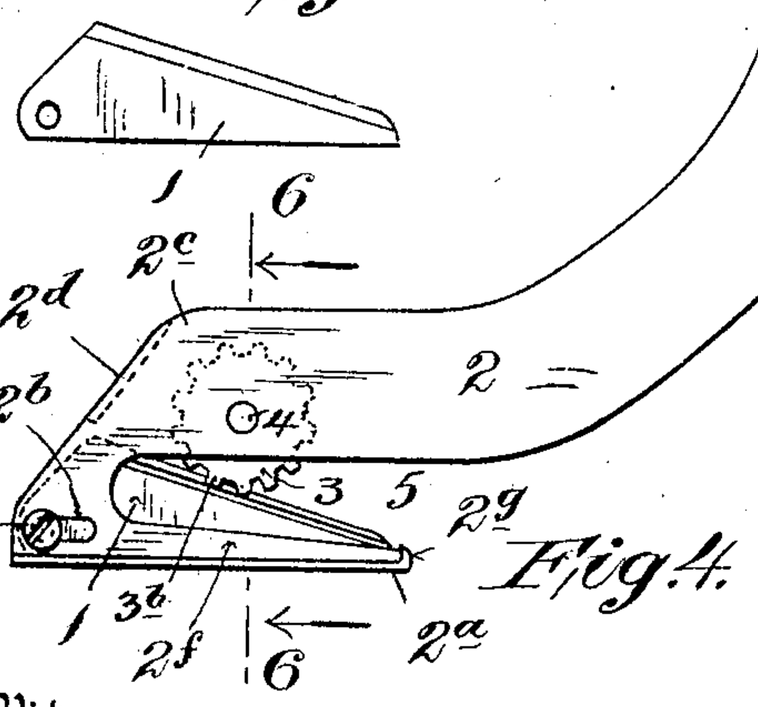

Fig. 4.

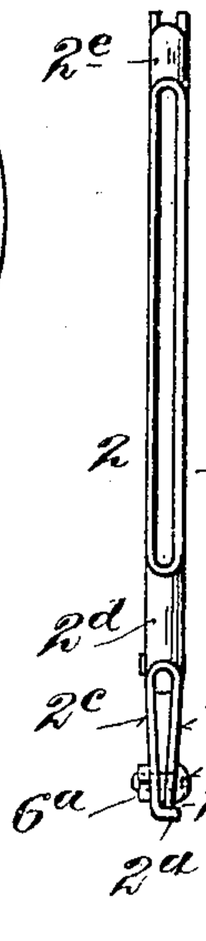

Fig. 6.

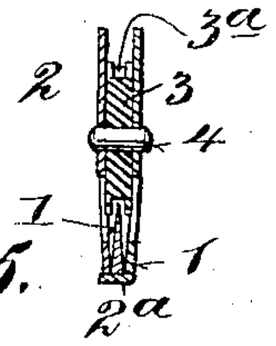

Fig. 5.

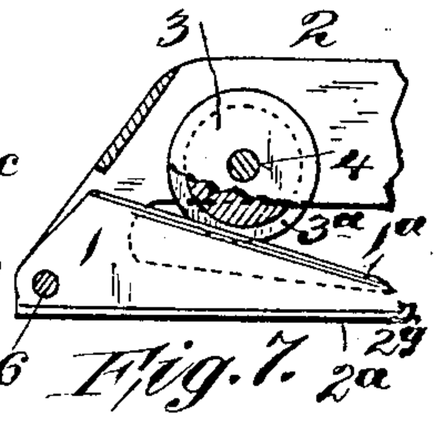

Fig. 7.

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TWINE AND THREAD CUTTER.

No. 814,153. Specification of Letters Patent. Patented March 6, 1906.

Application filed March 1, 1905. Serial No. 247,877.

To all whom it may concern:

Be it known that we, HARRY MYER, residing in the borough of Manhattan, and MARTIN KOENIGES, residing in the borough of Bronx, city and State of New York, citizens of the United States, have invented certain new and useful Improvements in Twine and Thread Cutters, of which the following is a specification.

This invention relates to improvements in cutters for twine, thread, and the like, and has for its object to provide means for causing the twine, &c., to be forcibly pressed against the edge of a cutter or blade to cause the more ready severing of the twine, &c.

The invention comprises a handle or support provided with a cutter or blade and a roller or wheel opposed to the cutting edge of the cutter or blade arranged to cause twine, thread, or the like to be forced against said edge by the rotation of said roller, said roller also by preference being toothed to engage the twine, &c., to more forcibly and positively press it against the cutting edge.

The invention also comprises the novel details of improvement that will be more fully hereinafter set forth and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part hereof, wherein—

Figure 1 is a side view of a twine-cutter embodying our improvements provided with a folding handle. Fig. 2 is a central longitudinal section thereof on the plane of the line 2 2 in Fig. 3. Fig. 3 is an edge view of Fig. 1. Fig. 4 is a side view of a similar twine-cutter having a non-pivotal handle. Fig. 5 is an edge view thereof. Fig. 6 is a section on the line 6 6 in Fig. 4. Fig. 7 is a sectional detail view showing the grooved roller without teeth, and Fig. 8 is a detail view of the cutting-blade.

Similar numerals of reference indicate corresponding parts in the several views.

In the drawings, the numeral 1 indicates a cutter or blade, which may be of any suitable construction.

2 indicates generally a handle or support for the blade, and 3 indicates a roller or wheel pivotally carried by the handle or support, as upon a pivot 4, and by preference said wheel or roller has a peripheral groove at 3^a, into which the cutting edge of blade 1 extends. The cutter or blade 1 is supported so that its cutting edge 1^a faces the main part of the handle or support 2, upon which the roller or wheel 3 is carried, whereby said cutting edge is protected, so that a person's fingers are not liable to be injured thereby. To this end the handle or support 2 is provided with a hook-like member or back 2^a, extending from one end of the handle rearwardly toward the opposite end, forming an open space at 5 between the main part of the handle and the blade edge, in which space the blade edge and the roller or wheel 3 extend, the cutting edge of the blade being located at an angle to the plane of the adjacent main part of the handle, whereby when the blade is applied upon twine or the like a pull upon the handle will cause the twine to pass into the angle between the blade edge and the roller, so that the latter will be caused to rotate and force the twine against the cutting edge. By having the peripheral groove 3^a in the roller 3 the tendency will be to cause the twine to more readily be pushed against the cutting edge of the blade. By preference the roller or wheel 3 is provided with teeth or projections 3^b on opposite sides of the groove 3^a, which teeth will grip the twine and press it forcibly against the cutting edge of the blade, and as the teeth extend on opposite sides of said cutting edge the twine will necessarily be forced fully beyond the cutting edge to assure the position and ready cutting of the twine, thereby reducing the labor of cutting, particularly with heavy twine, cord, rope, and the like.

By preference we make the cutting edge of the blade 1 adjustable with respect to the roller 3 to provide for wear of the blade edge by reason of use and sharpening, and to this end we have shown the back member 2^a of the handle as located substantially at a tangent to the roller 3, while the cutting edge of the blade lies at an angle to said back 2^a and also at a different angle to the roller, whereby as the blade is pushed along the back 2^a its edge will be adjusted more or less toward or from the roller 3.

The blade 1 may be provided with a slot 1^b receiving a screw 6, engaging threads in the handle 2 (or having a nut) to permit such adjustment of the blade, as shown in Figs. 1, 2, and 3, or the screw 6 may pass through a hole in the blade and enter a slot 2^b in the handle 2 and may be provided with a nut 6^a, as in Fig. 5. In some cases, if desired, the blade 1 may be attached to the handle by a screw or rivet 6 without providing adjustment, as in Fig. 7.

The handle we have shown preferably

consists of two side members 2^c, having a space between them receiving the blade 1 and roller 3, and said members may be made by stamping and folding sheet metal to the desired form.

In the form shown in Figs. 1, 2, and 3 the handle 2 is formed by folding suitably-shaped metal along the back part 2^a, so that the parts 2^c lie opposite each other.

In the form shown in Figs. 4, 5, and 6 the handle 2, of suitably-shaped metal, is folded at the parts 2^d 2^e, so that the members 2^c lie opposite each other, the back 2^a is bent sidewise, as in Fig. 5, against the side piece 2^f, and the parts 2^a and 2^f may be soldered together. At 2^g a lip may be formed, against which the end of blade or cutter 1 may bear.

As shown in Figs. 1, 2, and 3, the handle 2 may be made in two parts pivoted together, as at 7, the hand part 2^h being shown in the form of two side members, folded at the outer end 2^i, receiving between them the cutter part 2, and provided with stops or lugs 2^j, against which the heel 2^k of member 2 may bear in cutting. In this form the part 2, with its blade and roller, may be folded within the part 2^h, as in dotted lines in Fig. 1, for convenient carrying in the pocket and as a further shield for the blade and roller.

Changes may be made in the details of construction shown and described without departing from the spirit of our invention.

Having now described our invention, what we claim is—

1. A cutting implement comprising a handle provided with a blade and a toothed roller opposed to the cutting edge of the blade, substantially as described.

2. A cutting implement comprising a handle provided with a blade and a toothed roller provided with a peripheral groove opposed to the cutting edge of the blade, substantially as described.

3. A cutting implement comprising a handle provided with a back member extending from one end of the handle toward the opposite end thereof at a distance from the main part of the handle providing a space open at the inner end to receive twine, and a blade carried by said back member having its cutting edge facing the handle portion to receive twine passed into said space, substantially as described.

4. A cutting implement comprising a handle provided with a back member extending from one end of the handle toward the opposite end thereof at a distance from the main part of the handle providing a space to receive twine, a blade carried by said back member having its cutting edge facing the handle portion, and a roller opposed to the blade, substantially as described.

5. A cutting implement comprising a handle provided with a back member extending from one end of the handle toward the opposite end thereof at a distance from the main part of the handle providing a space to receive twine, a blade having its back bearing against said back member and its cutting edge at an angle to said back facing the main handle portion, and means for adjusting the blade along the back member, substantially as described.

6. A cutting implement comprising a handle provided with a back member extending from one end of the handle toward the rear portion thereof at a distance from the main part of the handle providing a space to receive twine, a blade having its back bearing against said back member and its cutting edge at an angle to said back facing the main handle portion, and means for adjusting said blade along said back, substantially as described.

7. A cutting implement comprising a handle provided with a back member extending from one end of the handle toward the rear portion thereof at a distance from the main part of the handle providing a space to receive twine, a blade having its back bearing against said back member and its cutting edge at an angle to said back facing the main handle portion, and a roller opposed to the cutting edge of the blade, substantially as described.

8. A cutting implement comprising a piece of metal folded to form two opposed sides of a handle having a space between them, a blade secured between said sides, and a roller pivoted between said sides opposite the cutting edge of the blade, substantially as described.

9. A cutting implement comprising a hand part having two sides provided with a space between them, a cutter part pivotally connected with the hand part to fold between its sides, a blade carried by the cutter part, and a roller carried by the cutter part opposed to the cutting edge of said blade. substantially as described.

10. A cutting implement comprising a hand part having two sides provided with a space between them, a cutter part having two sides forming a space between them and pivotally connected with the hand part to fold between its sides, a blade secured between the sides of the cutter part, and a roller pivotally carried between the sides of the cutter part and opposed to the blade, substantially as described.

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