(No Model.)

H. & B. OAKES.

THREAD CUTTER FOR SPOOLS.

No. 477,778. Patented June 28, 1892.

Fig. 1.

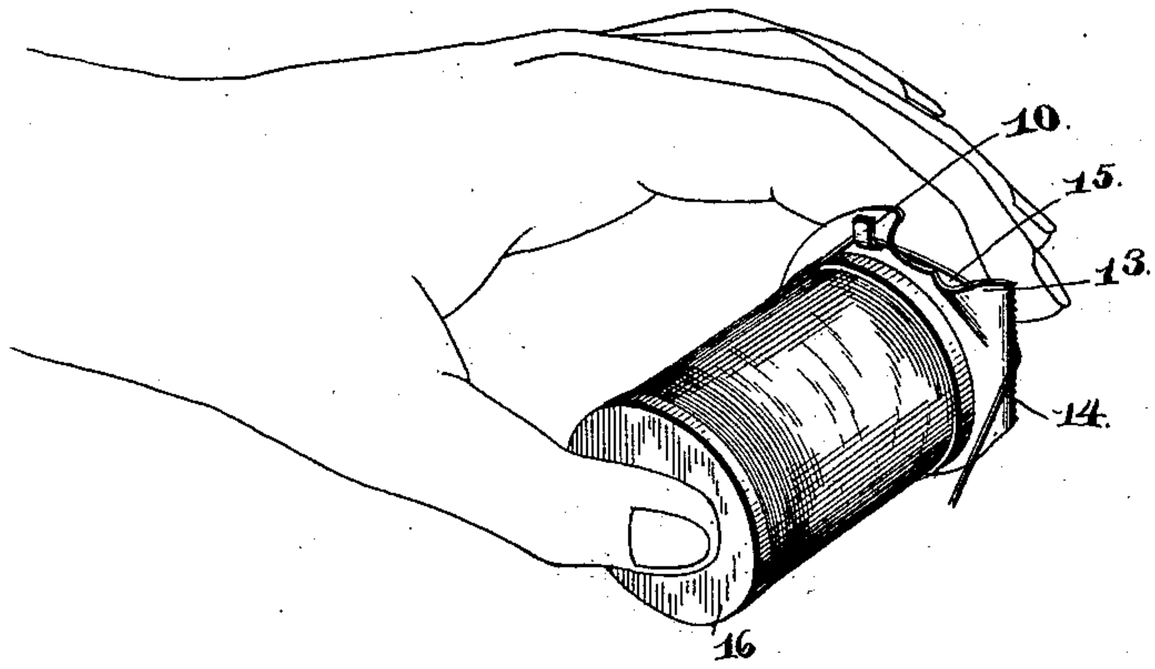


Fig. 2.

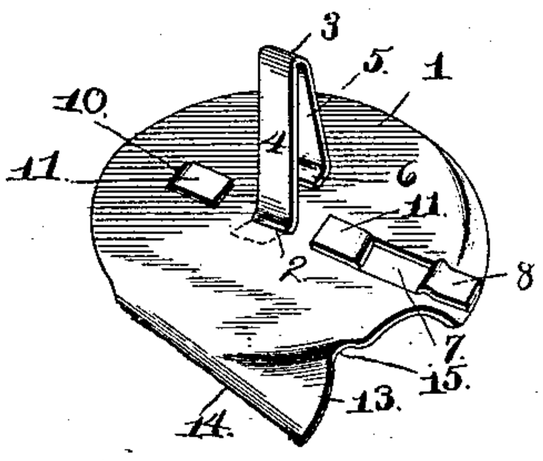
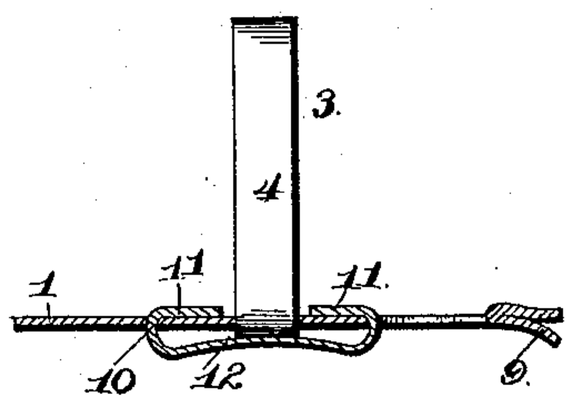


Fig. 3.



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UNITED STATES PATENT OFFICE.

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THREAD-CUTTER FOR SPOOLS.

SPECIFICATION forming part of Letters Patent No. 477,778, dated June 28, 1892.

Application filed January 22, 1892. Serial No. 418,927. (No model.)

To all whom it may concern:

Be it known that we, HENRY OAKES, residing at Silver City, Grant county, Territory of New Mexico, and BEN OAKES, residing at Chicago, in the county of Cook and State of Illinois, both citizens of the United States, have invented a new and useful Thread-Cutter Attachment for Spools, of which the following is a specification.

This invention relates to improvements in thread-cutter attachments for spool-cotton, the objects in view being to provide a cheap and simple device designed to be inserted into the bore of a spool, to be conveniently grasped by the fingers of the operator during the unwinding of the cotton, to provide a fastening for the free end of the cotton, and an edge against which the cotton beyond said free end may be drawn for the purpose of severance.

With these objects in view the invention consists in certain features of construction hereinafter specified, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a general view of our invention, the same being applied to a spool and shown in position for unwinding. Fig. 2 is a detail in perspective of the attachment. Fig. 3 is a central transverse section of the same.

Like numerals of reference indicate like parts in all the figures of the drawings.

In practicing our invention we stamp from sheet metal a substantially circular disk 1 and provide the same at its center with a narrow slit 2.

3 designates an inverted-V-shaped spring, having a long and short terminal, designated as 4 and 5, respectively. The long terminal 4 passes downwardly through the slit 2 and is laterally bent, as shown by dotted lines, Fig. 2, under the bottom of the disk 1. The short terminal 5 extends downwardly to a point near the disk and is inwardly turned, as at 6. At one side of the central slit 2 the metal is cut to form an oblong opening 7, the metal at the outer edge of the opening being left intact or uncut, so as to form a narrow tongue 8, which is bent over and upon the disk to form a thread-holder in conjunction with the edge of the disk 1, which is slightly extended opposite the tongue 8 to form a downwardly-curved lip 9. The lip and tongue combine to form a crotch, which, as will hereinafter appear, receives and holds the leading end of the thread.

Diametrically opposite the opening 7 a slit 10 is formed in the disk. Through the slit 10 and the opening 7 reduced fastening-tongues 11, formed at diametrically-opposite sides of a plate 12, are passed, and these tongues are inwardly bent upon the disk 1, whereby the plate becomes connected to the disk. The plate 12 has its under side concaved, so as to press snugly against the lower bent end of the long terminal 4 of the inverted-V-shaped spring before mentioned, and serves as the retaining means for the spring. The periphery of the plate 12 may be, and preferably is, soldered to the under side of the disk.

At a point in rear of the thread-holder the disk is extended to form a straight cutting edge or wing 13, and the said straight edge is downwardly bent or curved slightly and finely toothed or serrated, as at 14. The edge 14 is so disposed as to be substantially parallel with the tongue 8, and at its rear edge the wing is provided with an elevated crease 15.

This completes the construction, and the operation is as follows: The spring 3 is inserted in the tubular bore of any ordinary spool of cotton 16 and is designed to support the spool for rotation. The forefinger of the left hand of the user rests in the concavity of the plate 12, while the thumb of said left hand rests in the bore at the opposite end of the spool. The leading end of the cotton is now drawn upon, the spool revolving, as is usual, and after sufficient cotton has been drawn off or paid out to suit the sewer it is drawn under the tongue 8, where it becomes secured by the holder. It now simply remains to draw the cotton across the serrated edge 14, which quickly severs the same, leaving the leading end still secured by the holder, and hence preventing unwinding. By the crease 15 the act of inserting the cotton into the holder will also bring the cotton against the cutter or knife. By serrating the knife the same is not liable to cut the hand, and yet will cut the cotton more efficiently than if it were a plain

cutting-edge. It will be obvious that a spool thus provided may be tossed about in a work basket or bag without danger of injuring the work, cutting any one's hands feeling in the basket or bag for other articles, or of becoming detached.

Having thus described our invention, what we claim is—

1. A thread-cutter consisting of a metal disk having an axial spool-support and a downwardly-bent lip on its periphery, a tongue mounted on the disk, extending over the lip and combining therewith to form a thread-holder, and a cutter located at one side of the lip, substantially as specified.

2. A thread-cutter consisting of a metal disk provided with a peripheral extension, one edge of which is straight and downwardly bent to form a cutting-edge and the opposite edge of which is struck up, a thread-holder projecting from the periphery, and a spool-support upon the disk, substantially as specified.

3. A thread-cutter consisting of a disk provided at its center with a slit, an inverted-V-shaped spring having one of its terminals passed downwardly through the slit and laterally bent under the disk, a plate provided at its edges with tongues, said plate being located under the disk and having its tongues extending upwardly through slits formed in the disk and engaging said disk, and a cutter mounted on the disk, substantially as specified.

4. A thread-cutter consisting of a disk having an axial spool-support, a thread-holder located upon the disk, and a triangular wing extending from the periphery, said wing having a straight edge downwardly bent and serrated, substantially as specified.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

HENRY OAKES.
BEN OAKES.

Witnesses:
H. C. W. LAUBENHEIMER,
J. C. BEMENDERFER.