

(No Model.)

W. H. EARLE.

THREAD SEVERING ATTACHMENT FOR SPOOLS.

No. 591,592.

Patented Oct. 12, 1897.

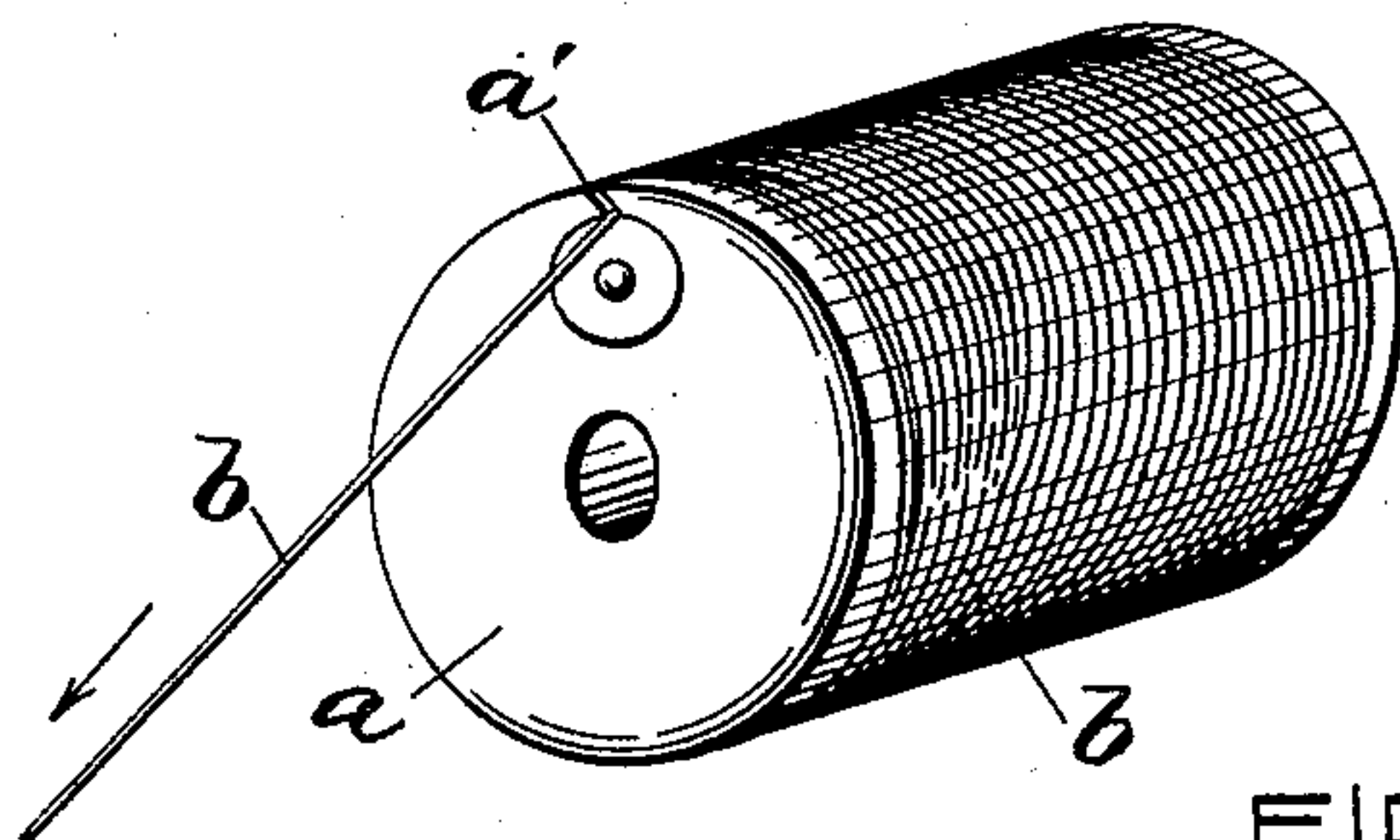


FIG. 1.

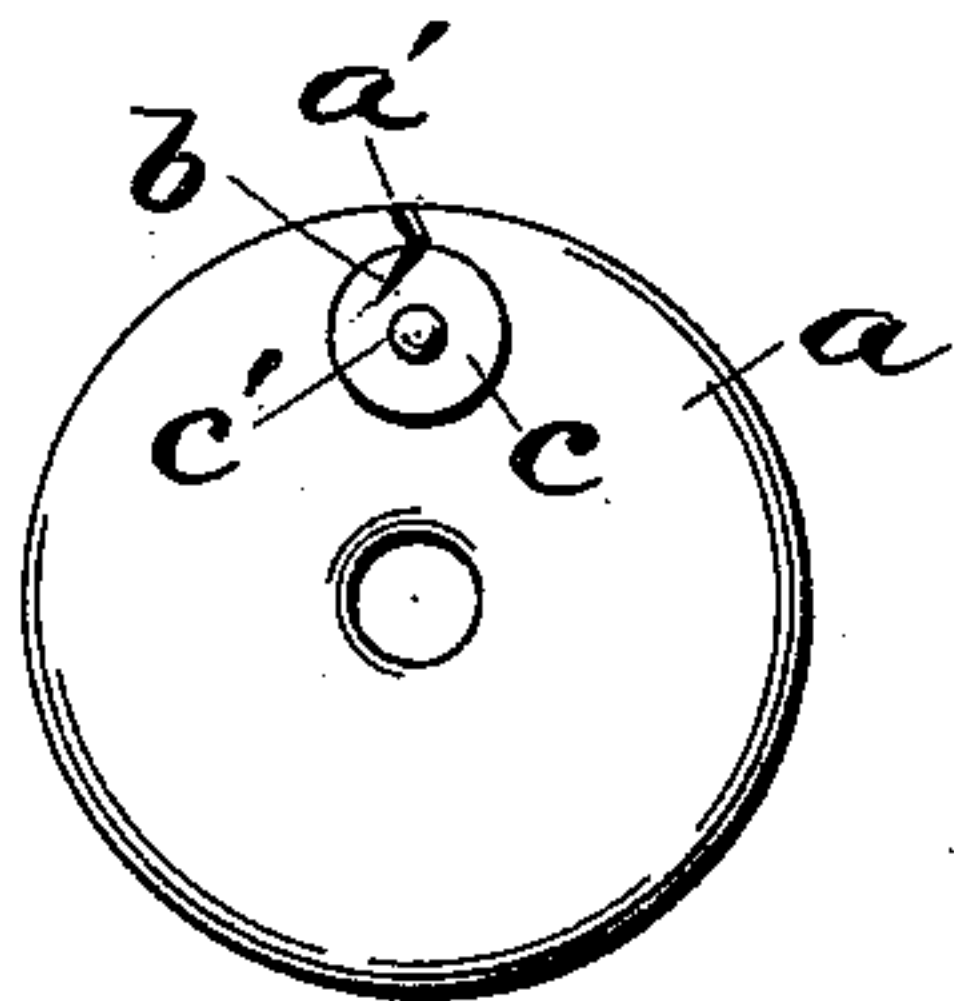


FIG. 3.

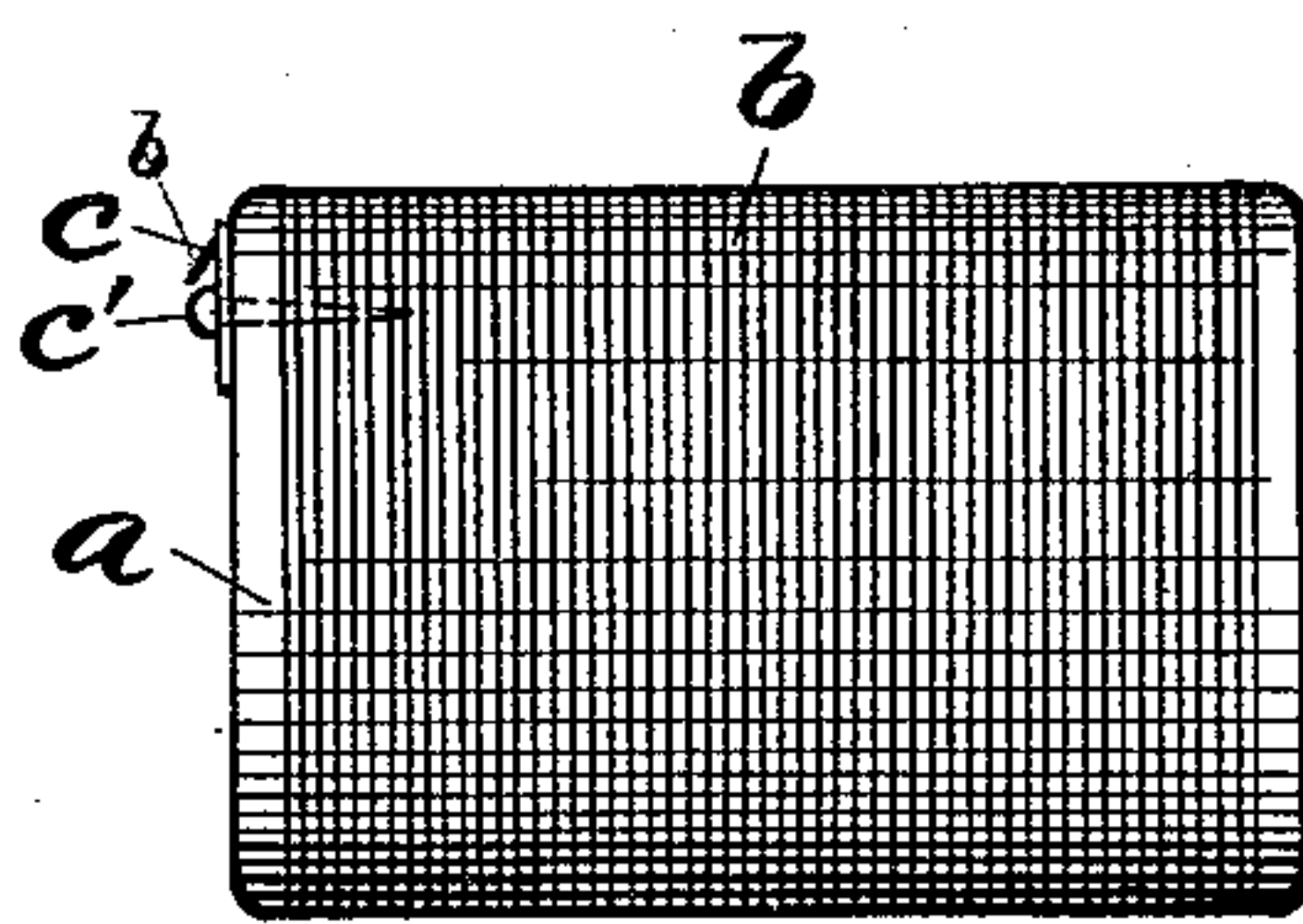


FIG. 2.



FIG. 4.

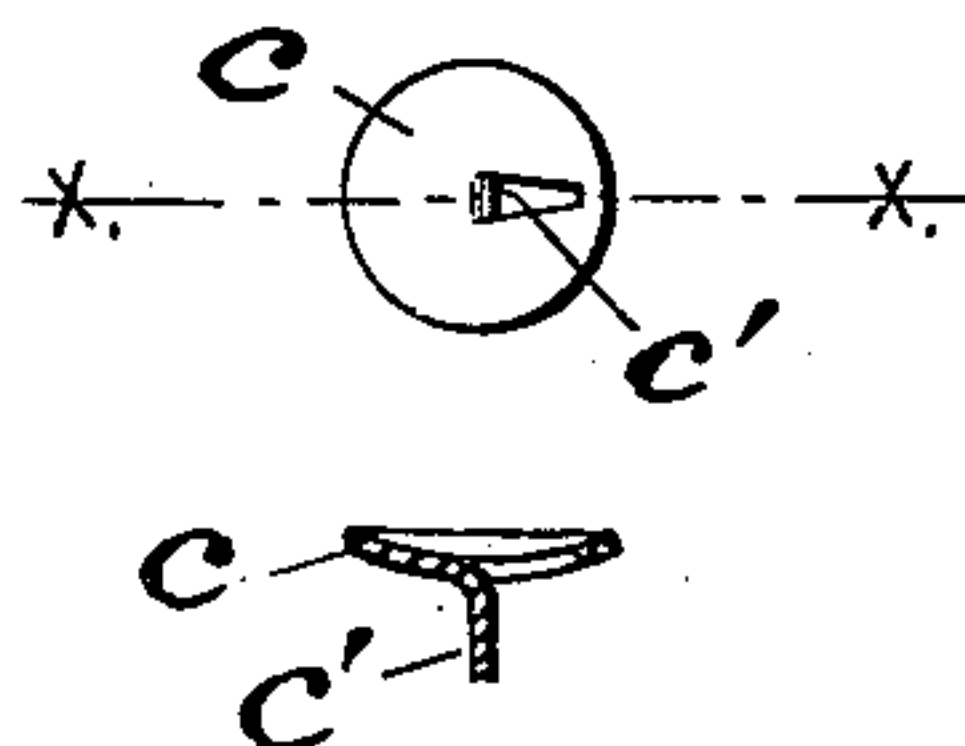


FIG. 5.

WITNESSES.

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THREAD-SEVERING ATTACHMENT FOR SPOOLS.

SPECIFICATION forming part of Letters Patent No. 591,592, dated October 12, 1897.

Application filed March 13, 1897. Serial No. 627,371. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. EARLE, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Thread-Severing Attachments for Spools; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as

will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification. My invention relates to devices employed for cutting spool cord or thread and adapted to be attached to the end of the spool; and it consists, essentially, in the combination, with a wooden spool having a thread-holding notch formed in its end, of a thin plain disk or blank of sheet metal rigidly secured to and being considerably smaller than said end and having the upper or cutting edge of the disk located contiguous to said notch, but not extending above it, all as hereinafter set forth and claimed.

I am well aware that prior to my present invention spools have been provided with thread-cutting attachments. Such former devices were, however, adapted to be removably secured to the spool by means of spring members inserted into the central hole usually formed in thread-carrying spools. The chief objection to the employment of such prior thread-cutting attachments has been due to the fact that they could not be produced cheaply enough, another disadvantage being that the thread or cord was severed practically squarely across.

The object I have in view is to produce a cord or thread severing device possessing superior advantages over the devices before referred to and one whose cost at the same time is so small that the thread manufacturer may, and, in fact, can, employ it on certain classes of his product without materially increasing the cost, since the value of the time and material entering into the cost of the device when considered per unit is practically nil. By means of my improvement the adjacent ends of the cord, when severed by it,

have the strands or fibers thereof abraded, as it were, in a tapering manner, thereby adapting the end to be readily twisted between the fingers and more easily passed through the eye of a needle. Moreover, the act of severing the cord leaves an end thereof held in the notch formed in the spool-flange in position to be readily seized when the succeeding length of the cord is to be unwound from the spool and severed.

I may add that my improvement is more particularly adapted for use on spools containing comparatively strong or coarse cord, as usually made of linen, silk, &c.

In the accompanying sheet of drawings, Figure 1 is a perspective view showing my invention combined with a spool of cord. Fig. 2 is a side view. Fig. 3 is an end view. Fig. 4 is a sectional view, enlarged, taken through the cutting-disk; and Fig. 5 shows a modification of the device detached from the spool.

As hereinbefore stated, my invention is more especially adapted to be combined with the usual wooden spool *a*, the same being reduced in diameter between the two end flanges to receive the thread or cord *b*, as common, and having the edge of one of its flanges notched, as at *a'*, to serve as a keeper for the free end of the cord. (See Figs. 1 and 3.)

The severing or cutting disk *c* is rigidly secured to the notched end of the spool by means of a headed pin or spur *c'*. In the drawings the thickness of the disk is somewhat exaggerated. The disk, which is perfectly plain, may be cut or punched from suitable sheet metal, as German silver, high brass, steel, &c., a central hole being provided to receive the attaching-pin *c'*. I prefer to make the disk slightly cup-shaped or concavo-convex, its diameter being considerably less than the semi-diameter of the spool, as shown. By this means I produce an efficient thread-severing device with a minimum amount of material. The disk when mounted is non-removable, its upper side or edge being adjacent to the notch *a'* and slightly below the edge of the corresponding end or flange, substantially as shown.

In Fig. 5 the disk *c* and its retaining spur or pin *c'* are integral—that is, by the use of suitable tools the spur is cut and bent con-

currently with the process of forming the disk itself.

The operation of the device is easy and simple. For example, the user by holding the 5 spool in one hand next unwinds with the thumb and index-finger of the other hand the desired length of cord, at the same time guiding the cord into the notch a' , after which, by simply drawing the cord gently but firmly 10 downwardly at an angle across the edge of the disk, substantially as shown in Fig. 1, the strands of the cord will be gradually abraded and severed, the cord meanwhile being kept under slight tension. The action just de- 15 scribed not only severs the cord, but it leaves the spool end of the latter firmly held in the notch conveniently ready to be grasped by the user when another length of the cord is to be severed. It will be found that the strands of 20 the thus severed ends of the cord are ruptured or torn apart instead of being cut squarely across, thereby adapting the end to be readily twisted to a taper form, capable of being more easily passed through the eye of a needle.

I claim as my invention and desire to se- 25 cure by United States Letters Patent—

1. The cord or thread severing attachment for spools, hereinbefore described, the same consisting of the small thin metal disk c 30 slightly concavo-convex in cross-section, and a central pin or spur, as c' , through which the said disk may be rigidly secured to the end of the spool.

2. The combination with the usual wooden thread-holding spool a having a thread-securing notch a' formed in one of its end flanges, 35 of the small metal disk c permanently secured to the said notched end and contiguous to but below the mouth of the securing-notch a' , constructed, arranged and adapted for use sub- 40 stantially as hereinbefore described and for the purpose set forth.

In testimony whereof I have affixed my signature in presence of two witnesses.

WILLIAM H. EARLE.

Witnesses:

GEO. H. REMINGTON,
REMINGTON SHERMAN.