A. GRASSELLY.

THREAD CUTTING DEVICE.

APPLICATION FILED NOV. 12, 1914.

1,178,798. Patented Apr. 11, 1916.

Fig. 1.

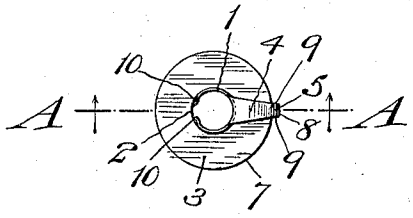


Fig. 2.

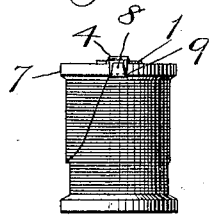


Fig. 3.

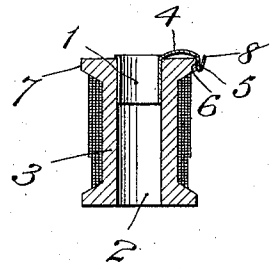


Fig. 4.

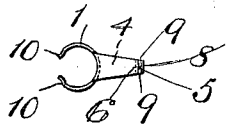
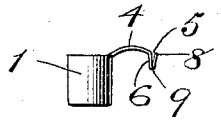


Fig. 5.



Witnesses:-
A. Barry
C. V. Barry

Inventor:-
Adrian Grasselly
by his attorney
F. George Barry

THE COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ADRIAN GRASSELLY, OF NEW YORK, N. Y.

THREAD-CUTTING DEVICE.

1,178,798. Specification of Letters Patent. Patented Apr. 11, 1916.

Application filed November 12, 1914. Serial No. 871,643.

To all whom it may concern:

Be it known that I, ADRIAN GRASSELLY, a citizen of the United States, and resident of the borough of Bronx, in the city and State of New York, have invented a new and useful Improvement in Thread-Cutting Devices, of which the following is a specification.

This invention relates to a thread cutting device, with the object in view of providing a device that can be readily attached to spools of thread, etc., now in common use, for severing the thread after the desired length has been removed from the spool, at the same time holding the remaining end of the thread, thereby preventing the unintentional unwinding of the thread on the spool.

Another object is to provide a device having means which will lock itself upon the spool so as it cannot be rotated as the thread is being cut.

Another object is to provide a device which will securely hold any size thread in its bight.

Another object is to provide a device which is simple in construction, economical in the manufacture, and one which may be formed from a single piece of sheet steel or other metal, whereby the above-named objects may be effectively carried out.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

Figure 1 represents a plan view of my device as applied to a spool of thread, Fig. 2 represents a front elevation of the same, Fig. 3 represents a central section taken in the plane of the line A—A of Fig. 1, Fig. 4 represents a plan view of the device detached from the spool, and Fig. 5 represents a side elevation of the same.

The device comprises an expansible tubular member 1 which is adapted to be inserted in the central bore 2 of the spool 3. A bridge 4 connects the top of the tubular member with a V-shaped thread holder 5, the inner wall 6 of which is adapted to engage the rim 7 of the spool 3. The outer wall 8 is arranged to be flexed toward and away from the inner wall thereby allowing threads of any thickness to be held within the bight formed by the converging walls. The lateral edges 9 at the point of convergence of the inner and outer walls are provided with cutting edges for the thread, which, when drawn at right angles, or to the bottom of the bight, serve to sever the thread.

To overcome the slight difference in the diameters of the spool, as well as secure the device firmly on the spool, the bridge 4 is arched to form a spring which will normally draw the tubular member and the holder together, thereby pinching the spool between the bore and the rim and locking the device firmly thereon.

The free ends of the expansible tubular member 1 are curved outwardly, as shown at 10, in Figs. 1 and 4, so as to impinge against the walls of the bore 2 and hold the device against rotation. Thus it will be seen that the holder is held tightly against the rim and extends only a slight distance beyond the rim, at the same time occupying a position which is directly in the path of the thread when it is to be severed.

The holder and cutter of this construction, when applied to a spool, do not obstruct or inconvenience the user in any way in unwinding the thread in the usual manner, *i. e.*, by pulling the free end of the thread while the spool is being rotated in the hand by the pull. When the desired amount of thread has been reeled off, the point to be severed is placed in the bight of the holder and by a downward pull the thread is drawn upon the sharp edges of the holder and thence severed, leaving the cut end of the thread on the spool fast in the bight of the holder.

By reason of the simplicity of the design and construction of the device, it will be seen that it can be made from a single piece of sheet steel or other metal, bent into shape very quickly, and the cost of the material and manufacture is very small.

What I claim is:

1. A thread cutting and holding device for spools comprising an expansible tubular member, a V-shaped holder having a vertical inner wall adapted to engage the rim of the spool, said holder having laterally convergent cutting edges in parallelism with the tubular member, and a resilient curved member formed integral with the tubular member and the holder for clamping the inner wall of the holder to the rim of the spool.

2. A thread cutting and holding device for spools comprising an expansible tubular member, a V-shaped holder having a verti-

cal inner wall and an outwardly inclined tapered outer wall forming a flexible bight, the vertical edges of said walls being laterally convergent to form cutting edges arranged in parallelism with the tubular member and a resilient curved member formed integral with the tubular member and holder for clamping the inner wall of the holder to the rim of the spool.

3. A thread cutting and holding device for spools comprising an expansible tubular member, having its free ends turned outwardly, a V-shaped holder having a vertical inner wall and an outwardly inclined tapered outer wall forming a flexible bight, the vertical edges of said walls being laterally convergent to form cutting edges arranged in parallelism with the tubular member and a resilient curved member formed integral with the tubular member and holder for clamping the inner wall of the holder to the rim of the spool.

In testimony, that I claim the foregoing as my invention, I have signed my name in the presence of two witnesses, this 10th day of November, 1914.

ADRIAN GRASSELLY.

Witnesses:
G. M. ROCHE,
C. S. SUNDGREN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."