(No Model.)

Z. B. OSGOOD.

THREAD FASTENING AND CUTTING DEVICE FOR SPOOLS.

No. 590,851. Patented Sept. 28, 1897.

Fig. 1.

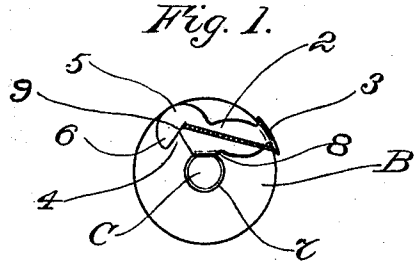


Fig. 2.

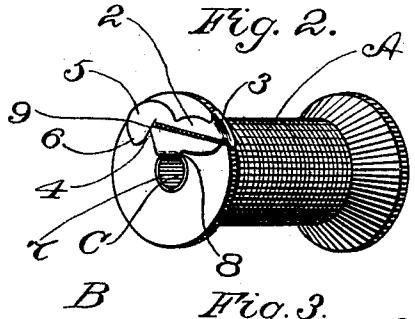
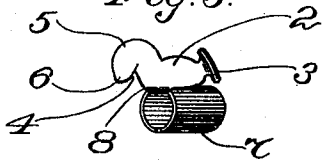


Fig. 3.



Witnesses:
Oscar F. Hill
Edith J. Anderson.

Inventor:
Zenas B. Osgood
by Macleod Calver & Randall
Attorneys.

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UNITED STATES PATENT OFFICE.

ZENAS B. OSGOOD, OF DAMARISCOTTA, MAINE, ASSIGNOR, DY DIRECT AND MESNE ASSIGNMENTS, OF ONE-HALF TO WALDRON H. RAND, WILLIAM B. RAND, AND THOMAS WATSON, OF BOSTON, MASSACHUSETTS.

THREAD FASTENING AND CUTTING DEVICE FOR SPOOLS.

SPECIFICATION forming part of Letters Patent No. 590,851, dated September 28, 1897.

Application filed December 29, 1896. Serial No. 617,307. (No model.)

To all whom it may concern:

Be it known that I, ZENAS B. OSGOOD, a citizen of the United States, residing at Damariscotta, in the county of Lincoln and State of Maine, have invented certain new and useful Improvements in Thread Fastening and Cutting Devices for Spools, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention has for its object to provide a simple and inexpensive device by means of which the delivery end of the thread on a spool may be easily, quickly, and securely fastened in such manner that undesired loosening and unwinding of the thread shall be prevented, and so that such end may be easily grasped and released when it is desired to take another piece of thread from the spool; also by means of which, when the proper length of thread has been withdrawn from the spool, the portion thus withdrawn may be severed, so that the ends at the place of severance will not be frayed but will be cleanly terminated, and therefore will be in condition to be readily passed through the eye of a needle.

My invention is fully set forth in the following description, and the novel features thereof are pointed out and clearly defined in the claim at the end of this specification.

In the following description reference is made to the accompanying drawings, in which—

Figure 1 is an end elevation, and Fig. 2 is a perspective view of a spool such as is used for thread with my device attached thereto. Fig. 3 is a perspective of my device detached.

In the use of common sewing-thread the free or delivery end of the thread tends to become loosened and to unwind, and this results not only in a waste of the thread but also in considerable annoyance to the person using it. In withdrawing a portion of thread sufficient for one needleful from a spool the portion withdrawn requires to be disconnected from the portion on the spool. When broken, the end of the thread is frayed and is not in the best condition to be readily inserted in the eye of a needle. My invention obviates the difficulties first referred to by securely holding the end of the thread and thus preventing wastage and annoyance, and it meets the requirements as to a cutter, which is attached to the spool, and is therefore always in convenient position to cleanly and quickly sever the thread. The invention embodies an arrangement of the holder relative to the cutter which leaves a sufficient portion of the thread that is wound on the spool projecting from the holder or fastened to enable such portion to be seized when it is desired to withdraw another portion from the spool. The device may also, as will be clear from the form of it which is shown in the accompanying drawings, be applied to a common spool and will not interfere with the use of the spool on any machine known to me.

The device is very simple and will be readily understood from the following description:

At A, I have shown a spool of common form. B is one end of the spool, and C is the hole through the center thereof. My device preferably is formed from thin sheet metal—such, for example, as steel. It comprises an intermediate or body portion 2, which lies against the flat end of the spool, it having formed at one end thereof an offset portion 3. This portion 3 preferably is curved slightly to conform to or approximately conform to the curve of the edge or periphery of the head B of the spool, and it overlies the said periphery and is in contact therewith or very close thereto, so that a slight strain is required to draw the thread in under the end of said portion 3 and between the said portion or projecting end thereof and the edge or periphery of the said head or end B of the spool. The portion of body portion 2 with which the part 3 is connected is narrowed to form a neck, thus allowing the end of the part 3 to constitute a projection under which the thread may be drawn. The opposite end 5 of the body part 2 is provided with the severing device, the latter preferably being formed integral with said part 2. The severing is effected in a slit or cut 9, that is formed in the slightly-enlarged portion 5 of the piece of sheet metal, from which, as previously stated, the device is preferably formed. The free extremity 6 of the part 5 is slightly bent

in a direction away from the face of the end B of the spool, so that after the thread has been drawn under the end of the holding part 3 and firmly clamped thereby it may be passed readily under the said end 6 and into the slit 9, after which a slight strain serves to sever the thread. A notch 4 leads the thread into slit 9. In consequence of the thread being held fast by the clamp 3 all the strain put upon the thread acts at the slit 4 and insures and facilitates the severance at that point. As will be clear, the precise contour of the device, as also the dimensions thereof, are not essential, but may be varied. The portion of the thread extending from the clamp 3 over the outer surface of the device to the slit 9, as indicated in Figs. 1 and 2, is in position to be picked up readily when it is desired to draw a fresh quantity of thread from the spool.

For the purpose of securing the device to the spool so that it may be readily attached or detached therefrom I provide it with a split cylinder 7 of a size adapted to be passed into the hole C and afford frictional contact with the walls of the said hole. The split cylinder 7 is secured at one end thereof to the part 2 by means of a neck 8, the said neck being of sufficient length to properly position the cylinder 7 with reference to the part 3. By employing a split cylinder the cylinder may be slightly enlarged or decreased in diameter to tightly fit the hole C in the spool. As will be clear, the device, including the split cylinder 7 for attaching it to the spool, may be formed integral by stamping out or otherwise forming a blank of proper shape from sheet metal and subsequently bending the blank to form the finished device. As will be clear, the split cylinder 7 is not an essential feature of my device. Any well-known means of attaching the device to a spool in such manner that it may be readily detached therefrom may be employed. It will also be clear that in case my device is to be secured in such manner as not to permit the ready detachment therefrom any well-known means of securing the device to the spool may be employed—such, for example, as a nail or nails or the like. By providing my device with a means of attachment whereby it may be readily attached to and detached from the spool the device may be removed when a spool is empty and applied to another spool.

In Figs. 1 and 2 of the drawings the coils of thread are supposed to extend around the spool in a direction corresponding with the direction of movement of the hands of a watch and the free end of the thread is drawn backwardly—that is, toward the left and across the top surface of the body portion 2. In order to enable the device to be used where the coils extend either in the direction just noted or in the opposite direction, the clamp 3 preferably is formed double-ended, as shown—that is to say, the ends thereof project on opposite sides of the neck adjacent to the same. This enables the device to be used whichever may be the direction of the coils on a spool of thread, for it enables the free end of the thread to be slipped under one end of the clamp or the other end thereof, as the case may be.

What I claim is—

The combination with a spool of the clamping and severing device applied thereto comprising the body portion 2 lying against the flat end of the spool and having a slit 9 therein located at a distance from the edge of the head of the spool, and also having the clamp 3 overlying the edge of the said head of the spool, the said clamp serving to compress the thread against the said edge and thereby operating to hold the thread, the thread being carried into the said slit in order to effect the severance of the same and being exposed on the said body portion intermediate the clamp and the slit to furnish an end to be seized for the purpose of drawing a fresh length off the spool, substantially as described.

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

ZENAS B. OSGOOD.

Witnesses:
E. E. PHILBROOK,
WM. B. RAND.