No. 808,114. PATENTED DEC. 26, 1905.

R. ROWLEY & L. S. RUBIRA.

THREAD HOLDING DEVICE.

APPLICATION FILED FEB. 8, 1905.

Fig. 1.

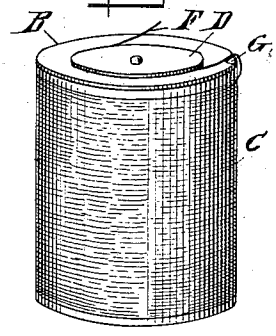


Fig. 2.

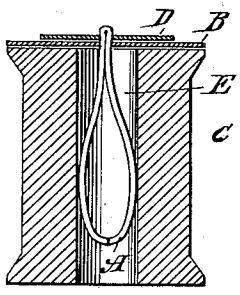


Fig. 3.

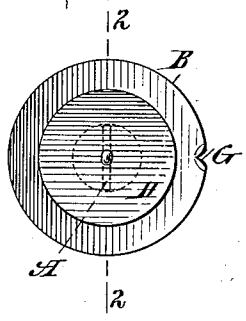


Fig. 4.

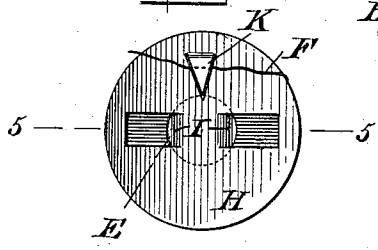


Fig. 5.

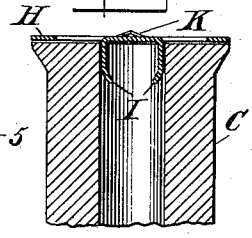


Fig. 6.

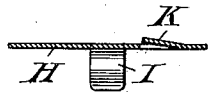


Fig. 7.

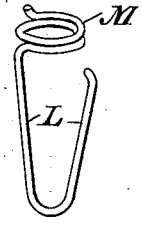


Fig. 8.

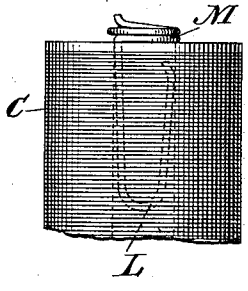


Fig. 9.

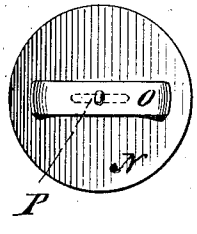
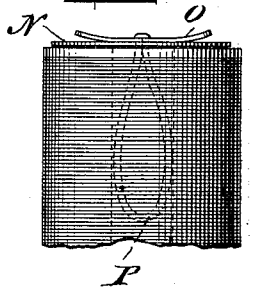


Fig. 10.



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UNITED STATES PATENT OFFICE.

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THREAD-HOLDING DEVICE.

No. 808,114. Specification of Letters Patent. Patented Dec. 26, 1905.

Application filed February 8, 1905. Serial No. 244,728.

To all whom it may concern:

Be it known that we, ROBERT ROWLEY and LUCIANO SANTOS RUBIRA, citizens of the United States, and residents of New York, borough of Manhattan, county of New York, and State of New York, have made and invented certain new and useful Improvements in Thread-Holding Devices, of which the following is a specification.

Our invention relates to a device for use in connection with spools wound with cotton or thread, the object or purpose of which is to receive and retain the end of the thread or cotton in order that the same may be prevented from unwinding.

It is now the common practice to provide one end of the spool with a cut or slit into which the end of the cotton or thread is inserted and held. In use, however, the slitted portion of the spool soon becomes broken or chipped off, the wood of which the spool is made being thin and easily broken at the ends where the cut is usually made.

The object of our invention is to provide a device, preferably of metal, which will be cheap of manufacture, neat in appearance, easily and readily attached to and detached from a spool of ordinary size and construction, and which will effectively hold the cotton or thread.

With these and other ends in view it consists in certain novel features of construction and combinations of parts, as will be hereinafter fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in perspective of our improved device applied to a spool of cotton. Fig. 2 is a view of the same in vertical section, taken on the line 2 2 of Fig. 3. Fig. 3 is a plan view of the same. Figs. 4, 5, and 6 are views of a modified form of the device. Fig. 7 is a view of another form thereof, and Fig. 8 shows the latter applied to a spool of cotton. Fig. 9 is a plan view of still another form, and Fig. 10 a view thereof in side elevation.

By reference to the illustrations above mentioned it will be seen that the device may assume many and various shapes, the gist of the invention lying in the employment of a retaining spring or springs adapted to fit in the opening in the spool and having the protruding end or ends thereof provided with means for holding the end of the thread, such means consisting either of a pair of disks between which the thread may be inserted, as illustrated in Figs. 1, 2, and 3, or, as illustrated in Figs. 4, 5, and 6, these means may consist of a lug or finger struck up from a single disk, or, again, as illustrated in Figs. 7 and 8, may consist of one or more coils of wire formed integral with the retaining-spring. Further, as shown in Figs. 9 and 10, these means may consist of an arm or elongated plate secured to a disk, between which disk and arm the thread may be inserted, and, in fact, numerous other changes and modifications will suggest themselves to a person skilled in this particular line of manufacture, the essential features being a retaining spring or springs fitting within the opening in the spool and having means provided at the end thereof into which the thread may be readily inserted, and thereby retained.

In Figs. 1, 2, and 3 the retaining-spring is shown consisting of the loop A made of spring-wire, the same being passed through and secured to the disks B, lying flat against the spool C and also through the smaller outer disk D, said retaining-spring A fitting within the opening E of the spool and retaining the several disks in their proper position with relation to the spool. The cotton or thread F is easily and readily slipped in between the disks D and B and held thereby, being first passed in the notch G, formed in the larger disk, if desired.

In Figs. 4, 5, and 6 the device consists of a single disk H, slitted as shown, those portions I of the metal being stamped downwardly, as clearly shown in Figs. 5 and 6, to form the retaining-spring. The metal of the disk is also so slitted as to allow striking up a lug or finger K, the point of which will be slightly raised, as shown in Fig. 6, in order to allow the insertion of the cotton or thread under it.

In Figs. 7 and 8 the device is shown as made of a single piece of wire, the retaining-spring consisting of the loop L, which is coiled into a spring M to form the fastening means for the thread, the latter being easily inserted between the folds of the wire when the device is applied to the spool, as illustrated in Fig. 8.

In Fig. 9 the device consists of the disk N, to which is secured the bent or curved plate O, these two plates having secured thereto the spring-arm P, formed of spring-wire, as in the case of the device first described, it being understood that the end of the thread in order to be retained is passed under the curved spring-plate O, which in connection with the disk N clamps and holds it.

In each of these instances it will be noted that the device consists of a retaining-spring adapted to fit within the opening of the spool and removably secure said device in place and of a clamping device or means formed on or secured to said retaining-spring for clamping and retaining the end of the thread. It will also be understood that the device is exceedingly simple in construction, can be readily inserted in place, may be easily removed from one spool when the cotton or thread is entirely used up and inserted in place in another spool, and will effectively retain the end of the thread, so as to keep the same from unwinding from the spool.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. An improved thread-holding device comprising a disk approximately the size of the end of the spool and having a spring member fixed to it and adapted to enter the opening in the spool, and a member lying substantially parallel with the disk and located interior to the edge thereof and between which member and said disk the thread is passed.

2. An improved thread-holding device consisting of two coacting members adapted to lie substantially parallel with each other and with the end of the spool, between which members the thread is passed, and a looped spring member adapted to enter the opening in the spool said spring having the portion intermediate of the ends adapted to frictionally engage the wall of said opening.

Signed at New York, borough of Manhattan, county of New York, and State of New York, this 4th day of February, 1905.

ROBERT ROWLEY.
LUCIANO SANTOS RUBIRA.

Witnesses:
GEORGE COOK,
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