

No. 855,848.

PATENTED JUNE 4, 1907.

E. S. GRAY.
RIBBON HOLDER.

APPLICATION FILED JUNE 27, 1906.

Fig. 1.

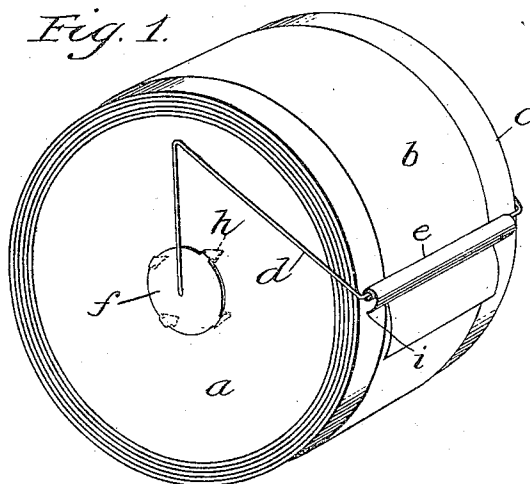


Fig. 2.

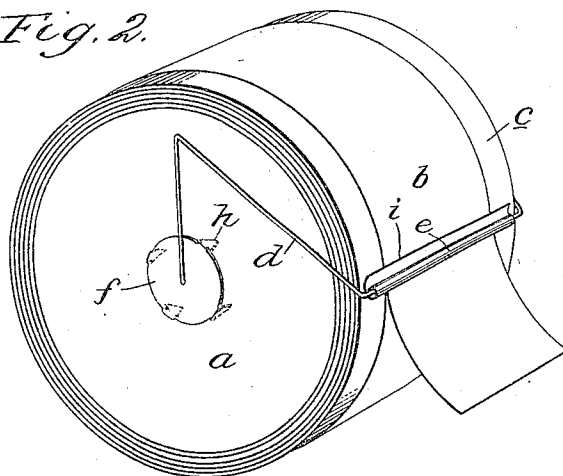
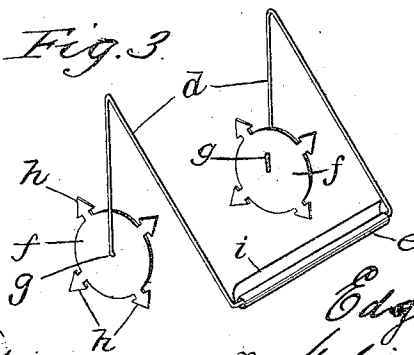


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

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RIBBON-HOLDER.

No. 855,848.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, EDGAR S. GRAY, a citizen of the United States, residing at Greenfield, in the county of Highland and State of Ohio, have invented certain new and useful Improvements in Spring Ribbon-Holders; 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.

This invention relates to that class of devices known as spring ribbon-holders, comprising wire spring-yokes adapted for attachment to the opposite sides of a ribbon-spool in such manner as to straddle the spool and clasp the ribbon thereon; the purpose of which is to prevent accidental or undesired unwinding of the ribbon, while yet allowing the ribbon to be pulled out from the spool readily, thus obviating the necessity of securing the free end of the ribbon by means of pins, the handling of which consumes time besides soiling and injuring the goods.

The object of my invention is to provide an improved device of the above stated character, better adapted for attachment to the ordinary ribbon spools on the market, and not liable to accidental detachment, and of more efficient operation for retaining the free end of the ribbon; the device being moreover of simple and practicable design, and constructed so as to hug the side and periphery of the spool closely, so as to avoid outstanding projections to catch in other articles, besides permitting the compact stacking or piling of the spools for shipment, storage or display.

In the accompanying drawings, which form a part of this specification: Figure 1 is a perspective view of a ribbon-spool having my improved device applied thereto, the transverse-locking-strip which clasps the ribbon being shown in position to lock the spool and ribbon and prevent the ribbon from slipping back or being pulled back from under said locking-strip. Fig. 2 is a similar view, showing a different position of the locking-strip to permit the ribbon to be pulled out or drawn from off the spool, as when a salesman or saleslady, desiring to accommodate a customer, holds the spool in one hand while pulling out the desired length of ribbon with the other hand. Fig. 3 is a detail perspective view of the holder detached from the ribbon-spool.

Referring more specifically to said drawings, the letter *a* indicates an ordinary ribbon-spool, such as the hollow pasteboard roll or drum commonly employed, upon which the ribbon *b* together with a layer of paper *c* is wound in the customary manner. The spring-holder, shown detached in Fig. 3, comprises a simple wire spring-yoke *d*, having an intermediate straight portion on which is arranged a locking-strip *e*, and having its opposite legs similarly bent at an acute angle to provide elasticity or resiliency, the ends of said legs being pivotally attached to spurred or pronged sheet-metal disks *f*. This device is applied to the ribbon-spool or drum astraddle of the same in the usual way, the disks *f* being secured centrally to the opposite sides of the spool or drum, so that the spring *d* causes the locking-strip *e* to yieldingly clasp the ribbon wound upon the drum; it being understood that the legs of the spring *d* are stretched or tensioned between the center and periphery of the drum so as to effectually clasp the ribbon until the last remnant thereof remains upon the spool. The spring *d* is of course of proper size to fit the drum, and is desirably constructed to hug the sides of the drum closely and avoid all outstanding projections, the angular bends of the wire legs of the spring being formed so as to come short of the rim of the drum or spool, or in other words so as to lie between the center and rim of the spool when the device is applied thereto.

The sheet-metal disks *f* may be attached to the spring by inserting the ends of the spring through central holes in said disks and doubling up or bending said ends inwardly, as indicated at *g*, the spring being thus pivotally fastened to said disks, while the disks themselves are safely held by the doubled extremities *g* of the wire. The spurs or prongs *h* of said disks *f* are intended to be bent inward and pressed into the opposite sides of the spool, so as to afford a firm hold or anchorage for the spring. Said spurs *h* are in the shape of arrow-heads or spear-heads, and when they are forced into the pasteboard sides of the spool or drum they afford substantially as strong a fastening as rivets, and are not liable to come out, for on the contrary considerable force would be required to tear them out. Thus the device is not dependent upon the tension of the spring for keeping it securely in place, and it is not liable to accidental detachment. Fur-

thermore, by this mode of fastening, no wear and tear of the centers of the spool is occasioned by revolving or turning the spool in use, since the ends of the wire spring are 5 pivotally attached to the centers of the disks, which latter are secured at a plurality of peripheral points to the sides of the drum.

The locking-strip *e*, mounted on the transverse intermediate straight portion of the 10 spring-yoke, is in the form of a roller having a protruding curved edge *i*; and this contrivance is preferably made by curling or bending a sheet-metal strip around the said intermediate straight portion of the spring. 15 When the holder is applied to the spool, the normal position of said locking-strip is as shown in Fig. 1, the free edge *i* bearing down upon the ribbon at the side of the spring toward the free end of the ribbon, so as to hold 20 the ribbon securely and prevent the same from slipping back under said locking-strip; since any backward movement or accidental pulling of the ribbon would tend only to lock the edge *i* the more tightly upon or against 25 the ribbon. On the other hand, this contrivance does not interfere with the free pulling or drawing out of the ribbon from the spool when desired, as when the salesman or saleslady desires to measure and cut off a 30 certain length of the ribbon; for when the ribbon is pulled out from the spool, its frictional effect upon the roller *e* turns said roller to the position shown in Fig. 2, thus releasing the edge *i* from the ribbon, and 35 allowing the free movement of the spool to unwind the ribbon. After the required length of goods has been unwound and cut off or removed from the spool, a slight backward movement given to the spool by the operator will throw the locking-strip *e* back to 40 the position shown in Fig. 1, thus safely locking the spool and securing the end of the ribbon. This locking contrivance thus serves the double function of a roller, strengthening 45 the intermediate cross-piece of the spring wire, and of a lock for the spool and ribbon when not in use.

The holder herein described can of course

be used for all sizes and kinds of ribbons and bands, being constructed in various sizes according to the sizes of ribbon spools or rolls 50 upon which it is to be employed.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:— 55

1. A spring-holder for ribbon-spools comprising a wire spring-yoke adapted to be applied astraddle of the spool and having an intermediate straight portion and angularly bent legs, a locking-strip on said intermediate 60 straight portion consisting of a roller having a protruding edge, and disks pivotally-attached to the ends of said legs and having spear-head prongs or spurs adapted to be inserted in the sides of the spool, the tension of the legs of said spring-yoke adapted 65 to cause the said locking-strip to clasp the ribbon wound upon the spool.

2. A spring-holder for ribbon-spools comprising a yoke adapted for application astraddle of the spool and having an intermediate 70 transverse portion to clasp the ribbon on said spool and having opposite spring-acting legs and sheet-metal disks arranged at the inner sides of said legs and provided with peripheral spear-head prongs or spurs adapted to be bent inward and inserted in the opposite 75 sides of the spool, the ends of said legs being positively but pivotally attached to the centers of said disks. 80

3. A spring-holder for ribbon-spools comprising a yoke adapted for application astraddle of the spool and having opposite spring-acting legs adapted for attachment to the 85 opposite sides of the spool and having an intermediate straight locking-strip consisting of a revoluble roller with a curved protruding edge, said legs adapted to cause the said locking-strip to clasp the ribbon on the periphery of the spool. 90

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

EDGAR S. GRAY.

Witnesses:

A. M. MACKERLEY,

L. C. SMITH.