

No. 696,132.

Patented Mar. 25, 1902.

M. H. CHAPIN.
BOX FOR INKING RIBBON SPOOLS.

(Application filed Feb. 7, 1902.)

(No Model.)

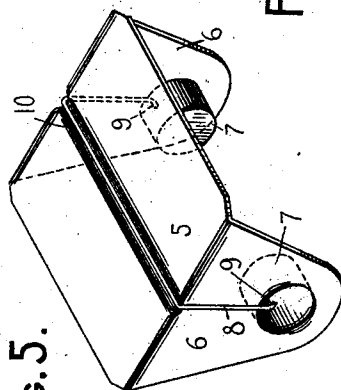
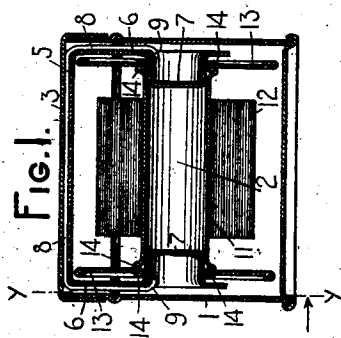
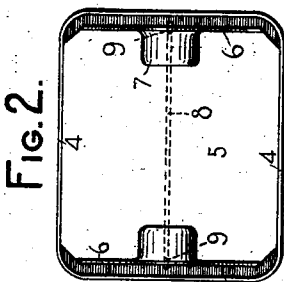
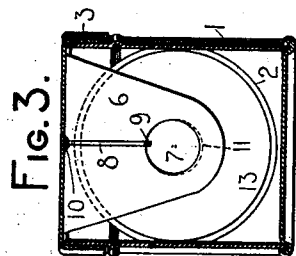


Fig. 6.

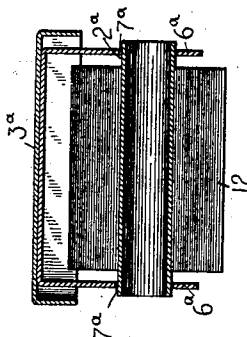
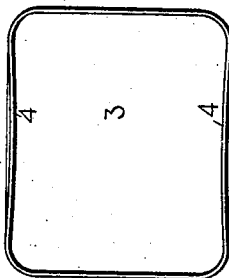


Fig. 5.

Fig. 4.



WITNESSES.

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BOX FOR INKING-RIBBON SPOOLS.

SPECIFICATION forming part of Letters Patent No. 696,132, dated March 25, 1902.

Application filed February 7, 1902. Serial No. 93,047. (No model.)

To all whom it may concern:

Be it known that I, MURRAY H. CHAPIN, a citizen of the United States, and a resident of Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Boxes for Inking-Ribbon Spools, of which the following is a specification.

My invention relates to packages for inking-ribbons for type-writing and like machines; and my main object is to provide a simple and efficient box or case in which the ribbon is properly protected against injury and deterioration and one from which the ribbon may be readily transferred to the machine without soiling the hands.

To the above ends my invention consists in the construction, arrangement, and combination of parts, to be hereinafter described, and particularly pointed out in the appended claims.

In the accompanying drawings, wherein like reference characters indicate corresponding parts in the various views, Figure 1 is a central vertical sectional view of the complete package. Fig. 2 is a bottom view of the cover of the package with the spool-supporting piece in place therein. Fig. 3 is a vertical sectional view taken at right angles to the view illustrated in Fig. 1, the section being taken on the line *y y* of Fig. 1 and looking in the direction of the arrow in said figure. Fig. 4 is a bottom view of the cover with the spool-supporting piece removed. Fig. 5 is an enlarged detail perspective view of the spool-supporting piece, and Fig. 6 is a modification.

In these several views the same part is marked with the same numeral of reference.

1 designates an imperforate box, which is preferably made of sheet metal and of suitable contour to receive a ribbon-spool 2. The box is provided with an imperforate cover 3, which is likewise preferably made of sheet metal and adapted to tightly close the box and prevent the atmosphere from unduly drying out the ribbon and otherwise acting injuriously thereon. Sprung into the cover and held friction-tight therein—as, for instance, by slightly contracting the side flanges 4 thereof—is a supporting or base piece 5, which

is preferably made of spring metal and provided with depending spool-supporting ears 6, that extend into the box 1 and have oppositely-disposed horizontal bearing studs or journals 7, which may be struck up from said ears or formed separately and applied thereto. These ears may be resilient for purposes which will hereinafter appear, and they may be pressed toward each other by an auxiliary U-shaped spring 8, that has its ends slightly bent at 9 to take within the depressions formed by the drawn or hollow studs 7. The cross-bar of this spring may be seated within a recess or groove 10 in the supporting-piece 5. The base-plate 5 may be soldered, riveted, or otherwise attached to the cover.

The spool 2 is preferably formed of metal and consists of a cylindrical hollow core or spindle 11, upon which the ribbon 12 may be wound, and ends or flanges 13, which may be connected to the core in any suitable manner. In the present instance the metal of the spindle is shouldered and grooved and spun over the flanges, as indicated at 14. The spool is connected to its support and to the cover by spreading the ears 6 apart and placing the spool between them with the supporting-studs projecting into the end openings in the spool-core, as shown in Fig. 1. Thus the spool is securely held by the studs, yet it is capable of revolving freely thereon.

The resiliency of the ears is ordinarily sufficient to maintain the studs in place, but the spring 8 may be employed to render the ears stiffer and prevent them from spreading apart. Obviously, however, the spring 8 may be dispensed with and the resiliency of the ears alone relied upon to maintain the studs in place in the openings in the spool. It should likewise be understood that the ears may be formed as a part of the cover itself, thus dispensing with a separate base or supporting plate 5.

When the cover is removed, the spool will be withdrawn therewith from the box. One end of the ribbon may then be connected to a ribbon-spool on a type-writing machine and the ribbon mechanism of the machine turned to wind the ribbon onto the spool of the machine and unwind it from the spool 2, taken

from the box. From this it will be seen that but little handling of the ribbon is necessary in transferring it from its package to the machine and that when the ribbon is within the package it is protected against injury and deterioration, the package being maintained substantially air-tight.

If desired, the studs 7 may be on the spool-core and the seats or bearings therefor on the depending ears or supports.

In Fig. 6 the spool 2^a is made of plain cylindrical form without flanges, and its ends are journaled to revolve in plain holes 7^a, formed in the lower portions of the depending arms 6^a, carried by the cover 3^a of the box.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a device of the character specified, the combination of a box, a cover therefor, oppositely-arranged supports depending from said cover within the box, and a ribbon-spool revolubly sustained by said supports.

2. In a device of the character specified, the combination of a box, a cover therefor, oppositely-arranged spreadable supports depending from said cover within the box, and a ribbon-spool revolubly sustained by said supports, and adapted to be readily attached to and detached therefrom.

3. In a device of the character specified, the combination of a box, a cover therefor, oppositely-arranged supports depending from said cover within the box, and a ribbon-spool revolubly sustained by said supports, one of the parts having horizontal journals for the spool and the other bearings for said journals.

4. In a device of the character specified, the combination of a box, a removable cover therefor, oppositely-disposed bearing-studs carried by said cover, and a spool having bearing-openings for the reception of said studs, whereby the spool may be removed with the cover.

5. In a device of the character specified, the combination of a box, a removable cover therefor, a spring-support carried by the cover, and a spool revoluble upon said support and removable with said cover and adapted to be removed from said spring-support.

6. In a device of the character specified, the combination of a box, a removable cover therefor, depending resilient supporting-ears carried by the cover, and a spool carried by and revoluble between said supporting-ears and removable with said cover.

7. In a device of the character specified, the combination of a box, a removable cover therefor, supporting-ears carried by said cover and projecting into said box and having oppositely-disposed bearing-studs thereon, and a spool having openings within which the studs are adapted to be seated.

8. In a device of the character specified, the combination of a box, a removable cover therefor, supporting-ears carried by said cover and projecting into said box and having oppositely-disposed bearing-studs thereon, a ribbon-spool having openings within which the bearing-studs are adapted to be seated, and a spring for maintaining said ears against accidental separation so as to prevent the studs from being accidentally displaced from their bearing-openings in the spool.

9. In a device of the character specified, the combination of an imperforate box, an imperforate cover therefor, oppositely-disposed supporting-ears carried by said cover, a spool detachably carried by and revoluble between said ears and removable from the box with the cover.

10. In a device of the character specified, the combination of an imperforate box, a removable imperforate cover therefor, supporting-ears carried by said cover and projecting into said box and having bearing-studs thereon, a ribbon-spool having openings for the reception of said bearing-studs to revolubly support the spool, and means for preventing accidental displacement of the bearing-studs from their bearings in the spool, whereby the spool may be removed from the box with the cover.

11. In a device of the character specified, the combination of a box, a removable cover therefor, a supporting-piece carried by and removable from said cover, resilient ears carried by said supporting-piece and projecting into said box, oppositely-disposed bearing-studs on said ears, and a ribbon-spool having a cylindrical spindle in which said bearing-studs are adapted to be seated, so that the spool is free to revolve between said ears and so that the spool may be removed with the cover.

Signed at Bridgeport, in the county of Fairfield and State of Connecticut, this 27th day of January, A. D. 1902.

MURRAY H. CHAPIN.

Witnesses:

CHARLES BUXTON,
E. M. BLIGHT.