

J. L. DOWNER.
 PACKAGE BINDER.
 APPLICATION FILED APR. 25, 1908.

1,004,246.

Patented Sept. 26, 1911.

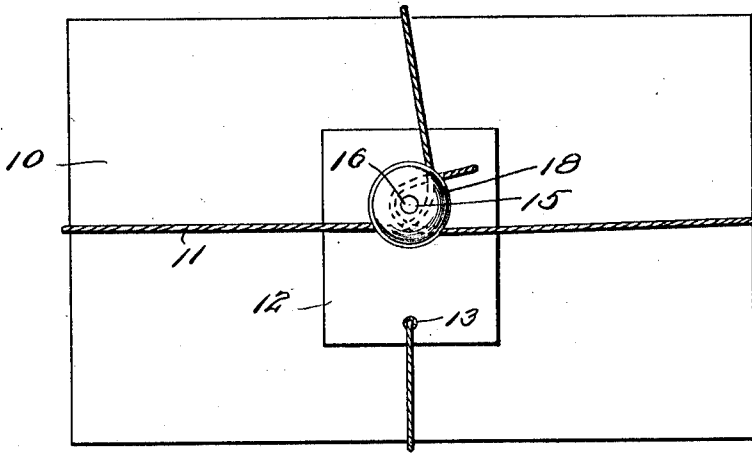


Fig. 1.

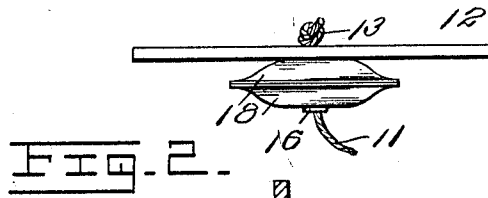


Fig. 2.

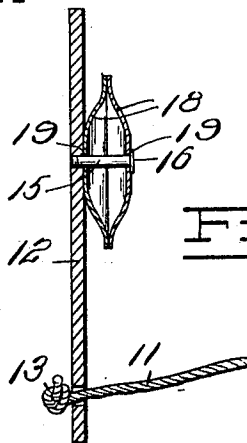


Fig. 3.

Witnesses
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JOHN L. DOWNER, OF HOPKINS, MISSOURI.

PACKAGE-BINDER.

1,004,246.

Specification of Letters Patent.

Patented Sept. 26, 1911.

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To all whom it may concern:

Be it known that I, JOHN L. DOWNER, a citizen of the United States, residing at Hopkins, in the county of Nodaway and State of Missouri, have invented certain new and useful Improvements in Package-Binders, of which the following is a specification.

This invention relates to package binders, and more particularly to fasteners arranged to secure the ends of a cord or lace.

It has for its object to provide a fastening means which will be simple to operate.

Another object is to provide such a fastener, the manufacture of which will be extremely simple and inexpensive.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side view of the fastener engaged with a package and having a cord end engaged therewith, Fig. 2 is a top plan view of the fastener similarly engaged, Fig. 3 is a cross sectional view of the fastener, showing the parts in semi-detached position.

Referring to the drawings, there is shown a package of letters 10, having a cord 11 engaged therearound and secured by means of the present fastener. The fastener comprises a base portion 12 of rectangular shape having a perforation therethrough adjacent to one edge as shown, through which an end of the cord 11 is extended and knotted as shown at 13 to prevent withdrawal of the cord from the opening. A spring fastening member carried by the base is disposed a spaced distance from the opening 12 of the base portion oppositely of the knot 13, and comprises a rivet or post 15 threaded into the base 10 at 15' and having a head 16 at its outer end as shown; concavo-convex disks 18 of resilient sheet material provided with concentric openings 19 therethrough are engaged slidably upon the post 15, with their convex surfaces disposed outwardly of each other, the edge portions of each disk bearing resiliently against the similar portion of the other. The outer disk is centrally compressed by the head of the pin 15, the central portion of the inner disk being thus yieldably forced against the base piece 12. It will be noted that the outer portions of the disks are flared to extend in a plane, the immediately adjacent inner portion being curved gradually away

from this plane, so that a maximum of resiliency is attained in the device.

This invention is most readily adapted to manufacture by having the base portion 12 made of wood, stiff paper or similar composition and a pair of disks stamped from commercial tin or other suitable resilient sheet material secured to the block by means of a rivet.

In use, the string 11 is engaged through the opening in the base portion 12, which is then disposed centrally upon the package to be bound, and the string engaged therearound in the usual manner. The loose end of the string is then wrapped tightly around the rivet portion beneath the disk, which will engage resiliently against the string and hold it firmly pinched against the base. The binder is adapted to successive and continuous use, and the string may be renewed in a very simple manner and very quickly.

On account of the smooth rounded face of the disk being engaged against the string in the fastening operation, a minimum amount of wear occurs in fastening the cord, and the expense on account of the cord is thus lessened.

By reason of the fact that the inner disk bears resiliently against the base member, a single wrapping of string will be held securely in the device, and when cord or other device is wrapped a number of times around the fastener, the last wrapping will be held as securely as the first, as on account of the yielding of the inner disk the last turn may be forced inwardly against the post, and thus bound beneath the central portion of the disk. This is quite an improvement over the usual devices in which a disk is secured rigidly at its center to a base member, as with these devices after a certain amount of string or cord has been wrapped therearound, subsequent wrappings are not held firmly, on account of the rigidity of the central portion of the disk with respect to the base, and such fastenings are likely to be extremely inefficient. The efficiency of the device is materially aided by the large frictional surface offered to an engaged fastening, due to the tendency of the central portion of the inner disk to remain in forceful contact with material engaged thereunder.

What is claimed is:—

In a device of the class described the combination with a base, of a rigid post screwed thereinto a centrally perforated concavo-

convex disk of resilient sheet metal engaged
slidably around the post member with its
central convex portion disposed toward and
against the base, a flat peripheral outwardly
5 extending flange on said disk, a second disk
engaged upon the outer end of the post with
its convexed portion disposed outwardly
and secured against outward movement, a
flat peripheral outwardly extending flange
10 on said second disk, said disks having their
flat peripheral portions flared toward each
other and their flanges disposed face to face

and in frictional contact whereby the inner
disk is pressed inwardly against the base,
said disks yielding in an outward direction 15
longitudinally of the post whereby the post
is exposed for engagement of a cord be-
tween the first named disk and the said base.

In testimony whereof I affix my signa-
ture, in presence of two witnesses.

JOHN L. DOWNER.

Witnesses:

DON INGRAM,
TOM INGRAM.

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