J. BENNOR.

PACKAGE TIE.

APPLICATION FILED OCT. 6, 1908.

924,594. Patented June 8, 1909.

Fig: 1

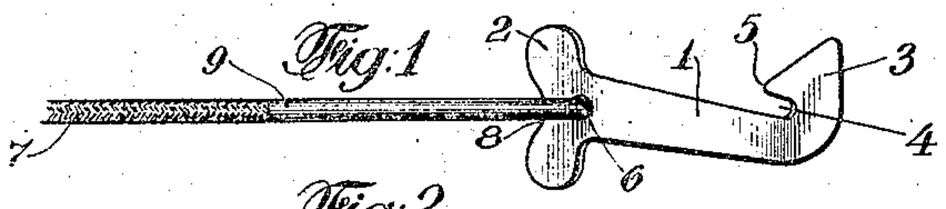



Fig: 2

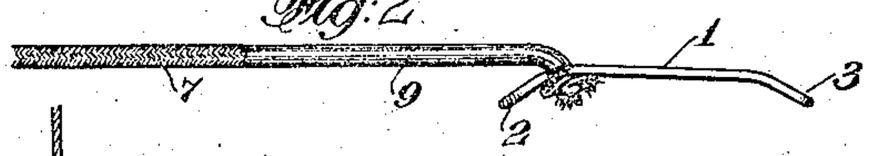



Fig: 3

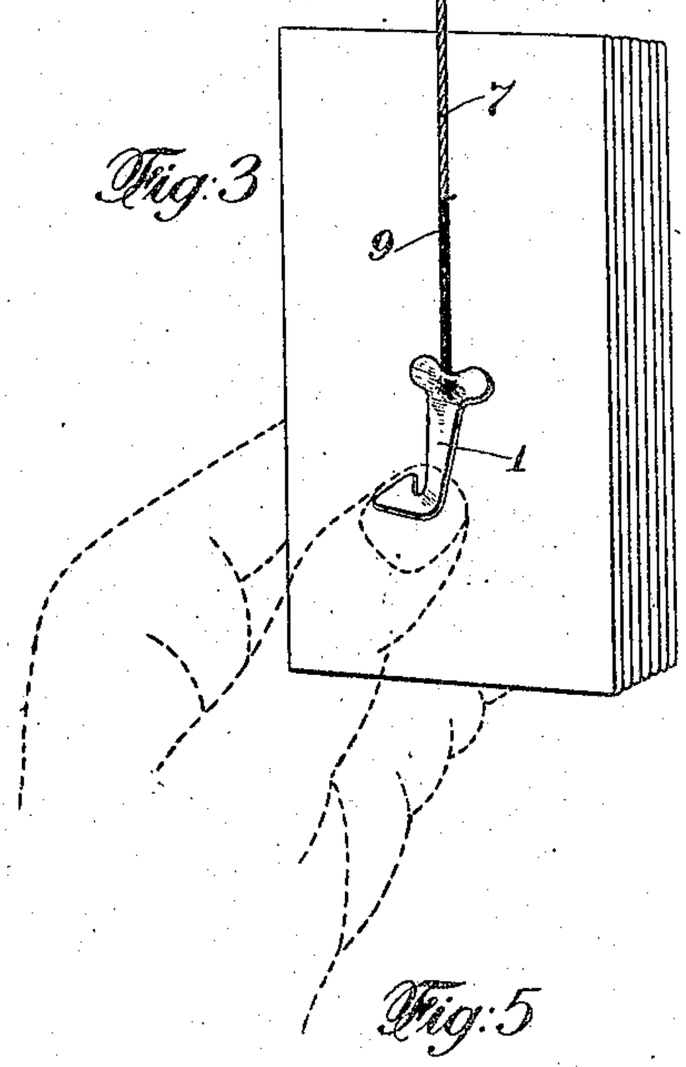



Fig: 4

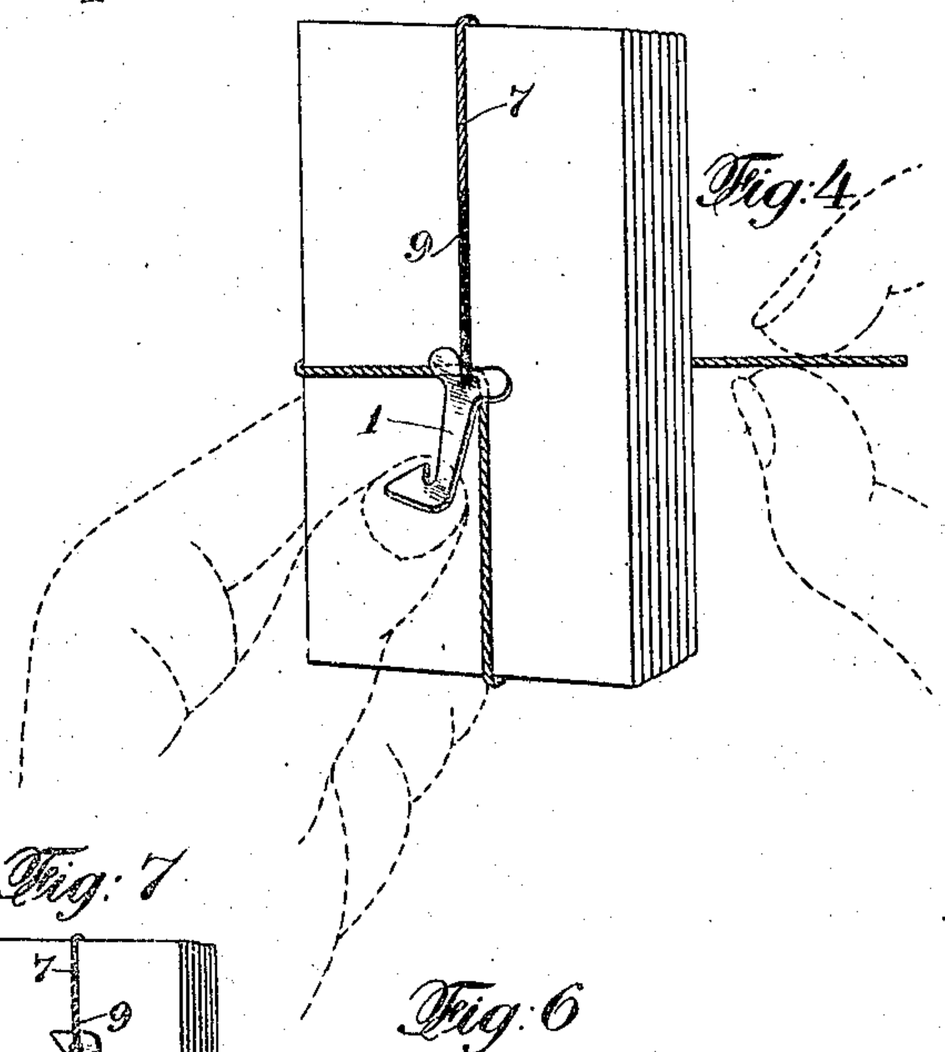



Fig: 7

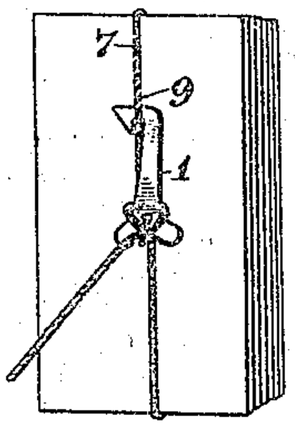



Fig: 5

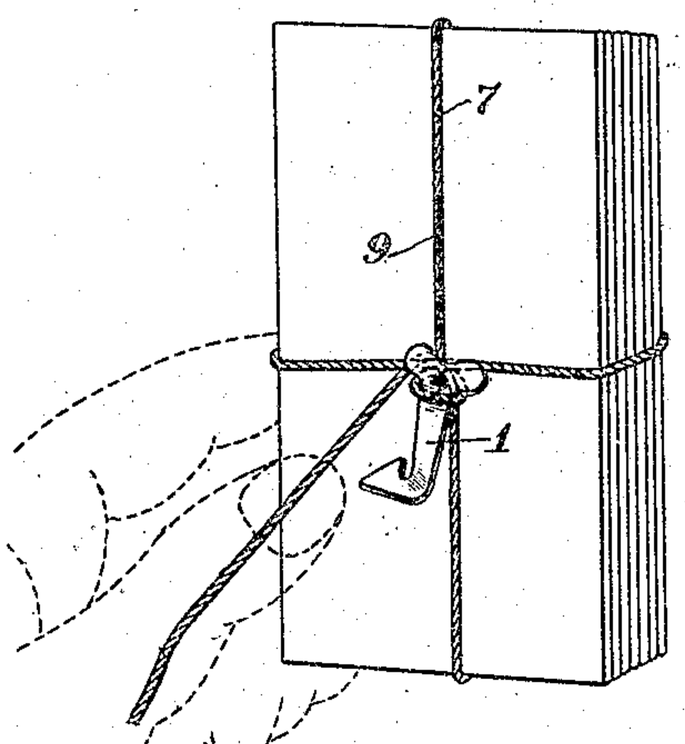



Fig: 6

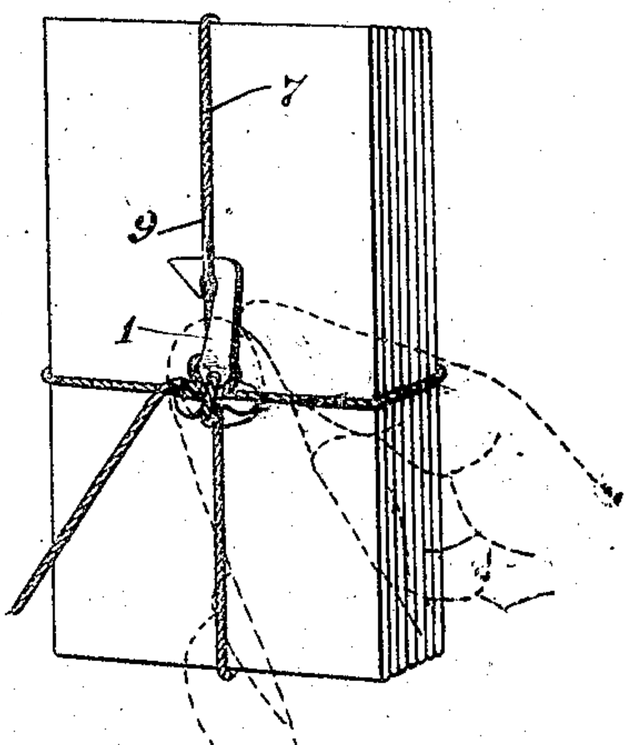
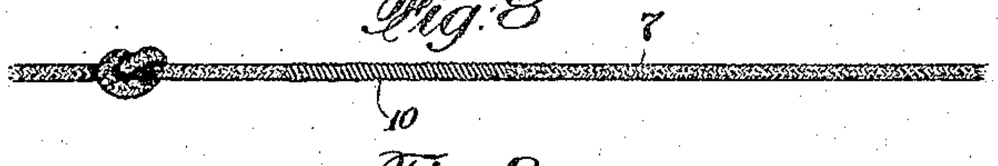
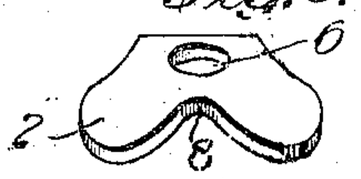



Fig: 8




Witnesses:
A. L. McDermott
M. L. Hayes

Fig. 9.




Inventor
Joseph Bennor
By his Attorney
John P. Nolan.

# UNITED STATES PATENT OFFICE.

JOSEPH BENNOR, OF MACON, GEORGIA, ASSIGNOR TO COMFORT-BENNOR TIE COMPANY, OF TIFTON, GEORGIA, A CORPORATION OF GEORGIA.

## PACKAGE-TIE.

No. 924,594. Specification of Letters Patent. Patented June 8, 1909.

Application filed October 6, 1908. Serial No. 456,402.

*To all whom it may concern:*

Be it known that I, JOSEPH BENNOR, a citizen of the United States, residing at Macon, in the county of Bibb and State of Georgia, have invented certain new and useful Improvements in Package-Ties, of which the following is a specification.

This invention relates to an improvement in that type of package-ties in which the cord or binder is secured to a lever-like locking member comprising a shank having at one end a transversely-disposed head or cleat about which the free end of the binder when properly passed around the package can be wound or belayed, and the member then bodily swung or turned to a reverse position upon the package so as to exert additional tension upon the binder, said shank being provided at its opposite end with a laterally-extending recessed or notched toe which can be slipped under the proximate stretch of the binder in a manner to maintain said member in locking relation with the binder and package.

Prior to my invention the locking members of the package ties were constructed of stout wire, and by reason of their peculiar formation they presented sharp corners and projecting parts which were objectionable, particularly when used with packages of mail matter.

My improvement, generally stated, consists in the provision of a package-tie in which the locking member is constructed of sheet material and the parts thereof so formed and correlated that sharp projecting corners are avoided; that the cord or binder can be readily attached thereto, and that the device remains in close contact with the package and efficiently performs its function; and further in the provision of a cord or binder having a protective covering adjacent the locking member, all of which will be hereinafter particularly described and claimed.

In the drawings—Figure 1 is a plan of my improved package tie. Fig. 2 is a side elevation thereof. Figs. 3, 4, 5 and 6 are perspective views illustrating the successive steps in the operation of securing a package by my device, the cord or binder being wound or passed longitudinally and crosswise of the package. Fig. 7 is a view illustrating a package as bound by a single wind of the cord or binder. Fig. 8 is a view of a piece of cord or binder provided with a protective covering of wire. Fig. 9 is an end elevation of the locking member.

The locking member is composed of a single piece of sheet material struck up to form a shank 1, provided at one end with a transversely-extending head 2 which constitutes a cleat, and at its other end with a laterally-extending notched toe 3 which constitutes a binder-engaging portion, the head and toe being bent downwardly and outwardly at an angle to the body of the shank, that is to say, the head 2 and toe 3, when the locking member is in locked position, extend downwardly toward the package, and by their projection at the sides of the shank, they also extend outwardly therefrom. The head is slightly bowed longitudinally so that its outer corners, which are rounded, bear upon the surface on which the device may be imposed, and the lower or outer edge of the toe extends parallel to the head so that such edge bears upon the underlying surface. The toe is beveled from the outer corner of its base to a point near the body of the shank where it terminates in a notch or recess 4, entering the toe coincident with the edge of the shank, the upper corner 5 of the beveled edge being on the same horizontal plane as the upper surface of the shank, or substantially so. In the shank at a point adjacent the cleat is an aperture 6 through which one end of the cord or binder 7 is passed, and then knotted on the under side of the shank. The notch 4 and the aperture 6 are in a line at right angles to the T-head, or substantially so, and the outer edge of this head is provided with a recess 8 intermediate its ends.

To use the above-described device a package of letters or papers is firmly grasped and held with the left hand, the locking member, with its cleat and toe up-turned, being imposed upon the package, longitudinally thereof, and the toe extending toward the user and under the thumb, as indicated in Fig. 3. The cord or binder is then grasped with the right hand and passed forwardly of the package and under and around the same. It is then drawn under one of the upwardly-projecting limbs of the cleat, as indicated in Fig. 4; then passed transversely around the package, and then wound or belayed about

the cleat, as indicated in Fig. 5. The thumb is then removed from the toe-piece and placed upon the free end of the cord or binder; the device is bodily swung or turned to a reverse position upon the package, by the right hand, and the toe-piece is finally slipped under the taut cord or binder, as indicated in Fig. 6. This completes the tying operation.

In Fig. 7 is illustrated a package in which the cord or binder is simply wound longitudinally of the package and secured by the locking member.

It is to be noted that the outer corners of the cleat serve as two bearings or fulcra for the device in turning the same, such operation exerting, perforce, an additional tension upon the binder and effectually tightening the same around the package. It is also to be noted that the angularity of the toe-piece permits its easy passage under the contiguous stretch of the binder, and that the relation of this notch to the edge of the shank and the aperture permits the binder readily to enter the notch and lie flush, or substantially so, with the upper surface of the shank. It is further to be noted that the recess 8 in the lower edge of the cleat permits the free passage of the cord beneath the cleat when the device is turned to locking position upon the package, and thus insures the uniform bearing of the corners of the cleat upon the package; and finally that when the device has been thus applied to the package no projecting points or corners are presented.

The operation of untying the package is quite simple. The package, with its lower left hand corner toward the person, is grasped with the left hand. The cord or binder is then grasped just above the toe-piece, with the thumb and fore-finger of the right hand, and the toe-piece is pushed from under the binder by the thumb. This being done, the locking device flies back into the right hand, and upon being seized and pulled from the person, the device with the attached binder will be completely disengaged from the package.

As a simple and efficient means to protect the cord or binder from wear at the points where the toe-piece is slipped under the cord and where the end of the locking member rubs on the cord when it is turned over to be fastened, I preferably coat the end of the cord, adjacent to said member, with celluloid or other suitable protective substance, as indicated at 9. The cord or binder can be advantageously provided at the part thereof engaged by the toe-piece with a protective metal sleeve or a covering of closely-wrapped wire, as 10, Fig. 8.

I claim—

1. In a package-tie, a locking member formed of sheet material struck up to provide a shank, a transversely-extending cleat at one end thereof, and a laterally projecting toe-piece at the other end, said cleat and toe-piece being bent downwardly and outwardly at an angle to the body of the shank.

2. In a package-tie, a locking member comprising a shank, a transversely-extending cleat at one end thereof, and a laterally projecting toe-piece at the other end having a notch extending longitudinally of the shank, said cleat and toe-piece being bent downwardly and outwardly at an angle to the body of the shank.

3. In a package-tie, a locking member comprising a shank, a transversely-extending cleat at one end thereof, and a laterally projecting toe-piece at the other end, said cleat and toe-piece being bent downwardly and outwardly at an angle to the body of the shank, and the toe-piece having a beveled lateral edge the upper portion of which terminates in a longitudinal notch coincident with the edge of the shank.

4. In a package-tie, a locking member comprising a shank, a transversely-extending cleat at one end thereof and a laterally-projecting toe-piece at the other end, said cleat and toe-piece being bent downwardly and outwardly at an angle to the body of the shank, and said shank being provided adjacent the cleat with an aperture for the reception of a cord or binder.

5. In a package tie, a locking member comprising a shank, a transversely-extending cleat at one end thereof, and a laterally-projecting toe-piece at the other end, said cleat and toe-piece being bent downwardly and outwardly at an angle to the body of the shank, the lower edge of the cleat being recessed between its ends, the shank having a binder-receiving aperture therein adjacent the cleat, and the toe-piece having a beveled lateral edge the upper portion of which terminates in a notch coincident with the edge of the shank and in line with the said aperture.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses, this 2 day of October 1908.

JOSEPH BENNOR.

Witnesses:

JOSEPH N. BENNOR,

R. G. PLUNKETT.