R. E. CONNER.

PACKAGE TIE.

APPLICATION FILED NOV. 1, 1916.

1,255,986. Patented Feb. 12, 1918.

Fig. 1

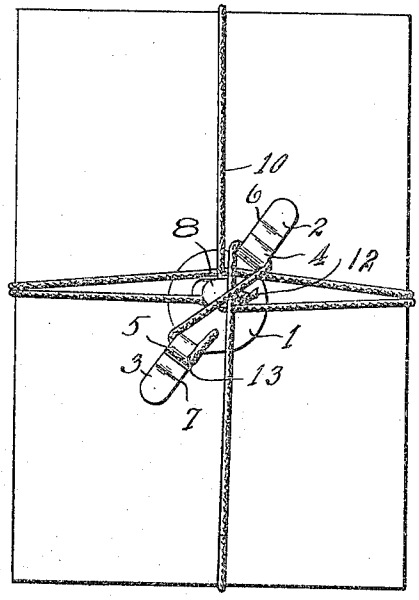


Fig. 2

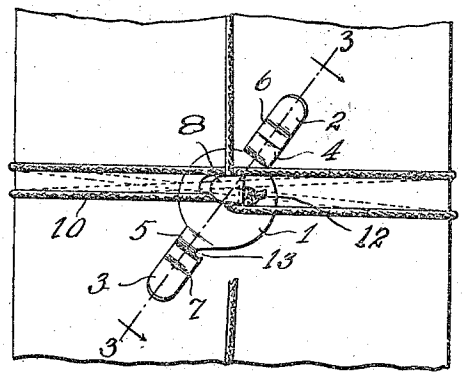


Fig. 4

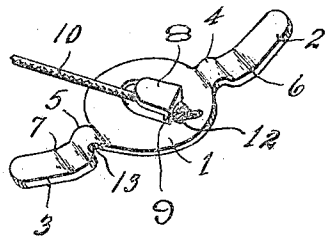
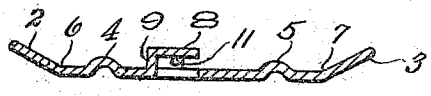


Fig. 3



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PACKAGE-TIE.

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To all whom it may concern:

Be it known that I, ROBERT E. CONNER, a citizen of the United States, residing at Atlanta, in the county of Fulton and State of Georgia, have invented new and useful Improvements in Package-Ties, of which the following is a specification.

Generically, this invention relates to package-ties capable of utilization in connection with packages of various sizes and types, but it more specifically comprehends a tying means adaptable to packages of medium size and compact form, such as mail matter, bundles of letters, and the like, where security in tying and speed in operation, are essential requisites.

Many efforts have been made to effect a package-tie embracing the above requisites and capabilities but with varied success, since those capable of holding the package securely bound, required such skill to operate, as to render them ineffectual and impracticable for usage where simplicity of operation, speed, and security, must necessarily be combined.

One object of this invention is to provide a device of the character described, without objectionable projections to catch and injure adjacent packages, and which may be easily secured about the package by the natural movement of the hands, either once or a number of times, as the exigencies of the occasion may require.

Another object is to provide a package-tie, which will lie flat against the package, positioned substantially under the cord or binder, thereby eliminating possibility of being knocked loose or out of position during process of handling.

Further objects are to provide a package-tie, which may be repeatedly used; capable of being readily fastened and released; and which is simple of construction and may be easily and economically manufactured from sheet metal, or other suitable material.

With these and other objects in view, which will become apparent as the description proceeds, the invention resides in the construction, combination and arrangement of parts, hereinafter more fully described and claimed, and illustrated in the accompanying drawing, in which like characters of reference indicate like parts throughout the several figures, of which:

Figure 1 is a top plan view of tie and binder operatively positioned.

Fig. 2 is a fragmentary plan view illustrating the relation of tie and binder prior to the final operation of looping about the fingers.

Fig. 3 is a longitudinal section taken on the line 3—3 of Fig. 2.

Fig. 4 is a perspective view of the device.

In the illustrated embodiment characterizing this invention there is shown a body 1, which in the present instance is disk-like, but may be of any desired configuration. Integral with body 1, peripherally extending therefrom in substantially the same plane, and in diametrically opposed relation, are the fingers 2 and 3, around which is looped the cord or binder.

Adjacent the circumferential edge of body-plate 1, the fingers 2 and 3 are crimped, forming the transversely extending channels 4 and 5, to receive the cord or binder when passed under said fingers in process of tying. Not only do these channels operate to grip and hold taut the cord or binder, but they also permit the body-plate 1 to remain flat against the package at all times.

The outer extremities of fingers 2 and 3 are sufficiently curved upward, as at 6 and 7, to insure the cord or binder being readily drawn thereunder when looped or belayed about them. These fingers 2 and 3, in addition to functioning as cord or binder retaining means, constitute members by which the device may be held in position while the package is being tied.

Struck from body-plate 1, is the guiding tongue 8, under which is passed the cord or binder when the direction of tying is to be changed. The wall 9, of tongue 8, serves as an anchor for the inner end of the cord 10, and is apertured as at 11, through which the cord is passed and the inner end knotted as at 12.

The crimped portion 5 of the finger 3 is notched as at 13, to receive the free end of the cord after it has been looped around finger 2 and brought across and under finger 3, to hold it in locked position. It will be noted no further operation is necessary

to secure the free end of the cord, it being drawn by the natural expansion of the package into said notch to remain there, holding the package firmly bound, until intentionally disengaged.

The operation of the device may be briefly described as follows: The package to be tied is firmly held by one hand, the thumb pressing down on finger 3 holds the tie in position. The cord or binder 10 by a perfectly natural movement of the other hand is passed around the package laterally from right to left, once, or as many times as desired, and then under tongue 8 and in a direction opposite to the operator, around said package longitudinally, after which it is brought around and under the upturned extremity of finger 2 from left to right. It is then brought back diagonally across the tie toward the operator to the left side of finger 3, looped under said finger from left to right, similar to the operation with respect to finger 2, and then simply by a slight upward pull of the cord it is brought within notch 13, wherein the free end is automatically held by the natural tension of the cord after the hand has been removed, until such time as it is desired to untie the package.

When it is desired to undo the package, the free end of the cord is pulled downwardly and toward the operator, which disengages it from notch 13, and brings it from under finger 3. A slight pull then brings it from under finger 2, whereupon the package is practically unwound. Thus to untie the package it is only necessary to remove the cord from beneath finger 3, after which the tension of said cord and the expansion of the package will nearly automatically complete the operation.

From the foregoing it is apparent that I have designed a package-tie eliminating the inherent deficiencies of those now in use, one capable of great adaptability, efficient in operation, simple in construction, and manufacturable from sheet metal or other suitable material at a negligible cost.

Although in the foregoing, certain elements have been set forth as best adapted to perform the functions allotted to them, nevertheless, it is to be understood that various minor changes as to form, substance, etc., may be resorted to within the scope of the appended claims without departing from or sacrificing any of the principles of this invention.

Having now described my invention, what I claim is:

1. A package tie comprising a body portion; a tongue struck from and vertically offset with respect thereto, said tongue having means to engage the knotted extremity of a cord; belaying fingers radially extending in opposed relation from said body portion, each of said fingers having a transversely extending channel in its under surface adjacent the body portion for the passage of said cord, substantially as described.

2. A package tie, comprising a body portion, a tongue struck therefrom and bent upwardly and thence horizontally to a plane parallel with that of said body portion, the upwardly extending portion having means to engage the knotted extremity of a cord, belaying fingers radially extending in opposed relation from said body portion, each of said fingers being transversely crimped adjacent the body portion to form a channel in its under surface for the passage of said cord, substantially as described.

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