1,167,227.

D. W. SQUIRE. PACKAGE TIE.

APPLICATION FILED JULY 1, 1914.

Patented Jan. 4, 1916.



By

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.



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Witnesses

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Inventor

D·W·Squire

LOKI Attorney

UNITED STATES PATENT OFFICE. DAVID WILLIAM SQUIRE, OF WHITE PLAINS, NEW YORK. PACKAGE-TIE. 1,167,227. Specification of Letters Patent. Patented Jan. 4, 1916. Application filed July 1, 1914. Serial No. 848,443.

To all whom it may concern: to the shank 1 and is disposed at the end of Be it known that I, DAVID W. SQUIRE, a the shank farthest removed from the eye 2.

citizen of the United States, residing at-5 and State of New York, have invented certain new and useful Improvements in Package-Ties, of which the following is a specification.

My invention relates to new and useful 10 improvements in devices for quickly tying cord upon packages, bundles or the like and has for its primary object to provide a simple and inexpensive device of this character that will obviate the tying of knots in 15 cord to secure packages or bundles or the like and enable a reliable and expeditious tying action.

Another object of importance is to provide a package tie of the character described that may be formed of a single piece of pref- $\mathbf{20}$ erably spring wire and is to have secured thereto permanently one end of a cord while the other end of the cord is to be quickly and reliably secured to the device.

The clamp 3 is formed by bending the ma-White Plains, in the county of Westchester terial to the inner end of the shank 1 at right 60 angles to provide an arm 4 and then extending the material from the outer end of the arm 4 to provide a U-shaped portion 5. The arms of the U-shaped portion 5 are disposed parallel with the arm 4 for a distance 65 equivalent to approximately one-half their length and then disposed outwardly in a divergent plane as at 6 so as to provide sufficient space between the U-shaped portion 5 and the arm 4 to receive the cord. 70 From the side of the U-shaped portion 5 opposite to that which is adjacent to the arm 4 the material is bent to form an inwardly extending arm 7 that is disposed in the same plane with the arm 4 and coiled a number of 75 times as at 8 at its free end about the intermediate portion of the shank 1. It will thus be seen that the U-shaped portion 5 in being slightly diverged adjacent its inner end with

Another and more specific object of my 25device is to provide a tie that is so constructed as to enable a reliable and expeditious tying and untying of packages, bundles and the like, said device being formed of a single 30 piece of metal having an eye formed at one end and being bent to provide a clasp at the other end in which the cord is to be secured. The above and additional objects are accomplished by such means as are illustrated 35 in the accompanying drawings, described in the following specification and then more particularly pointed out as claimed.

With reference to the drawings, wherein I have illustrated the preferred embodiment 40 of my invention as it is reduced to practice, and throughout the several views of which similar reference numerals designate corresponding parts, Figure 1 is a detail perspective view of my improved device showing it 45 in operative position upon a package, Fig. 2 is a top plan view showing the cord in dotted lines in secured position, Fig. 3 is a side elevation. Referring to the drawings by characters 50 of reference the numeral 1 designates a straight shank portion and 2 an eye formed on one end of the shank portion. My improved device is formed of a single piece of preferably spring wire and is bent in 55 a novel form to provide a clamp designated 3 as an entirety that extends at right angles

relation to the arms 4 and 7 and formed of 80 spring wire will provide for a reliable clamping of the tie cord.

A cord 9 is secured as at 10 to the eye 2 at one end and is designed to be passed about the package, bundle or the like a number of 85 times and clamped by the clamp 3 as shown in Fig. 1.

In operation the device is held flat upon the package or bundle to be secured and the cord 9 wrapped once about the bundle 90 brought under the clamp 3 and then around the package in the opposite direction so that a portion of the cord adjacent the free end may be fitted between the U-shaped portion 5 and arms 4 and 7. After the cord has been 95 fitted as described the end is pulled so as to cause the cord to tightly engage the package. The clamping action provided by the clamp 3 will securely hold the cord in place and to untie the device it is only necessary to pull 100

the cord from between the U-shaped portion 5 and the arms 4 and 7.

With reference to the foregoing description and accompanying drawings it will be readily seen that I have provided a simple, 105 inexpensive and highly useful device that may be readily put into operation so as to provide for a secure tying of packages, bundles and the like, prevent waste of cord and save time in tying and untying. 110 In practice, I have found that the form of my invention, illustrated in the drawings

and referred to in the above description, as the preferred embodiment, is the most efficient and practical; yet realizing that the conditions concurrent with the adoption of my device will necessarily vary, I desire to emphasize the fact that various minor changes in details of construction, proportion and arrangement of parts may be resorted to, when required, without sacrificing 10 any of the advantages of my invention, as set forth.

forming a cord receiving eye, a downwardly 15 extending arm formed at the outer end of said shank, a U-shaped member connected to the lower extremity of said arm its free end bent upwardly and around said shank said U-shaped member acting as a spring, when a 20 tying element is forced down between the arms and the U-shaped member.

In testimony whereof I affix my signature in presence of two witnesses. DAVID WILLIAM SQUIRE.

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Witnesses:

What is claimed is:-A package tie formed of a single piece of metal comprising a shank, one end loop

FRANK C. SHAND, MARTIN H. STEVENSON.

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

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