

W. M. CONRAD.
PACKAGE FASTENING MEMBER.
APPLICATION FILED JUNE 15, 1908.

931,569.

Patented Aug. 17, 1909.

Fig. 1.

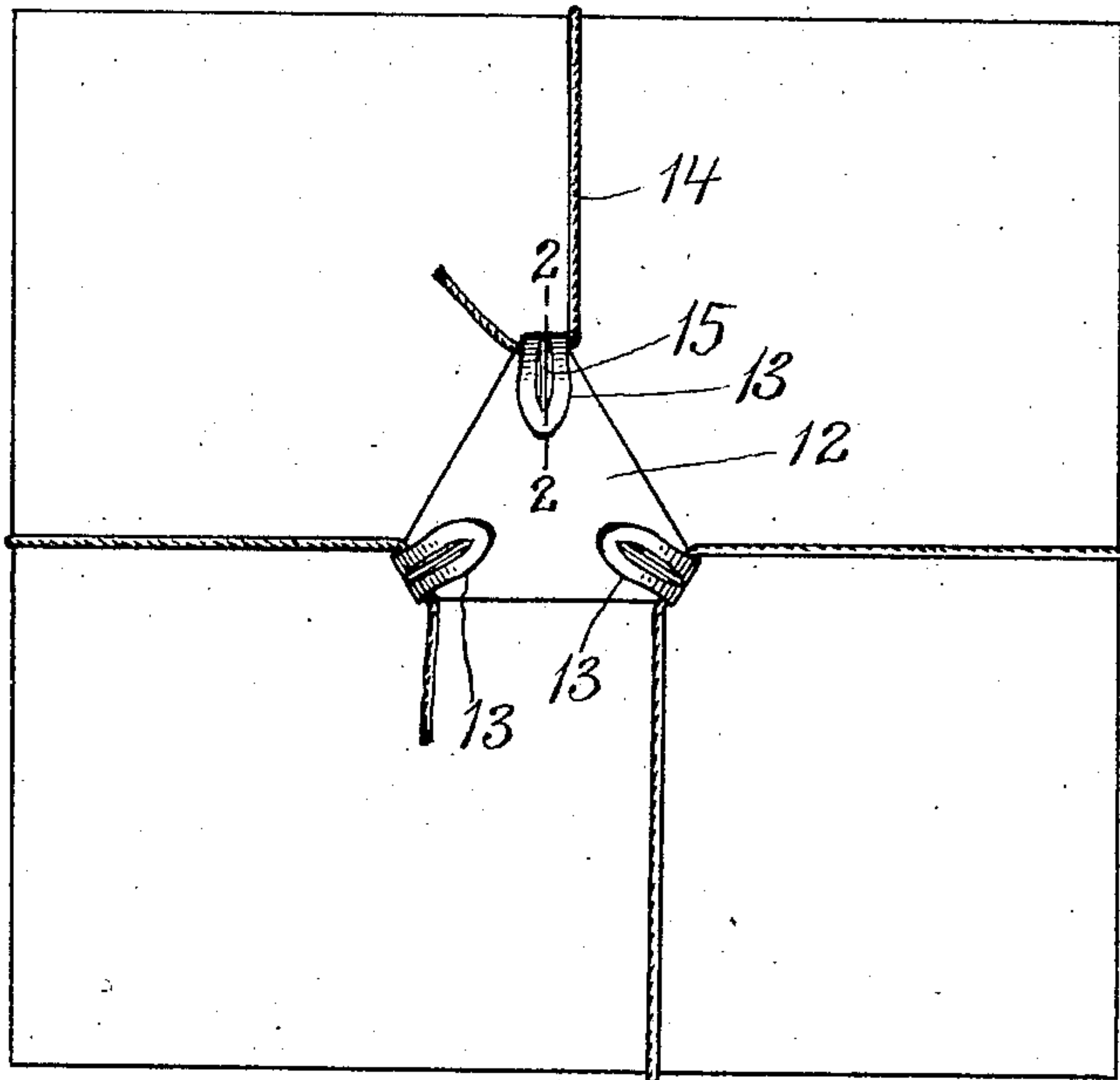


Fig. 2.

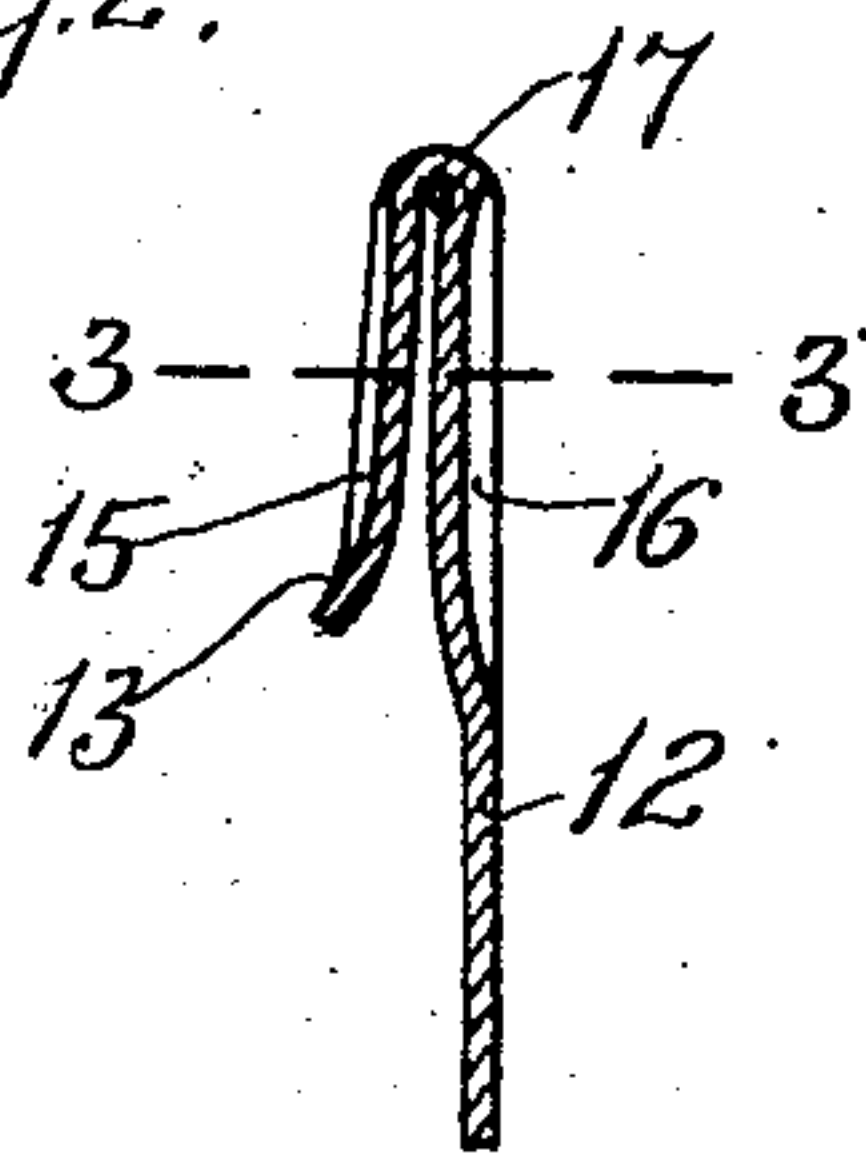


Fig. 3.

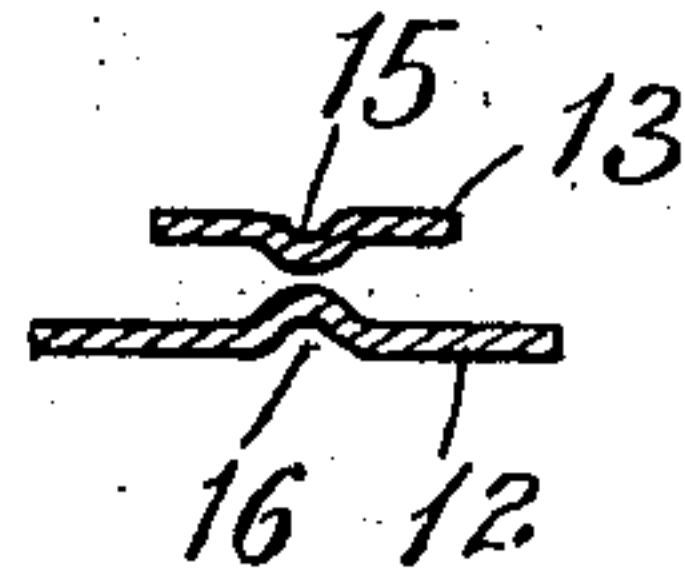
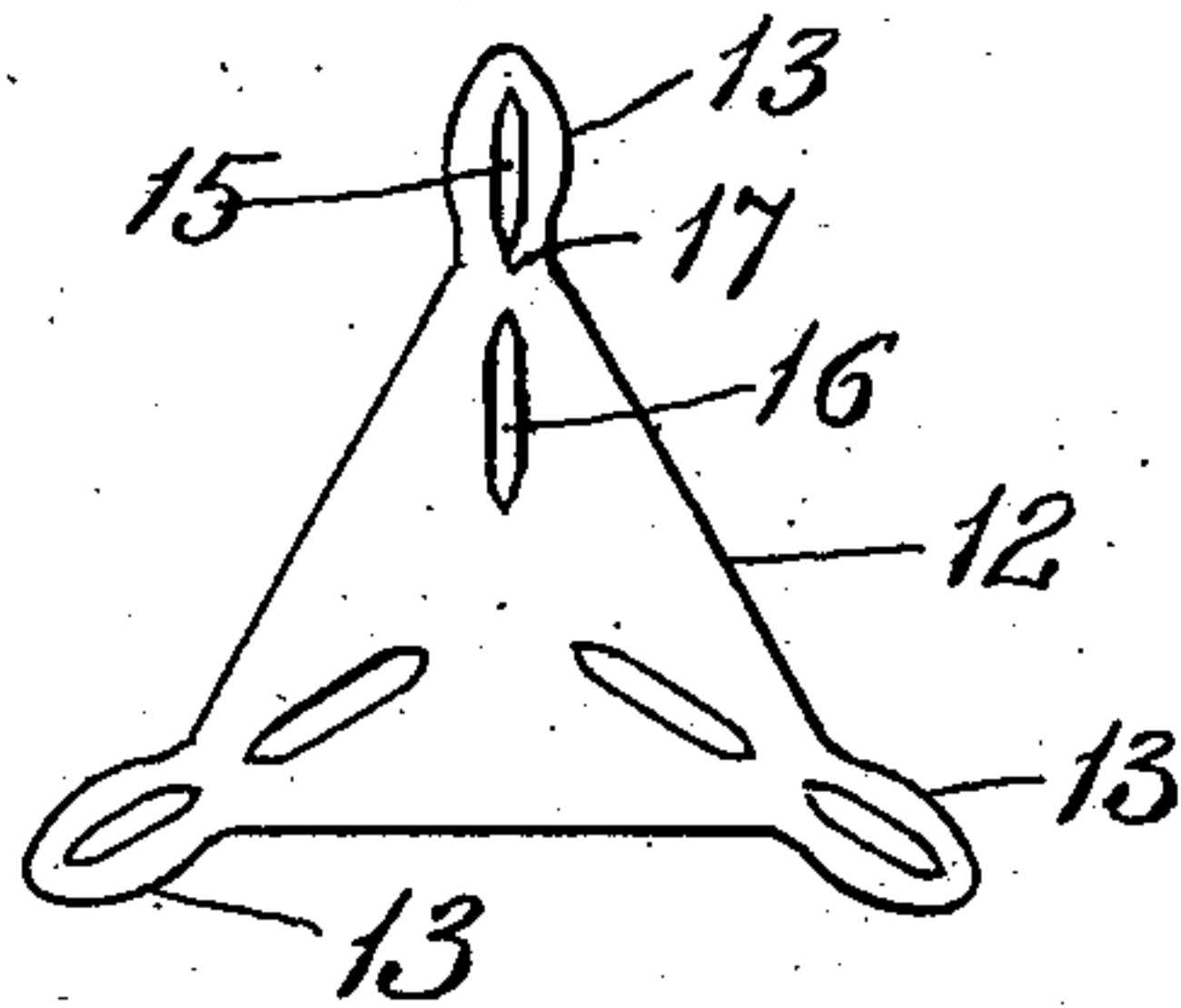


Fig. 4.



Witnesses:

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PACKAGE-FASTENING MEMBER.

No. 931,569.

Specification of Letters Patent.

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Application filed June 15, 1908. Serial No. 438,505.

To all whom it may concern:

Be it known that I, WARREN M. CONRAD, of Chelsea, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Package-Fastening Members, of which the following is a specification.

This invention relates to a metallic member adapted to engage portions of a wrapping cord or string, and hold the latter in confining engagement with a parcel or package.

The invention has for its object to provide a simple and effective fastening member of this character adapted to securely grip the string at a plurality of points, and in such manner as to securely hold the string and prevent the slipping of the same without fraying or cutting the string, and therefore without weakening it.

The invention consists in the improved fastening member which I will now proceed to describe and claim.

Of the accompanying drawings forming a part of this specification, Figure 1 represents a plan view showing a parcel confined by a string, and a string-engaging member, embodying my invention. Fig. 2 represents an enlarged section on line 2—2 of Fig. 1. Fig. 3 represents a section on line 3—3 of Fig. 2. Fig. 4 represents a plan view of the blank from which the fastening member, shown in Fig. 1, is made.

The same reference characters indicate the same parts in all the figures.

My improved fastening member is composed of a substantially flat plate 12, preferably of sheet metal of sufficient thickness to afford the requisite stiffness. Portions of the margin of the plate are extended to form ears 13, which, in the blank shown in Fig. 4, radiate from the center of the plate, and are adapted to be bent over the body of the plate and overhang considerable portions of said body, as shown in Figs. 1 and 2.

The inner side of each ear and the adjacent side of the portion of the plate overhung by the ear, constitute string-gripping jaws which are separated by a contracted tapering throat opening inwardly toward the center of the plate. In other words, the mouths or open ends of the throats are nearest the center of the plate so that the strain exerted on the stretches of string 14 engaged by said jaws tends to pull the engaged portions of the string toward the closed ends of the said throats. The said jaws are more widely

separated at the mouths of the throats than at the closed ends, the jaws converging from the mouths of the throats so that the throats are tapered, as shown in Fig. 2. Each ear 13 is provided with a longitudinal boss 15, which projects from the inner side of the ear toward the corresponding portion of the plate, and extends lengthwise of the ear, and in this embodiment of my invention, from the neck portion of the ear toward the center of the plate. The portions of the plate which are overhung by the ears are provided with corresponding bosses 16, which project outwardly from the plate toward the ears, and coincide with the bosses 15, each boss 15 and the corresponding boss 16 forming the acting portions of a pair of string-gripping jaws, said acting portions being of considerably less width than the ears, as indicated in Figs. 1 and 3, so that they are adapted to, indent, and therefore firmly grip the portion of string that is inserted between the jaws.

By reference to Fig. 4, which shows the blank from which the fastening member is made, it will be seen that the bosses 15 and 16 are formed before the ears are bent over the body of the plate, the bosses 15 being in alinement with the bosses 16, and separated from the latter by portions 17 of the blank, which portions are practically flat in cross section, and are, therefore, adapted to be bent to form the necks which connect the ears with the body of the plate, the flat form of the portions 17 enabling the said portions to be as abruptly bent, as to bring the inner ends of the bosses into close proximity to each other.

Fig. 1 shows a suitable engagement between the fastening member and a string 14 which embraces a parcel or package 20, one end of the string being preferably engaged with one of the pairs of jaws before the application of the fastening member and string to the package. The fastening member is then laid flat upon one side of the package, and the string is carried in one direction around the package between another pair of jaws, then around the package in a direction at right angles with the first wrapping, and then engaged with the third pair of jaws. I find that the bite or grip exerted on the string by the bosses 15 and 16 enables the string to be securely held against longitudinal movement by being passed once between the jaws of each pair, although if desired, the string may be passed between each pair of jaws more

than once, the jaws being sufficiently elongated to permit of this. The opposed bosses are free from sharp angles or corners liable to cut or fray the string, so that the latter is
5 securely held without liability of being weakened at the points where it is gripped. Either edge of either ear 13 may be utilized for severing from the main body of string the
10 portion that has been engaged with the parcel and the fastening member, the thin edges of the ears constituting somewhat blunt cutters on which the string may be severed by pulling it forcibly against one of said edges.

The distance between the string-gripping
15 jaws formed by the bosses, and the edges of the ears is such that the severance of the string across one of said edges does not loosen the hold of the adjacent jaws on the string. It may be more advantageous to
20 sever or break the string across one of the jaw edges after forming an additional wrap of the string around said jaw in the manner above stated, the distance between the severed end of the string and the jaws being
25 thus increased.

I have here shown three pairs of jaws radiating from the center of the plate. One pair of jaws is adapted to grasp the central portion of a length of string while the other
30 two pairs are adapted to grasp the end portions. All the jaws are at one side of the plate so that when the device is in use the plate is entirely under all the portions of the string which are engaged with it, and no

parts of the string are interposed between
the plate and the package. The fastener is therefore adapted to be quickly engaged with the string by lateral movement of the string into the throats, no threading of the string through openings in the plate being
40 required. The employment of a sufficient number of jaws to grasp the string at three points, viz:—its central and two end portions, enables the operator to engage the
45 central portion of the string with the fastener by forcing it laterally between the jaws of one pair before applying the fastener to the package, the end portions being subsequently engaged with the other jaws.

I claim:

A package fastening member formed from
a flat sheet metal plate having an approximately triangular body portion and ears at the angles, said ears and body portion having bosses in alinement but separated by
55 intermediate flat neck portions which are bent to cause the ears to overhang the body of the plate, the ear bosses cooperating with the body bosses in forming string-gripping jaws which are separated by contracted
60 spaces or throats opening inwardly toward the center of the plate.

In testimony whereof I have affixed my signature, in presence of two witnesses.

WARREN M. CONRAD.

Witnesses:

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P. W. PEZZETTI.