April 27, 1926. 1,582,444

C. BART

PACKAGE SEAL

Filed April 4, 1924

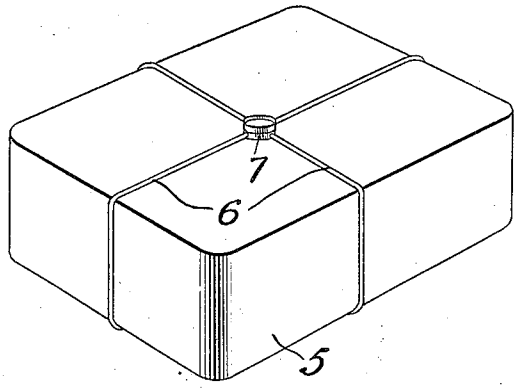


Fig. 1,

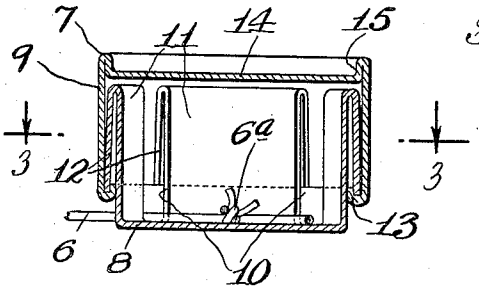


Fig. 2,

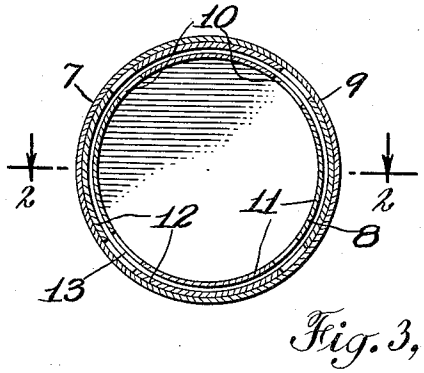


Fig. 3,

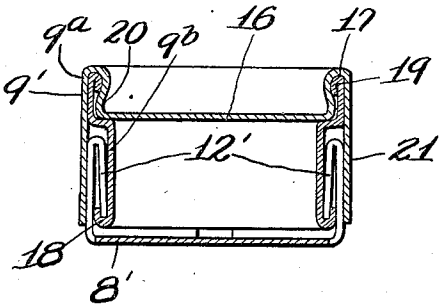


Fig. 4,

INVENTOR

Charles Bart

BY

Howard C. Thompson

ATTORNEY

Patented Apr. 27, 1926. 1,582,444

UNITED STATES PATENT OFFICE.

CHARLES BART, OF NEW YORK, N. Y.

PACKAGE SEAL.

Application filed April 4, 1924. Serial No. 704,100.

To all whom it may concern:

Be it known that I, CHARLES BART, a citizen of the United States, and residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Package Seals, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to devices for sealing packages and particularly for sealing the tie cords of packages where said cords are joined or knotted together; and the object of the invention is to provide a device of the class and for the purpose specified composed of two or more interlocking parts, one of said parts being adapted to receive the tie cords of a package and to receive the knot therein, while the other part or parts cooperate with the first named part to form a complete enclosure for the knot contained within the first named part; and with these and other objects in view, the invention consists in a device of the class specified, which is simple in construction, efficient in use and which is constructed as hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which:—

Fig. 1 is a perspective view of a package with a tie cord thereon and showing my improved sealing device in use.

Fig. 2 is a sectional view of the sealing device shown in Fig. 1, and on an enlarged scale, the section being on the line 2—2 of Fig. 3.

Fig. 3 is a section on the line 3—3 of Fig. 2; and,

Fig. 4 is a view similar to Fig. 2 but showing a modification.

In Fig. 1 of the drawing, I have shown for the purpose of illustrating one use of my invention a package 5 with a tie cord 6 passed therearound in the usual manner, and knotted centrally of the top portion of the package, and at 7 I have indicated one form of sealing device which I may employ.

The device 7 is shown in detail in Figs. 2 and 3 of the drawing and comprises two cup-shaped sheet metal parts 8 and 9, the side walls of the part 8 of the device being subdivided at four points as shown at 10, the subdivisions being oppositely arranged or at 90 degrees to each other to provide for independent wall members 11. As shown in Figs. 2 and 3 of the drawing, the wall members 11 are folded to form on the outer faces thereof spring lock members 12.

The part 9, as above stated, is cup-shaped in form and the side wall thereof is provided at its free end with an inwardly and outwardly bent peripheral flange portion 13 forming an annular channel upon the inner face of the part 9, into which the free edge portions of the members 12 are adapted to pass for interlocking the parts 8 and 9 together in the manner clearly shown in Fig. 2. The top plate 14 of the part 9 is depressed slightly as shown at 15 in Fig. 2 of the drawing, whereby a comparatively strong edge is formed for the part 9 and the depression of the plate 14 reinforces said part and aids in preventing the collapsing or compression of said parts in the event of its being subject to undue stress or strain.

In the use of the device, the tie cord 6 passes through the apertures or divisions 10 of the part 8 and the junction or knot 6^a of said cord is contained within said part as indicated in Fig. 2 of the drawing, after which the part 9 is passed over the part 8, and in the downward movement thereof, the members 12 are compressed or sprung inwardly until they clear the flange 13, after which said members will automatically spring outwardly and the parts 8 and 9 are locked against displacement. It will be understood that clearance will be allowed between the top of the part 8 and the top plate 14 of the part 9.

In Fig. 4 of the drawing, I have shown a modification, in which the part 9′ is composed of separate members 9^a and 9^b. The member 9^a of the part 9′ is cup-shaped in form and provided with a countersunk top plate 16 and an annular recess 17 is formed within the member 9^a and around the top plate 16. The member 9^b is in the form of a tube, the lower end portion of which is provided with an outwardly and upwardly turned flange 18 which forms an annular channel, and the upper end portion of the member 9^b is enlarged and beaded as shown at 19. In practice, the members 9^a and 9^b are secured together and in accomplishing this result the

enlarged beaded portion 19 of the member 9^b is passed into the recess 17 and the top portion of the member 9^a is compressed as shown at 20 to lock said parts together. It will be noted that an annular recess 21 is formed between the lower end portion of the member 9^b and the corresponding end portion of the member 9^a.

The part 8' in the construction shown in Fig. 4 distinguishes from the part 8' shown in Fig. 2 in that the members 12' are bent inwardly and downwardly rather than outwardly and downwardly, and in securing or interlocking the parts 8' and 9', the members 12' are passed into the recess 21 and the members 12' are sprung outwardly in this operation and when said members clear the flange 18, the same will automatically spring inwardly and interlock with the channel formed by said flange as shown in Fig. 4 of the drawing.

It will be understood that the several parts of my improved device are composed of thin sheet metal or metal of such thickness as to give the required strength to the article and in the drawings and especially Figs. 2, 3, and 4, the thickness of the metal has been exaggerated to clearly illustrate the invention. It will be understood that while I have shown two forms of construction for carrying my invention into effect that I am not necessarily limited to the constructions herein shown and described, and various changes therein and modifications thereof may be made within the scope of the appended claims without departing from the spirit of my invention or sacrificing its advantages.

Having fully described my invention, what I claim as new and desire to secure by Letters-Patent, is:—

1. A package seal of the class described comprising two cup-shaped parts, one of said parts being of less diameter than the other, the upstanding wall of which is provided with a plurality of spaced apertures opening through the free edge of said wall and forming of said wall, a plurality of spring members the free portions of which are bent upon the remainder thereof in spaced and substantially parallel relation therewith to form hook-shaped spring members and the other of said parts being adapted to pass over the first named part and provided with a flange adapted to pass over and interlock with the spring members of the first named part, and the apertures in the first named part extending beyond the second named part when said parts are coupled together, whereby tie cords may extend into the chamber within said parts.

2. A package seal of the class described comprising two cup-shaped parts, one of said parts being provided with spaced apertures which extend from the base of said part outwardly through the edge of the wall thereof and adapted to receive the tie cord of a package, said apertures forming of the remainder of said wall a plurality of spring members, the free end portions of which are bent upon the remainder theerof in spaced and substantially parallel relation therewith to form hook-shaped spring members, the other of said parts being provided at the free edge portion thereof with a flange, said parts being adapted to be placed one within the other and the flange of the second named part being adapted to engage the spring hook members of the first named part to retain said parts together.

3. A package seal of the class described comprising a cup-shaped part, the upstanding wall of which is fashioned to form a plurality of apertures which open through the free end of said wall and which facilitate the placement of tie cords within the chamber of said part and adjacent the bottom thereof, the remaining portions of said wall being fashioned to form spring members, the end portions of which are bent upon and in substantially parallel relation with the remainder thereof to form hook-shaped portions, another cup-shaped part, a sleeve member mounted and secured within the closed end of said last named part, the wall of said member extending in spaced and parallel relation to the wall of said part to form a chamber therebetween, one of said walls being provided with a flange projecting into said chamber, and the spring members of said first named part being adapted to be passed into the chamber of the last named part and to engage said flange for interlocking the separate parts of the device against separation.

In testimony that I claim the foregoing as my invention I have signed my name this 2nd day of April 1924.

CHARLES BART.