W. W. ANDERSON.

CLOSURE FOR PACKAGES.

APPLICATION FILED FEB. 18, 1907.

902,705. Patented Nov. 3, 1908.

2 SHEETS—SHEET 1.

Fig. 1.

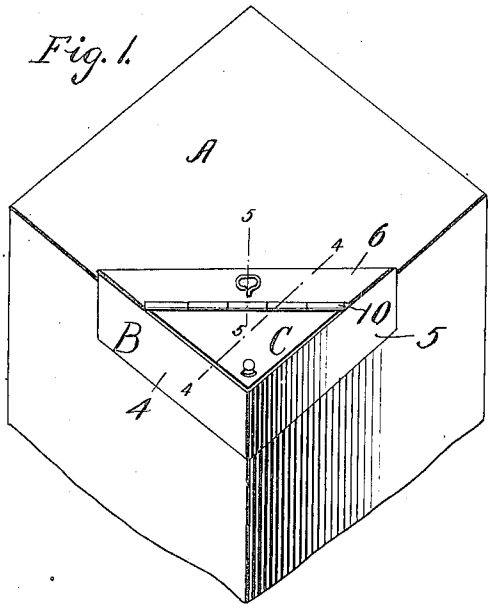


Fig. 4.

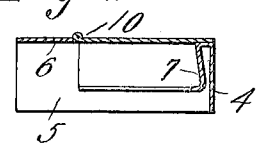


Fig. 5.



Fig. 3.

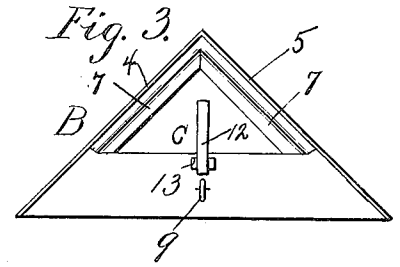


Fig. 2.

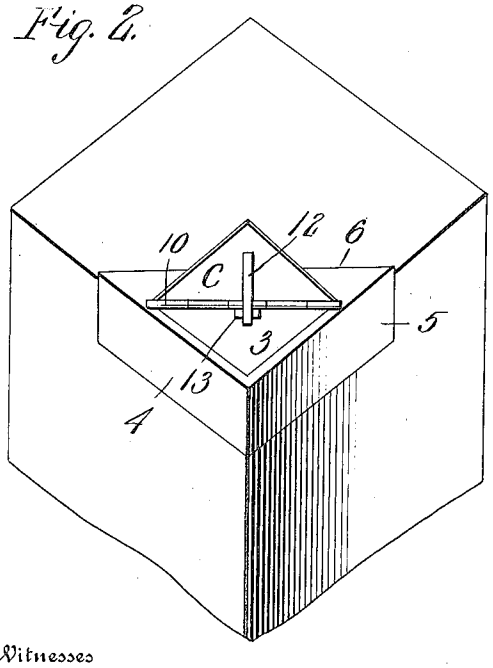
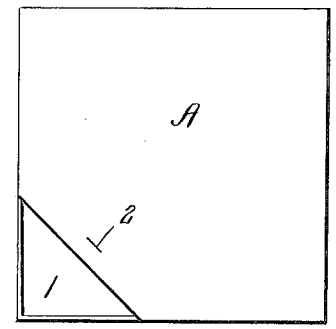


Fig. 6.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 7.

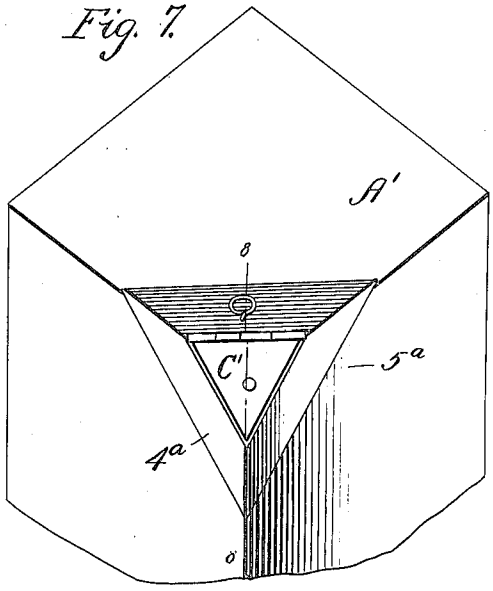


Fig. 8.

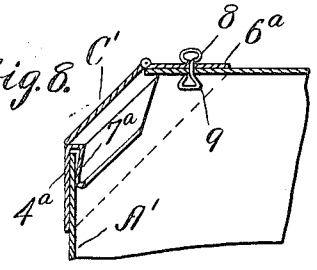
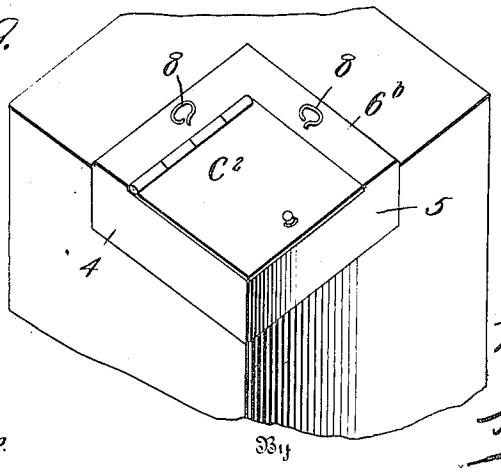


Fig. 9.



Witnesses

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UNITED STATES PATENT OFFICE.

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CLOSURE FOR PACKAGES.

No. 902,705. Specification of Letters Patent. Patented Nov. 3, 1908.

Application filed February 18, 1907. Serial No. 357,963.

To all whom it may concern:

Be it known that I, WILLIAM WALLACE ANDERSON, a citizen of the United States, residing at Takoma Park, in the county of Montgomery and State of Maryland, have invented certain new and useful Improvements in Closures for Packages, of which the following is a specification.

Cereals or "breakfast foods" are, as is well known, packed in cardboard or paper packages having the form of a parallelopiped, on account of the comparative inexpensiveness of the latter. However, when these packages are once opened, it is impossible to properly exclude air from their contents and if, upon opening, the contents are not then soon used they absorb moisture from the atmosphere and lose their crispness, and flavor and are even sometimes made unfit for use. If these packages were of a standard size it would be possible to provide a metallic or other close fitting cover which would prevent this absorption of moisture, but owing to the various sizes put out by various manufacturers, no device has heretofore been provided which is suitable for any and all packages of the above type.

It is an object of my invention to provide a closure which is adapted to fit any size box having the form of a rectangular parallelopiped, and which may be fitted to and removed from the box and applied to other boxes of the same shape with very little trouble.

With this and other objects in view the invention consists of the parts and combination of parts hereinafter described, shown in the accompanying drawings and more particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view showing one embodiment of my invention with the lid closed. Fig. 2 is a like view showing the lid open. Fig. 3 shows a bottom view of the embodiment shown in Figs. 1 and 2. Fig. 4 is a section view on line 4—4, Fig. 1. Fig. 5 is a section view on line 5—5, Fig. 1. Fig. 6 is a top plan view of a box showing the manner of forming the opening therein. Fig. 7 is a perspective view of another embodiment of my invention. Fig. 8 is a section on the line 8—8, Fig. 7. Fig. 9 is a perspective view of still another embodiment of my invention.

Referring more particularly to the drawings, and to the embodiment shown in Figs. 1 to 6, the box A has a triangular piece cut away at 1 in one corner of the top and is provided with a slit 2 near the cut away portion. The closure is formed of an attaching portion B and a lid C. The attaching portion is provided with a discharge opening 3 and comprises a pair of side engaging portions or members 4 and 5 and a top engaging portion 6. The side engaging portions 4 and 5 are arranged at right angles to each other and in the same plane and each comprises a strip to engage on the outer face of one of the vertical walls of the box. Secured to the upper edge of each strip is a spring clip 7 which is adapted to pass over the upper edge of one of the vertical walls of the box and yieldingly engage the inner wall of the box to provide means for detachably engaging the box. The top engaging portion 6 comprises a plate or strip in which is rotatably mounted a fastening device which extends from both sides of the plate and is formed of a finger piece 8 and an inverted V shaped piece 9 which is adapted to pass through the slit 2 in the top of the box and, when turned, to draw and to hold the top engaging portion and the top into close engagement. Hinged at 10 on the top engaging portion is the lid C which is triangular in form to close the discharge opening. This lid is held in its closed and in its open position by a leaf spring 12 which is secured at one end to the lid and has its other end free so as to slide over on edge 13 and by lying upon either side of said edge hold the lid in either its open or its closed position, but yielding to permit the lid to be freely moved.

In the embodiment shown in Fig. 7, a triangular piece is cut from the corner formed by the top and two adjacent vertical walls of a box A′ and the side engaging portions 4^a and 5^a are arranged at right angles to each other but are inclined relatively to each other so as to fit the cut edges of the vertical walls, being provided with clips 7^a. The top engaging portion 6^a carries a fastening device and has a lid C′ hinged thereto. The lid when closed lies in an inclined position.

The embodiment shown in Fig. 9 is the same as that shown in Figs. 1 to 6 except that the top engaging portion 6^b is formed of two strips at right angles to each other and carries two fastening devices and a rectangular lid C^2 which is hinged to one of the strips forming the top engaging portion.

While the advantages of my invention are obvious, it might be stated that the device as shown in Figs. 1 to 9 is adapted for a box of any size, having the form of a rectangular parallelopiped. It is susceptible of being used a great number of times and is easily attached and detached. Further, it is inexpensive to manufacture.

Having thus described my invention, what I claim is:

1. A device for application to the trihedral angle of an angular box, to provide for opening and closing an opening in the box, comprising an attaching portion constructed with three intersecting faces whereby it is adapted to conform to the trihedral angle of a box, and provided with a dispensing opening, and movable means for closing the dispensing opening.

2. A dispensing attachment for packaging boxes constructed with three intersecting faces and having an opening in a plane intersecting the three faces thereof, and a movable cover closing said opening.

3. A closure for an opening formed at one of the trihedral angles of a rectangular box or other packaging receptacle comprising an attachment constructed with three faces which meet at right angles, whereby it is adapted to conform to the three faces of said angle of the rectangular box, and provided with a discharge opening, a lid for closing the discharge opening, and means for detachably engaging the closure structure with the receptacle, to hold it in position thereon.

4. A closure comprising an attaching portion formed with a discharge opening and having means for detachably engaging the top of a box and two vertical walls at angles to each other, and a lid for the discharge opening.

5. A closure attachment for openings in the corners formed by the intersection of three faces of a box, said closure being constructed in the form of a tri-hedron whereby it is adapted to overlap and conform to the said three faces of different sizes of boxes, and provided with the discharge opening, in a plane intersecting the three faces of the attachment, a lid for said discharge opening, and clips sliding into engagement with and adapted to secure the attachment to each of a plurality of the faces of the box.

6. In a closure of the class described, an attaching portion formed with a discharge opening and comprising a top engaging member, two members carrying clips to engage two side walls of a box; and a lid for closing the discharge opening in the attaching portion.

7. In a closure for boxes or the like, an attaching portion having a discharge opening and comprising a side engaging member and top engaging member, both carrying means for holding them to a box; and a lid for the discharge opening.

8. In a closure for boxes or the like, an attaching portion having a discharge opening, and comprising a side engaging member carrying a clip, and a top engaging member carrying means for securing it to the top of the box; and a lid for the discharge opening.

9. In a closure of the class described, an attaching portion provided with a discharge opening and comprising two side engaging members arranged at right angles to each other and carrying spring clips adapted to engage the inner walls of the sides; and a top engaging member having a lid hinged thereto, and carrying a rotatable device provided with a finger piece and an inverted V shaped portion adapted to pass through a slot in the top of a box and when turned to clamp the top to the top engaging member.

10. A closure-attachment for openings in the corners formed by the intersection of three faces of boxes, said closure-attachment being constructed in the form of a tri-hedron adapted to overlap and conform to the said three faces of the box and provided with a discharge opening, a lid for said discharge opening, clips in position on the attachment to slide into engagement with and secure the closure to each of two of said box faces, and means for engaging the closure with the third face to prevent the clips sliding out of engagement with the box.

11. In combination with a box in which a plurality of sides intersect to form a corner thereof, a closure therefor provided with a discharge opening and comprising an attaching portion, means residing therein for detachably securing the attaching portion to each of the sides, and a lid for the discharge opening.

The foregoing specification signed at Ashland, Ky., this thirty-first day of January, 1907.

WM. WALLACE ANDERSON.

In presence of two witnesses—
JOHN M. HOPKINS,
MIKE PURTLE.