Feb. 6, 1923. 1,444,135

W. R. O'CONNOR.

CLOSURE FOR PACKING AND SHIPPING CONTAINERS.

FILED MAY 11, 1921.

Fig. 1.

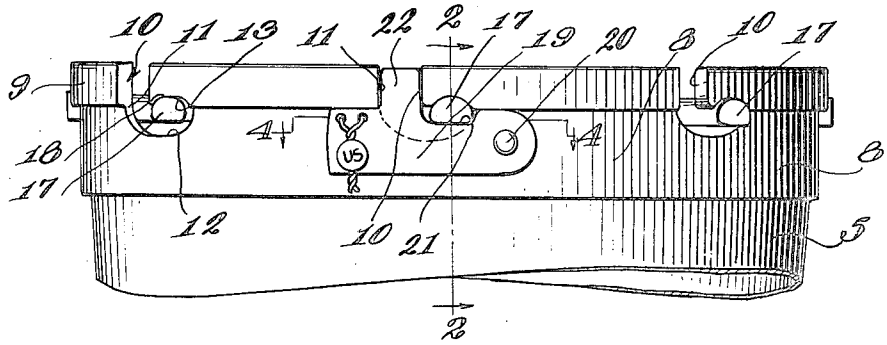



Fig. 2.

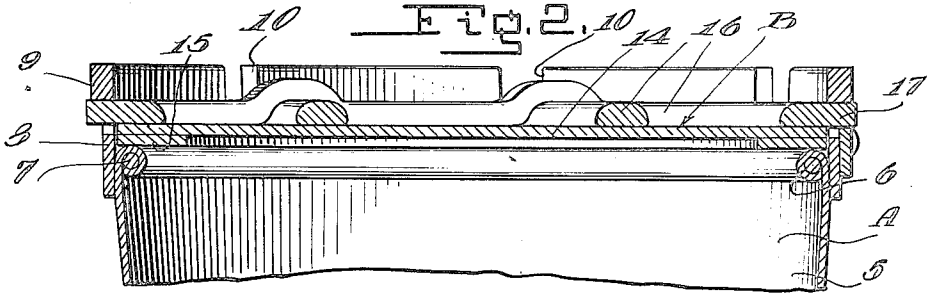



Fig. 3.

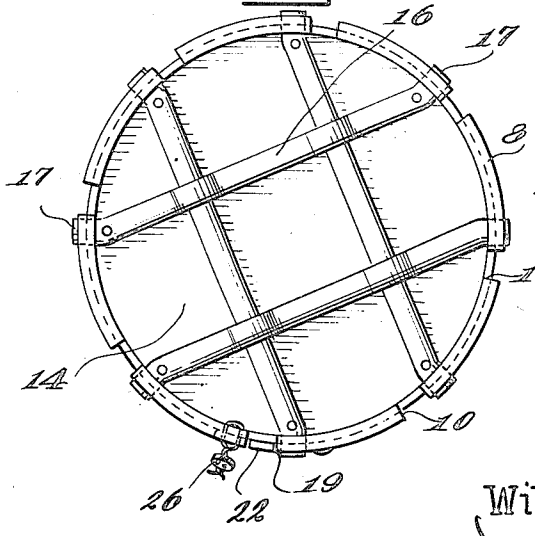
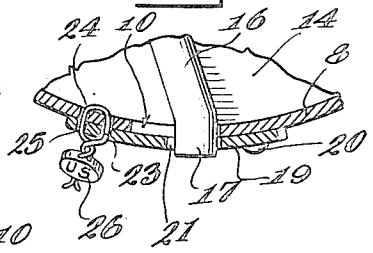



Fig. 4.




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# UNITED STATES PATENT OFFICE.

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## CLOSURE FOR PACKING AND SHIPPING CONTAINERS.

Application filed May 11, 1921. Serial No. 468,782.

*To all whom it may concern:*

Be it known that I, WILLIAM R. O'CONNOR, a citizen of the United States, residing at Elizabeth, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Closures for Packing and Shipping Containers, of which the following is a specification.

This invention relates to closures for receptacles, and more particularly to closures for shipping containers of the type illustrated in my copending application filed on even date herewith, and the primary object of my present invention is to provide a novel means of simple construction for permitting the heads of shipping containers to be quickly and easily placed in position and held against accidental displacement and removal by unauthorized persons.

Another object of the invention is to provide a closure for packing and shipping containers embodying novel shaped radially extending lugs carried by the heads and arranged to fit in novel shaped bayonet slots formed in the terminals of the body of the container.

A further object of the invention is to provide a novel means for preventing rotation of the head after the same has been placed in position, said means embodying a pivoted latch having a lug arranged to fit in one of the bayonet slot openings, whereby accidental displacement of the radially extending lugs from said slots is absolutely precluded.

With these and other objects in view, the invention consists in the novel construction, arrangement and formation of parts, as will be hereinafter more specifically described, claimed and illustrated in the accompanying drawings, forming a part of this specification, in which drawings:

Figure 1 is a fragmentary side elevation of a container showing the improved closure incorporated therewith.

Figure 2 is a diametric section through the same taken on the line 2—2 of Figure 1.

Figure 3 is a top plan view of the improved closure.

Figure 4 is a detail horizontal section taken on the line 4—4 of Figure 1.

Referring to the drawings in detail, wherein similar reference characters designate corresponding parts throughout the several views, the letter A indicates the container; and B, the improved closure therefor.

The container A as shown consists of a cylindrical body 5, having its terminal rolled to provide annular bead 6 on which the closure B is adapted to rest. This bead 6 may be coiled around a suitable ring or hoop 7.

An annular flat band 8 is secured to the terminal of the body 5 and projects outwardly therefrom a predetermined distance. The outer end of the band 8 is increased in thickness, as at 9, so as to form a reinforcing flange therefor.

The band 8 is provided at equi-distantly spaced points with inwardly extending bayonet slots which open out through the outer end of the band. These slots 10 include the vertically positioned neck portion 11, and the laterally extending body portion 12. The upper walls of the body portions 12 of the bayonet slots 11 are undercut as at 13, in order to form seats for a purpose which will hereinafter more fully appear.

The closure B includes a disc shaped body 14 which is adapted to fit within the band 10. The inner surface of this body 14 at the marginal edge thereof may be provided with an annular reinforcing band 15, which is adapted to seat upon the inturned annular bead 6. The outer surface of the disc shaped body 14 is provided with pairs of crossed bars or bracing strips 16, which have their terminals bent to provide radially extending lugs 17, which are adapted to fit within the bayonet slots 10. It is preferred that the outer surface of these lugs 17 be curved as at 18, in order to fit within the seats 13 formed in the upper wall of the body portions 12 of the bayonet slots. This forms a frictional seat for the lugs and prevents the accidental rotation of the head or body 14 within the band 8.

In order to absolutely preclude the accidental rotation of the head or body 14 and the displacement, thereof, a latch 19 is provided. This latch is pivoted at one end upon a pivot pin 20 which is carried by the band 8. The outer surface of the latch is provided with a notch 21 for receiving one of the lugs 17. The outer edge of this latch 19 adjacent to the end which is remote from the pivot pin 20, is also provided with an outwardly extending lug 22, which is adapted to seat in the neck portion 11 of one of

the bayonet slots 10. This closes the entrance or neck portion of the bayonet slot, and thus absolutely precludes the movement of the lugs through the bayonet slot.

If so desired, the free end of the latch 19 can be provided with a pair of openings 23, which are adapted to register with opening 24 formed in the band 8 when the latch is in its operative position. These registering openings are adapted to receive a wire 25 of a seal 26. It thus can be seen that actuation of the latch by unauthorized persons without detection is absolutely prevented.

From the foregoing description, it can be seen that a closure has been provided for shipping container, which is of exceptionally simple and durable construction, which will effectively hold the head against accidental displacement, and permits the heads of shipping containers to be readily and easily placed in position.

The closure also practically makes the container rain proof, as the bayonet slots 10 provide drain openings for permitting water to run off of the head or body 14. It can be seen that the body portion 12 of the bayonet slots 10 are located below the head, which permits the water to run off of the same.

Changes in details may be made without departing from the spirit or scope of this invention; but,

I claim:

1. In a container, a body, a head for the body, the body having a plurality of bayonet slots formed therein, a plurality of radially extending lugs carried by the head arranged to fit in the bayonet slots, the upper walls of the bayonet slots being provided with undercut portions to form seats, the lugs being adapted to fit in said seats, the lower walls of the slots being disposed below the upper surface of the head to form drain openings for the head, whereby liquid settling upon the upper surface of the head will drain off of the same.

2. In a container, a body, having a plurality of bayonet slots formed therein, a head arranged to fit in the body, radially extending lugs carried by the head arranged to fit in the bayonet slots, and a pivoted latch carried by the body having a lug arranged to fit in the entrance neck of one of the bayonet slots.

3. In a container, a body having a plurality of bayonet slots formed therein, a head adapted to fit in the body, radially extending lugs carried by the head shaped to fit in the bayonet slots, and a pivoted latch carried by the body having a lug arranged to fit in the entrance neck of one of the bayonet slots, and means for holding the latch in operative position against displacement by unauthorized persons.

4. In a container, a body having a plurality of bayonet slots formed in the upper edge thereof, a head arranged to fit in the body, a plurality of crossed bracing bars carried by the head angularly extending oppositely bent lugs formed on the terminals of the bracing bars projecting radially beyond the head and to fit in the bayonet slots formed in the upper edge of the container.

5. In a container, a body having an inturned annular bead, an annular band secured to the outer edge of the body and projecting outwardly beyond the same, the outer end of the band being increased in thickness to form a reinforcing flange, a head arranged to fit within the flange and to seat upon the bead and adapted to be rotated with respect thereto, the band having bayonet slots formed therein, pairs of parallel cross bracing strips secured to the outer surface of the head, radially extending angularly bent attaching lugs formed on the terminals of the bars arranged to fit in said slots, the upper walls of the bayonet slots being undercut to receive said lugs.

6. In a container, a cylindrical body having its upper edge rolled to provide an inturned bead, an annular band secured to the outer surface of the body and projecting outwardly therefrom, the band having a plurality of inwardly extending bayonet slots formed therein, a head arranged to fit within the band and sit upon the bead, pairs of crossed bracing strips carried by the head, radially extending lugs formed on the bracing strip arranged to fit within the bayonet slots, each of the bayonet slots including vertically disposed neck portion and a laterally extending body portion, a latch pivotally secured at one end to said band, the latch being notched to receive one of the lugs when the same is positioned in one of the bayonet slots, a laterally projecting lug formed on the latch arranged to fit in the neck portion of one of the bayonet slots, and means for holding the latch in position against accidental displacement.

WILLIAM R. O'CONNOR.