

1

2,875,918

REINFORCED LOCKING DEVICE FOR COVERS FOR RECEPTACLES

Marius Baumier, Toulon, France

Application November 7, 1955, Serial No. 545,447

Claims priority, application France November 16, 1954

3 Claims. (Cl. 220—55)

The object of the invention is to provide an improved container of the kind having a closure plate which can be secured in position by a plurality of locking bolts coupled to a common rotatable actuating member for simultaneous operation of the bolts.

A container in accordance with the invention is illustrated in the accompanying drawing, wherein:

Fig. 1 is a plan view of the container, showing the closure plate with its moving parts in locking position,

Fig. 2 is a sectional view through the top of the container and the locking means on the closure plate,

Fig. 3 is a plan view of the container, to a smaller scale, showing the locking means in unlocked position,

Fig. 4 is a side view of a catch member, in raised position, and

Fig. 5 is a corresponding view thereof in lowered locking position.

The container consists of a receptacle 1 of rectangular cross-section open at one end and having slots 2 provided one at each corner of the receptacle wall adjacent to and at equal spacing from its open end. Corner plates 3 are welded internally across each corner of the receptacle wall and have their inner or lower face adjacent to the upper or outer edge of the associated slot 2 (see Fig. 2). A seating rim 4 is secured internally to the receptacle wall and is positioned inwardly of the slots 2. This rim defines a substantially rectangular opening with rounded corners. A correspondingly-shaped closure plate 5 overlies and forms a seal against said rim 4. An actuating disk 6 is mounted rotatably on a boss 7 on the plate 5 and four pivots 8 on the disk each serve to couple thereto a bolt 9, these bolts being slidable through guides 10 on the closure plate. Each bolt 9 has an inclined surface 11 at its outer end and the bolts are of a suitable length such that by partial rotation of the disk 6 they can be moved as required into a locking position in which their inclined surface 11 engages under the adjacent corner plate 3 and against the outer edge of the slot 2 so as to wedge the closure plate into sealing position against the rim 4, or into a withdrawn position in which the inclined surface of the bolts is withdrawn clear of the corner plate and slot to release the closure plate.

Two of the bolts 9 have an aperture 12, and the disk 6 carries two radial handles 13 positioned to overlie the apertured bolts when said bolts are in locking position. An L-shaped catch member 14 is pivoted at the junction of its limbs on each handle 13 and one of the limbs can be engaged into the aperture 12 of the respective bolt 9 so as to prevent relative movement of the disk 6 with respect to the bolts. Fig. 4 shows the catch member with its longer limb raised to act as a handle, and its shorter limb disengaged from the bolt, while Fig. 5 shows the longer limb lowered and the shorter limb engaged into the aperture of the bolt.

A pin 15 mounted on the plate 5 is contacted by the shoulders at each end of a recess 16 in the periphery of

2

the disk 6, thereby limiting the amount of rotation possible.

Apertures 17 are provided in the wall of the receptacle 1 to drain off any water which may collect on its upper part.

The closure plate is held in position by equal forces applied at its four corners, which keeps it securely in locked condition. The raised rim 18 of the receptacle permits each stacking of a plurality of such receptacles, without affecting the closure plate and locking means.

I claim:

1. A container comprising a receptacle of rectangular cross-section and open at one end, said receptacle having slots provided one at each corner of the receptacle wall adjacent to and at like spacing from the open end thereof, corner plates secured internally across each corner of the receptacle and having their inner face adjacent to the outer edge of the slot, a seating rim secured internally to the receptacle wall and positioned inwardly of the slots, said rim defining a substantially rectangular opening with rounded corners, a correspondingly-shaped closure plate adapted to overlie the rim and form a seal against said rim, an actuating member rotatably mounted on the closure plate, a plurality of guides carried on the plate, and a plurality of bolts slidable one through each of said guides and having an inclined surface at one end, each bolt being pivotably coupled at the other end to the rotatable actuating member and being of a length such that partial rotation of the actuating member serves to move the bolts between a locking position in which the inclined surface engages under the corner plate and against an edge of the slot to wedge the closure plate into sealing position against the rim, and a withdrawn position in which the ends having said inclined surface are withdrawn clear of the corner plate and slot to release the closure plate.

2. A container, as claimed in claim 1, wherein a plurality of the bolts are apertured, a corresponding number of radial handles being secured on the actuating member and positioned to overlie the apertured bolts when the bolts are in locking position, and a catch member being pivoted on each handle for engagement into the aperture of the adjacent bolt, thereby to prevent relative movement of the actuating member with respect to the apertured bolts.

3. A container, as claimed in claim 1, wherein a plurality of the bolts are apertured, and comprising a corresponding number of radial handles secured on the actuating member and positioned to overlie the apertured bolts when the bolts are in locking position, and a corresponding number of L-shaped catch members, each such catch member being pivoted at a point adjacent the junction of its limbs to a handle, and one of the limbs of the catch member being releasably engageable into the aperture of the adjacent bolt to prevent relative movement of the actuating member with respect to the apertured bolt.

References Cited in the file of this patent

UNITED STATES PATENTS

138,167	Langenbach	Apr. 22, 1873
539,925	Swan	May 28, 1895
815,466	Phillips	Mar. 20, 1906
892,471	Voelkner	July 7, 1908
991,548	Schmid	May 9, 1911
1,927,657	Evans	Sept. 19, 1933
2,460,961	Wilson	Feb. 8, 1949
2,632,580	Biddlecombe	Mar. 24, 1953

FOREIGN PATENTS

123,986	Switzerland	Jan. 2, 1928
---------	-------------	--------------