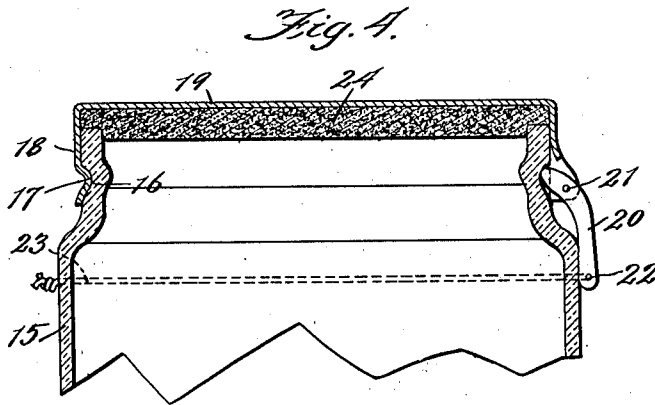
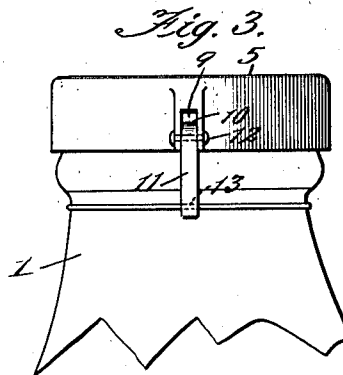
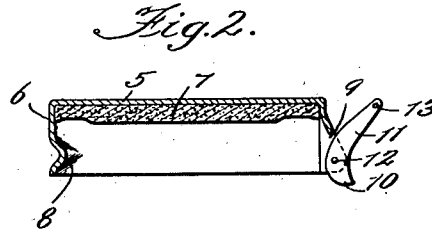
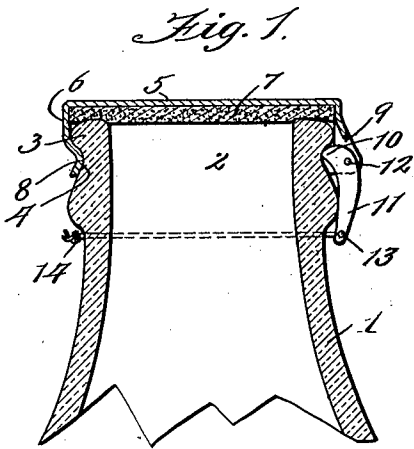


E. N. GILFILLAN.
CLOSURE FOR RECEPTACLES.
APPLICATION FILED AUG. 14, 1909.

970,037.

Patented Sept. 13, 1910.



Witnesses:

W. E. Perry
W. Knight

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UNITED STATES PATENT OFFICE.

ESSINGTON N. GILFILLAN, OF SYRACUSE, NEW YORK, ASSIGNOR OF FIFTY-ONE ONE-HUNDREDTHS TO JOHN HUNTER, OF FULTON, NEW YORK.

CLOSURE FOR RECEPTACLES.

970,037.

Specification of Letters Patent. Patented Sept. 13, 1910.

Application filed August 14, 1909. Serial No. 512,793.

To all whom it may concern:

Be it known that I, ESSINGTON N. GILFILLAN, a citizen of the United States, residing at Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Closures for Receptacles, of which the following is a specification.

This invention relates to closures for receptacles, and has for its primary object to provide improved means for releasably locking said closures in sealing engagement with the receptacles.

One of the objects of this invention is to provide an improved closure simple in construction and efficient in action, which can be applied to receptacles at present in general use.

One of the specific objects of this invention is to provide an improved closure for bottles constructed more especially for use with crown caps.

With these and other objects in view, as will appear in the following specification, the invention consists in the combination and arrangement of parts hereinafter described in connection with the drawings forming a part of the specification.

In the drawings—Figure 1 is a sectional view of the upper portion of a bottle provided with a closure exemplifying my improvements and showing the cap locked in position on the bottle. Fig. 2 is a medial axial section of the cap removed from the bottle. Fig. 3 is an elevation of the cap taken from the right of Fig. 2. Fig. 4 is an axial section of a fruit jar or other similar receptacle having my improved closure applied thereto.

Referring more particularly to the drawings and first to the embodiment shown in Figs. 1, 2 and 3 thereof, the receptacle has been illustrated as a bottle 1 provided at the top with a mouth or opening 2, the outer edge of the mouth of said bottle being provided with an annular protuberant portion 3 forming a protuberant lip on the outer wall of the bottle, in such manner as to provide an annular depression 4 in said outer wall. Surmounting the top of the bottle 1 is a cap 5 of metal or other suitable material provided with a cylindrical flange 6 extending down over the protuberant lip 3 and across said annular depression 4. Interposed between the cap 5 and the mouth 2 of

the bottle is a sealing pad 7 of cork or other suitable material for making an air-tight closure for the receptacle. In order to provide means for detachably connecting the cap with the bottle, the inner wall of the cylindrical portion 6 of the cap 5 is provided with any suitable projection or protuberance 8 adapted to engage in the depression 4, and in order to make the cap easily removable from the top of the bottle, said projection or protuberance is made in the form of a ledge or ridge extending but a short distance around the inner wall of the cylindrical portion 6. This ledge or ridge 8, according to the present exemplification as shown in the drawings, is provided by imparting a kink or indentation in the wall of the cylindrical portion 6 at the point desired. At any suitable point within the cylindrical portion 6 of the cap 5, and removed from the ridge or protuberance 8, any suitable means which is adapted to cooperate with the projection or ledge 8 may be movably mounted on the cap 5. Preferably, however, said means consists of a catch pivotally mounted at 12 within the slot 9 in the cylindrical portion 6 of the cap, said catch being provided with a stop or nose 10 on one end and a power arm 11 on the other end thereof. The stop catch lever thus provided is therefore pivoted intermediately of its ends in such manner as to make the stop or finger 10 movable radially into and out of locking engagement with the annular depression 4 hereinbefore referred to. According to the present preferred embodiment of this invention, said stop catch lever is disposed diametrically opposite to the ledge or protuberance 8 of the cap. In the event of the receptacle 1 being subjected to considerable pressure, means may be provided for maintaining the stop catch lever in its locking position, as shown in Fig. 1. According to the present embodiment, this means consists of a perforation 13 in the extremity of the power arm 11, through which perforation a cord or wire 14 is passed and secured about the neck of the bottle. The stop catch lever is thus adapted to resist considerable pressure outwardly against the cap 5.

Referring now to Fig. 4 of the drawings, in which the present invention is exemplified in its application to a fruit jar or other similar receptacle, a fruit jar 15 is provided

adjacent its top with an annular depression 16, into which fits the protuberance 17 formed in the cylindrical portion 18 of the cap 19 of the jar. Said cap 19 is of substantially the same form as the cap 5 of the embodiment shown in Figs. 1, 2 and 3, and is provided with a stop catch lever 20 of suitable form to engage in the annular depression 16, said lever 20 being pivoted at 21 for the purpose already described in reference to the former embodiment. Said lever is perforated at 22 to receive a cord or wire 23, which may be passed around the jar to hold said lever 20 in locking position. Interposed between the top of the jar 15 and the cap 19 is a sealing pad 24, which effects an air-tight joint when the stop catch lever is in locking position.

What I claim is:

- 20 1. A closure for receptacles comprising a flanged cap provided with a projection on its inner wall and a catch having moving contact with the flange of said cap to cooperate with said projection for securing the cap on a receptacle.
- 25 2. A closure for receptacles comprising a flanged cap provided with a ledge on its inner wall, and means having movable contact with the flange of said cap for cooperating with said ledge to lock the cap on a receptacle.
- 30 3. The combination with a receptacle provided with a protuberant lip, of a closure therefor comprising a flanged cap detachably engaging said protuberant lip, and a catch pivotally mounted in the flange of said cap to engage said lip.
- 35 4. The combination with a receptacle provided with a depression in the outer wall thereof, of a closure therefor comprising a cap having a slotted flange provided with a protuberance on the inner wall of said flange, said protuberance being adapted to releasably engage in said depression, and a stop movably mounted in the slot in said flange to adapt it to be moved into and out of engagement with the outer wall of the receptacle.
- 40 5. The combination with a receptacle provided with an annular depression in the outer wall thereof, of a closure therefor comprising a cap having a depending flange provided with a protuberance on the inner wall thereof adapted to releasably engage in said depression, said flange being provided with a slot parallel to the axis of said receptacle, and a stop pivotally mounted in
- 45 5. The combination with a receptacle provided with an opening, and with an annular protuberant portion adjacent to said opening, of a closure for said opening comprising a cap releasably engaging said protuberance, and a stop catch lever pivotally connected to said cap adjacent to said protuberance, said lever being provided with a nose movable into and out of engagement with said protuberance.
- 50 6. The combination with a receptacle provided with an opening, and with an annular protuberant portion adjacent to said opening, of a closure for said opening comprising a cap releasably engaging said protuberance, and a stop catch lever pivotally connected to said cap adjacent to said protuberance, said lever being provided with a nose movable into and out of engagement with said protuberance.
- 55 7. The combination with a receptacle provided with an opening, and with an annular protuberant portion adjacent to said opening, of a closure for said opening comprising a cap releasably engaging said protuberance, and a stop catch lever pivotally connected to said cap adjacent to said protuberance, said lever being provided with a nose movable into and out of engagement with said protuberance, and a power arm.
8. The combination with a receptacle provided with an opening, and with an annular protuberant portion adjacent to said opening, of a closure for said opening comprising a cap releasably engaging said protuberance, a stop catch lever pivotally mounted in said cap adjacent to said protuberance, said lever being provided with a nose movable into and out of engagement with said protuberance, a power arm, and means for locking said power arm against movement to maintain the nose in locking engagement with said protuberance.
9. The combination with a receptacle provided with an opening, and with an annular protuberant portion adjacent to said opening, of a closure for said opening comprising a cap releasably engaging said protuberance, a stop catch lever pivotally mounted in said cap adjacent to said protuberance, said lever being provided with a nose movable into and out of engagement with said protuberance, a power arm, and means for locking said power arm against movement to maintain the nose in locking engagement with said protuberance.

said slot, said stop being oppositely disposed with reference to said protuberance and movable into and out of locking engagement with said depression.

6. The combination with a receptacle provided with an annular depression in the outer wall thereof, of a closure therefor comprising a cap provided with a protuberance on the inner wall thereof, said protuberance being adapted to releasably engage in said depression, and a stop pivotally mounted on said cap to swing about an axis transverse to the axis of said receptacle into and out of locking engagement with said depression.

7. The combination with a receptacle provided with an opening, and with an annular protuberant portion adjacent to said opening, of a closure for said opening comprising a cap releasably engaging said protuberance, and a stop catch lever pivotally connected to said cap adjacent to said protuberance, said lever being provided with a nose movable into and out of engagement with said protuberance.

8. The combination with a receptacle provided with an opening, and with an annular protuberant portion adjacent to said opening, of a closure for said opening comprising a cap releasably engaging said protuberance, a stop catch lever pivotally mounted in said cap adjacent to said protuberance to swing about an axis transverse to the axis of said receptacle, said lever being provided with a nose movable into and out of engagement with said protuberance, and a power arm.

9. The combination with a receptacle provided with an opening, and with an annular protuberant portion adjacent to said opening, of a closure for said opening comprising a cap releasably engaging said protuberance, a stop catch lever pivotally mounted in said cap adjacent to said protuberance, said lever being provided with a nose movable into and out of engagement with said protuberance, a power arm, and means for locking said power arm against movement to maintain the nose in locking engagement with said protuberance.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 24th day of July A. D. 1909.

ESSINGTON N. GILFILLAN.

Witnesses:

J. C. F. MOTT,
L. M. CLARK.