

Jan. 4, 1927.

1,612,927

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BOTTLE CAP OR CLOSURE

Filed March 2, 1926

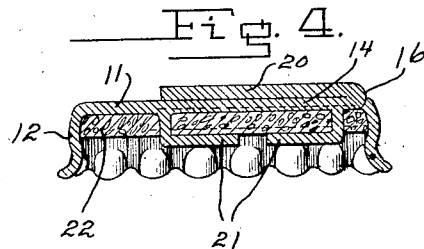
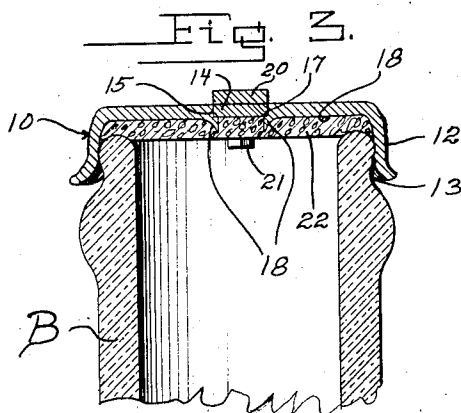
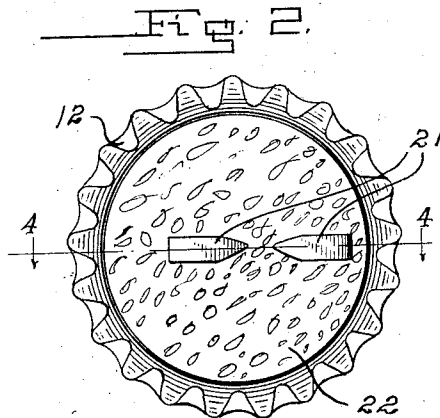
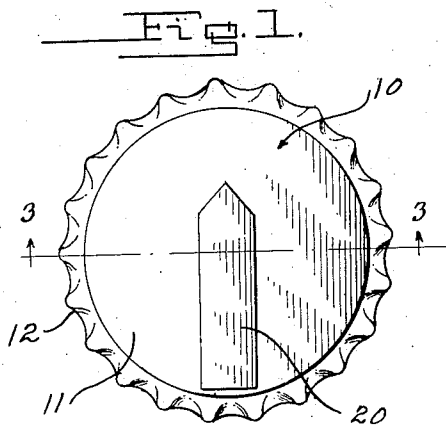


Fig. 5.

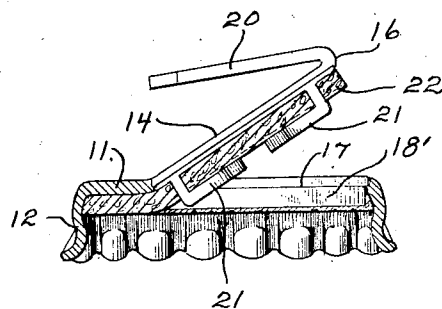
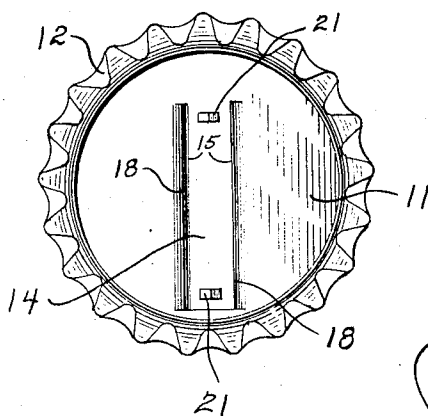


Fig. 6.



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Patented Jan. 4, 1927.

1,612,927

UNITED STATES PATENT OFFICE.

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BOTTLE CAP OR CLOSURE.

Application filed March 2, 1926. Serial No. 91,735.

The present invention relates to improvements in bottle caps or closures, and the primary object of the invention is to provide an improved cap, a portion of which may be swung with respect to the main body portion in order to permit of the contents of the bottle to be poured out, or a portion of the contents withdrawn and the bottle subsequently closed.

10 A further object of the invention is to provide a metallic sealing cap of that type embodying a crimped locking flange, and which cap is of such construction as to permit of a portion of the cap being distorted for permitting of the contents of the bottle being withdrawn, without the necessity of employing a suitable tool for wholly removing the cap from the bottle.

20 A still further object of the invention is to provide an improved cap embodying all of the aforementioned features, and which cap may be readily crimped about the mouth of a bottle as by the usual capping machines now in general use.

25 Other objects and advantages of the invention will be apparent during the course of the following detailed description, taken in connection with the accompanying drawing forming a part of the specification, and in which drawing—

30 Figure 1 is a top plan view of a cap constructed in accordance with my invention.

Figure 2 is a bottom or inner plan view of the same.

35 Figure 3 is a transverse section through the improved cap taken on line 3—3 of Figure 1, and showing the cap in position upon the mouth of a bottle for acting as a closure for the bottle.

40 Figure 4 is a transverse section on line 4—4 of Figure 2.

Figure 5 is a view taken substantially like that of Figure 4, and showing a portion of the cap swung upwardly for permitting of a passageway being formed through the cap.

45 Figure 6 is a plan view of the inner side of the improved cap before the positioning of a sealing disk within the cap.

50 In the drawing, and wherein similar reference characters designate corresponding parts throughout the several views, the sealing cap 10 which is made of sheet metal, embodies a flat disk shaped top portion 11 having the usual scalloped flange 12 which is adapted to be crimped into a groove 13 formed on the upper end of the neck of the

bottle B as is the usual method for securing this type of cap to a bottle for forming a closure for the bottle.

55 A flap 14 is formed in the top or main body portion 11 by providing therein, two parallel extending slits 15 extending from a point close adjacent the flange 12 to a point adjacent the diametrically opposite portion of the flange. This flap 14 as will be observed, lies wholly inwardly of the peripheral edge of the top 11, and has its free end 16 disposed relatively close to the flange 12. Provided in the top 11, at each longitudinal edge of the flap 14, are shoulders 17 and beneath which extend parallel blades or cutters 18 which extend inwardly of the cap past the inner face 18' as clearly illustrated in Figure 3. These blades or cutters 18 which extend throughout the length of the flap 14, have their inner or confronting faces disposed in parallel confronting relation as is also illustrated in Figure 3. Connected to the free end of the flap 14, and extending rearwardly in overlying relation thereto, is a tongue or lift 20 of a length substantially equal to the length of the flap, and which lift normally lies in contacting relation with the outer face of the flap as clearly illustrated in Figure 4. As will be observed, this lift 20 also lies wholly inwardly of the peripheral edge of the top 11 when the lift is in its normal relation with respect to the flap 14, and thus it will be seen that no portion of the flap or lift extends past the peripheral edge of the top.

60 Carried inwardly of the flap 14, and at points adjacent each end thereof, are pointed fastener arms 21 having their major cross sectional dimensions extending transversely of the flap. These arms 21 are adapted to be passed through a sealing disk 22 formed of cork or the like, and be clinched or bent toward one another against the inner side of the disk for securing a portion of the disk between the blades or cutters 18 to the flap 14. These arms 21 are preferably of a width slightly less than the distance between the blades 18 and of a length such that when the free ends of the arms are bent toward one another beneath the sealing disk 22, that the majority of the disk beneath the flap 14 will be engaged by the arms.

65 As will be observed in Figure 3, the depth of the blades 18 is slightly less than the thickness of the sealing disk 22, so that when the disk is positioned within the cap, a small

portion of the disk will be uncut beneath the edges of the blades and thus allow the sealing disk to function properly for forming an efficient seal for the bottle.

5 In use, and when it is desirable to draw all or a part of the contents of the bottle, the lift 20 may first be slightly raised as in Figure 5, and which will provide a thumb piece. Upon further pulling upon the lift
10 20, the flap 14 will swing upwardly at its free end, and during which upward swinging of the flap, that portion of the sealing disk 22 disposed between the blades 18 will be severed from the remaining portion of
15 the sealing disk by the sharp lower edges of the blades. The portion of the sealing disk between the blades is caused to move upwardly in the slot by reason of the fastening arms 21, which project through that portion
20 of the sealing disk and overlie a substantial area of the inner face of the sealing disk between the blades. Should it be undesirable to remove all of the contents of the bottle, the flap 14 may be forced downwardly
25 again against the shoulders 17, the shoulders serving as means for preventing the flap from being forced inwardly to a position whereby the same could not be readily grasped for further opening of the bottle.
30 By so having the free end of the flap disposed at a point relatively near one portion of the flange 12, the opening formed by raising of the flap will permit of all of the contents being poured from the bottle.

35 From the foregoing description it will be apparent that a novel closure for bottles has been provided, comprising a metallic sealing cap, a portion of which may be swung with respect to the main body portion, and which
40 portion when being swung severs a portion of the sealing disk of the closure for providing an opening through which the contents of the bottle may be poured.

Changes in details may be made to the
45 specific form of the invention herein shown and described, without departing from the spirit of the invention or the scope of the following claims.

I claim:

50 1. A bottle closure comprising a metallic cap having an integral flap formed in the top portion thereof and capable of being swung outwardly with respect to the top
55 portion, and a sealing disk arranged inwardly of the cap and having a portion secured to the flap for swinging movement therewith.

60 2. A bottle closure comprising a metallic cap having an opening formed in the top portion thereof and a flap for closing of the opening, and a sealing disk arranged inwardly of the cap and secured to the flap whereby upon upward swinging of the flap
65 a portion of the sealing disk will be severed and drawn through the opening.

3. A bottle closure comprising a metallic cap having an opening formed in the top portion thereof and a flap for closing of the opening, a sealing disk arranged inwardly of the cap and secured at one portion to the
70 flap, and blades arranged at opposite sides of the opening in the top portion for severing a portion of the sealing disk upon upward swinging of said flap.

4. A bottle closure comprising a metallic
75 cap having an opening formed in the top portion thereof and a flap for closing of the opening, a sealing disk arranged inwardly of the cap, and arms carried by the flap and extending through the sealing disk whereby
80 upon upward swinging of the flap a portion of the sealing disk will be drawn through the opening in the top portion of the cap.

5. A bottle closure comprising a metallic cap embodying a top portion and a crimping
85 flange, said top portion having parallel slits forming a flap capable of being swung outwardly of the top portion, a sealing disk arranged inwardly of the cap, and arms carried by opposite ends of the flap extending
90 through the sealing disk and then towards one another at the inner surface of the sealing disk whereby upon upward swinging of the flap a portion of the sealing disk between
95 the slit in the top portion of the cap will be caused to move with the flap for providing an opening through the cap and sealing disk.

6. A bottle closure comprising a metallic cap embodying a top portion and a crimping
100 flange, said top portion being provided with parallel slits forming a flap capable of being swung outwardly of the top portion, a sealing disk arranged inwardly of the cap and secured at one portion to the flap, and inwardly extending blades formed on the top
105 portion at each longitudinal edge of said flap.

7. A bottle closure comprising a metallic cap having a flap formed in the top portion thereof and capable of being swung with
110 respect to the top portion, a sealing disk arranged inwardly of the cap and secured at one portion to the flap, and a lift secured at one end to the free end of the flap and normally disposed in overlying contacting relation with the flap, said lift and flap normally disposed wholly inwardly of the peripheral edge of the top portion of the cap.
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8. A bottle closure comprising a metallic cap embodying a top portion and a crimping
120 flange, said top portion being provided with an elongated opening having shoulders formed at each longitudinal edge of the opening, a flap connected at one end of the opening to the top portion of the cap and adapted
125 for resting upon said shoulders when swung to a position for closing said opening, and a sealing disk arranged inwardly of the cap and secured at one portion to the flap whereby upon swinging movement of the flap a
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portion of the sealing disk will move with the flap.

9. A bottle closure comprising a metallic cap having a flap formed in the top portion thereof and capable of being swung with respect to the top portion for the opening and closing of an opening in the top, a sealing disk arranged inwardly of the cap and secured at one portion to the flap, and blades

arranged inwardly of the top portion of the flap and partially severing the sealing disk whereby upon slight outward swinging of the flap the blades will sever a portion of the sealing disk and allow the same to move upwardly with the flap and form an opening through the bottle closure.

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