

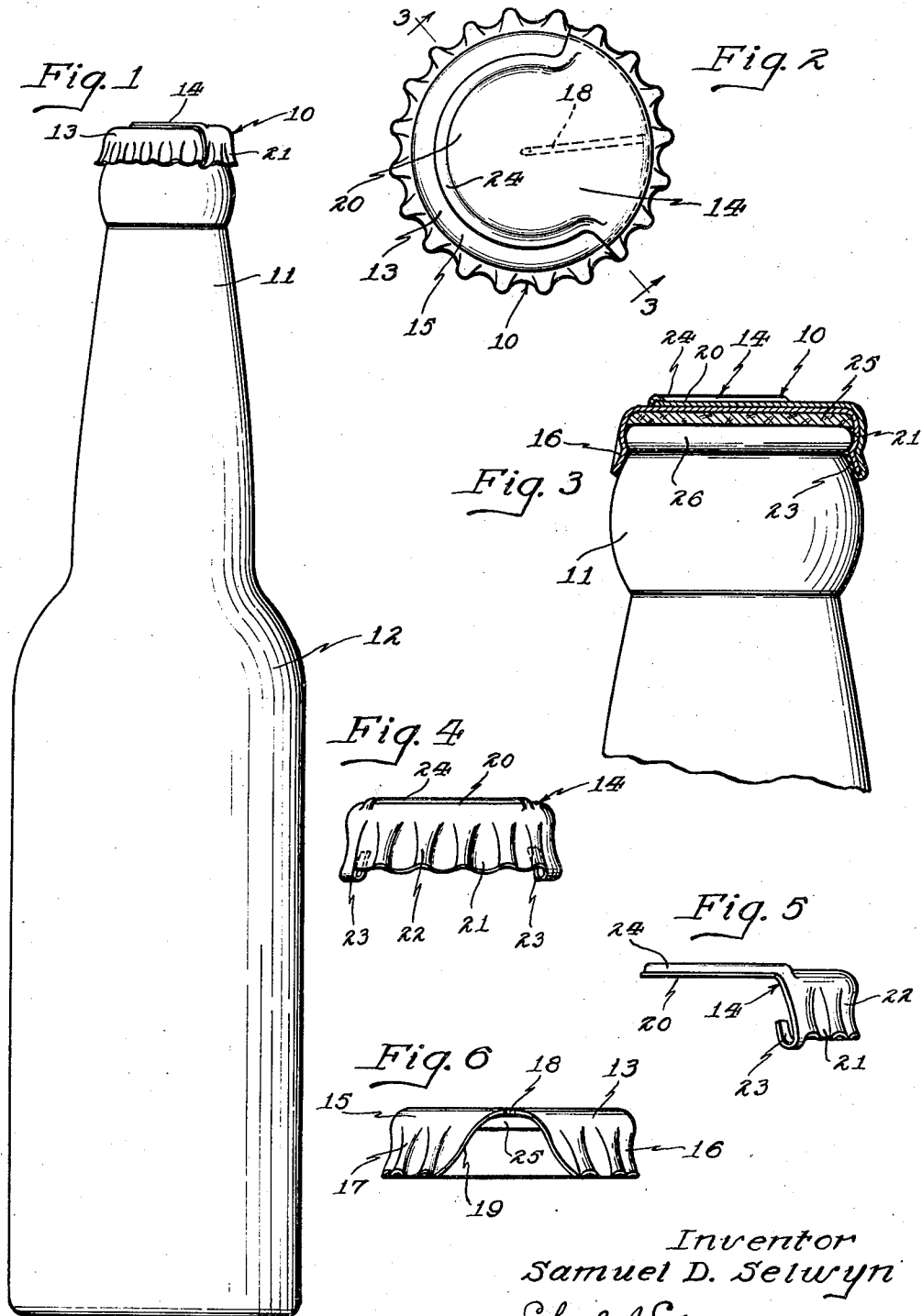
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BOTTLE CAP

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BOTTLE CAP

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This invention relates to a bottle cap.

It is an object of this invention to provide an improved bottle cap which is relatively simple and inexpensive in construction and efficient in use.

Another object of the present invention is to provide a new and improved closure cap for bottles and analogous containers by means of which such a container may be efficiently sealed while still permitting the seal to be broken and the cap removed from the container so that the contents of the latter may be used or removed in part, whereupon the lower part of the cap may be restored to its initial or position of use so as to act as a closure for the bottle or like container during the time the contents of the latter remain in the container for use, as desired, from time to time.

Another object of the present invention is to provide a bottle or closure cap which may be removed from a bottle, or like container to which it is fastened, by hand and without the use of any tool or implement.

An additional object of the present invention is to provide a new and improved bottle cap which is particularly adapted for use upon bottles and analogous containers in which liquids, such as beverages and the like, are contained under pressure, that is, under the pressure of gas stored therein.

It will be seen, from the foregoing object that the new closure cap is particularly intended for use upon bottles and analogous containers for food products and the like from which only a part of the contents is removed at one time after the seal has been broken and the remainder of the contents are retained in the container for use from time to time.

Another object of the present invention is, therefore, to provide a new and improved closure cap for bottles and analogous containers which are used in the manner hereinbefore set forth.

Another object of the present invention is to construct the new closure cap of two parts and in such a manner that the same may be readily applied to the neck of a bottle or analogous container, then removed therefrom so as to permit a part of the contents of the container to be removed, whereupon the lower part of the cap may be reinserted back onto the said neck of a bottle or analogous container so as to seal or close the same again.

Other objects will appear hereinafter.

The invention consists in the novel combina-

tion and arrangement of parts to be hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawing showing the preferred form of construction, and in which:

Fig. 1 is a side elevational view showing a preferred form of the new closure cap attached to the neck of a bottle of conventional design;

Fig. 2 is an enlarged top plan view of the cap shown in Fig. 1;

Fig. 3 is a central vertical sectional view, on line 3-3 in Fig. 2, of the cap shown in Fig. 2, and showing the same in applied position;

Fig. 4 is a front elevational view of the upper part of the new closure cap shown in Figs. 1, 2 and 3;

Fig. 5 is a perspective view of the upper part of the new closure cap; and

Fig. 6 is a front elevational view of the lower part or base of the new closure cap.

A preferred form of the new closure cap is shown in the drawing, being therein generally indicated at 10, and is shown as applied to the neck 11 of a bottle 12 although it is to be understood that the present closure cap may be applied to the necks of other analogous containers including cans. The new closure cap 10 is made of two parts and includes a lower cap part 13 (Fig. 6) and an upper cap part 14 (Fig. 5). The lower part 13 of the cap 10 includes a disc-like portion or body 15 and integral with, and depending from, this disc-like portion 15 of the lower part 13 of the cap 10, and extending around the annular marginal edge of the same, is a skirt 16 which is provided with a series of corrugations 17, which are, of course, conventional in the art of closure caps. Provided in this disc-like portion of the lower part 13 of the cap 10 is a slit or slit-like opening 18 which extends, radially, from the center of the same outwardly to the periphery thereof and then downwardly through the skirt 16; that portion of the opening 18 which extends downwardly through the skirt 16 being flared or splayed and being indicated at 19 (Fig. 6). The lower cap part 13 also includes a sealing disc 25, which may be made of cork or other suitable material, and which is arranged within the skirt 21 and under the disc-shaped portion 15.

The upper part 14 of the new closure cap 10 includes a tab portion 20 and integral with this tab portion 20 is a depending flange or skirt 21 which is provided with a series of corrugations 22, and formed integrally with the skirt portion 21 of the lower cap part 13, at the lateral edges

of the said skirt 21, are two spaced and upwardly curved lugs 23, these lugs 23 providing a gripping means for detachably attaching the two cap parts 13 and 14 together.

5 Formed in the tab 20, and extending around the marginal edge of the same, is a reenforcing ridge or flange 24.

In the use of the new closure cap the upper and the lower parts 13 and 14 of the same are 10 fastened together, prior to the bottle-capping operation, that is, the parts 13 and 14 of the cap are formed separately and are then attached or latched together by projecting the lugs 23 of the upper cap part 14 up under the skirt 16 of the 15 lower cap part 13, on opposite sides of the mouth 19 of the opening 18 in the lower cap part 13. Accordingly, when thus assembled or attached together, the cap parts 13 and 14 are applied simultaneously in position of use upon the neck of 20 a bottle or analogous container by means of a bottle capper or forming die. Accordingly, when the cap parts 13 and 14 are arranged upon the neck of a bottle or analogous container and pressure is applied to the same during the capping 25 operation, the lugs 23 on the upper cap part 14 will be forced into close engagement with the skirt 16 of the lower cap part 13, thereby binding the said cap parts together and upon the bottle.

It will be noted that when the cap parts 13 and 30 14 are thus assembled together and arranged upon the neck of a bottle, the tab 20 is forced down over the disc-like portion 15 of the lower cap part 13, thereby securely closing that portion of the slit or opening 18 which extends through 35 the disc portion 15 of the lower cap part 13. At the same time the skirt portion 21 of the upper cap part 14 is urged into engagement with the skirt portion 16 of the lower cap part 13, so as to close the opening 19 in the latter, and the gripping means or lugs 23 are urged into gripping engagement with the skirt portion 16 of the 40 lower cap part 13, at opposite sides of the opening 19 in the latter, so as to hold the two cap parts together and upon the container to which they are applied.

When it is desired to remove the new closure cap from a bottle or analogous container, so as 45 to remove either a part or all of the contents thereof, this may be accomplished manually, without the use of any tools or implements, by inserting the fingernails under the tab 20 and between the latter and the disc portion 15 of the 50 lower cap part 13, and lifting upwardly on the tab 20, whereupon, by pulling the tab 20 to the right (Figs. 1 and 2), that is, radially outwardly 55 along the axis of the slit 18, the upper cap part 14 may be separated from the lower cap part 13, it being understood that the seal is not, at this time, broken by reason of the fact that the cork or analogous disc 25, which forms a part of the 60 lower cap part 13, still closes that portion of the opening 18 which extends through the disc 15. The lower cap part 13 may then readily be removed from the neck of the container, by inserting the fingernail under the skirt 16 of the same, 65 and then, lifting upwardly thereon by means of the thumb and index finger, since the slit 18 enables the lower cap part 13 to be spread or expanded slightly so that the skirt 16 thereof may 70 be raised up over the flange or bead 26 on the neck 11 of the bottle or other container.

It will thus be noted that the cap parts 13 and 14 may be removed from the neck of a bottle 75 without the use of any tool or implement, as described above, although these parts may likewise,

if desired, be removed from the bottle by means of a suitable tool or implement, such as a screw driver or bottle cap remover.

Accordingly, when it is desired to reseal or close the container 12 this may be accomplished by manually forcing the lower cap part 13 down onto the neck 11 of the container, this being rendered possible by reason of the slit 18 in the disc 15 which permits the skirt 16 of the lower cap part 13 to be spread or expanded slightly so that it 10 will pass the bead 26, whereupon when the thus divided skirt 21 is forced past the bead 26 it will, by reason of its own resiliency, spring back into its initial position, thus resealing the container. It is to be noted, in this connection, that 15 both the upper and lower cap parts 14 and 13, respectively, are preferably made of metal of the character usually employed in making closure caps.

From the foregoing description it will be seen 20 that the present invention provides a new closure cap for bottles and the like which is simple in construction and efficient in use by reason of the fact that it may be removed by the hand, without the use of any tool or implement; and 25 that it may be used repeatedly on a container to which it is applied and as long as it is desired to keep the container closed and the contents thereof covered. Hence, it will be seen that the present closure cap is particularly adapted 30 for use in connection with bottles and analogous containers, such, for example, as are used for containing beverages under the pressure, that is, under the pressure of the gas dissolved therein; and from which containers only a part of the 35 contents is removed after the seal has been broken, whereupon the lower cap part 13 may be reinserted onto the neck of the bottle or analogous container so as to keep the same closed and covered until such time as the contents 40 thereof have been completely removed.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, this is capable of variation and modification, without departing from the 45 spirit of the invention. I, therefore, do not wish to be limited to the precise details of construction set forth, but desired to avail myself of such variations and modifications as come within the scope of the appended claims.

Having thus described my invention, what I 50 claim as new and desire to protect by Letters Patent is:

1. A two-part closure cap for bottles and analogous containers comprising a lower cap part including a disc-shaped portion adapted to be attached to the neck of a bottle or analogous container and having a skirt adapted to extend 55 downwardly over, and to grip, the upper end portion of the neck of a bottle or like container when the said closure cap is in use, the said lower cap part having a slit-like opening formed therein and said opening extending through a part of the said disc-shaped portion of the said upper cap part and downwardly through the said skirt 60 portion of the same, the said lower cap part including a sealing disc arranged within the said disc-shaped portion of the said lower cap part for sealing the said opening in the latter, said closure cap including a second and upper cap 70 part having a tab portion adapted to rest upon the said disc-shaped portion of the said upper cap part so as to close the said opening in the said disc-shaped portion of the latter, said second and upper cap part including a skirt adapt- 75

ed to extend downwardly over a portion of the said first-named skirt so as to close the said opening in the latter when the said closure cap is in use, and the said upper cap part having means formed on the said skirt portion thereof for gripping the said skirt portion of the said lower cap part so as to hold the two cap parts together when the said closure cap is in position of use while at the same time permitting the said upper cap part to be detached from the said lower cap part by an upward movement of the former, the said lower cap part being slightly expansible by reason of the said opening in the latter so that it may be removed from, and reinserted back onto, the neck of a bottle or analogous container after the said upper cap has been detached therefrom, the said gripping means having the form of a pair of spaced lugs formed integrally with the said skirt portion of the said upper cap part and adapted to engage under the said skirt portion of the said lower cap part and between the latter and the neck of a bottle or analogous container and on opposite sides of the said slit-like opening in the said skirt portion of the said lower cap part when the said closure cap is in position of use.

2. A closure cap comprising a lower cap part including a disc-like body adapted to fit upon the top of the neck of a bottle or analogous con-

tainer and having a slit or opening formed therein, said lower cap part including a depending and corrugated skirt formed integrally with the said body thereof and having an opening formed therein continuous with the said opening in the said body of the said lower cap part, said closure cap also including an upper cap part having a portion adapted to fit over at least a portion of the said disc-like body of the said lower cap part so as to close the said slit or opening in the said body of the latter, the said upper cap part also including a depending and corrugated skirt formed integrally with the said portion thereof and adapted to close the said opening in the said skirt of the said upper cap part when the said closure cap is in use, and the said skirt of the said upper cap part having means formed thereon engaging with the said skirt of the said lower cap part so as to hold the said upper and lower cap parts together when the said closure cap is in use, said means consisting of a pair of lugs formed on the said skirt of the said upper cap part and the said lugs being engageable under the said skirt of the said lower cap part, and between the latter and the neck of a bottle or analogous container, and at opposite sides of the said opening in the said skirt of the said lower cap part, when the said closure cap is in use.

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