

May 15, 1923.

S. BJORKQUIST

1,455,068

BOTTLE CAP

Filed July 15, 1922

Fig. 1.

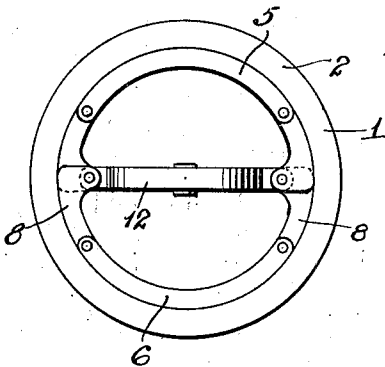


Fig. 2.

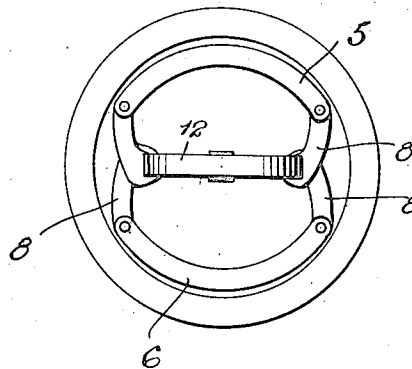


Fig. 3.

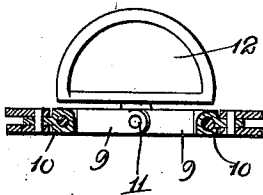


Fig. 4.

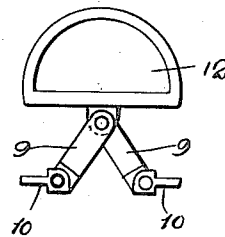


Fig. 5.

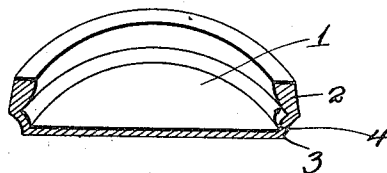
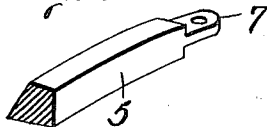


Fig. 6.



Inventor

Sigurd Bjorkquist

UNITED STATES PATENT OFFICE.

SIGURD BJORKQUIST, OF BLANEY, MICHIGAN.

BOTTLE CAP.

Application filed July 15, 1922. Serial No. 575,270.

To all whom it may concern:

Be it known that I, SIGURD BJORKQUIST, a citizen of the United States, residing at Blaney, in the county of Schoolcraft and State of Michigan, have invented certain new and useful Improvements in a Bottle Cap, of which the following is a specification.

This invention relates to bottle caps and more particularly to an improved milk bottle cap adapted to be releasably held in the neck of the bottle in a manner that will permit the cap to be removed when desired.

The primary object of the invention is to provide a bottle cap which may be easily thrust into operative position so that the cap will firmly adhere to the bottle neck, but which will be so constructed as to permit the user to readily remove the bottle cap when the bottle is to be opened.

Other objects of the invention will appear upon consideration of the following detail description and accompanying drawings, wherein:—

Figure 1 is a plan view of the cap constructed in accordance with my invention, showing the parts in closed position,

Figure 2 is a similar view showing the parts in open position,

Figure 3 is a side view of the structure for removing the cap showing the same in closed position,

Figure 4 is a similar view showing the parts in open position,

Figure 5 is a detail view showing a perspective cross section of the cap disk, and

Figure 6 is a detail perspective view partly in section showing a portion of the binding rings.

Referring to the drawing by numerals, the cap disk 1 is constructed of rubber or other suitable flexible material and includes the relatively thick annular band 2 and the inwardly curved flange 3 which is arranged to provide an interior annular groove 4 in the inner wall of the disk as shown in Fig. 5. The portions 2 and 3 are upstanding from the marginal edge of the disk which closes the bottle neck when the disk is in operative position. Associated with the disk is the opening and closing means which consists of complementary curved links 5 and 6 hav-

ing their terminals connected by pivot members 7 to the levers 8 which are jointed to transversely extending toggle links 9, by connecting members 10. The central connecting pivot member 11 of the links 9 is joined by means of a lug to a handle member 12 which will be employed to operate the links 9. The members 5 and 6 are curved to conform to the curvature of the annular groove 4 in the closure disk and when the handle member 12 is pressed downwardly the toggle members 9 will force the links 8 outwardly whereby the members 6 will be pressed tightly into the annular groove 4 to force the rubber disk tightly against the interior of the bottle neck thus holding the closure disk firmly in position, when the bottle is closed. To open the bottle for removing the closure disk it is merely necessary to exert an upward pull on the handle member 12 so that the parts will move to the position shown in Fig. 2 of the drawing whereby the pressure on the disk against the neck of the bottle will be released to permit the closure disk to be removed for opening the bottle.

Minor changes may be made in the details of construction without departing from the spirit of the invention or the scope of the claims hereunto appended.

What is claimed is:—

1. A bottle cap comprising a closure disk provided with an annular band having an interior annular groove, curved pressure links adapted to be moved into and out of the groove, transversely extending toggle links, means to connect the toggle links with the terminals of the said pressure link, a handle connected to the central meeting ends of the said toggle links whereby the latter may be raised and lowered to move the said pressure links for releasing or applying the pressure of the pressure links against the said band and the closure disk for loosening or tightening the closure disk in the bottle neck.

2. A bottle cap comprising a closure disk provided with an annular band having an interior annular groove, complementary curved pressure links adapted to be moved into and out of the said groove, levers pivotally connected to the terminals of the

said links, the said levers being arranged in pairs, the levers in each pair being pivotally connected together, toggle links, connecting members joining the pivotally connected
5 ends of the levers to the said toggle links, a handle member joined to the connected ends of the said toggle links whereby the toggle links may be manually moved to open and closed positions for releasing or applying

the said pressure links to the groove in the 10 said closure cap.

In testimony whereof, I have affixed my signature in the presence of two witnesses.

SIGURD BJORKQUIST.

Witnesses:

F. P. MACFARLANE,
C. E. PALMERLEE.