July 16, 1929. A. C. HOLMDAHL 1,720,835

BOTTLE CAP

Filed Dec. 30, 1926

Fig. 1.

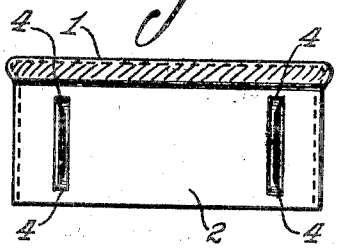


Fig. 3.

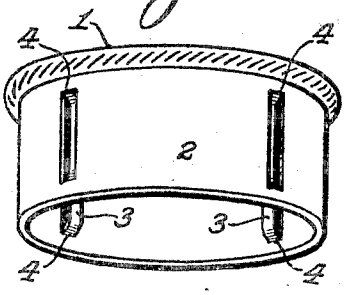


Fig. 2.

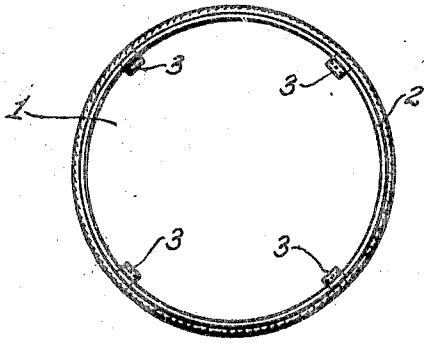
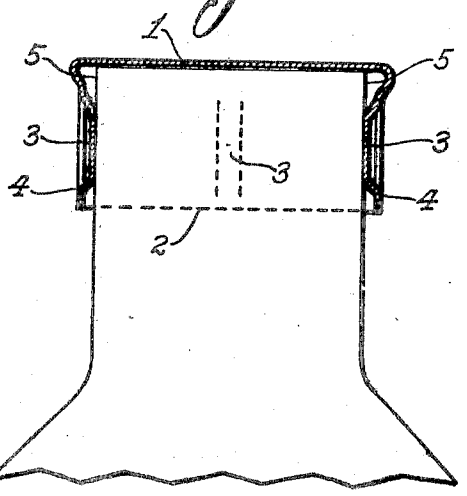


Fig. 4.



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UNITED STATES PATENT OFFICE.

ARTHUR CARL HOLMDAHL, OF ALTON, ILLINOIS, ASSIGNOR TO WESTERN CARTRIDGE COMPANY, OF EAST ALTON, ILLINOIS, A CORPORATION OF DELAWARE.

BOTTLE CAP.

Application filed December 30, 1926. Serial No. 157,908.

This invention pertains to caps for containers or bottles.

One of the objects of this invention is to provide a cap of simple construction which may be easily applied to a bottle or container neck and which will be frictionally retained thereon.

Another object of this invention is to provide such a cap which may be used on containers of varying dimensions.

Another object is to provide such a cap which will be simple and cheap to manufacture and reliable in service.

Further objects will appear from the following description taken in connection with the accompanying drawing in which:

Figure 1 is a side view of a container cap embodying this invention;

Figure 2 is a bottom view of Figure 1;

Figure 3 is a perspective view of the same; and

Figure 4 is a sectional view of the cap in place on the neck of a container.

The cap is formed of resilient material and with a generally cupped shape, as illustrated in Figure 1, and having a top 1 and a downwardly extending deep flange 2. At spaced points about or circumferentially of the flange 2, long sections or strips are cut and struck from the flange 2 to provide gripping elements 3. These sections extend longitudinally or axially of the flange 2 to substantially the full depth thereof and are cut entirely free of the flange along their side edges, but remain integral therewith at their ends 4. These sections are punched inwardly, as shown in the drawing, so as to provide inwardly extending resilient elements secured at their ends to the flange 2 but free at their intermediate portions. The inside bearing faces of these strips are, therefore, formed to provide extended resilient bearings extending substantially the full depth of the flange in order to yieldingly engage the container for an extended distance therealong.

This cap may be applied to a bottle or other container by simply slipping the cap onto the neck of the same. The elements 3, being resilient, will grip the neck 5 of the container with sufficient pressure to retain the cap in place even on a perfectly straight neck. Some types of small containers are constructed from glass tubing. Such tubing often varies considerably in size, and a close fitting cap may fit one size but fail to fit another. The cap of the present invention, having the gripping elements 3 resilient, provides extended bearings extending substantially the full depth of the flange and is adapted to fit containers or tubes of varying sizes within a certain degree of variations. Accordingly, a stock of one size of caps may be adaquate to fit a complete line of containers in spite of the variation in the size of tubing from which such containers can be made.

It will be noted that since the gripping elements are cut free of the flange 2 throughout their extent and since they are long, their resiliency is due to their own flexure and does not involve flexure of the flange 2. A wider range of sizes may thus be accommodated.

It is obvious that various changes may be made in the details of construction without departing from the spirit of this invention; it is to be understood, therefore, that this invention is not limited to the specific details shown and described.

Having thus described the invention, what is claimed is:

1. A container cap provided with a deep flange of resilient material having a long strip struck therefrom and remaining connected thereto at its ends but free therefrom between its ends, the inside bearing face of said strip being formed to provide an extended resilient frictional bearing extending substantially the full depth of said flange in order to yieldingly engage the container for an extended distance therealong.

2. A container cap provided with a deep flange of resilient material having a series of circumferentially spaced long strips struck therefrom, each strip remaining connected to said flange at the ends thereof but free therefrom between its ends, the inside bearing faces of said strips being formed to provide extended resilient frictional bearings extending substantially the full depth of said flange in order to yieldingly engage the container for an extended distance therealong.

In testimony whereof I affix my signature this 21st day of December, 1926.

ARTHUR CARL HOLMDAHL.