

G. L. BEST.
BOTTLE CAP.

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943,510.

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Fig. 3.

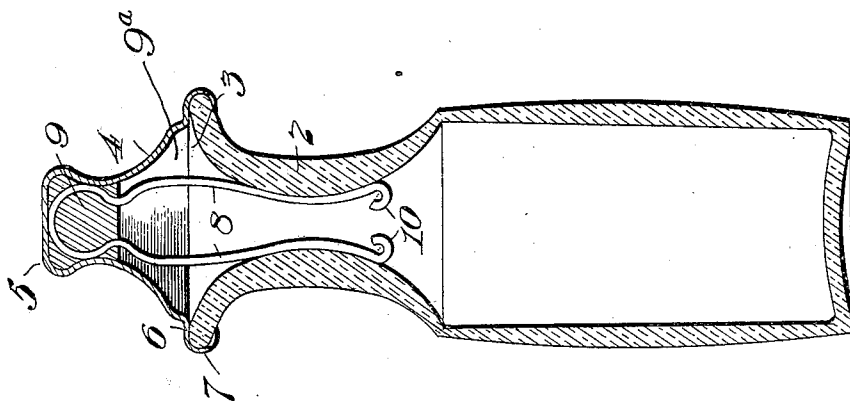


Fig. 2.

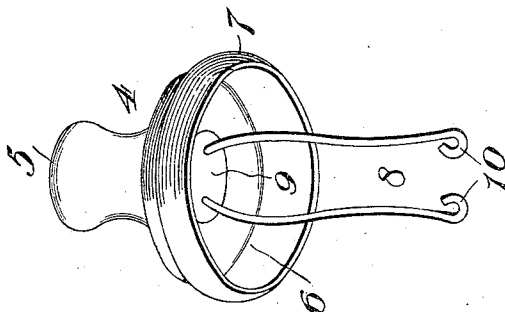
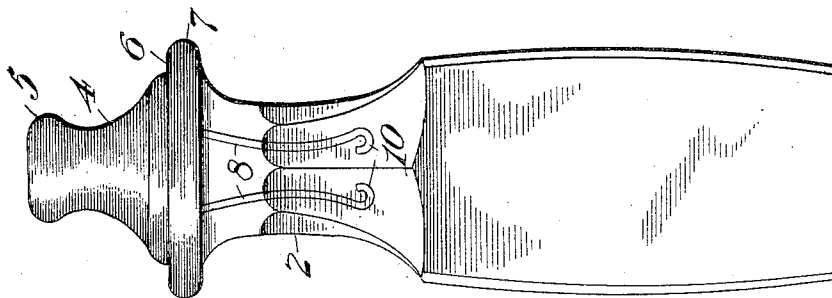


Fig. 1.



Witnesses

T. L. Mockman
Emmett P. Hutchinson

By

Inventor

George L. Best,
Edson Bros.,
Attorneys

UNITED STATES PATENT OFFICE.

GEORGE L. BEST, OF CHARLOTTE, NORTH CAROLINA.

BOTTLE-CAP.

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To all whom it may concern:

Be it known that I, GEORGE L. BEST, a citizen of the United States, residing at Charlotte, in the county of Mecklenburg and State of North Carolina, have invented certain new and useful Improvements in Bottle-Caps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to bottle caps especially designed for covering bottles or cruet for holding water, vinegar, olive oil, etc., used in the railway dining car service. They will also be found useful in hotels, restaurants and residences. Such bottles are generally made of cut glass and until recently were fitted with cut glass stoppers. These stoppers cost about \$.50 a piece and a great many were broken by the jarring to which they were subjected by the motion of the cars. For this reason, the use of the stoppers has now been discontinued to a considerable extent and other means for covering the bottles resorted to which do not involve such a loss from breakage. The dining cars of some railroads use folded linen doilies which are folded into conical form and inserted into the necks of the bottles, but this has not proved entirely satisfactory because the doilies soon become crumpled, limp and soiled and do not effectually protect the contents of the bottles from cinders, dust and other foreign matter. Another railroad employs small sized drinking glasses which are placed over the mouths of the bottles in an inverted position. This is also objectionable because the glasses are often broken, but principally because they make so much noise by continually clinking against the outsides of the bottle necks.

The bottle cap constituting my present invention is free from all of these objections because it is made of non-breakable material, may be easily cleansed and is held firmly in the bottle neck against any movement with relation thereto which might break or chip the mouth of the bottle. My cap is not only incapable of injuring the bottle, but protects the mouth thereof from being broken or chipped in case it is turned over or otherwise strikes some external object. Said cap also covers the mouth of the bottle closely so that dust and cinders are prevented from entering it.

My invention consists further in the features of construction and combinations of parts hereinafter described and specified in the claims.

In the accompanying drawing illustrating the preferred embodiment of my invention: Figure 1 is an elevation of a bottle or cruet, such as is generally used on dining cars for vinegar, water and olive oil, equipped with one of my caps. Fig. 2 is an enlarged detailed perspective view of the cap alone, and Fig. 3 is a sectional view through the cap and the bottle or cruet.

Referring more particularly to the drawing, 1 designates the bottle which is formed with a restricted neck 2 and a flared mouth 3.

The inner walls of the bottle neck, as shown in Fig. 3, are convex from the edge of the mouth to the point where the neck joins the body of the bottle. It will also be noted that the diameter of the mouth at its edge or extremity of its flared portion is substantially equal to the width of the body, whereby the edge of the mouth is apt to strike when the bottle is accidentally turned over. Hence the importance of protecting said edge of the mouth against breaking or chipping which is almost sure to result when it is struck.

The bottle cap 4 is preferably made of a single seamless piece of sheet metal, such as aluminium, and is formed with an upwardly extending knob 5, a flat rim 6 adapted to rest upon the edge of the mouth of the bottle, and a depending flange 7 which fits down over and protects said edge of the mouth. To hold the cap in place on the bottle, I employ two resilient or spring arms 8 which extend from the cap down into the neck of the bottle. These arms are preferably made of one piece of aluminium or nicked wire bent into a loop at the middle which is inserted into the knob 5 and secured therein by having solder filled in and around it, as at 9 in Fig. 3. This filling of solder not only holds the wire in place but serves the additional functions of adding weight to the cap, whereby it may be more conveniently handled, and reinforces the knob against being mashed or dented, which would disfigure it.

It will be noted that the solder filling is only placed in the knob at the top of the cap where the latter is most apt to be struck and that an open space 9^a, Fig. 3, is left between said filling and the rim 6 which en-

gages the mouth of the bottle. This open space houses the upper portions of the resilient arms, gives them a longer leverage whereby they will wear longer, and provides plenty of room for the expansion of said arms. It will also be observed that by reason of the flared shape of the mouth of the bottle, the ends of the resilient arms are readily inserted and guided into the bottle neck when the cap is grasped by its knob and without requiring said free ends of said arms to be pressed together with the fingers before they can be introduced into the bottle neck as is necessary in some previous constructions.

The portions of the arms which project or depend from the cap are bent on opposite curves to conform to the inner wall of the bottle neck. As illustrated in Fig. 3, when the cap is in place on the bottle, these arms extend down into the neck below the narrowest point thereof. The lower ends of said arms are curved away from one another so as to engage the downwardly receding wall of the bottle neck and clamp the cap firmly down upon the mouth of the bottle. To guide said arms more easily into the neck, their lower extremities are bent into small loops.

I reserve the right to make such changes in the construction shown and described herein as may fairly fall within the scope of my invention. For instance, the size, and proportions of the cap may be changed to suit requirements and the length of the resilient arms altered to fit bottle necks of various lengths.

I claim:

1. A bottle cap comprising a portion adapted to engage the mouth of a bottle, a reduced upwardly projecting knob adapted

to be grasped for placing the cap on and removing it from a bottle, and resilient arms depending from said cap and adapted to engage the interior of a bottle neck for holding said cap in place thereon, said arms being secured in a filling of solder arranged in said knob and also serving to add weight to the cap and prevent said knob from being dented.

2. A bottle cap comprising a portion adapted to engage the mouth of a bottle, a reduced upwardly projecting knob adapted to be grasped for placing the cap on and removing it from a bottle, and resilient arms depending from said cap and adapted to engage the interior of a bottle neck for holding said cap in place thereon, said arms being secured in a filling of solder arranged in said knob, an open space being left in the cap between the solder filling and the portion for engaging a bottle mouth for the purposes specified.

3. The combination, with a bottle having a flared mouth and a restricted neck, of a cap comprising a portion to engage the upper portion of the bottle mouth, a flange to fit over and protect the edge of said mouth, a reduced knob for grasping to place the cap on or remove it from the bottle, and resilient arms secured in the knob and having their free ends arranged so as to be guided into the bottle neck by the flared mouth and to engage said neck below the restricted portion thereof for retaining the cap on the bottle.

In testimony whereof, I affix my signature, in presence of two witnesses.

GEORGE L. BEST.

Witnesses:

C. F. LEMMOND,
F. F. JONES.