

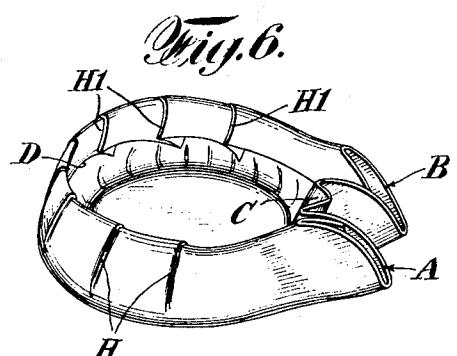
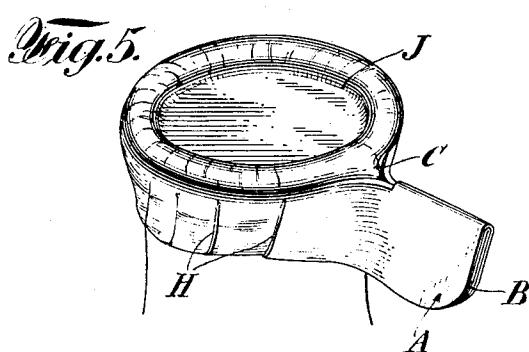
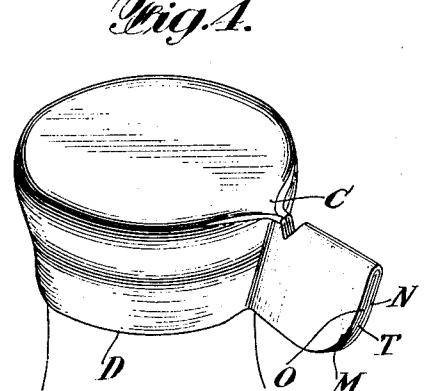
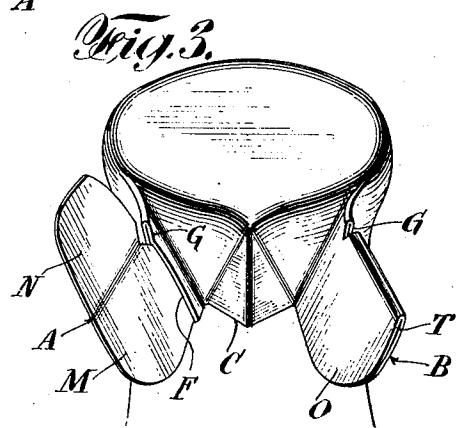
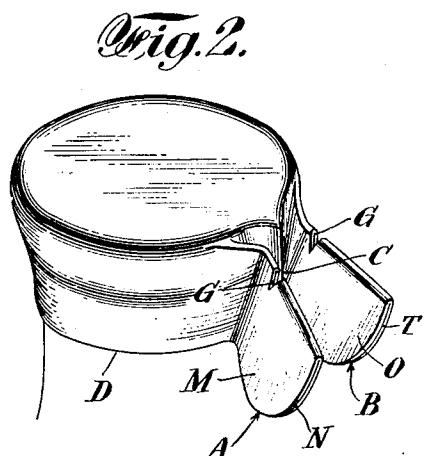
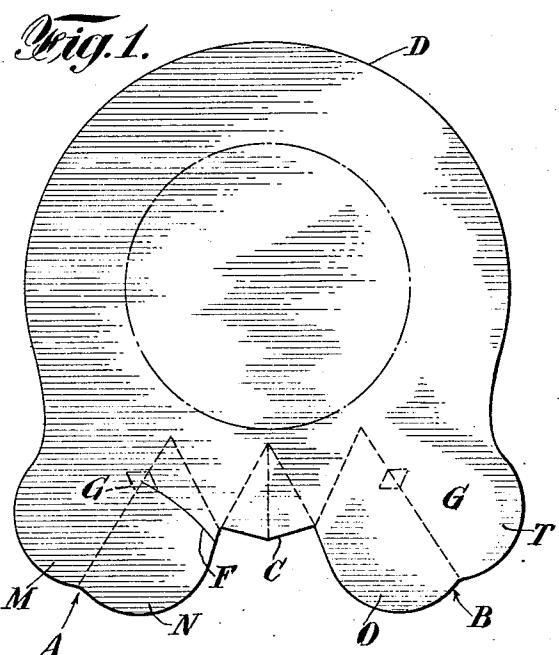
May 10, 1932.

E. MUÑOZ Y SALI

1,857,793

BOTTLE CAP

Filed June 12, 1931



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# UNITED STATES PATENT OFFICE

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## BOTTLE CAP

Application filed June 12, 1931, Serial No. 543,861, and in Cuba February 17, 1931.

The object of my invention has been to provide a cap for bottles and similar containers, which shall have, among others, the following advantages:

5 That the cap may be composed of a single piece of sheet material such as paper, or other fibrous material, with, or without, reinforcement, and, therefore, can be applied to the bottle in one operation.

10 That it shall be capable of being very securely attached to the bottle, and

That it shall be capable of being detached and completely removed from the bottle with great ease, and by a single movement of the 15 hand.

To such ends, my invention consists in the bottle cap hereinafter specified.

In the accompanying drawings, Fig. 1 is a plan view of a paper blank, suitable for forming my cap.

Fig. 2 is a perspective view of the said blank on a bottle, but two ears thereof having not yet been drawn together to grip the bottle.

Fig. 3 is a perspective view from another 25 viewpoint, and

Fig. 4 is a perspective view of the cap of Figs. 2 and 3 having the ears drawn together,

Fig. 5 is a perspective view from above of the said cap having its lower edge turned 30 under and upward, and

Fig. 6 is a perspective view of the under side of the cap of Fig. 5.

The blank as shown in Fig. 1 consists of a circular portion bounded by an edge D and 35 having ears A and B formed on the blank, each ear being creased on a radial line as shown. The two ears are separated by a portion C, also having a radial crease. The ear A has tabs N and M, and the tab N is pref-

40 erably cut along the line F for a purpose later to be described. The ear B has tabs O and T. In applying my cap to a bottle, the blank is placed over the mouth of the bottle, the circular portion D being placed concentric with the bottle. The edges of the blank 45 are then pressed downward, and the tabs O and T of the ear B are brought together, the fold C being permitted to project outward from the bottle as shown in Fig. 3. The tab 50 N of the ear A is raised as shown in Fig. 3,

and the two ears are brought together, after which the said tab N is folded over the ear B and fastened in place, by adhesive or a wire staple, metal clip, or other convenient fastener. This action draws the outer edge of 55 the blank around the neck of the bottle and causes it to obtain a good hold on the bottle. In order to remove the cap from the bottle, it is only necessary to clasp the united tabs with the finger and thumb and tear them 60 through approximately along the line F. For this purpose, a scoring, weakening or notch G can be formed as shown in Fig. 4.

In the form of my invention shown in Figs. 5 and 6, the blank is crimped so as to 65 form folds H which preferably slant to the vertical, and then the edge D of the blank is turned into the cup thus formed. In this manner the blank can not only be made to snugly fit the neck of the bottle, but the overlapping portions H1 of the folds, being next to the bottle, and within the outer layer of 70 paper, the ears may be caused to draw the lower edge I thus formed closely about the neck without releasing the folds, contrary to 75 what might be expected. In other words, the folds overlap and interlock so that they resist the pull of the ears substantially as well as if there were no folds, because the folds cannot release from their folded position. 80

While my bottle cap may be used without reinforcement, it may as shown in Fig. 5 have a reinforcing disc J attached to its center, and this disc may be pressed downward to engage a beading in the bottle neck, as is 85 commonly done today. My bottle cap, however, serves the purpose both of the said disc and of the usual cover which is put over the bottle mouth and neck to prevent dust from settling on the said cap. The operation of 90 removing the usual paper disc from its engagement with the beading in the mouth is difficult and clumsy, and, being in addition to the operation of removing the dust cap from the bottle, causes the opening of the bottle to 95 consist of two rather difficult operations. My single cap, performing as it does both functions, enables the bottle to be opened in a single operation. Furthermore, since the cap can both be released and removed by merely 100

grasping and tearing the tabs, a single bottle equipped with my cap can be opened merely by a single movement.

My cap has the added advantage that it cannot be removed from the bottle without being destroyed. It thus is a guarantee that the contents of the bottle have not been tampered with.

Various changes in the illustrated embodiments of my invention: For instance, more than two ears can be used—two pairs of ears can be made on opposite sides of the bottle.

I claim:

15. A blank for a bottle cap comprising a substantially circular portion of sheet material having two ears formed on its edge, said ears each having two tabs divided by a radial crease, said ears being separated from each other by a portion having a radial crease.
20. 2. A blank for a bottle cap comprising a substantially circular portion of sheet material having two ears formed on its edge, said ears each having two tabs divided by a radial crease, one of the tabs of one of said ears being severed or substantially severed along a line substantially perpendicular to the crease of said ear.
25. 3. A blank for a bottle cap comprising a substantially circular portion of sheet material having two ears formed on its edge, said ears each having two tabs divided by a radial crease, said ears being separated from each other by a portion having a radial crease, one of the tabs of one of said ears being severed or substantially severed along a line substantially perpendicular to the crease of said ear.
30. 4. A bottle cap comprising a blank having a substantially circular portion of sheet material having two ears each composed of two tabs having a radial fold between them, said ears being separated from each other and said blank having a radial fold between said ears, said blank being folded down around the neck of the bottle and being drawn tight around said neck by bringing said ears together and securing them.
35. 5. A bottle cap comprising a blank having a substantially circular portion of sheet material having two ears each composed of two tabs having a radial fold between them, said blank being folded down around the neck of the bottle and having folds formed in said folded down portion, said folds being oblique to the axis of the bottle, the lower edge of said blank being turned up on the inside of said blank next to the bottle, said blank being drawn tight about said neck by bringing said ears together and securing them together.
40. 6. A bottle cap comprising a blank having a substantially circular portion of sheet material having two ears each composed of two tabs having a radial fold between them, said blank being folded down around the neck of the bottle and having folds formed in said
45. 7. A blank for a bottle cap comprising a substantially circular portion of sheet material having two ears formed on its edge said ears each having two tabs divided by a radial crease, said ears being separated from each other by a portion having a radial crease, said ears being partially severed near the bottle neck to facilitate removing said cap from said bottle.

folded down portion, said folds being oblique to the axis of the bottle, the lower edge of said blank being turned up on the inside of said blank next to the bottle, said blank being drawn tight about said neck by bringing said ears together and securing them to each other, the central portion of said blank having a stiff disc-like portion that is adapted to be engaged under a beading in a bottle neck.

7. A blank for a bottle cap comprising a substantially circular portion of sheet material having two ears formed on its edge said ears each having two tabs divided by a radial crease, said ears being separated from each other by a portion having a radial crease, said ears being partially severed near the bottle neck to facilitate removing said cap from said bottle.

In testimony that I claim the foregoing, I have hereunto set my hand this 5th day of June, 1931.

ENRIQUE MUÑOZ Y SALI.

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