

(No Model.)

M. RILEY.
CAP STOPPER FOR BOTTLES.

No. 562,243.

Patented June 16, 1896.

Fig. 1.

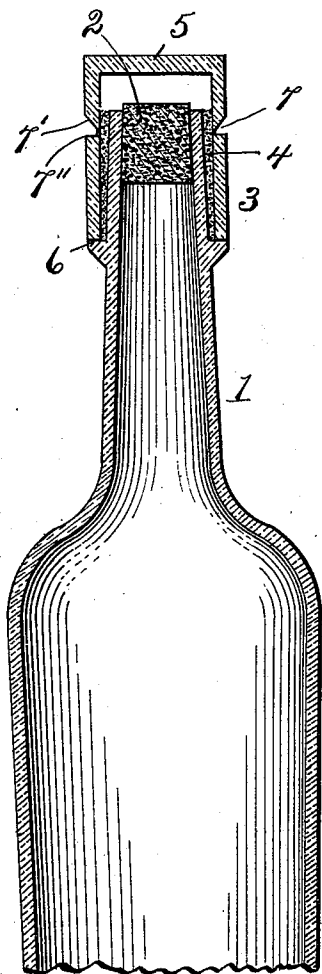


Fig. 2.

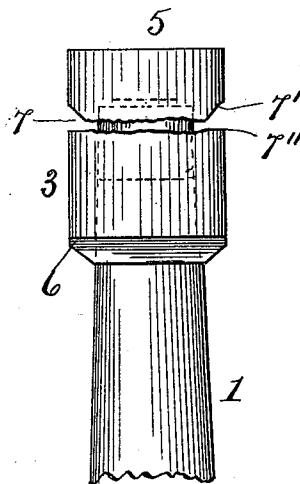


Fig. 3.

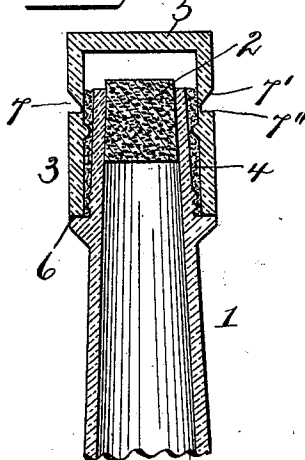
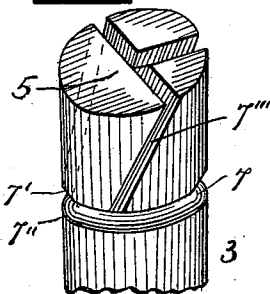


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE,

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CAP-STOPPER FOR BOTTLES.

SPECIFICATION forming part of Letters Patent No. 562,243, dated June 16, 1896.

Application filed March 5, 1896. Serial No. 581,875. (No model.)

To all whom it may concern:

Be it known that I, MARTIN RILEY, a resident of Washington, in the District of Columbia, have invented certain new and useful Improvements in Cap-Stoppers for Bottles; 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 pertains to make and use the same.

10 The invention relates to frangible cap-stoppers for bottles adapted to be partly broken away to uncover the mouth of the bottle and leave a part fixed upon its neck adjacent said mouth. One purpose of the fixed part is to

15 conspicuously mark the bottle and to prevent the application of another similar cap, said fixed part being cemented on the bottle in a practically irremovable manner. Heretofore such caps have been formed to be broken in

20 a plane above the mouth of the bottle, whereby a broken edge was left above such plane. Such broken edge thus extending above the bottle is very objectionable and liable to injure the hands of users, and in case they are

25 packed or wrapped they are liable to cut their covering. Further, when the top of such prior cap is broken fragments of glass are liable to enter the bottle, or if the bottle is corked they may fall on the cork and subsequently prove an annoyance if not a serious

30 danger.

The object of the present improvement is to provide a cap of such character that when partly broken away the top of the removing or fixed part of the cap will coöperate with the mouth of the bottle to guard the broken edge in manner to render such edge practically harmless, and incidentally to provide that loose glass fragments produced in the

35 breaking shall not enter the mouth of the bottle or lodge on the cork; and the invention consists in the construction hereinafter described and particularly pointed out.

In the accompanying drawings, Figure 1 is

45 a central longitudinal section. Fig. 2 is a side elevation showing the crown of the cap broken off. Fig. 3 is a partial section of a modified detail. Fig. 4 is an isometric view of a modification.

50 Numeral 1 denotes the neck of a bottle, and 2 an ordinary cork fitting the same in usual manner.

3 denotes a supplementary cap-stopper made of glass or other frangible material secured upon the bottle-neck over its mouth. 55

4 denotes cement, plaster-of-paris, or the like to secure the cap on the neck. A thin coat or layer of the plaster or equivalent is used to preclude the practicability of removing it, the object being to make the lower 60 part of the cap and the bottle-neck inseparable. The cap when applied preferably rests against a bead 6 on the bottle-neck.

In some cases ribs or bands can be formed on the inside of the cap or on the bottle-neck, 65 as indicated in Fig. 3, to hold a thicker portion of plaster in a position inaccessible from the exterior.

7 indicates a circumferential groove formed in the cap below the mouth of the bottle to 70 facilitate the breaking away of the crown 5 of the cap or that part of the cap above said groove. It is essential that the groove 7 be situated in a plane below the bottle-mouth, so that broken fragments of glass are more 75 certain to fall away without entering the bottle or lodging on the cork. This groove 7, situated below the top or upper horizontal plane of the bottle-mouth, preferably has its upper wall 7' inclined downwardly, while its 80 lower wall 7'' is horizontal, as shown. The line of fracture will be along the bottom of the groove. As the glass on that line is quite thin a sharp edge is left which may also in some cases be a little uneven; but by the de- 85 scribed construction such edge is both within the vertical lines of the outer surface of the top of the cap and below the top of the bottle, which parts therefore coöperate to fend off from the aforesaid edge the hand or other ob- 90 jects passed over or placed on the mouth of the bottle.

This portion of the cap permanently fixed to the bottle is necessarily of such character that it is detectable at a distance and it at 95 once suggests a previous use. If desired to make this remnant of the cap more conspicuous, it may be made of a color unlike that of the bottle-neck. Said part of the cap can in some cases be used for the application of a 100 trade-mark for the goods contained in the bottle.

If the groove 7 is situated so low down on the bottle-neck, and especially if the cap

above the groove is cemented, though such construction is not preferred, then one or more subsidiary grooves 7''', (see Fig. 4,) running over the crown of the cap, may be used to facilitate breaking of the same. When the crown is struck, the line of fracture would follow down the upper groove or grooves to the lower and insure a fracture along the latter. In such case more than one blow may be required to remove separate parts of the crown.

Having thus described my invention, what I claim is—

A bottle-stopper consisting of a frangible cap cemented to the bottle-neck, said cap

having a groove adjacent the mouth of the bottle, the bottom of said groove being situated in a plane below the top of the bottle to insure that when the cap is broken, the fractured edge shall be below said top and within the plane of the outer surface of the cap, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

MARTIN RILEY.

Witnesses:

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FRANK D. BLACKSTONE.