

(No Model.)

M. CARR.
BOTTLE.

No. 569,614.

Patented Oct. 20, 1896.

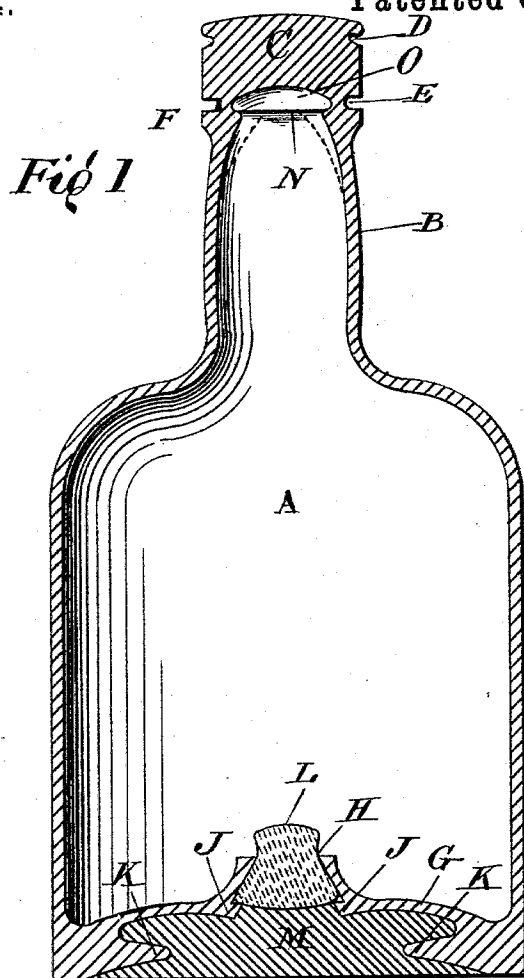
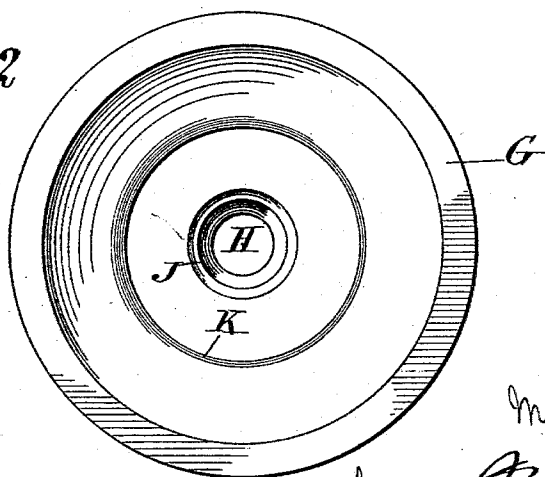


Fig 2



Witnesses
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MATTHEW CARR, OF LONDON, ENGLAND.

BOTTLE.

SPECIFICATION forming part of Letters Patent No. 569,614, dated October 20, 1896.

Application filed June 15, 1896. Serial No. 595,589. (No model.) Patented in England November 19, 1895, No. 21,985.

To all whom it may concern:

Be it known that I, MATTHEW CARR, outdoor officer of Her Majesty's Customs, residing at 5 Bradley Villas, White Hart Lane, Wood Green, London, in the county of Middlesex, England, have invented certain new and useful Improvements in and Relating to Bottles to Prevent Them Being Refilled, (for which I have obtained Letters Patent in Great Britain, No. 21,985, and bearing date November 19, 1895, within seven months next preceding the date of this application, as prescribed by the international convention,) of which the following is a specification.

My invention relates to improvements in glass and other bottles, the object of which is to provide a means whereby such bottles when filled and once emptied cannot be refilled in fraud of the original bottler or without such fraud being apparent and easily detected.

In order that my invention and the manner of its uses may be fully understood, reference is hereinafter made to the accompanying sheet of drawings, of which—

Figure 1 is a vertical central section, while Fig. 2 is an under plan view, of a bottle, substantially as I prefer to construct it according to and for the purposes of my invention.

I carry my invention into effect by casting, blowing, molding, or otherwise producing from glass, vulcanite, stone, or other material, or combination of materials, a bottle, flagon, or similar vessel A of any desired size and shape, the neck of which, B, I prefer to construct with a solid integral head or crown C, entirely closing the mouth of same, and around and near the top of said crown I provide an annular groove or channel D, and at a suitable distance below this a second groove or channel E, the latter being partly formed by an annular ridge or projection F, formed upon C.

The bottom G of the vessel is provided with a central circular hole or aperture H, preferably of conical shape in cross-section, and upon the inner surface of the wall forming said aperture I provide an annular ridge or step J, and from or about the lower end of the said hole H the substance of the bottom G is removed in such a manner as to form a ridge or projection K, which may be either

annular or divided into any number of points or peaks, as may be found most convenient.

To fill or charge the bottle or vessel, this would be first inverted and the liquid or other contents passed therein through the opening H, and when the vessel is filled, or sufficiently so, the said opening may be closed by a cork or the like, such as L, and this when forced home would be prevented from spontaneous return by reason of the final and expansive end of this engaging with the annular step or ridge J, as shown in Fig. 1. The hollow portion of the bottom G may then be filled in with any suitable cement or material M that would become perfectly hard when set, the annular ridge or the like K providing a perfect key for this, as shown by Fig. 1, and before the plastic substance M has hardened any desired seal, name, letter or letters, trademark, or the like may be impressed therein, so as to render it impossible to remove the said substance M without entirely destroying such seal or mark. The under surface of the bottom G, above K, may, if desired, after inserting the cork or the like L, be scored with a diamond before placing in position the material M, the object of such scoring being that G would more easily break should the substance M be tampered with after hardening.

To remove the contents of the vessel A, a sharp tap or knock would be given to the side of the crown C, when this would part from the neck B at its weakest point of the groove E, (which may, if desired, be previously scored with a diamond or other cutting-tool,) when the contents may be poured or otherwise extracted through the mouth N, and to facilitate the said easy removal of the crown C from the neck B at E, I prefer to hollow the said crown at O, which also provides that the breaking off of C from B may not leave a sharp edge upon the mouth of the latter should it be intended that the thus broken-neck vessel may be again used for containing some liquid other than that which it originally contained, and which could not possibly be represented as the original package by reason of the absence of the crown C. In such a case the mouth N may be formed as shown to receive a cork, but if desired by the original packers that the said vessel when once used shall not be used again for any

purpose I may narrow the mouth N, as indicated by dotted outline in Fig. 1, so that a cork or the like could not be so used.

In order that the crown C may not spontaneously part from the neck B should the vessel A be filled with liquid under pressure or with a liquid that may generate expansive gases by age, a wire or wires or the like may be used engaging with the groove D, or passing over the crown of C, or both, or in any other suitable manner, such wire or wires or the like being also connected to the neck B below the ridge E. The crown and its wire or other fastening may then be covered by a suitable capsule, if desired.

Having now fully described and shown my invention, what I claim, and desire to secure by Letters Patent, is—

1. A bottle having an integral solid cap C, with a groove E at the joint between the same

and the bottle-neck and having also a groove D about its upper part above the groove E, said cap having a hollowed under part at O opposite the groove E and the ridge F both of said grooves being exposed, substantially as described.

2. A bottle having a cavity in its bottom with a pointed ridge as K extending about the same, the cement held in said cavity by the ridge, said bottom having a central conical opening with a ridge J about the base of the same and the cork resting on said ridge, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

MATTHEW CARR.

Witnesses:

HENRY CONRAD HEIDE,

GEORGE THOMAS HYAL.