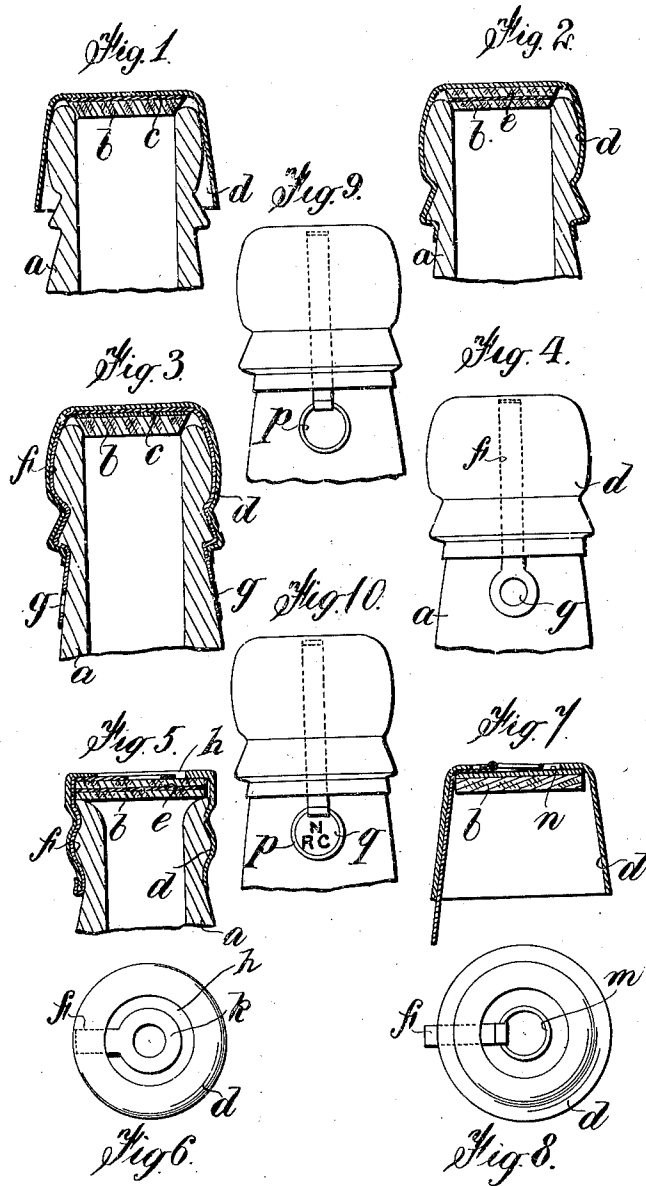


H. C. BRAUN.
BOTTLE STOPPER.
APPLICATION FILED NOV. 13, 1909.

985,000.

Patented Feb. 21, 1911.



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UNITED STATES PATENT OFFICE.

HENRY CHARLES BRAUN, OF KING'S CROSS, LONDON, ENGLAND.

BOTTLE-STOPPER.

985,000.

Specification of Letters Patent.

Patented Feb. 21, 1911.

Application filed November 13, 1909. Serial No. 527,888.

To all whom it may concern:

Be it known that I, HENRY CHARLES BRAUN, a subject of the King of England, residing at 236 Pentonville road, King's Cross, in the county of London, England, have invented certain new and useful Improvements in Bottle-Stoppers; 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.

This invention has for its object a new and improved means of stoppering bottles and the like and relates essentially to devices for closing and securing a bottle by means of a metallic cap to replace the ordinary cork now used in stoppering wine, spirit, liqueur and other bottles.

The invention further refers to simple and convenient means for opening bottles which have been closed in the aforesaid manner.

In the ordinary form of my invention, I use an aluminium or other hard metal cap and into this I place immediately before putting it upon the neck of the bottle a disk of very thin metal, paraffined paper, shellacked or varnished paper or such like material impervious to the liquid contents of the bottle, and I then take a thin disk of cork and either cement it in or render the cork entirely liquid proof by soaking it in a varnish or other suitable solution. The cap is then placed upon the neck of the bottle and put in a suitable spinning machine. Where it is required to provide means for opening the cap this may consist of a strip of tin or other suitable metal or material provided at one or both ends with a hole. This strip is placed within the capsule and over the cork so that one or both ends provided with a hole project below the capsule when spun in position on the bottle, so that by inserting a nail or other implement through the hole the strip may be wrenched up tearing away the capsule and enabling the bottle to be opened. In place of having a strip with a hole coming below the bottom of the capsule when in position I may make the capsule open at the top where it comes above the cork, the cork in this case having a protective covering of tin, celluloid or the like and I may insert a strip with a ring coming in the space above the cork by means

of which the strip can be turned down so as to open the capsule. In some cases I may place a label bearing any suitable inscription in the space between the strip and the capsule, or I may employ the same as a seal.

The drawing accompanying this specification shows various forms of applying my device.

Figure 1 is a vertical section of the neck of a bottle with my stoppering device applied ready for spinning; Fig. 2 is a similar view to Fig. 1 with the device fixed in position, but showing a slightly modified form of cork. Fig. 3 is a similar view of another modified form of the device, where- in a device for tearing open the capsule is provided. Fig. 4 is a side view of Fig. 3. Fig. 5 is a vertical section of a further modified form of the device; Fig. 6 is a plan of same; Figs. 7 and 8 show a vertical section and plan respectively of a modification of the form of the device shown at Figs. 5 and 6. Figs. 9 and 10 show other forms of the invention.

The same letters of reference are employed to denote the same parts in all the views.

a is the neck of the bottle.

b is a disk of cork provided with a beveled edge.

c is a thin layer of paraffined, shellacked or varnished paper.

d is a cap of aluminium or other suitable material. This cap is placed over the cork *b* and disk *c*, and then spun into position. This not only causes the lower part of the metallic cap to conform to the contour of the bottle neck but also produces a stretching action upon the metallic cap, thus causing the cork to be firmly held in the neck of the bottle rendering it perfectly liquid tight. Any liquid that might possibly percolate through the pores of the cork is prevented from escaping by the layer of shellac or the like.

In Fig. 2 a cork is shown in which in place of a disk of shellacked paper or the like at the top, the cork is made in two layers and shellac or the like is interposed between the layers at *e*.

Referring to Figs. 3 and 4 in this case before the cap *d* is spun into position a strip *f* of tin or other suitable material provided at each end with an eye *g* is placed over the cork so that when the cap *d* is spun into

position, as shown, the strip *f* is held firmly in position, but can be easily used for opening the bottle by inserting a nail or the like through either or both of the eyes *g* in order to tear open the capsule. It is of course obvious that in place of providing an eye at each end I may only provide the strip *f* with one eye *g*, in which case the strip *f* should be taken far enough over to hold it in position on the other side.

It will be observed that in the form of the device shown at Figs. 3 and 4 the eye *g* is formed in one with the strip *f*. In the modification of this form of the device shown at Fig. 9, in place of forming the eye *g* with the strip *f*, the strip is doubled back so as to form a loop, which holds the ring *p* by means of which the opening is effected.

Referring to the device shown at Figs. 5 and 6, in this case the capsule *d* is provided with a circular hole *h*, which comes above the cork *b*. The strip *f* for opening the device is formed with a ring *k* which can be seen through the hole *h*. The strip is spun into position as shown clearly at Fig. 5, so as to come on one side of the capsule *d*, and by inserting a suitable implement through the hole *h*, the strip can be torn down the side of the capsule thus enabling the bottle to be opened.

The form of the device shown at Figs. 7 and 8 is similar to that shown at Figs. 5 and 6, except that in this case in place of the strip *f* being formed with a ring *h* a separate ring *m* is provided and an additional disk *n* is placed over the cork *b* to render the seal further effective.

It will be understood that a paper or other label may be placed over the capsule where

desired, with directions for opening or with the name of the brand or the like, or a disk of cardboard, celluloid or other suitable material with a suitable indication of quality, brand, make or the like may be fastened into the ring. At Fig. 10 *p* shows the ring and *q* a disk with an indication such as that just mentioned thereon.

Although I have described my improvements as applied to the necks of bottles, it will be understood that with suitable modifications they may be applied to the tops of jars or other like vessels.

What I claim and desire to secure by Letters Patent of the United States of America, is:—

1. A bottle stopper comprising a tapered cork disk, a metal plate reinforcing the same, a soft metal cap mounted over said reinforced cork disk, and a tear strip mounted between said reinforced cork and said metal cap having an end projecting whereby said metal cap may be parted when desired, substantially as described.

2. A bottle stopper comprising a tapered cork disk, a metal plate reinforcing the same, a soft metal cap mounted over said reinforced cork disk, and a tear strip mounted between said reinforced cork and said metal cap having an end projecting whereby said metal cap may be parted when desired, said tear strip being provided with a ring at its end, substantially as described.

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

HENRY CHARLES BRAUN.

Witnesses:

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F. L. RANDS.