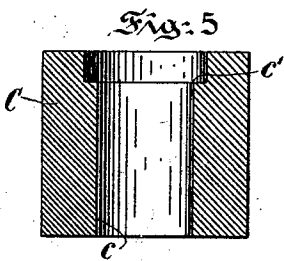
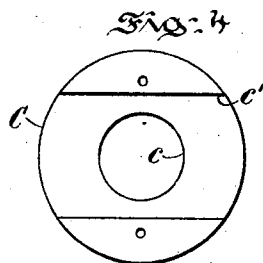
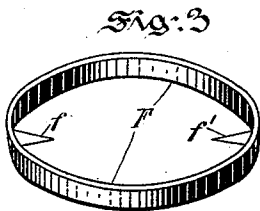
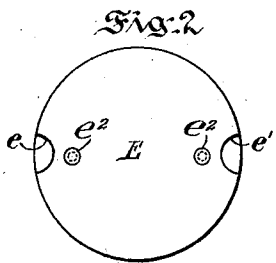
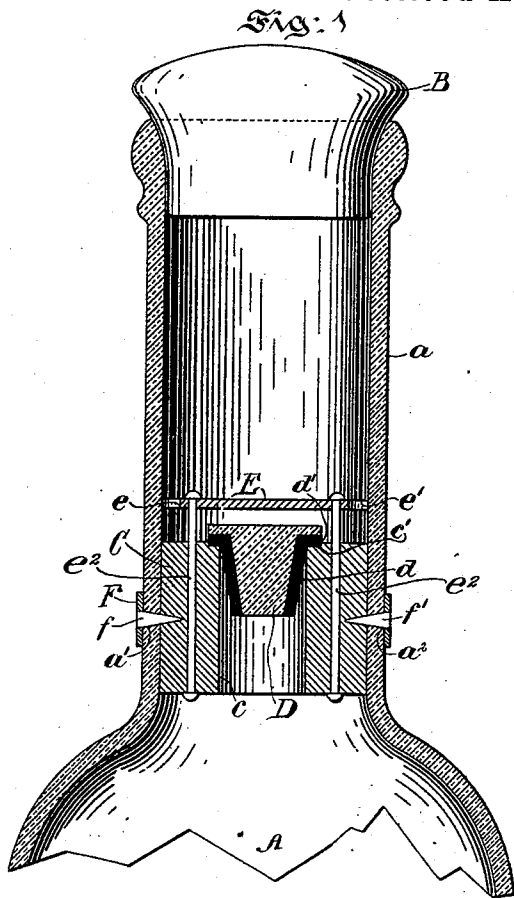


(No Model.)

H. C. F. E. SNOWMAN.
STOPPLE FOR BOTTLES.

No. 518,081.

Patented Apr. 10, 1894.



Witnesses:
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UNITED STATES PATENT OFFICE.

HERMAN C. F. E. SNOWMAN, OF NEW PALTZ, NEW YORK.

STOPPLE FOR BOTTLES.

SPECIFICATION forming part of Letters Patent No. 518,081, dated April 10, 1894.

Application filed February 5, 1894. Serial No. 499,077. (No model.)

To all whom it may concern:

Be it known that I, HERMAN C. F. E. SNOWMAN, a citizen of the United States, residing at New Paltz, in the county of Ulster and State of New York, have invented certain new and useful Improvements in Stopples for Bottles, of which the following is a specification.

My invention has relation in general to bottles; and in such connection to the construction and arrangement of stopples therefor.

The principal objects of my invention are first, to provide a simple, durable, inexpensive and effective stopple for a bottle so arranged as to permit of the contents of the bottle being discharged and to prevent refilling without destroying or mutilating certain parts thereof; second, to provide a bottle with a stopple in the neck thereof and so arranged as that by the tilting of the bottle the contents thereof can be quickly removed but subsequent use of the bottle prevented unless a designation band surrounding the neck and connected therewith is mutilated or destroyed; and third, to provide a bottle with an internal stopple having a movable valve seating with a hollow plug or cork and a designation band embracing the neck of the bottle and engaging the plug or cork and the valve afforded a range of movement to permit of the removal of the contents of the bottle and to prevent the refilling thereof without removing the stopple or mutilating said band.

My invention stated in general terms comprises a bottle provided with a stopple consisting of a hollow plug or cork fitting the neck of the bottle and having a movable valve, a recessed disk and a band fitting said neck and engaging the plug or cork; and my invention further consists of the improvements hereinafter described and claimed.

The nature, objects and scope of my invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof; and in which

Figure 1, is a vertical central section of the neck and upper part of a bottle, showing a stopple of my invention in application thereof. Fig. 2, is a top or plan view of the disk with semi-circular side recesses formed therein and in fitting the neck of the bottle consti-

tuting a vent and exit for the fluid contents of the bottle. Fig. 3, is a perspective view of the designation band adapted to fit the neck of a bottle and with pins adapted to be inserted through the neck into a hollow plug or cork. Fig. 4, is a top or plan view of the hollow plug or cork with a recessed top for the reception and seating of the flanged tapering plug valve therein as illustrated in Fig. 1; and Fig. 5, is a slightly modified form of hollow plug or cork with an annular rim for the reception of the plug valve of the type illustrated in Fig. 1.

Referring to the drawings A, is the bottle in broken section and provided with a neck *a*. B, is a cork of any preferred form fitting the neck of the bottle.

C, is a hollow plug or cork snugly fitting the internal surface of the neck *a*.

D, is a flanged tapering plug valve with a surrounding flexible gasket *d*, of rubber or other suitable material normally fitting the central opening *c*, in the plug or cork C, as illustrated in Fig. 1.

E, is a disk with semicircular recessed sides *e* and *e'*, respectively forming a vent and exit. This disk is preferably located a short distance above the plug or cork C, and connected with the same by means of pins or bars *e²*, as illustrated in Fig. 1, to hold the same to position in the neck of the bottle and to prevent removal thereof save with the cork or plug C. Moreover, this disk E, affords the plug valve D, a slight range of movement in the tilting of the bottle so as to permit of the removal of the contents thereof and in order that when the bottle is again caused to assume a vertical position the plug valve D, may seat in the opening *c*, of the plug or cork C.

The cork or plug C, in the top at *c'*, may be recessed as shown in Figs. 4 and 5, in order that when the bottle A, occupies its normal position, the flanged portion *d'*, of the plug valve D, may seat therewith.

F, is a designation band of metal or other suitable material surrounding the exterior wall of the neck *a*, of the bottle and provided with tacks or pins *f* and *f'*, inserted through the band F, and openings *a'* and *a²*, of the neck and extending into the plug or cork C, so as to maintain the band to required posi-

tion and to prevent removal of the disk E, and plug or cork C, without destroying or mutilating the band F, thus enabling detection of the unauthorized use thereof.

5 In order to remove the contents of the bottle with a stopple as illustrated in Fig. 1, it is only necessary to remove the cork B, and to then tilt the bottle A, so that air may enter through the top of the neck and pass
10 through the openings *e* and *e'*, of the disk E, when by tilting the bottle the gasketed plug valve D, will be liberated from its seat in the hollow plug or cork C, permitting thereby the fluid to flow until the contents of the bottle is
15 entirely removed therefrom. In order to refill the bottle, the band F, must be mutilated or destroyed or the tacks or pins *f* and *f'*, removed from the plug or cork and band, when the disk E, with the plug valve D, connected
20 therewith by means of the pins or bars *e*², can be withdrawn by means of a hook or other convenient device applied to the recesses *e* and *e'*, of the disk E.

The particular advantageous feature of the
25 stopple for a bottle such as described is, that refilling of the same is practically prevented, that is, the substitution of an inferior article for the product of the manufacturer of the original article, because the name and brand of
30 the contents of the bottle can be inscribed or printed on the designation band encircling the neck thereof, and any unauthorized use of the bottle can be readily detected.

35 It will be manifestly obvious that as to minor details modifications may be made without departing from the spirit of my invention; and hence I do not wish to be understood as limiting myself to the precise con-

struction and arrangement hereinbefore explained; but

40 Having thus described the nature and objects of my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A bottle provided with a stopple, a hollow cork with a movable flanged tapering
45 plug, a recessed disk disposed in range thereof and connected therewith and a sealing strip or band encircling the neck of the bottle and provided with means engaging said cork, substantially as and for the purposes set forth. 50

2. A bottle provided with a neck having an internal hollow plug with a movable valve, a recessed disk disposed in range thereof, and a band provided with pins or tacks engaging said plug, substantially as and for the purposes set forth. 55

3. A bottle provided with a stopple having a hollow plug or cork with a recessed face, a flanged gasketed tapering valve seating with said plug or cork, and a recessed disk disposed
60 in range of said valve and connected by means of pins or bars with said cork, substantially as and for the purposes set forth.

4. A bottle provided with a stopple having a plug or cork with a movable valve and a
65 band engaging said neck and provided with means fitting into said plug or cork, substantially as and for the purposes set forth.

In testimony whereof I have hereunto set my signature in the presence of two subscribing witnesses. 70

HERMAN C. F. E. SNOWMAN.

Witnesses:

JAMES MYER,

JACOB D. WURTS.