

(No Model.)

R. B. YERBY.
BOTTLE.

No. 516,006.

Patented Mar. 6, 1894.

Fig: 1.

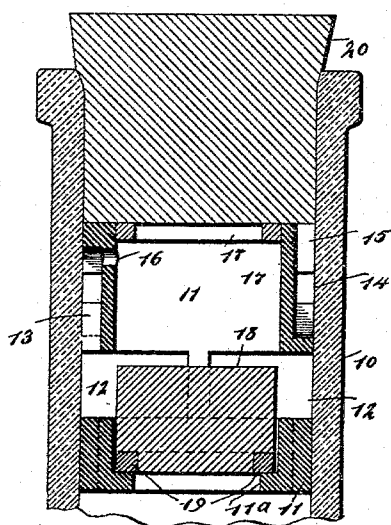


Fig: 2.

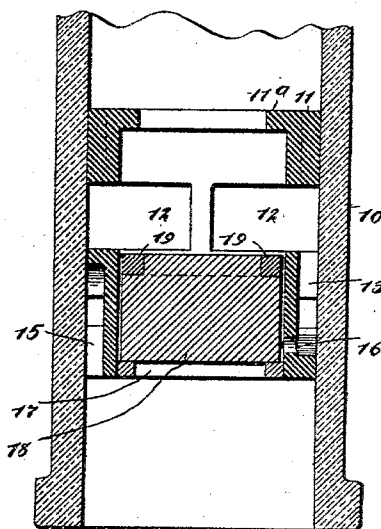


Fig: 3.

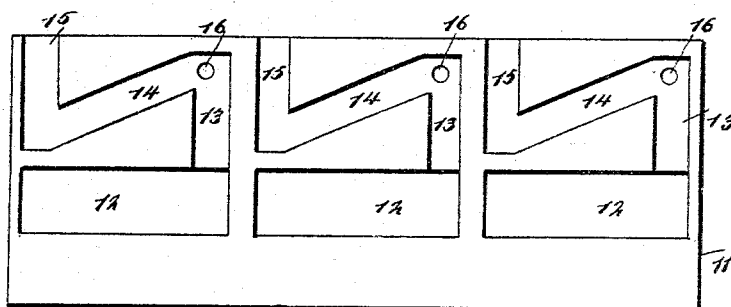
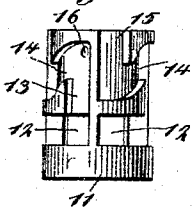


Fig: 4.



WITNESSES:
John A. Rennie
E. Sedgwick

Fig: 6.

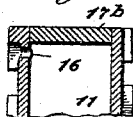
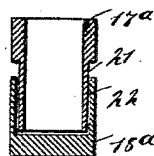


Fig: 5.



INVENTOR
R. B. Yerby
BY *Munn & Co*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

ROSS B. YERBY, OF BROOKLYN, NEW YORK, ASSIGNOR OF TWO-FIFTHS TO
FRANK D. CREAMER, OF SAME PLACE.

BOTTLE.

SPECIFICATION forming part of Letters Patent No. 516,006, dated March 6, 1894.

Application filed March 21, 1893. Serial No. 467,088. (No model.)

To all whom it may concern:

Be it known that I, ROSS B. YERBY, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Bottle, of which the following is a full, clear, and exact description.

It is well known that it is a common practice to refill certain bottles that have contained valuable liquors, with liquor of an inferior grade and sell the same at an enhanced price on account of the trade-mark on the bottle.

The object of my invention is to produce a bottle having its neck constructed in such a manner that the bottle may be easily emptied but cannot be refilled, thus preventing the fraudulent practice referred to.

To this end my invention consists in certain features of construction and combinations of parts, as will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a central horizontal section of a bottle neck provided with my improved attachment. Fig. 2 is a similar but inverted view, showing the position of the valve when an attempt is made to refill the bottle. Fig. 3 is a diagram or development of the bushing in the bottle neck, showing in detail the arrangement of its exit ports. Fig. 4 is a detail side elevation of the bushing which is secured in the bottle neck. Fig. 5 is a central longitudinal section of a modified form of valve for the bottle neck; and Fig. 6 is a detail sectional view showing a modified form of the upper end of the bushing.

The bottle to which my improvements are applied may be of any kind whatever, and the neck 10 has fastened immovably within it a bushing 11 which is cut through at intervals to form the openings 12, these being arranged near the lower end of the bushing, and in the upper part of the bushing and on its exterior side, are sinuous or zigzag exit ports through which the contents of the bottle pass. Each of these ports has a vertical portion 13 leading upward from one of the openings 12 to a point near the top of the bushing where it

merges into the downwardly-inclined portion 14 which, at its lower end, enters another vertical portion 15 leading upward to the top of the bushing. It will be seen then that each zigzag port provides an outlet for the liquid in the bottle and the shape of the port prevents the insertion of an implement to tamper with the valve of the bottle. It will be understood however, that these ports may be varied without materially affecting the principle of the invention.

In the upper portion of the bushing, opposite each zig-zag port, is a transverse hole 16 through which the liquor flows when an attempt is made to refill the bottle and this assists in forcing the valve to its seat, thus preventing such refilling, as will appear clearly from the description to follow: In the lower end of the bushing is an inwardly extending annular flange 11^a which serves as a seat for the valve 18, and at the top of the bushing is a ring 17 which is also arranged within the bushing and serves as a seat for the valve when the bottle is inverted; that is, it prevents the removal of the valve. A plug 17^b, see Fig. 6, may be substituted for the ring and this plug closes tightly the top of the bushing. The valve 18 is shaped to fit the bore of the bushing and is longitudinally movable therein. The valve 18 is limited in its movement by the two seats 11^a and 17, and it has preferably around its lower edge a cork packing 19 which is adapted to close snugly against the seat 11^a. The bushing 11 does not extend quite to the top of the bottle neck and space is left for the insertion of an ordinary stopple 20. The bottle is filled before the valve 18 and ring 17 or 17^a or plug 17^b are in position, after which the valve is inserted in the bushing and the ring or plug secured immovably in place. When the bottle is to be emptied, the cork 20 is removed and the liquor poured out in the usual way. As the liquor runs into the neck, it moves the valve 18 to the outer end of the bushing and the liquor passes through the openings 12 and out through the zigzag ports 13, 14, 15, and from thence through outer end of the bottle neck. If an attempt is made to refill the bottle by pouring liquor into the bottle neck, the valve 18 immediately drops to its seat 11^a, thus effectually closing

the neck and preventing any liquor from passing into the bottle. If an attempt is made to pump liquor into the bottle with the zigzag ports, the liquor will press the valve 18 against the seat 11^a and a portion of the liquor will pass through the holes 16 so as to strike the outer end of the valve, and thus make sure that it is pressed against the seat 11^a.

In Fig. 5 instead of the solid valve 18 I show a valve 18^a made in two sections movable relatively one to the other. The valve proper 18^a has a tubular extension 22 into which the reduced portion 21 of the tubular open ended section 17^a loosely fits; the idea being to prevent the valve proper 18^a from tilting into an oblique position and leaving its seat when the bottle is inclined or held horizontally in an attempt to refill it. The valve proper 18^a confines the air in the bottle and prevents the entrance of the outer air and hence the liquid cannot enter.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination with the bottle neck of an internal bushing or valve casing therein open at both ends to permit the filling of the bottle therethrough and provided between its open ends with a valve chamber, a valve movable longitudinally in said chamber to prevent refilling and outlet passages in the valve casing leading from the valve chamber above its lower seat outwardly to permit the contents of the bottle to be poured out, substantially as set forth.

2. The combination, with the bottle neck, of a tubular open ended bushing fixed in the bottle neck and provided with seats at its opposite ends, sinuous ports leading from the interior of the bushing above the inner valve seat and running along the exterior of the bushing to its upper end, and a longitudinally movable valve held in the bushing between its seats, substantially as described.

3. The combination, with the bottle neck and the tubular open ended bushing therein,

of seats in the opposite ends of the bushing, a valve held to move longitudinally between the seats, sinuous ports leading from the interior of the bushing along its outer wall and to its upper end, and transverse holes leading from said ports to the interior of the bushing, substantially as described.

4. The combination, with the bottle neck, of a tubular open ended bushing held therein and provided with seats at its opposite ends, a valve held to move longitudinally between the seats, side openings in the bushing, zigzag ports leading from said openings along the exterior wall of the bushing to its upper end, and passages leading from said ports to the interior of the bushing, substantially as described.

5. A bushing or valve casing for bottles open at both ends to permit the filling of the bottle therethrough and provided with ports leading outward through its side and having passages leading from said ports along its exterior, substantially as set forth.

6. A bushing or valve casing for bottles, open at both ends to permit the filling of the bottle therethrough, an annular valve seat within the lower end of the casing, lateral openings thereabove tortuous passages leading along the exterior of the bushing from said openings, and a plug for closing the outer end of the bushing, substantially as set forth.

7. The combination with the bottle neck of an internal bushing or valve casing therein open at both ends to permit the filling of the bottle therethrough and provided between its open ends with a valve chamber, a sectional valve movable longitudinally in the said chamber to prevent refilling and outlet passages leading from the valve chamber outwardly to permit the contents of the bottle to be poured, substantially as set forth.

ROSS B. YERBY.

Witnesses:

E. M. CLARK,

F. W. HANAFORD.