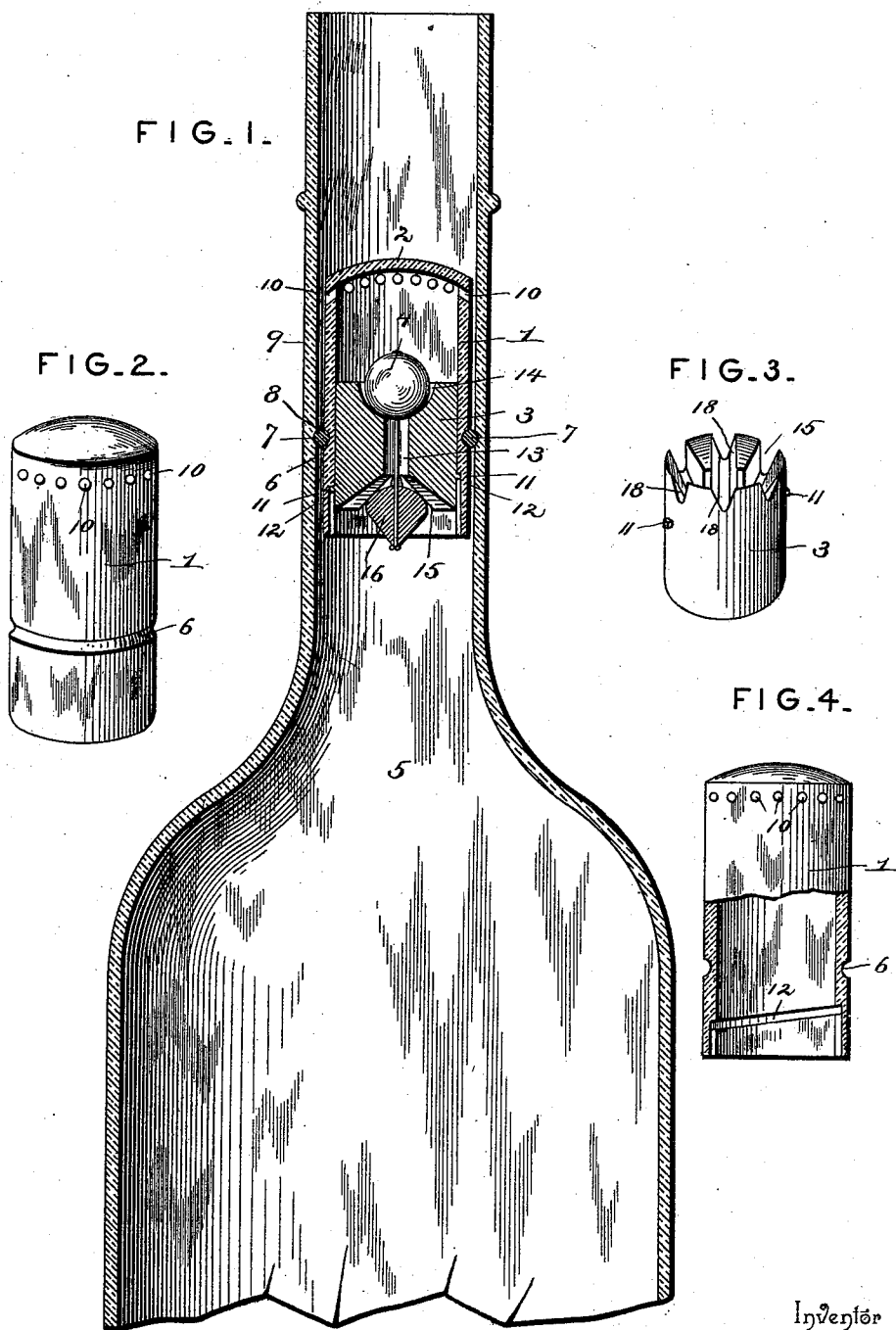


(No Model.)

H. A. BIERLEY.
BOTTLE.

No. 523,956.

Patented July 31, 1894.



Inventor

Henry A. Bierley.

Witnesses

Harry L. Amer.
N. H. Pihay

By his Attorneys.

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

HENRY A. BIERLEY, OF LEXINGTON, KENTUCKY.

BOTTLE.

SPECIFICATION forming part of Letters Patent No. 523,956, dated July 31, 1894.

Application filed August 31, 1893. Serial No. 484,616. (No model.)

To all whom it may concern:

Be it known that I, HENRY A. BIERLEY, a citizen of the United States, residing at Lexington, in the county of Fayette and State of Kentucky, have invented a new and useful Bottle, of which the following is a specification.

The invention relates to improvements in bottles.

10 The object of the present invention is to improve the construction of bottles, and to provide one adapted for holding fine whis-
kies, and other valuable liquids, and capable of absolutely preventing refilling to avoid any
15 liability of an imitation being sold in original bottles.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated
20 in the accompanying drawings and pointed out in the claims hereto appended.

In the drawings—Figure 1 is a longitudinal sectional view of an upper portion of a bottle constructed in accordance with this inven-
25 tion. Fig. 2 is a detail perspective view of the cap. Fig. 3 is a similar view of the valve support. Fig. 4 is a detail view, partly in section, of the cap.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a cylindrical cap, having an open bottom or lower end and a closed top 2, and receiving within it a valve support 3, which holds a weighted ball valve 4, adapted
35 to open automatically when a bottle 5 is tilted below a horizontal position for pouring out its contents. The cap is provided intermediate of its ends with an annular groove 6 receiving an elastic ring 7 of cork, rubber, or similar material, which projects from the cap, and engages a corresponding annular groove
40 8 of the neck 9 of the bottle 5, whereby the cap is securely held in the bottle, and is prevented from being withdrawn. The upper end of the cap is provided with an annular series of discharge openings 10, which incline inward and upward to prevent the introduction of a wire, or the like, into the cap for
50 the purpose of withdrawing the same or interfering with the operation of the valve.

The valve support 3 consists of a cylindri-

cal plug provided at opposite sides with lugs 11 to engage opposite grooves 12 of the cap, which grooves are located on the inner face 55 of the same and have a screw pitch; the valve support is provided with a vertical bore or opening 13, which terminates at the top in a substantially semispherical concavity or valve seat 14, and which has its lower terminus 60 flared at 15 to form a downwardly inclined mouth for a conical weight 16. The conical weight 16 is inverted and is provided with a rounded base, which is connected by a silk thread with the ball valve, and is adapted to
65 draw on the thread and hold the ball valve in its seat until the bottle is inverted below a horizontal position to prevent any attempt at re-filling the bottle. The lower end of the valve support is provided with a series of 70 openings or notches 18, which communicate with the longitudinal opening or bore to provide passages for the discharge of the contents of the bottle when the latter is inverted, and the weight is supported by the plug or 75 support 3.

It will be readily seen that the bottle is simple and comparatively inexpensive in construction and is capable of absolutely preventing refilling. 80

The parts are constructed of any suitable material, preferably glass, which will not affect the contents of a bottle.

Changes in the form, proportion and the minor details of construction may be resorted 85 to without departing from the principle or sacrificing any of the advantages of this invention.

What I claim is—

1. The combination with the neck of a bottle, of a cylindrical cap having a closed top and provided at its sides below the top with upwardly and inwardly inclined discharge openings, and a valve seat arranged within the lower end of the cap and closing the same 95 and interlocked therewith and provided with a valve, substantially as described.

2. The combination with the neck of a bottle, of a cylindrical cap having a closed top and provided at its sides below the top with 100 upwardly and inwardly inclined discharge openings, a valve support arranged within the lower end of the cap and closing the same and interlocked therewith and provided at its

upper end with an approximately semispherical valve seat and having a vertical opening and provided at its lower end with a flaring mouth presenting a downwardly inclined
5 face, said support being provided at its lower end with notches 18 communicating with the vertical opening, a valve arranged on the valve seat, a weight located below the valve support, and a silk thread suspending the
10 weight from the valve, substantially as describe.

3. The combination with the neck of a bottle provided with an annular groove, of a cap arranged within the neck of the bottle and
15 provided with a corresponding annular groove and having upwardly and inwardly inclined discharge openings, an elastic ring arranged

within the groove of the cap and engaging that of the neck of the bottle, a valve support secured within the cap and having a longitudinal opening and provided at its top with
20 a valve seat and having at its bottom a flaring mouth forming inclined sides and provided with recesses forming passages, a valve arranged in the valve seat, and a weight arranged below the valve support and connected
25 with the valve, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

HENRY A. BIERLEY.

Witnesses:

E. G. SIGGERS,
ARTHUR B. SEIBOLD.