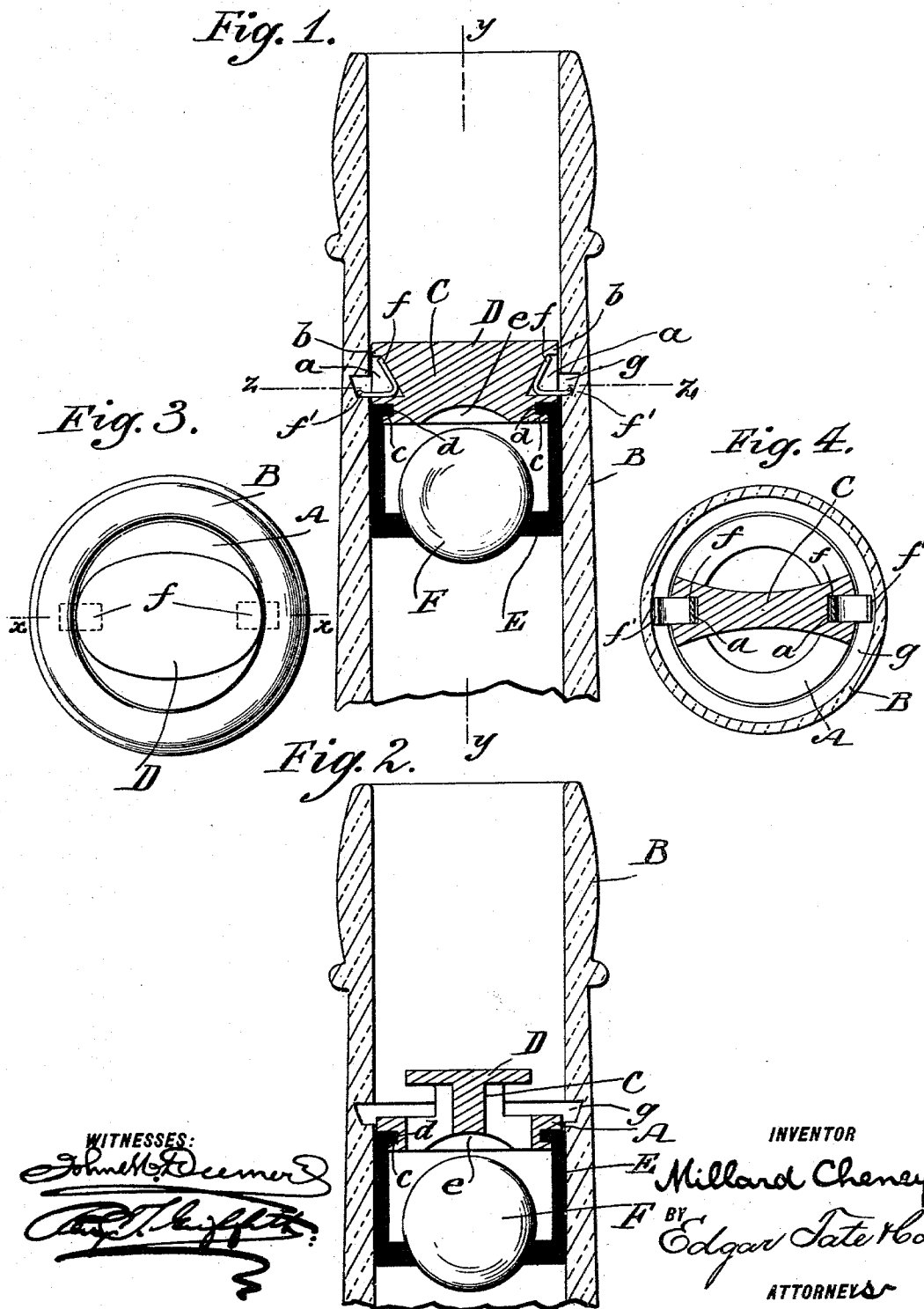


M. CHENEY.
ATTACHMENT FOR BOTTLES.

Patented Aug. 27, 1895.



UNITED STATES PATENT OFFICE.

MILLARD CHENEY, OF FLINT STONE, MARYLAND.

ATTACHMENT FOR BOTTLES.

SPECIFICATION forming part of Letters Patent No. 545,346, dated August 27, 1895.

Application filed September 15, 1894. Serial No. 523,066. (No model.)

To all whom it may concern:

Be it known that I, MILLARD CHENEY, a citizen of the United States, and a resident of Flint Stone, county of Allegany, and State of Maryland, hath invented certain new and useful Improvements in Attachments for Bottles, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts in all the figures.

This invention relates to means for preventing the refilling of bottles after they have been emptied, and has for its object to provide a simple, cheap, readily constructed, and perfectly-operating attachment, which may be inserted in the bottle after the same has been filled, which will not restrict the delivery of the liquid and will render it practically impossible to refill the bottle after the same is emptied or to adulterate its contents by removing a portion of the liquid and substituting an inferior quality.

The invention consists in the novel construction and arrangement of parts hereinafter fully described.

In the accompanying drawings, Figure 1 is a central vertical section of the neck of a bottle having my attachment inserted therein. the same being taken upon the line *xx*, Fig. 3. Fig. 2 is a central vertical section taken upon the line *yy*, Fig. 1. Fig. 3 is a plan view of the bottle with the attachment therein. Fig. 4 is a cross-section taken upon the line *zz*, Fig. 1.

In the practice of my invention I construct a ring A, preferably of metal, but which may be manufactured of glass or any other material, if desired, the said ring being of sufficient size to fit snugly within the neck B of the bottle. Projecting across the said ring is a strip C, concaved or cut out at either side and having upon the top thereof an elliptical or similarly-shaped plate D. In each end of the strip C are formed recesses *a*, tapering downwardly and inwardly, the plate D above the said recesses forming shoulders *b*. The ring A, the strip C, and the plate D are all formed in one piece, preferably by casting.

Depending from the ring A is a cylindrical box E, of rubber or like material, having at the top thereof an inwardly-ranging annular

flange *c*, which engages in a peripheral groove *d*, formed in the said ring A. The base of the box E is open at the center to form a seat for a ball-valve F, which is located within the said box and of such size as to project almost to the under side of the ring A, which said ring has a concavity *e* formed in the center thereof to receive the ball F therein when the same is raised and prevent lateral movement thereof.

The device is secured in the bottle-neck B by means of angular springs *f*, substantially V-shaped, which said springs are inserted in the recesses *a* in the strip C, the outer ends *f'* thereof being forced inwardly when the device is inserted in the bottle-neck until the same reaches the proper position below the top of the said neck, when the ends *f'* expand and spring into a flat or square annular groove or recess *g*, which I form in the bottle-neck B, the edges of which groove, in conjunction with the springs *f*, prevent the withdrawal of the device from the bottle. By this annular form of groove the insertion of the device into the bottle is facilitated, as the springs will engage with the said groove immediately upon reaching its position without the manipulation which would be necessary if single notches were employed.

The operation of the device will be readily understood from the foregoing description, taken in connection with the accompanying drawings. The bottle having been filled and the ring A with its appendages been inserted in the bottle-neck, so that the springs *f* enter the groove *g*, the box E will engage with the interior of the bottle-neck and fit tightly against the same to prevent any leakage of the contents of the bottle, and the ball F, fitting in the base thereof, the bottle is closed, and usually a cork or other stopper is inserted in the top thereof above the plate D, on which it rests. When it is desired to empty the bottle or partially remove the contents thereof, the same is tilted or held at an angle as ordinarily, the movement dislodging the ball F, which then rests in the concavity *e*, whereupon the contents flow through the base of the box E, through the ring A, and at either side of the plate D, out of the bottle. When the bottle is returned to the perpendicular position, the ball F falls back into place within

the base of the box E, whereupon the bottle is again closed, and however great the force used in attempting to pour or pump liquid thereinto the valve will remain closed. Not
5 only is withdrawal of the device from the bottle rendered impossible by the springs f, but furthermore any attempts at manipulation of the valve are prevented by the plate D.

The advantages resultant from the use of
10 my invention will be manifest to all who are conversant with the general class of devices to which the invention appertains. I do not confine myself to the exact formation of parts and details herein set forth and illustrated.

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

The combination, with a bottle having an annular recess in its neck, of a stopper, or de-
20 vice for preventing the refilling thereof, consisting of a body portion having a ring adapted to fit within the neck of the bottle, a strip cut out on its sides and extending across said ring and having a top piece elliptical in form,
25 each end of said strip being provided with re-

cesses substantially triangular in form, with the base downward, triangular plate springs in each of said recesses, one end of which is adapted to enter the annular recess in the neck of the bottle, a circular box, the top of
30 which is open and provided with an inwardly extending annular flange adapted to enter an annular groove formed in the body portion, said box being adapted to closely fit within the neck of the bottle and the lower side
35 thereof being apertured to form a valve seat, and a ball valve in said box adapted to be seated thereon, the under surface of the body being provided with a concavity to receive the ball valve when the bottle is tilted and
40 retain the same in alignment with its seat, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 12th day of Sep-
45 tember, 1894.

MILLARD CHENEY.

Witnesses:

PERRY WARFIELD,
JNO. R. SMOUSE.