No. 774,830.

PATENTED NOV. 15, 1904.

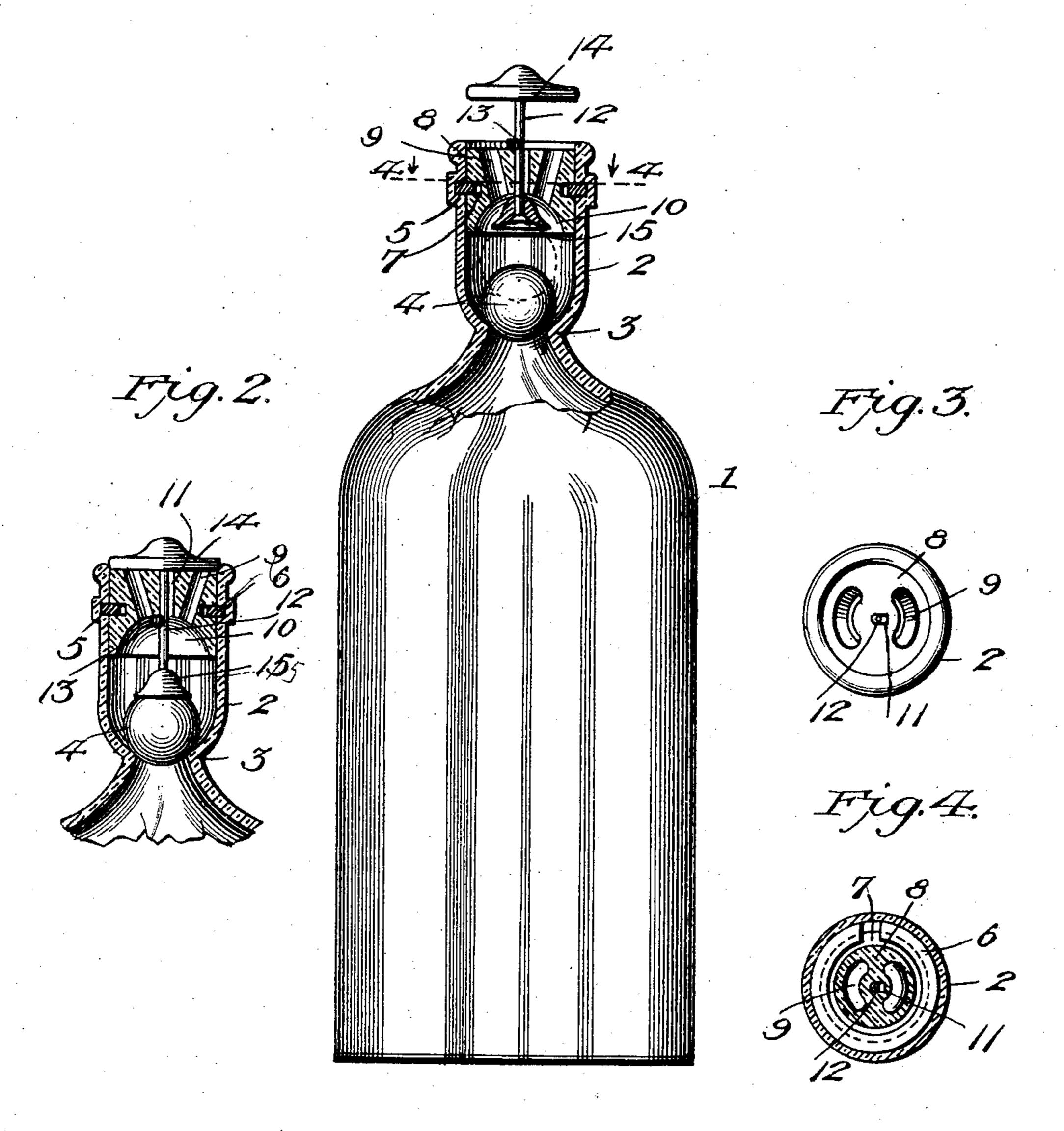
C. COLEMAN.

NON-REFILLABLE BOTTLE.

APPLICATION FILED FEB. 25, 1904.

NO MODEL.

Fig. 7.



Witnesso.

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United States Patent Office.

CHARLES COLEMAN, OF INDEX, WASHINGTON, ASSIGNOR OF ONE-HALF TO DANIEL M. PORTER, OF EVERETT, WASHINGTON.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 774,830, dated November 15, 1904.

Application filed February 25, 1904. Serial No. 195,241. (No model.)

To all whom it may concern:

Be it known that I, Charles Coleman, a citizen of the United States, residing at Index, in the county of Snohomish and State of Washington, have invented new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

My invention relates to new and useful improvements in non-refillable bottles; and its object is to provide a device of this character which is of simple construction and which is provided with means whereby the contents of the bottle may be sealed without the necessity of employing a cork or similar stopper.

With the above and other objects in view the invention consists of a bottle having a closure which is permanently secured in the neck thereof, and this closure has converging passages extending therethrough. A stem is slidably mounted within the closure and has a cup at its inner end and a button at the other end thereof, and this cup is adapted to be pressed inward against a ball-valve and hold the same upon its seat. Means are provided for securing the stem and cup in their inner positions.

The invention also consists of the novel construction and arrangement of parts, which will be more fully hereinafter described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of a bottle, the neck and closure thereof being shown in section. Fig. 2 is a section through the neck and closure of a bottle and showing the valve locked upon its seat. Fig. 3 is a plan view of the neck and closure with the button removed; and Fig. 4 is a section on line 4 4, Fig. 1.

Referring to the figures by numerals of reference, 1 is a bottle, the neck 2 of which is contracted adjacent its inner end to form a seat 3
for a ball 4. An annular groove 5 is formed
in the inner face of the bottle-neck near its
other end and is adapted to receive an expansible ring 6, which is fitted within an annular
groove 7, formed within a closure 8. This
closure is arranged within the bottle-neck and

has converging passages 9, which open into a recess 10, formed in the inner end of the closure. A passage 11 extends through the center of the closure, and a stem 12 is slidably mounted therein. This stem has a lug 13 extending laterally from it and adapted to swing into position over either the outer or inner end of the closure and prevent longitutional movement of the stem. By rotating the stem, however, the lug can be caused to register with passage 11 and to slide therethrough. A button 14 is secured to the outer end of the stem, and to the inner end thereof 60 is secured a cup 15.

After the bottle 1 has been filled the ball 4 is placed on the seat 3 and closure 8 is then inserted into the neck until the expansible ring 6 springs into engagement with groove 65 5. The bottle is then sealed by rotating the stem 12, so as to permit lug 13 to slide through passage 11. Stem 12 is then pressed inward with the cup 15 bearing against the ball 4, and the stem is again rotated so as to bring the lug 70 13 into engagement with the inner end of the closure. I have shown these positions of the parts in Fig. 2. It will be seen that the ball will be held tightly upon its seat and the contents of the bottle cannot be removed until 75 the ball is released. This can be done by rotating stem 12 by means of button 14 and sliding lug 13 outward through passage 11. The liquid can then flow through the passages 9 in the closure 8. When any attempt is 80 made to refill the bottle, the ball 4 will seat itself by gravity upon its seat and prevent

It will be seen that this bottle is very simple in construction, and by using the form of 85 closure described it becomes unnecessary to utilize any particular form of stopper in addition to the valve mechanism.

the refilling of the device.

In the foregoing description I have shown the preferred form of my invention; but I do 90 not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing any of the advantages thereof, and I therefore reserve the right to make such changes and alterations as fairly fall within the scope of my invention.

Having thus fully described the invention,

5 what is claimed as new is—

1. The combination with a bottle having a valve-seat within the neck thereof, and a valve normally upon the seat; of a closure permanently secured within the neck and having a passage therethrough, a stem slidably mounted within the closure and adapted to contact with the valve upon the seat, and means for locking the stem in holding position.

2. The combination with a bottle having a valve-seat in the neck thereof, and a valve normally upon the seat; of a closure permanently secured within the neck and having a passage therethrough, a stem slidably mounted within the closure, a cup at one end there-

of adapted to contact with the valve and hold 20 it upon its seat, and a lug integral with the stem for engaging the closure and locking the stem.

3. The combination with a bottle having a valve-seat in the neck thereof, and a valve 25 normally upon the seat; of a closure permanently secured within the neck and having converging passages therein, a stem slidably mounted within the closure, a cup at one end thereof, and a lug extending from the stem 3° and adapted to lock it in adjusted position.

In testimony whereof I affix my signature in

presence of two witnesses.

CHARLES COLEMAN.

Witnesses:

FRED J. WARE, A. H. SCHINDLER.