

No. 757,391.

PATENTED APR. 12, 1904.

W. A. COKE.
NON-REFILLABLE BOTTLE.
APPLICATION FILED AUG. 7, 1903.

NO MODEL.

Fig. 1.

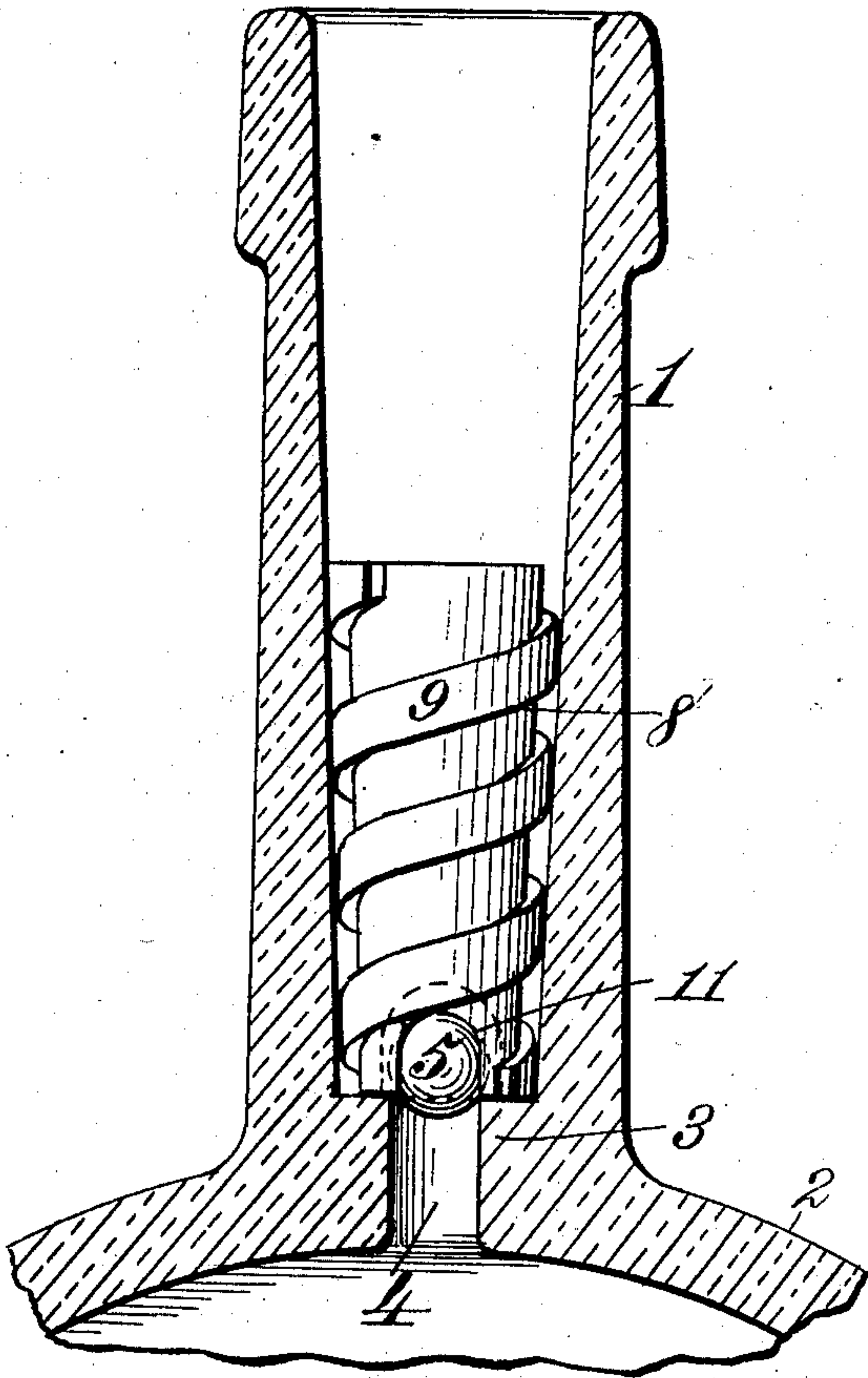


Fig. 2.

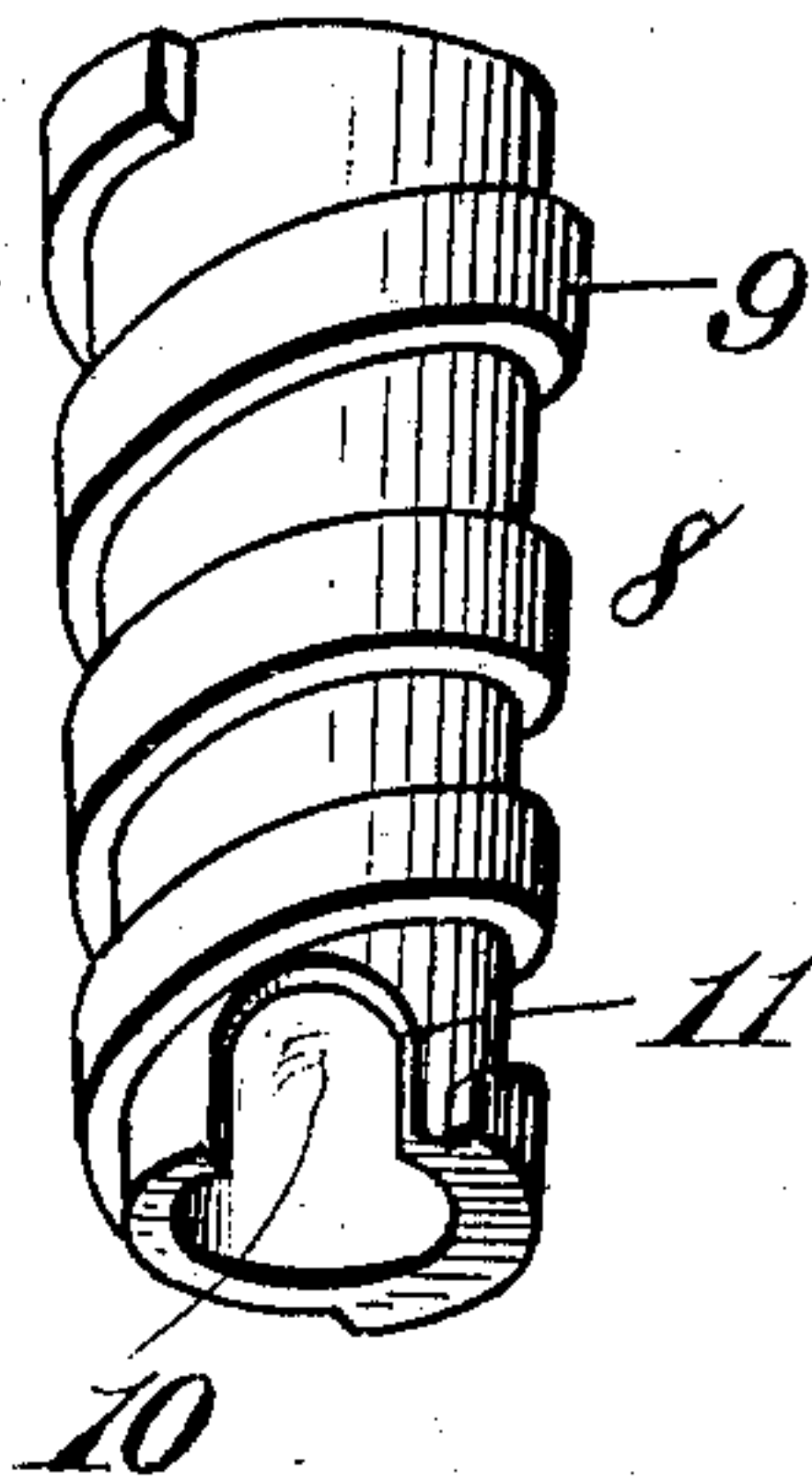


Fig. 3.
7-5

Witnesses:
Robert Ervatt.
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Inventor:
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By *James L. Norris*
Att'y.

UNITED STATES PATENT OFFICE.

WILBUR A. COKE, OF NORFOLK, VIRGINIA, ASSIGNOR OF ONE-HALF TO
CHARLES M. BARNETT, OF NORFOLK, VIRGINIA.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 757,391, dated April 12, 1904.

Application filed August 7, 1903. Serial No. 168,674. (No model.)

To all whom it may concern:

Be it known that I, WILBUR A. COKE, a citizen of the United States, residing at Norfolk, in the county of Norfolk and State of Virginia, have invented new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

This invention relates to non-refillable bottles.

The object of the invention is while permitting free escape of the liquid contained within the bottle positively to preclude refilling of the same, thereby preventing the perpetration of fraud by filling the bottle with a spurious liquor and foist it upon the public as being of the same brand as that originally contained by the bottle or package.

With these and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and combination of parts of a non-refillable bottle, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like characters of reference indicate corresponding parts, there is illustrated one form of embodiment of the invention capable of carrying the same into practical operation, it being understood that the elements therein exhibited may be varied or changed as to shape, proportion, and exact manner of assemblage without departing from the spirit thereof, and in these drawings—

Figure 1 is a view in elevation, partly in section, showing the plug and valve seated within the neck of a bottle. Fig. 2 is a perspective detail view of the plug. Fig. 3 is a sectional detail view of a modified form of valve that may be employed, if found necessary or desirable.

Referring to the drawings, 1 designates the neck of an ordinary bottle, which for a purpose that will presently be described has its bore tapered throughout the greater portion of its length and terminates adjacent to the shoulder 2 in a stop 3, provided with a central duct 4, in the upper end of which the valve 5 rests when the bottle occupies an up-

right position. The valve 5 may be of any suitable material, such as an ordinary marble, or it may be a rubber sphere, or, as shown in Fig. 3, the center 6 of the valve may be of a solid non-yielding material inclosed by an elastic sheathing or covering 7, of rubber or any other material constituted to the purpose. The salient feature of the present invention resides in the plug 8, (shown in detail in Fig. 3,) the same being tapered to fit the bore of the neck and is held therein in any suitable manner, as, by means of cement or glue, the lower end of the plug when positioned within the bore of the neck resting upon the stop 3, as clearly shown in Fig. 1. The reason for making the bore of the neck and the plug on a taper is to insure a tight union between the parts when assembled, thus to prevent removal of the plug for illicit purposes. The exterior of the plug is provided with a spiral thread 9, the groove between which forms an escape-duct to permit passage of the liquid from the body outward through the neck. The lower portion of the plug is provided with a chamber 10, which is of such depth that when the bottle is inverted for the purpose of pouring out the contained liquid the valve will be entirely housed within the chamber, and thus permit the liquid to pass from the duct 4 around the grooves of the plug and thence outward. One side of the lower end of the plug is provided with a recess 11, the object of which is to permit free egress of the liquid.

So long as the bottle remains in an upright position or is even slightly tilted escape of liquid is positively prevented; but as soon as the bottle is practically inverted the liquid will pass from the duct 4 around the groove of the plug and thence outward. If an attempt be made to refill the bottle after having been emptied, the valve 5 will positively preclude this, as it will always rest upon the seat formed in the upper end of the duct, and thus not only seal the bottle from entrance of liquor from without, but also from the escape of air from within, so that liquid could not be supplied to the bottle.

While the device of this invention is exceedingly simple in construction, it will be

found thoroughly efficient in use and will in a positive manner perform the functions designed.

Having thus described the invention, what I claim is—

1. A bottle having a neck, a stop in the neck, and a duct connecting the interior of the neck and the body of the bottle, combined with a plug permanently secured in said neck and fitting against said stop, the plug being externally threaded, having a chamber in its lower side and a recess affording communication between said chamber and the lower end of the groove between the threads of the plug, and a valve adapted, when the bottle is in an upright position, to be seated against the upper end of said duct, and when said bottle is tilted or inverted, to enter said chamber.

2. A bottle having a neck, an annular stop in the neck, and a duct connecting the interior

of the neck with the body of the bottle, combined with a tapered plug permanently secured in said neck, the latter being also tapered interiorly, said plug fitting against said annular stop, being externally threaded, having a chamber in its lower side, and an aperture affording communication between said chamber and the lower end of the groove between the threads of the plug, and a spherical valve adapted normally to be seated against the upper end of said duct and to roll in said chamber when the bottle is tilted or inverted.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WILBUR A. COKE.

Witnesses:

CHAS. M. BARNETT,
JNO. W. STEVENS.