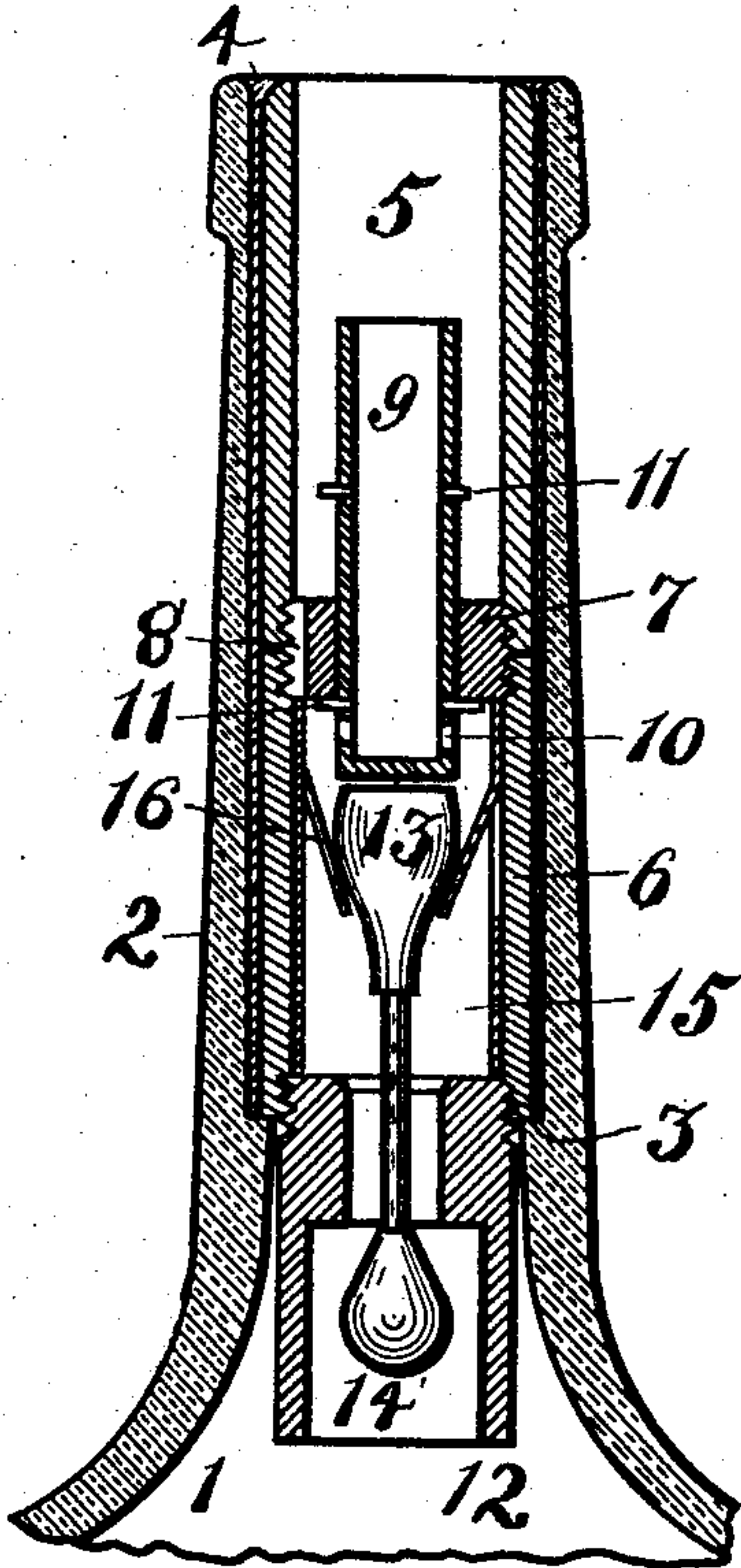


No. 774,989.

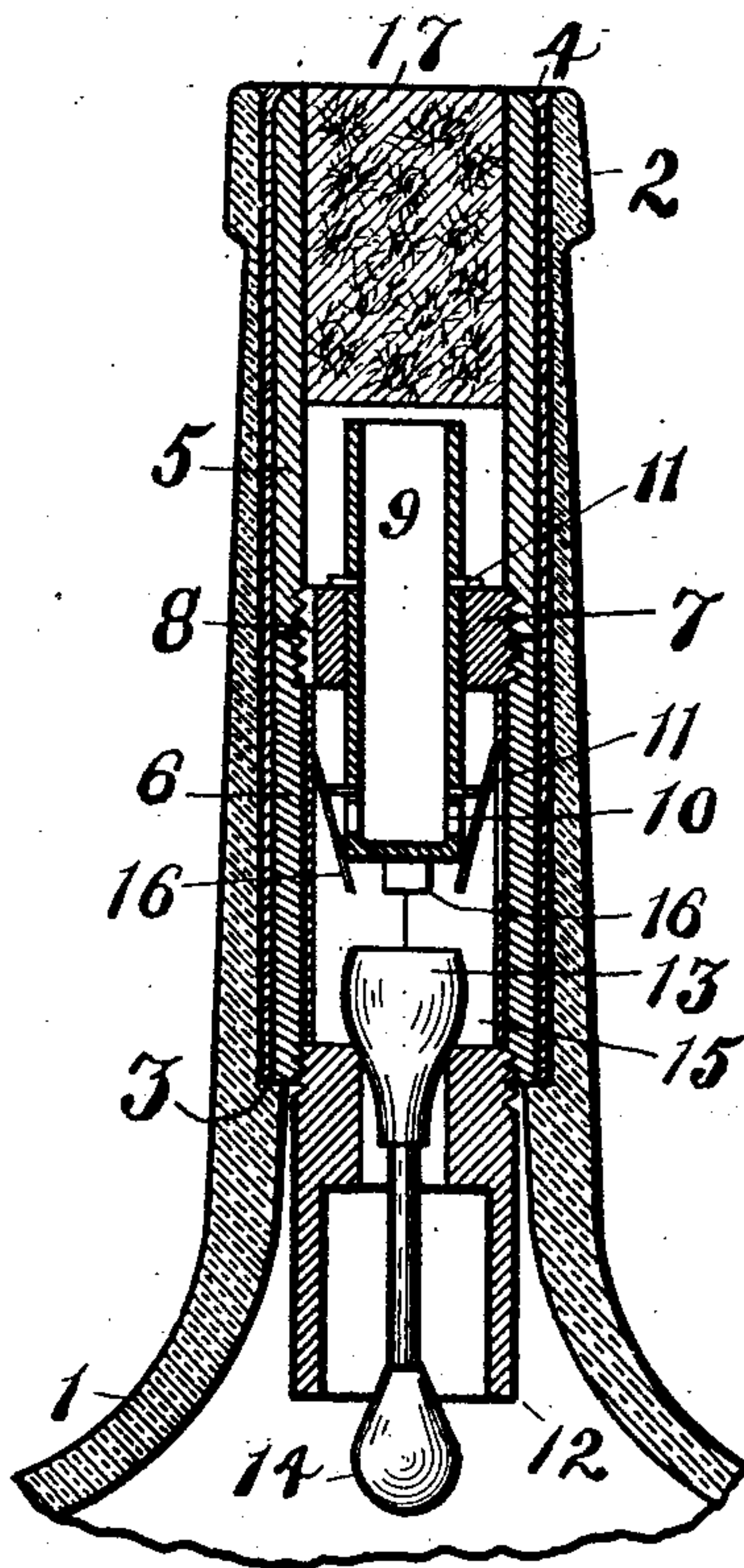
PATENTED NOV. 15, 1904.

J. S. MILLER.  
NON-REFILLABLE BOTTLE.  
APPLICATION FILED JULY 27, 1904.

NO MODEL.



*Fig. 1.*



*Fig. 2.*

Witnesses:  
A. E. King  
W. S. Wood

Inventor:  
J. S. Miller,  
by C. E. Humphrey  
Atty.



# UNITED STATES PATENT OFFICE.

JOHN S. MILLER, OF AKRON, OHIO.

## NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 774,989, dated November 15, 1904.

Application filed July 27, 1904. Serial No. 218,383. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN S. MILLER, a citizen of the United States, residing at Akron, in the county of Summit and State of Ohio, have invented a certain new and useful Improvement in Non-Refillable Bottles, of which the following is a complete specification.

This invention relates to improvements in non-refillable bottles.

The object of this invention is to provide mechanism for use in connection with a bottle or equivalent device which will permit a ready initial filling thereof and the subsequent emptying of the contents, either at one operation or in small quantities, at desired intervals and which will absolutely prevent a second refilling of said bottle.

To the accomplishment of the aforesaid object this invention consists in the new and peculiar construction, arrangement, and combination of parts hereinafter described, reference being had to the accompanying drawings.

In the accompanying drawings, in which similar reference-numerals indicate like parts in the different figures, Figure 1 is a vertical central section of this invention, showing the bottle and device ready for filling; and Fig. 2, a similar view with the mechanism in position to prevent refilling.

In the drawings, 1 represents the upper portion of a bottle used for dispensing liquors provided with a relatively long narrow neck 2 of the form customarily given to bottles for retailing whisky. The interior of the larger portion of the neck is vertically cylindrical and has an inset shoulder 3 near its junction with the body of the bottle 1. Within this neck 2 and resting on the shoulder 3 is placed the mechanism to prevent refilling, and it is held securely against removal by a layer 4 of cement. This mechanism in the cylindrical portion of the neck 2 consists of two tubes 5 and 6, the adjacent ends of which are threaded, and thus are fastened to an interposed nipple 7. The upper end of the tube 5 is flush with the top of the bottle-neck 2, and the lower end of the tube 6 rests on the shoulder 3 when the tubes are properly united around the nipple 7. Through the threads on the nipple 7 are cut a number of vents or grooves

8 for a purpose to be stated. Centrally within the nipple 7 is a vertical tube 9, open at the top and closed at the bottom, but having side ports 10. This tube 9 is slidable in the nipple; but its fit therein is such as to retain it in a desired position unless a slight force is exerted to move it. The vertical movement of the tube 9 is limited by the abutments 11.

In the lower end of the tube 6 is screwed a hollow valve-seat 12, in which is a gravity-valve 13, to the lower end of the stem of which is fastened a weight 14, having an upwardly-pointed conical exterior.

Within the tube 6 and held between the nipple 7 and valve-seat 12 is a split cylinder 15, of spring sheet metal. Cut along three sides and integral at one end with the tube 15 are spring-fingers 16, which are bent inwardly toward the center of the tube 6 to such an extent as to lie in the path of the valve 13.

In giving the initial filling to the bottle the tube 6 is unscrewed from the nipple 7 and the valve 13 dropped into the position shown in Fig. 1 by dropping onto the spring-fingers 16, the weight 14 having been previously removed, if necessary. The weight 14 is then replaced and the tube 6 screwed onto the nipple 7 and the tube 9 drawn up to its highest point, as shown in Fig. 1. The entire mechanism is then placed in and cemented to the neck of the bottle. Liquor is then poured into the top of the tube 9 by means of a piece of hose or a funnel, and it finds its way out through the ports 10 and valve-seat 12 to the interior of the bottle, the air displaced meanwhile passing out through the vents 8 in the nipple 7 until the bottle is full. The operator then withdraws the hose or funnel and presses down the tube 9 either with his finger or with a suitable tool, which forces the valve 13 past the grasp of the spring-fingers 16 and allows it to seal the opening in the valve-seat 12. A return movement of the valve is prevented by the spring-fingers 16. A cork 17 is then placed in the top of the tube 5, and any suitable capsule can then be placed over the top of the bottle and it is ready for the market.

It will be obvious that any desired quantity of liquor may be emptied from the bottle by

inverting it; but when once emptied the valve 12 will prevent a refilling, for the reason that even if laid on its side the conical sides of the weight 14 will cling to the lower edge of the valve-seat opening until the bottle is inverted to such an extent as to render impossible the flow of fluid into the interior.

What I claim is—

1. The combination with a bottle of a casing to be inserted in the neck thereof, a valve and seat therefor in said casing, means to temporarily hold said valve from said seat, a filling-tube slidably mounted in said casing arranged when pressed down to release said valve and permit it to rest on said seat.

2. The combination with a bottle, of a two-part casing to be inserted in the neck thereof, a nipple to unite the parts of said casing, a filling-tube slidably mounted in said nipple, spring-fingers in said casing, a valve arranged

temporarily on said fingers and a valve-seat designed to receive said valve when forced from said fingers by the movement of said filling-tube.

3. In a device of the class described, the combination of a separable casing, a nipple provided with vents to unite the parts of said casing, a valve and valve-seat in said casing, spring-fingers arranged to temporarily hold said valve from its seat, a filling-tube slidable in said nipple capable of forcing said valve from the grasp of said fingers and allow it to rest on said seat.

In testimony that I claim the above I hereunto set my hand in the presence of two subscribing witnesses.

JOHN S. MILLER.

In presence of—

C. E. HUMPHREY,  
W. G. GOOD.