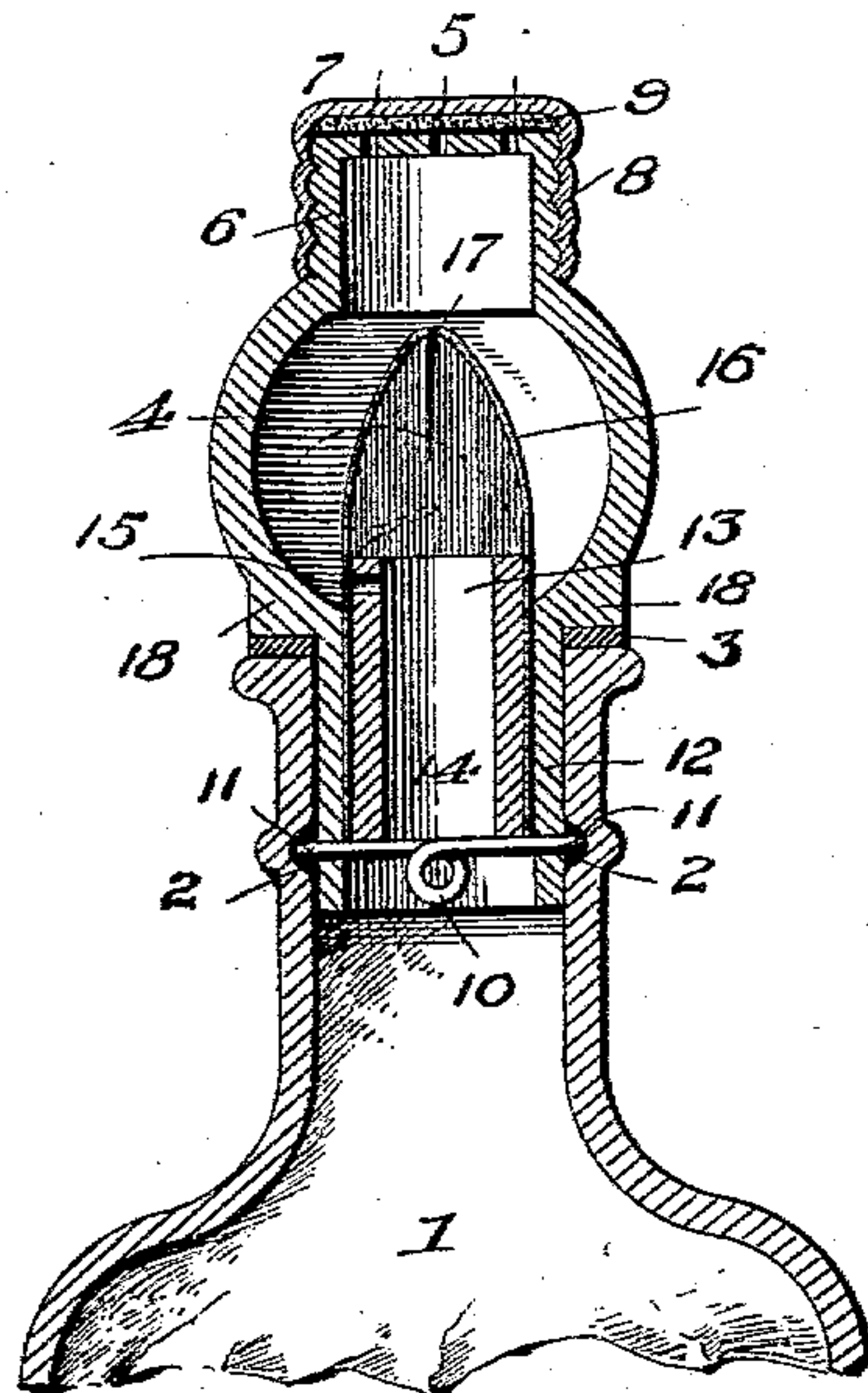


No. 745,552.

PATENTED DEC. 1, 1903.

M. M. ADDISON.
NON-REFILLABLE BOTTLE.
APPLICATION FILED APR. 6, 1903.

NO MODEL.



Witnesses

John J. Nelligan

Inventor
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her Attorney

UNITED STATES PATENT OFFICE.

MARY M. ADDISON, OF BALTIMORE, MARYLAND.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 745,552, dated December 1, 1903.

Application filed April 6, 1903. Serial No. 151,261. (No model.)

To all whom it may concern:

Be it known that I, MARY M. ADDISON, a citizen of the United States, residing at Baltimore city, in the State of Maryland, have invented certain new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

My invention relates to non-refillable bottles; and the objects of the same are to provide a bottle with a collapsible valve within the neck portion of the bottle, which will permit liquid to flow outward when the bottle is tilted to the required position, but which will prevent refilling of the bottle after the contents have been poured out by the action of the collapsible valve.

In the accompanying drawing, which forms part of this specification, the figure illustrates a central vertical section of a bottle made in accordance with my invention.

The numeral 1 designates a bottle, which may be of any desired shape or size. Within the neck of the bottle an internal groove 2 is formed for a purpose which will presently be explained, and resting upon the top of the bottle is a rubber gasket 3. A supplemental nozzle or valve-casing may be employed, and consists of a bulb or enlarged portion 4, which may be formed of glass or other suitable materials of the required thickness. The bulb 4 is provided with a top or upper end having a series of perforations 5 and is screw-threaded at 6 to accommodate a metal cap 7. This cap is provided with a screw-threaded depending flange 8, and a cork disk 9 may be placed in the upper end of the cap. A metal spring 10 has its ends 11 passing through perforations in the tubular lower portion 12 of the valve-casing 4. Fitted within the tubular portion 12 is a molded rubber tube 13, which is made of sufficient thickness to hold an upright position and to permit liquid to flow freely through the central opening 14. A vent-hole 15 is formed near the upper end of the tube 13, and a thin tissue-rubber nipple 16 is fitted over the upper end of the tube 13, as shown in the drawing, the vent-hole passing through the side of the nipple and permitting the entrance of air into the bottle as the liquid is decanted to prevent a vacuum therein. A slit 17 is formed in the upper end of the tissue-rubber

nipple 16. When the tubular portion 12 of the valve-casing is inserted within the mouth of the bottle 1, the ends 11 of the spring 10 are seated within the groove 2 in the bottle-neck to secure the two parts firmly in place, the gasket 3 then resting firmly against the shoulder 18 at the bottom of the valve-casing.

From the foregoing it will be obvious that the bottle 1, being filled with liquid, when it is tilted to the proper position liquid will flow through the tube 13 into the nipple 16, out through the slot 17, and through the perforations 5. When the bottle is brought to an upright position, the tissue-rubber nipple 16 collapses or falls to the position shown in dotted lines in the drawing. It will then be impossible to refill the bottle, as the slit 17 closes and occupies such a position with relation to the perforations 5 that it would be practically impossible to refill the bottle. The cap 7 is used to close the perforations 5 when the bottle is not in use.

A bottle made in accordance with my invention may be constructed at a comparatively slight cost and is a reliable and efficient means for preventing the refilling of bottles after the original contents have become exhausted.

What I desire to secure by Letters Patent and claim is—

1. The combination with a bottle-neck having a recess therein, of a valve-casing comprising an apertured lower portion, a valve-chamber and an apertured top, a resilient member carried by the lower portion, the ends of the member projecting through the apertures and into the recess, a tube received in the lower portion and supported upon the resilient member, a valve carried by the tube and removable means for closing the apertured top.

2. The combination with a bottle provided with a neck, of a valve-casing comprising a tubular portion received and locked within the neck, a valve-chamber and an apertured top, a tube located in the tubular portion of the valve-casing and having a vent therein, and a flexible slit nipple received on the tube, the nipple provided with an aperture registering with the vent in the tube.

3. The combination with a bottle-neck, of a valve-casing comprising a tubular portion

received in the neck, a valve-chamber and an
apertured top, a resilient cross-bar carried
by the tubular portion, the ends of the bar
projecting through the sides of the tubular
5 portion and engaging the bottle-neck to lock
the valve-casing therein, a tube received
within the tubular portion and supported by
the cross-bar, and a nipple-valve located upon
the tube, the tube and valve provided with

registering apertures forming a vent, the nip- to
ple-valve projecting into the valve-chamber.

In testimony whereof I have signed my
name to this specification in presence of two
witnesses.

MARY M. ADDISON.

Witnesses:

E. WALTON BREWINGTON,
ROBT. C. RHODES.