P. L. HAIMS.

NON-REFILLABLE BOTTLE.

APPLICATION FILED AUG. 21, 1913.

1,122,914.

Patented Dec. 29, 1914.

Fig. 1.

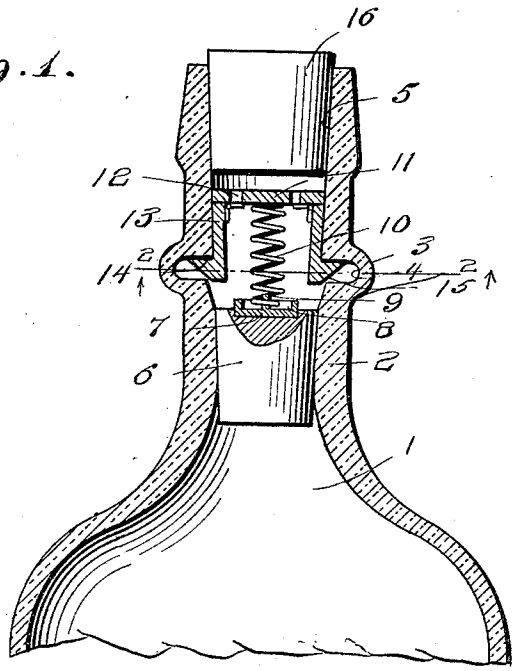


Fig. 2.

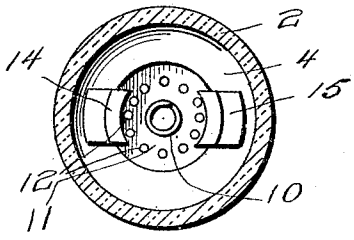


Fig. 3.

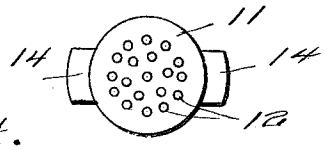
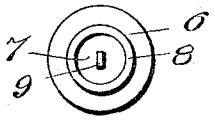


Fig. 4.



Witnesses

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NON-REFILLABLE BOTTLE.

1,122,914. Specification of Letters Patent. Patented Dec. 29, 1914.

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To all whom it may concern:

Be it known that I, PHILIP L. HAIMS, a citizen of the United States, residing at Redding, in the county of Shasta and State of California, have invented certain new and useful Improvements in Non-Refillable Bottles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to new and useful improvements in non-refillable bottles and has for its object the provision of a device of the above character which will prevent the refilling of bottles.

Another object of my invention is the provision of such a device which will frustrate any attempt at either diluting the contents of a bottle or entirely removing the same and refilling with an imitation.

Still another object of my invention is the provision of such a device which will insure the consuming public against any substitution of spurious liquids for those originally placed in the package.

A still further object of my invention is the provision of such a device which will be simple in operation, and easily and quickly applied.

With the above and other objects in view I now proceed to describe my invention in the following specification and accompanying drawings, in which, Figure 1 is a longitudinal sectional view of the bottle showing my improved stopper applied thereto, Fig. 2 is a transverse sectional view taken on line 2—2 of Fig. 1, Fig. 3 is a top plan view of the guard used in connection with my improved bottle stopper, and Fig. 4 is a top plan view of the valve.

Referring to the drawings by characters of reference 1 indicates the body portion of an ordinary bottle having formed integrally therewith a neck 2. This neck 2 is provided with an outstanding portion 3 which is shaped to form the annular groove 4. The interior of the neck is tapered as illustrated at 5.

My improved stopper preferably comprises a valve 6 having secured at the upper extremity thereof a suitable plate 7. This plate 7 is provided with the annular upstanding flange 8 which is adapted to form a cup in which the end of the spring is adapted to seat.

Centrally located with relation to the plate 7 and formed integrally therewith I preferably provide the upstanding ear 9 having an aperture therethrough which is adapted to receive the end of the coil spring to be more fully hereinafter described and hold the same in place.

The coil spring mentioned above which is illustrated by the numeral 10 is preferably of the compression type and the end is bent to extend through the aperture in the ear 9. This coil spring extends upwardly from the plate and is adapted to abut the guard 11 which is provided with a plurality of apertures 12 through which the liquid contained in the bottle is adapted to flow when the device is in use.

Hingedly secured to the guard at diametrically opposite points I preferably provide the latches 13 having the enlarged portions 14 formed at their lower extremities. These enlarged portions 14 are preferably provided with the cam faces 15 which are adapted to act in a manner similar to the latch of a door when the device is being put in place.

An ordinary form of stopper 16 is adapted to be inserted in the upper end of the bottle neck as clearly illustrated and may be removed and discarded after the package has been unsealed.

The latches 13, or better latch fingers are so arranged that it is an easy matter to insert the guard within the bottle, since the fingers will readily move by force of gravity into locking position and it is not necessary to force the guard into the bottle as it may be placed with ease in position, thus possibility of chipping off pieces of glass or the material of which the bottle is made is obviated.

It will be clearly seen from the foregoing that with my improved non-refillable bottle the spring 10 will normally hold the valve 6 into engagement with the side walls of the bottle neck and frustrate any attempt at filling the bottle with a spurious liquid. When it is desired to remove the contents of the bottle it will be obvious upon tipping the bottle the weight of the liquid pressing against the valve 6 will force the same downwardly and out of engagement with the side walls of the bottle neck, thereby permitting the liquid to flow around the valve and out through the apertures 12 formed in the guard. Upon returning the bottle to

its normal upright position it will be apparent that the spring 10 will force the stopper back to its closed position and effectively close the passage through the bottle neck thereby preventing the refilling of the bottle and thus insuring the public of always obtaining the original contents.

While in the foregoing I have shown and described the preferred embodiment of my invention I wish it to be understood that I may change the specific arrangement and combination of parts without in any way departing from the spirit and scope of my invention as defined in the appended claim.

What is claimed is:—

In a device of the character described, the combination with a bottle and a neck having an annular recess formed intermediate its ends, a valve adapted to close the neck immediately beneath the annular recess, a plate having apertures therein, latch fingers hingedly secured to the plate, lateral extensions formed on the latch fingers, said lateral extensions being adapted to project into the annular recess and hold the plate immovable, and a spring interposed between the plate and the valve, whereby the valve is normally held in its closed position.

In testimony whereof I affix my signature in presence of two witnesses.

PHILIP L. HAIMS.

Witnesses:
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