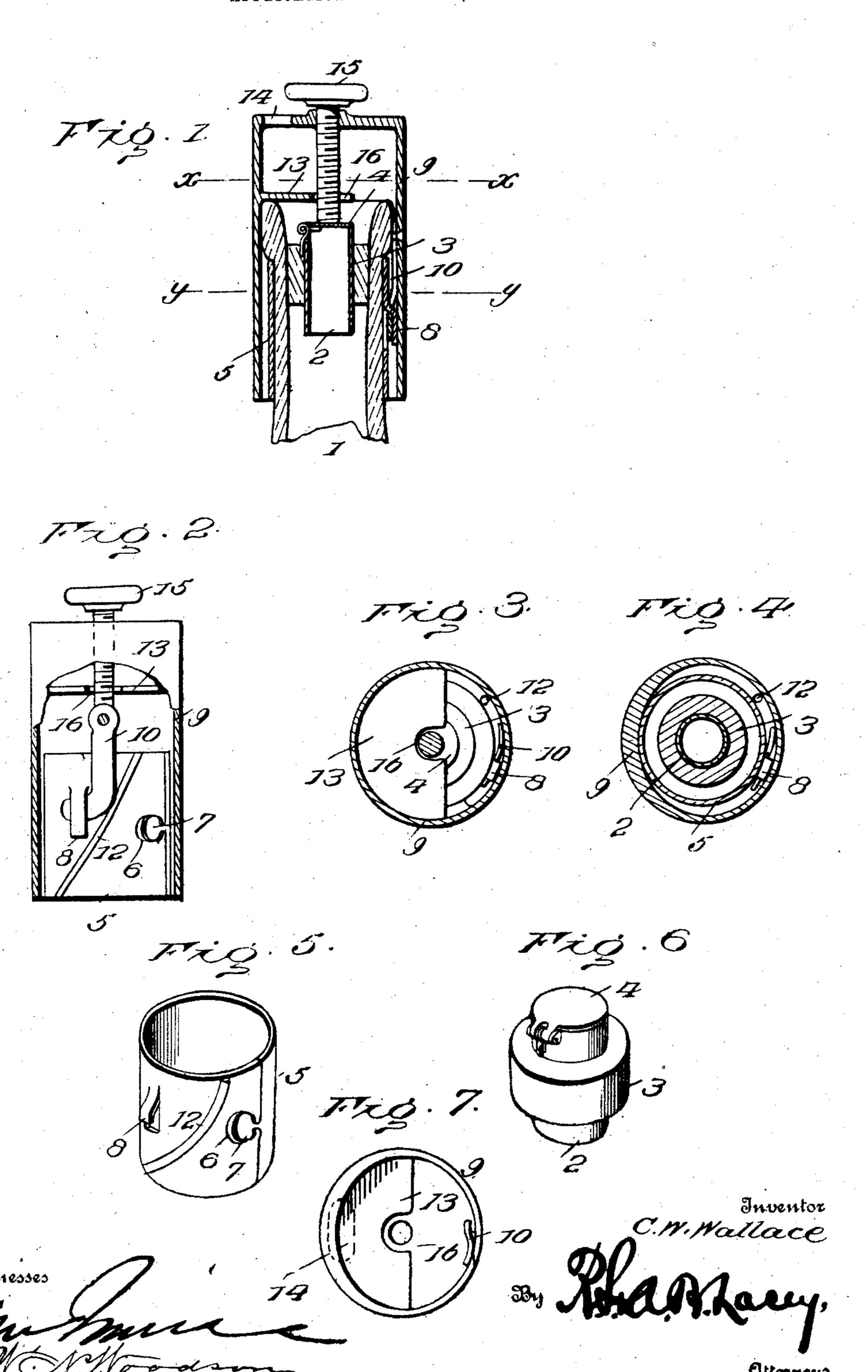
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NON-REFILLABLE BOTTLE.

APPLICATION FILED JAN. 2, 1907.



UNITED STATES PATENT OFFICE.

CHARLES WESLEY WALLACE, OF PITTSBURG, PENNSYLVANIA.

NON-REFILLABLE BOTTLE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Charles Wesley Wallace, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, bave invented certain new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

The object of my invention is to provide an efficient construction of non-refillable bottle, which will effectually insure that the bottle cannot be refilled after its contents have been withdrawn or poured out, and which will be composed of comparatively few and simple parts which may readily be applied to the neck of the bottle and held securely thereon after once in place, the invention including means whereby the bottle may be effectually sealed so as to prevent the contents from spilling if the bottle should be overturned.

With this and other objects in view, as will more fully appear as the description proceeds, the invention consists in certain constructions, arrangements and combinations of the parts hereinafter described and claimed.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a vertical sectional view of the upper portion of a bottle neck with my invention applied thereto.

30 Fig. 2 is a side elevation, parts being broken away. Fig. 3 is a horizontal sectional view on the line x—x of Fig. 1, the bottle being omitted. Fig. 4 is a similar view on the line y—y of Fig. 1. Fig. 5 is a detail perspective view of a band designed to encircle the bottle neck and adapted for engagement by the cap of the device. Fig. 6 is a detail perspective view of the outlet tube and its valve. Fig. 7 is a bottom plan view of the cap detached.

Corresponding and like parts are referred to in the 40 following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawing, the numeral 1 designates the neck of the bottle and 2 a tube which is inserted in the neck of the bottle below the mouth rim thereof, 45 being preferably held within the neck frictionally by means of a surrounding band 3. The upper end of the tube 2 is normally closed by means of a valve 4 which in the present instance is in the form of a disk, spring pressed towards its seat, but adapted to be moved from 50 its seat by the weight of the liquids within the bottle, when the bottle is inverted.

5 designates a band, preferably of sheet metal, which encircles the outside of the neck 1 and is secured thereto, preferably by means of a tongue 7 having a reduced neck and adapted to fit with locking engagement in a key-hole slot 6, the tongue and slot being

formed on and in the respective ends of the band as shown. The band 5 is provided with a locking lug 8 which faces downwardly, as shown, and is preferably formed by punching out a small leaf-like projection 60 from the metal of which the band is formed.

A cap 9 is adapted to fit down over the mouth of the bottle and is provided with a cylindrical body portion on the inner wall of which is mounted a pivoted latch 10. The latch 10 hangs down, as shown, and is pro- 65 vided at its free end with a hook 11 which extends laterally and is adapted for locking engagement with the lock 8. An obliquely disposed guide rod 12 is secured to the outer wall of the band 5 in proximity to the lug 8 and is adapted to engage with the rear face or edge of 70 the pivoted latch 10 so as to act in the nature of a cam or wedge as the cap is inserted down over the bottle neck and upon the latch into positive engagement with the lug 8.

Near its top, the cap 9 is provided with a baffle plate 75 13 which is in alinement with a small opening or outlet 14 in the top of the cap 9, said top being entirely closed except for this outlet. A lock screw 15 works in the top of the cap 9 in registry with the valve 4, said locking screw extending through a recess 16 in the 80 baffle plate 13. When the screw is turned downwardly into the top of the cap 9, it will impinge against the valve 4 and hold it securely to its seat so that the bottle may be then effectually sealed and all possibility of leaking will be precluded in the event that 85 the same may be accidentally overturned.

In applying my improved non-refilling device to a bottle, it is manifest that the tube 2 is as indicated in the bottle neck below the mouth of the same with the valve 4 uppermost. The proper sized band 5 is then 90 locked around the bottle neck and the cap 9 is then placed downwardly over the bottle mouth, the pivoted latch 10 being forced positively into locking engagement with the lug 8 by means of the ablique guide rod 12. This results in securely locking the cap 95 around the bottle neck so as to effectually protect the disk valve 4 from being tampered with. When the bottle is inverted, the contents will move the valve 4 off of its seat, and the contents will then flow out through the outer end of the tube 2 and around the 100 baffle plate 13 and thence flow out through the opening 14 in the top of the cap 9. It is obvious that the arrangement of the baffle plate will prevent a wire or any tool from being inserted in the mouth of the bottle so as to tamper with the disk valve 4, the said valve 105 being at all times protected by the cap which is locked to the bottle mouth.

From the foregoing description, in connection with the accompanying drawings, it will be seen that I have provided a very simple construction of device for preventing refilling of bottles, and one which will be durable and that may be readily applied to the mouth

of the bottle. It is also to be noted that by the provision of the locking screw 15, the bottle may be kept sealed and the contents prevented from spilling should the bottle be accidentally overturned.

Having thus described the invention, what is claimed as new is:

1. The combination with the neck of a bottle, of an outlet tube held therein and provided with a normally closed valve, a band encircling the neck of the bottle, and a cap 10 surrounding the neck of the bottle and having locking engagement with said band, said cap being provided with a baffle plate above the valve and with an outlet opening

above and in registry with said baffle plate.

same into engagement with the lug.

2. The combination with the neck of a bottle, a tube 15 held therein and provided at its outer end with a spring closed disk valve, a locking band encircling the neck of the bottle and provided with a locking lug, a cap adapted to be placed over the mouth of the bottle and provided with a pivoted catch designed to engage said lock, and an oblique 20 guide rod secured to the band in proximity to the lock and adapted to engage the heel of the latch so as to swing the

3. The combination with a bottle neck, of a valve therein and adapted to normally close the outlet to the neck, a band 25 encircling said neck and provided with a locking lug, and a cap adapted to be placed over the mouth of the bottle and provided with a pivoted depending catch, and means

whereby the catch will be swung laterally into engagement with the lock as the cap is thrust downwardly over the bottle mouth.

4. In combination with a bottle neck, of a valve mounted therein and adapted to close the outlet thereof, a band encircling the neck of the bottle and provided with a locking lug and an obliquely disposed guide rod in proximity to the lug, a cap adapted to be thrust down over the mouth 35 of the bottle, and a pivoted latch mounted in said cap and adapted to swing laterally into engagement with said lug, the heel of said latch being arranged for sliding engagement with the said guide rod, whereby the latch will be turned into positive engagement with the lug of the band 40 as the cap is thrust down over the bottle mouth.

5. In combination with a bottle neck, of a valve therein and adapted to close the outlet thereof, a band encircling the bottle neck and provided at its ends with a tongue and a keyhole slot adapted to receive said tongue whereby 45 to lock the band to the neck, and a cap adapted to be thrust down over the mouth of the bottle and over said band and arranged for locking engagement therewith, the body of said cap covering the said tongue and slot of the band, as and for the purpose set forth.

In testimony whereof I affix my signature in presence of

two witnesses.

CHARLES WESLEY WALLACE. [L. s.] Witnesses:

John J. Donavan, LEWIS CRIST.