

O. J. FLACK.
NON-REFILLABLE BOTTLE.
APPLICATION FILED MAY 10, 1911.

1,004,402.

Patented Sept. 26, 1911.

Fig 1

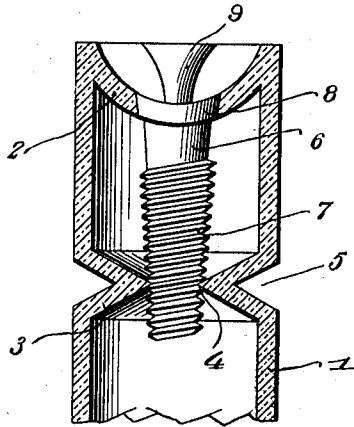


Fig 3

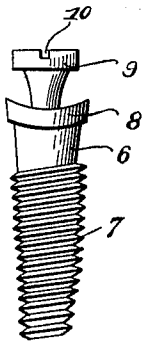
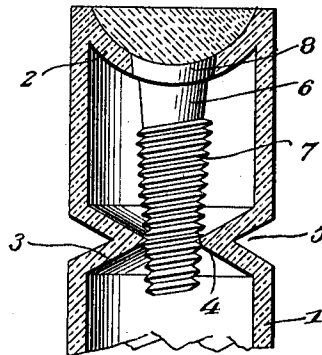


Fig 2



Witnesses

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NON-REFILLABLE BOTTLE.

1,004,402.

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To all whom it may concern:

Be it known that I, OLE J. FLACK, a citizen of the United States, residing at Coleraine, in the county of Itasca and State of Minnesota, have invented new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

This invention relates to bottles, the primary object of the invention being to provide a non-refillable bottle which is of an extremely simple construction and which effectively prevents a fraudulent attempt at filling the bottle with an imitation or inferior fluid.

With the above object in view, and others which will appear as the nature of the invention progresses, the improvement resides in the novel construction and arrangement of parts hereinafter fully described and claimed.

In the accompanying drawings, there has been illustrated a simple and preferred embodiment of the improvement, it being understood that minor details of construction as to size, proportion, shape, material, etc., which fall within the scope of the appended claims, may be made, if desired.

In the drawings,—Figure 1 is a longitudinal sectional view of a bottle neck constructed in accordance with the present invention, and showing the closing member therein. Fig. 2 is a similar view, the head closing member being removed. Fig. 3 is an elevation of a modified form of the closing member.

In the drawings, the numeral 1 designates the bottle neck. This neck 1 has its top portion preferably inturned, to provide what may be termed an annular flange 2. The flange 2 provides a valve seat and preferably has its wall inclined from the top thereof toward its bottom, the purpose of which will presently be set forth. The bottle neck is provided with a second inturned portion or flange 3, the same being substantially V-shaped and threaded as at 4, and the exterior of the neck adjacent the said inturned portion 3 is formed with a weakened depression 5. The numeral 6 designates the closing member for the bottle neck. This member comprises essentially a threaded lower portion 7 which is adapted to engage with the V-shaped extensions or threads 4 of the inturned portion 3. The member 6 has its upper portion enlarged and flared to pro-

vide a valve 8 which is adapted to snugly engage with the inclined walls of the valve seat 2. The member 6 is further provided with a detachable head 9. This head may comprise a rectangular member as illustrated in Fig. 3 of the drawings, and the said head may be provided with a transverse slit 10. The heads 9 and 10 are each constructed of some breakable material, and when the screws 7 of the member 6 are driven home, so that the enlarged portion 8 of the said member is seated upon the flange 6, a further turn of the head 9 will sever the said head from the member 6.

From the above description, taken in connection with the accompanying drawings, the simplicity of the device, as well as the advantages thereof, will, it is thought, be perfectly apparent to those skilled in the art to which such inventions appertain, it being noted that the head 9 is completely removed from the member 6, leaving no ragged edges or other projections which might assist in the removal of the said member 6. Furthermore, it may be noted that the flange 2 which provides the valve seat extends downwardly within the bottle neck, so as to leave a compartment 11 which may be readily filled with a cement which provides an additional securing element for the bottle.

Having thus fully described the said invention, what I claim is:—

1. In a bottle closure, the combination with a bottle neck, the said neck being formed adjacent its mouth with a downwardly extending inclined flange, the said neck being further provided with a spaced inturned portion, a closure for the bottle neck, said closure having its upper portion formed with an enlarged portion adapted to engage the wall of the flange, and the extending portion of the closure adapted to engage with the inturned portion of the bottle neck.

2. In combination with a bottle neck having a downwardly inclined flange arranged adjacent the mouth thereof, the said bottle neck being further provided with an inturned portion spaced below the said flange, a closure for the bottle neck, said closure adapted to engage with the inturned portion of the neck as well as with the walls of the inclined flange, and the said closure having a breakable head arranged above its point of contact with the inclined flange.

3. A bottle neck having its mouth provided with a downturned flange, the said neck being further provided with a V-shaped inturned portion spaced away from the flange, a closure for the bottle neck, said
5 closure adapted to securely engage with the V-shaped inturned portion, said closure being provided with an enlargement adapted to engage the flange and to lie flush with
10 the lower portion of the inclined flange, and said closure being further provided with a breakable extension which projects above the enlargement thereof.

4. A bottle neck having its mouth formed
15 with an inturned flange, the said neck being further provided with an inturned portion spaced away from said flange, the neck having a weakened depression adjacent the said
inturned portion, the inner face of the in-
20 turned portion being V-shaped, a closure for the neck, said closure provided with a threaded portion adapted to engage with the V-shaped inturned portion, the said
closure having its upper extremity enlarged

and adapted to engage with the wall of the
flange of the neck. 25

5. A bottle neck and a closure therefor, said neck having its mouth provided with an inturned flange, said neck being further
provided with an inturned annular portion
30 positioned away from the flange, the neck adjacent the inturned portion being provided with a weakened depression, the inner face of the inturned portion being V-
35 shaped, the closure having a threaded extension adapted to engage with the V-shaped inturned portion, the upper portion of the
said closure adapted to snugly engage with
the flange of the mouth, and the upper face
40 of the closure having a breakable head, substantially as described.

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

OLE J. FLACK

Witnesses:

G. E. O'CONNOR,
CAROLINE JOHNSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."