Aug. 19, 1924. 1,505,705

J. L. DUNNOCK

SHAKER BOTTLE CLOSURE

Filed March 6, 1923

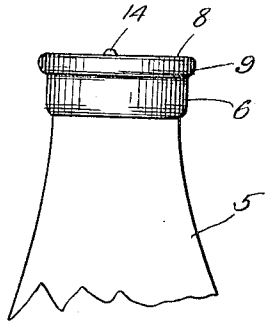


Fig. 1.

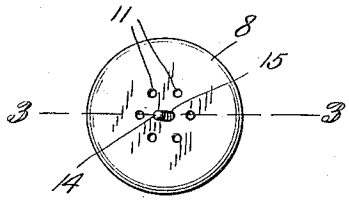


Fig. 2.

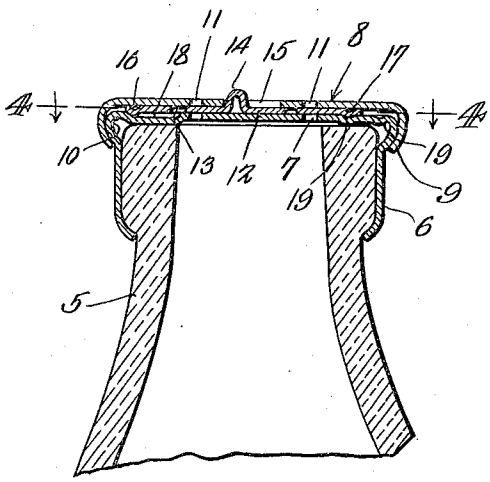


Fig. 3.

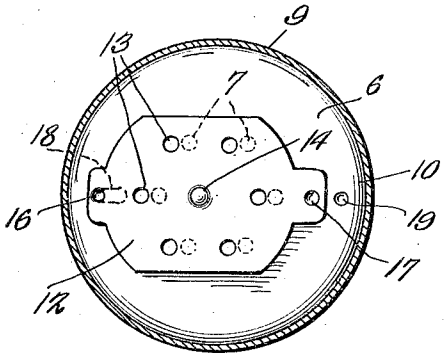


Fig. 4.

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UNITED STATES PATENT OFFICE.

JOHN L. DUNNOCK, OF BALTIMORE, MARYLAND.

SHAKER-BOTTLE CLOSURE.

Application filed March 6, 1923. Serial No. 623,083.

To all whom it may concern:

Be it known that I, JOHN L. DUNNOCK, a citizen of the United States, residing at Baltimore city, State of Maryland, have invented certain new and useful Improvements in Shaker-Bottle Closures, of which the following is a specification.

This invention relates to containers for talcum and other toilet powders having a perforated top for discharge of the powder, and its object is to provide a novel and improved closure therefore whereby accidental escape of the powder is effectually prevented.

The invention also has for its object to provide a closure device which is very simple, and capable of being easily and cheaply manufactured.

With the objects stated in view, the invention consists in a combination and arrangement of parts to be hereinafter described and claimed, and in order that the same may be better understood, reference is had to the accompanying drawing wherein,—

Figure 1 is an elevation of a fragment of the container showing the application of the invention thereto;

Fig. 2 is a plan view thereof;

Fig. 3 is an enlarged vertical section on the line 3—3 of Fig. 2, and

Fig. 4 is a horizontal section on the line 4—4 of Fig. 3.

Referring specifically to the drawing, 5 denotes a fragment of a glass or other container adapted to hold talcum and other toilet powders, and having its mouth fitted with a closure member in the form of a cap 6, the top of which is provided with perforations 7 for discharge of the contents of the container. The cap is shaped to fit the neck of the bottle, with its perforated top extending across the mouth thereof.

The cap 6 is provided with a cover consisting of a disk-shaped plate 8 having a marginal flange 9 which is forced over an annular bead 10 of the cap into sealing contact therewith, whereby said cover is rigidly and permanently united to the cap. The cover plate 8 has perforations 11 which are in alinement with the perforations 7, and hence register therewith.

In order to prevent accidental discharge of the contents of the container 5 through the perforations 7 and 11, there is mounted between the cover plate 8 and the perforated top of the cap 6, a valve in the form of a slidable plate 12 having perforations 13. When this valve plate is positioned so that its perforations 13 register with the perforations 7 and 11, the contents of the container may be discharged through such registering perforations in an obvious manner. When the valve plate is slid to bring its perforations 13 out of registry with the perforations 7 and 11, and the imperforate portions of the valve plate cover the perforations 7 and 11, the escape of the contents of the container is effectually prevented. The valve plate can be placed in closing position after the desired quantity of powder has been discharged, and it is particularly useful in effecting a closure and preventing escape of the contents of the container during shipment and while being handled.

It will be noted that the valve plate 12 is completely closed in by the cover plate 8 and its flange 9, and as the latter snugly fits the bead 10 of the cap 6, there is an entire absence of slots or similar apertures through which the contents of the container might accidentally escape in shipment or while handling the same.

In order that the valve plate 12 may be manipulated from the outside it is provided with an outstanding lug 14 stamped up from the body thereof, and projecting through a slot 15 in the cover plate 8 a sufficient distance so that it may be engaged by the finger tip.

At diametrically opposite points, the valve plate 12 has depending lugs 16 and 17 formed in the same manner as the lug or finger piece 14. The lug 16 seats in a groove 18 formed in the top of the cap 6 by indenting the same, which, together with the lug 14, prevent rotation or shifting of the valve plate 12, this being necessary in order to prevent disturbance of the position of the perforations 13 relative to the perforations 7 and 11.

The lug 17 is positioned to snap into one or the other of a pair of indentations 19 made in the top of the cap 6, for locking the valve plate 12 in open or closed positions. When the lug 17 seats in one of the indentations 19, the valve plate 12 is held in closing position and when seating in the other indentation the valve plate is held in open position.

The structure is very simple, it can be

easily and cheaply produced, and it effectually serves the purpose for which it has been designed.

I claim:

1. The combination with a container, of a closure cap fitted over the mouth thereof and having discharge perforations, a cover cap fitted over the closure cap and provided with discharge perforations registering with the perforations of the latter, a movable valve plate mounted between the caps and completely enclosed by the cover cap, said valve plate having perforations adapted to be brought into and out of registry with the perforations of the caps, the top of the closure cap having a guide indentation and the valve plate having a lug seating in said indentation, and a finger piece on the valve plate for operating the same, the top of the cover cap having a slot through which the finger piece protrudes.

2. The combination with a container, of a closure cap fitted over the mouth thereof and having discharge perforations, a cover cap fitted over the closure cap and provided with discharge perforations registering with the perforations of the latter, a movable valve plate mounted between the caps and completely enclosed by the cover cap, said valve plate having perforations adapted to be brought into and out of registry with the perforations of the caps, the top of the closure cap having a pair of indentations, and the valve plate having a lug adapted to enter one of said indentations when the perforations are in registry, and the other indentation when the perforations are out of registry, the top of the closure cap also having a guide indentation and the valve plate having a lug seating in said indentation, and a finger piece on the valve plate for operating the same, the top of the cover cap having a slot through which the finger piece protrudes.

In testimony whereof I affix my signature.

JOHN L. DUNNOCK.