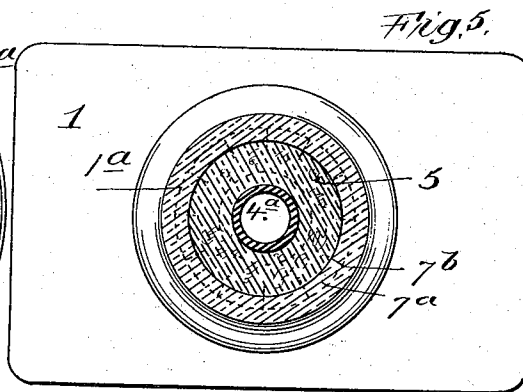
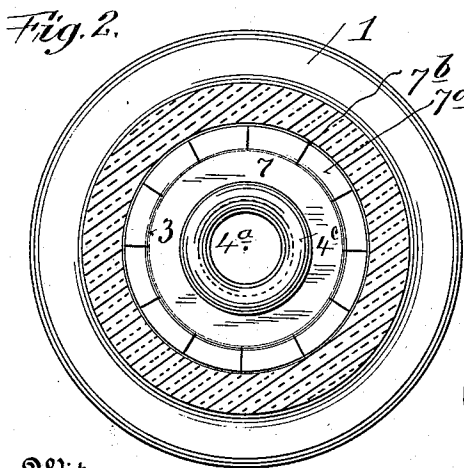
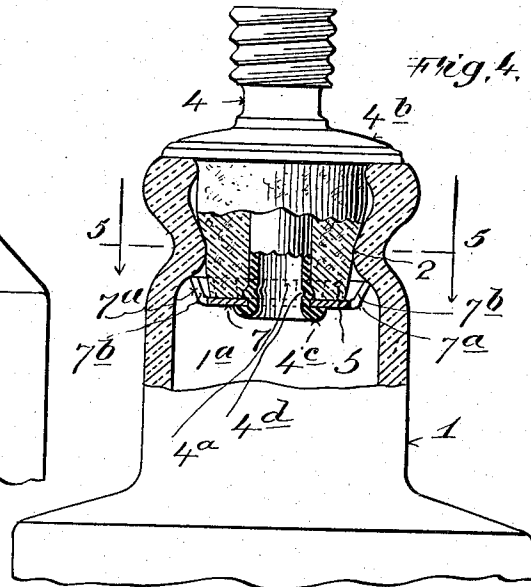
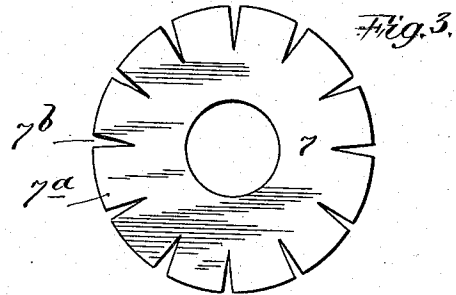
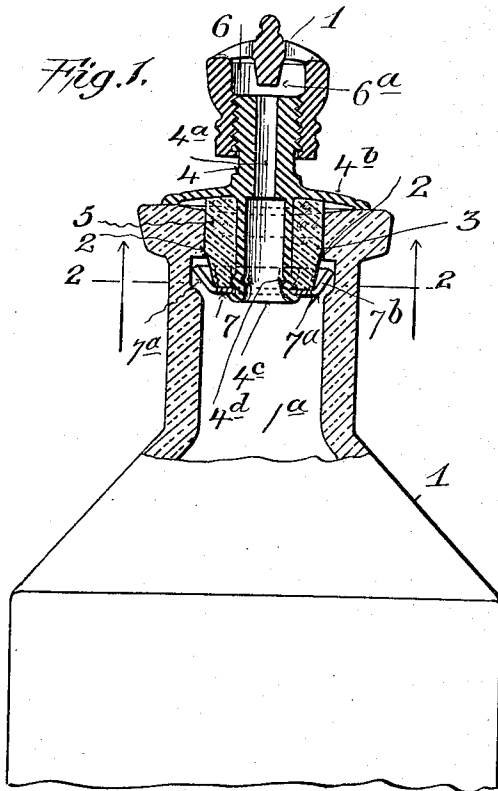


L. J. MAZOYER.
NON-REMOVABLE BOTTLE STOPPER.
APPLICATION FILED JAN. 22, 1915.

1,156,915.

Patented Oct. 19, 1915.



Witnesses:
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UNITED STATES PATENT OFFICE.

LEON JULES MAZOYER, OF WEST HOBOKEN, NEW JERSEY.

NON-REMOVABLE BOTTLE-STOPPER.

1,156,915.

Specification of Letters Patent.

Patented Oct. 19, 1915.

Application filed January 22, 1915. Serial No. 3,662.

To all whom it may concern:

Be it known that I, LEON JULES MAZOYER, a citizen of the United States, and resident of West Hoboken, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Non-Removable Bottle-Stoppers, of which the following is a specification.

Bottle stoppers having outlets, such as those commonly known as "sprinkler" or "shaker" stoppers, etc., so far as I am aware, have been adapted to be readily removed from the bottles, whereby such bottles may be refilled with substitute material.

The object of my invention is to provide means to prevent the stoppers from being removed from the bottles, jars or the like, after the same have once been filled and the stoppers properly applied thereto, whereby to prevent the ready refilling of such bottles etc.

In carrying out my invention I provide, for use in a bottle or jar neck having an interior stop, such as a shoulder or choke neck finish, a stopper having retaining means adapted to pass such stop when the stopper is inserted in the neck but to prevent the stopper from being withdrawn from such neck without injury to the parts.

In a preferred embodiment of my invention I provide an apertured stopper with a cork thereon to closely fit the bottle neck and with means below the cork adapted to readily slide into the bottle neck and so arranged that when such means has passed such shoulder or choke neck finish, said means will expand or spring outwardly opposed to the shoulder or finish to prevent the stopper from being withdrawn from the neck.

Reference is to be had to the accompanying drawings forming part hereof, wherein,

Figure 1 is a partly sectional side view of a bottle equipped with my improvements;

Fig. 2 is an enlarged section on the line 2, 2, in Fig. 1; Fig. 3 is a plan view of the stopper retaining means; Fig. 4 is a sectional view illustrating a modified form of bottle-neck, and Fig. 5 is a section on the line 5, 5, in Fig. 4.

The bottle or jar 1 may be of any suitable construction, and its neck 1^a is shown provided with an interior stop, such as an annular shoulder 2, which may be formed by means of the annular recess or choke neck finish at 3, as shown in Fig. 1, or by the an-

nular contraction at 2 as shown in Fig. 4, or in any other suitable manner.

At 4 is a stopper upon which is applied a cork or the like 5 to fit tightly in the neck. The stopper illustrated is shown provided with a bore 4^a, and a flange 4^b to fit upon the bottle mouth. The stopper is also shown provided with a threaded cap 6 having a valve 6^a to close and open the bore 4^a. Said parts of the stopper may be of any desired form.

At 7 is a retainer shown secured to stopper 4 below the cork, for which purpose the lower end of the stopper is shown flanged or bent back at 4^c, whereby the retainer 4 and the cork 5 are securely retained upon the stopper 4. By preference the stopper is provided with an abutment or shoulder shown projecting outwardly at 4^d, against which the retainer 7 is seated and firmly held by the bent back part 4^c of the stopper. The retainer 7 is provided with upwardly extending projecting portions 7^a, which are shown provided upon a disk-like member comprising the retainer 7, illustrated in Fig. 6 where portions of the retainer are cut away at 7^b to permit the edge portions thereof to be folded upwardly to provide the projections 7^a. The retainer may be made of metal having such resiliency as to enable the projecting portions 7^a to extend angularly with respect to the plane of the stopper in the direction of the upper part of the stopper, and yet adapted to fold or bend inwardly as required.

When my improved stopper is made, the projecting portions 7^a of retainer 7 will preferably extend outwardly in an upwardly flaring manner, at an acute angle to the axis of the stopper, substantially as illustrated in Figs. 1 and 4, the dimensions of the cork and such retainer being such as to permit said parts to be pushed into the bottle neck. As such stopper is pushed into the bottle neck, the projecting portion 7^a of retainer 7 will spring outwardly beneath the stop 2, so that if an attempt be made to pull the stopper out of the neck the projections 7^a, by engaging the stop 2, will prevent such removal of the stopper unless such force be applied to the stopper as would injure or destroy the same and render it unfit for further use.

While I have illustrated a stopper 4 having a threaded cap, it will be understood that any other form of cap or closure upon

the stopper may be used, and also that my invention may be used with suitable bottles, jars and analogous containers.

My invention is not limited to the details of construction and arrangement of parts shown and described, as the same may be varied, within the scope of the appended claim, without departing from the spirit of the invention.

By the term "cork" I intend to include any equivalent material for the purpose intended.

Having now described my invention what I claim is:—

The combination of a bottle having a neck provided with an inner shoulder, with a

cork adapted to fit the shoulder and extend below the same, an apertured stopper receiving the cork and extending below it, said stopper being provided with a retainer extending transversely at its inner end below the cork, said retainer having its marginal portion projecting outwardly to engage said shoulder in a neck, said shoulder being above the retainer.

Signed at New York city, in the county of New York, and State of New York, this 21st day of January, A. D. 1915.

LEON JULES MAZOYER.

Witnesses:

T. F. BOURNE,

MARIE F. WAINRIGHT.

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