No. 737,638. PATENTED SEPT. 1, 1903.

M. A. LAZAREFF.

BOTTLE.

APPLICATION FILED DEC. 20, 1902.

NO MODEL.

Fig. 1

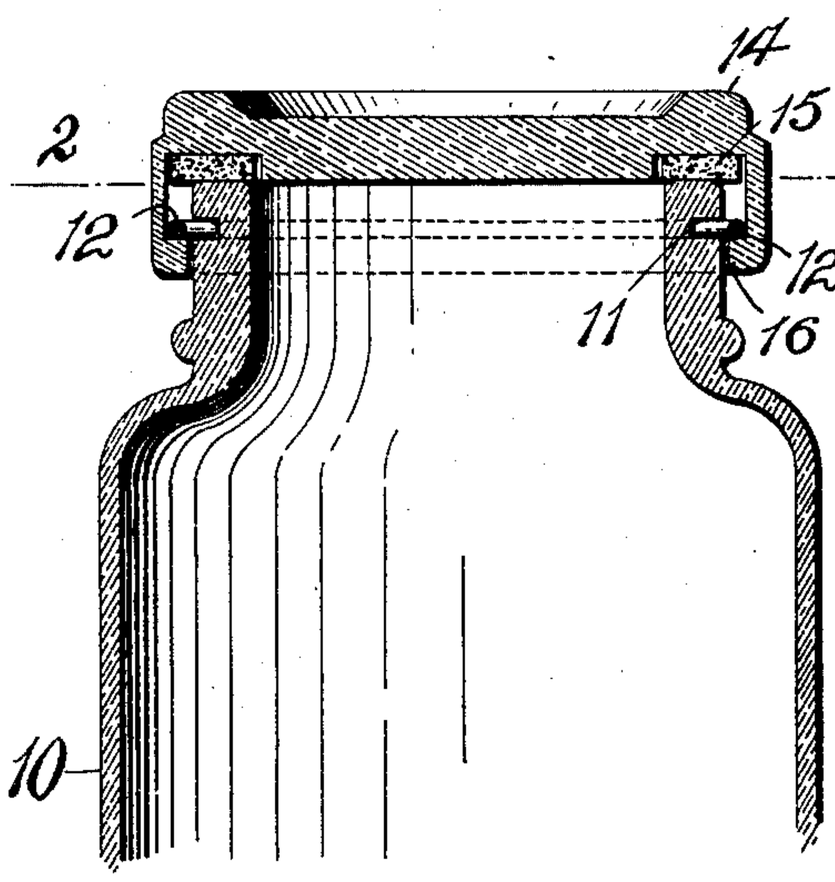


Fig. 2

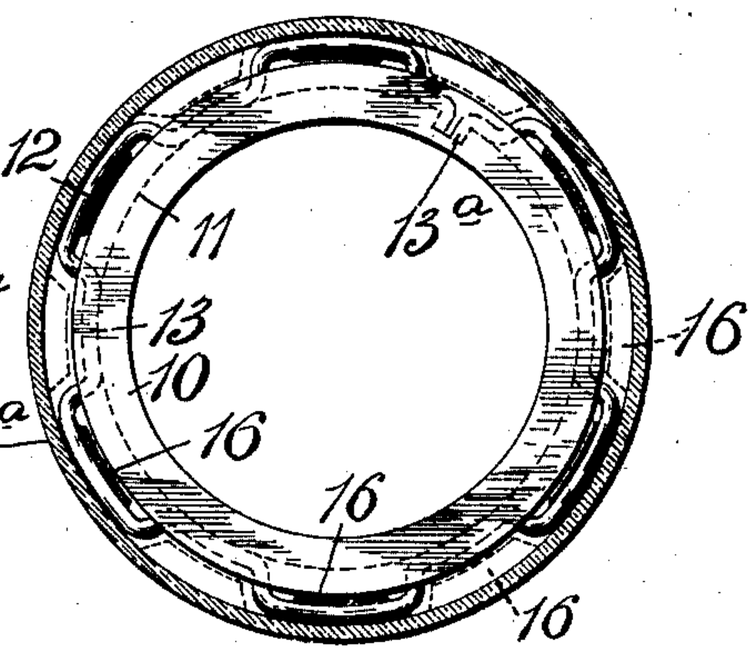
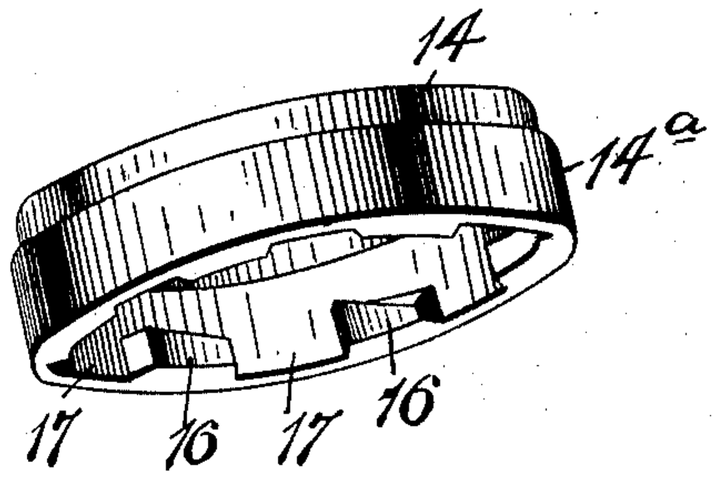


Fig. 3



WITNESSES:

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No. 737,638. Patented September 1, 1903.

UNITED STATES PATENT OFFICE.

MATHIAS A. LAZAREFF, OF NEW YORK, N. Y.

BOTTLE.

SPECIFICATION forming part of Letters Patent No. 737,638, dated September 1, 1903.

Application filed December 20, 1902. Serial No. 135,970. (No model.)

To all whom it may concern:

Be it known that I, MATHIAS A. LAZAREFF, of the city of New York, county of Kings, and State of New York, have invented certain new and useful Improvements in Bottles, of which the following is a full, clear, and exact description.

My invention relates to improvements in bottles, jars, and similar vessels; and the object of my invention is to produce a bottle having a very simple and effective closure which is cheap, durable, and efficient, and especially to produce a closure which can be instantly operated to make an air-tight seal or is easily moved to provide for opening the bottle.

My invention is intended to produce a closure which is applicable to any usual type of bottle, jar, or similar vessel; and with these ends in view my invention consists of certain features of construction and combinations of parts, which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar figures of reference refer to similar parts throughout the several views.

Figure 1 is a broken vertical section of a jar, showing my improved closure. Fig. 2 is a sectional plan on the line 2 2 of Fig. 1. Fig. 3 is a perspective view of the cap to fit the jar.

I have shown my invention as applicable to a jar, though it is perfectly obvious that the construction may be applied to any analogous vessel, and, as shown, the jar 10 has in its neck a circumferential groove 11, in which is held a corrugated wire forming a part of the lock or closure, this wire having its projecting portions 12, which serve as bosses and which extend beyond the face of the bottle-neck, and its inner portions 13 held in the groove, so that the wire is securely fastened in place. As a further preventive of displacement the wire has its ends 13^a turned in and fitting into corresponding holes in the bottle, as shown in Fig. 2. I have shown an ordinary wire circular in cross-section; but the section of the wire is not material, and it can be made of any suitable substance.

The jar has a cap 14, between which and the top of the bottle is the customary washer 15, and a side flange 14^a of the bottle extends downward over the bottle-neck, this portion of the cap having near its lower edge and on its inner surface a series of cam-lugs 16, the upper portions of which are inclined, as shown in Fig. 3, which lugs form between them the recesses 17.

It will be seen that by adjusting the cap so that the recesses 17 register with the lugs 12 the cap may be dropped to its seat, and then by turning the cap slightly the lugs 16 may be made to engage under the lugs 12, and so the cap is locked securely in place, while by a slight reverse movement it can be easily brought into position for removal. This will be understood by reference to Fig. 2, where the dotted lines show the position of the lugs 16 before the cap is turned, while the full lines show the position after the cap has been turned to bring the two series of lugs into engagement.

It will be seen that an important feature lies in the fact that the lugs 16 have no parts projecting above their inclined bearing-faces and that the lugs on the bottle have no projections depending below their bearing-faces, the result whereof is to permit the cap to be turned to whatever extent may be necessary, short of disengagement, to obtain a tight joint. This capability of being turned to varying distances insures a tight joint, even though the washers are much worn or are of varying thicknesses.

In this connection it will be understood that there is an advantage in using the wire, which is more or less springy, as in this way the lugs 12 have each an independent spring action and will each yield, so as to permit the cap to be properly turned.

From the foregoing description it will be seen that I provide a very simple and secure closure which is applicable to any usual form of vessel and which can be very easily operated either to lock or unlock the said vessel.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with the bottle or similar vessel having projecting yielding lugs on its neck, of the cap shaped to fit on over the neck, the cap having inwardly-extending lugs adapted to turn beneath and engage the lugs on the bottle-neck.

2. The combination with the bottle, of a corrugated wire fastened to the bottle-neck, the outwardly-extending corrugations forming lugs, and the cap shaped to fit on over the neck, said cap having inwardly-extending lugs spaced apart and adapted to turn into engagement with the lugs on the bottle-neck.

3. The combination with the bottle, having a circumferential groove in its neck, of a corrugated wire held in the groove, a portion of such corrugations projecting outward beyond the bottle so as to form engaging lugs, and a cap fitting on over the bottle-neck, said cap having inwardly-extending lugs spaced apart and adapted to turn beneath and in engagement with the lugs on the bottle-neck.

4. The combination of a bottle or similar vessel having an annular series of lugs on the exterior of its neck, these lugs being constructed of yielding wire fastened to the bottle-neck, and a cap fitting over the bottle-neck and provided interiorly with an annular series of lugs adapted to engage under the lugs on the neck, the bearing-faces of one of the series of lugs being inclined, for the purpose set forth.

5. The combination with a bottle or similar vessel having a groove in its neck, a corrugated wire engaging this groove and extending around the bottle-neck and having portions projecting beyond the surface of the bottle-neck, and means for holding this wire against circumferential movement; of a cap fitting over the bottle-neck and provided interiorly with lugs adapted to engage the projecting portions of the wire, for the purpose set forth.

In witness whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MATHIAS A. LAZAREFF.

In presence of—

WM. H. CAMFIELD,

J. G. DUNBAR.