No. 735,439. PATENTED AUG. 4, 1903.

N. D. ASDELL.

BOTTLE.

APPLICATION FILED MAY 4, 1903.

NO MODEL.

Fig. 1.

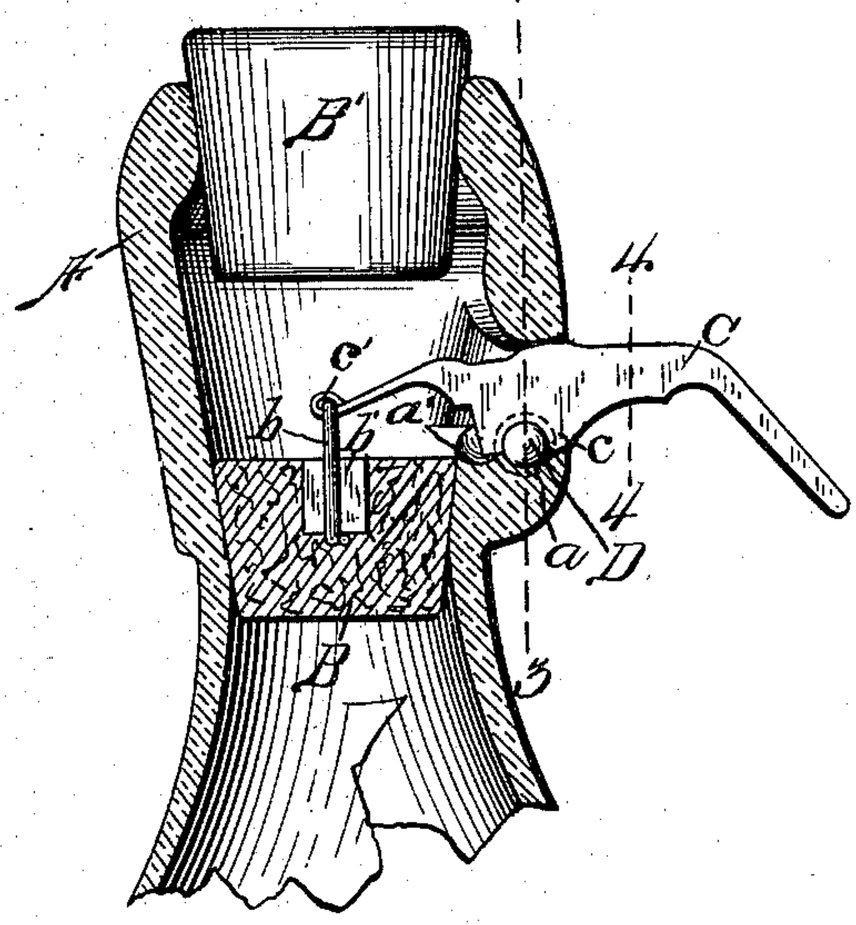


Fig. 2.

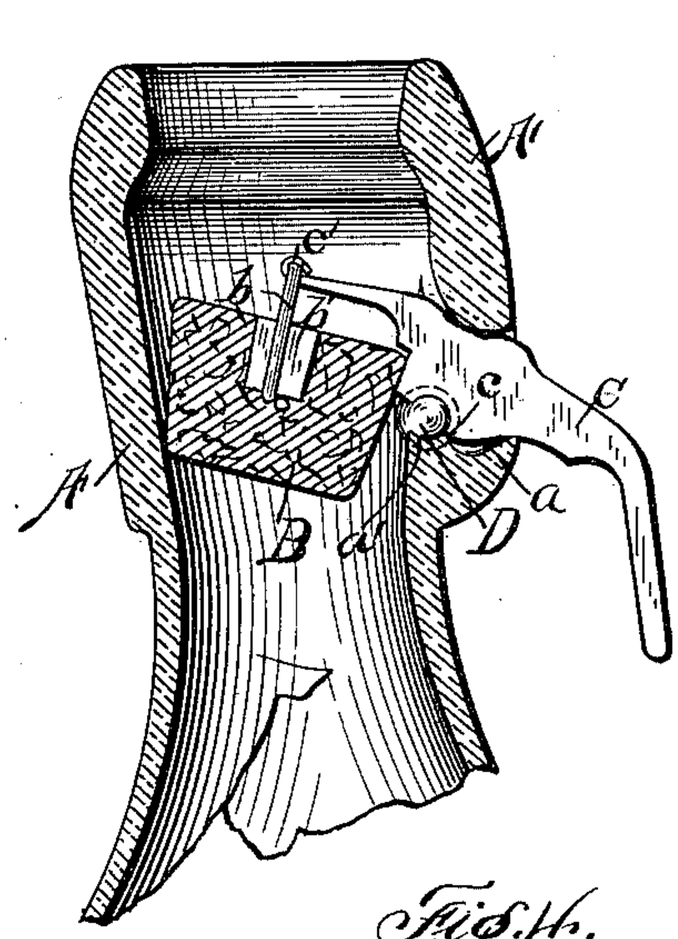


Fig. 3.

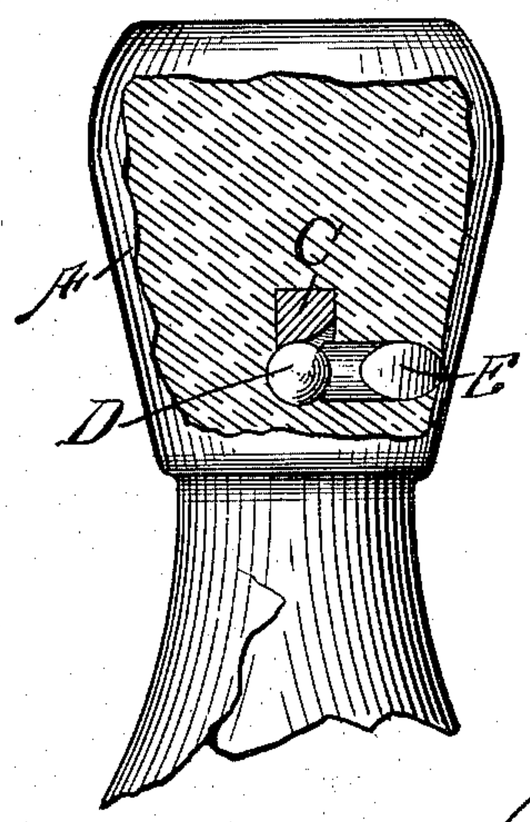


Fig. 4.

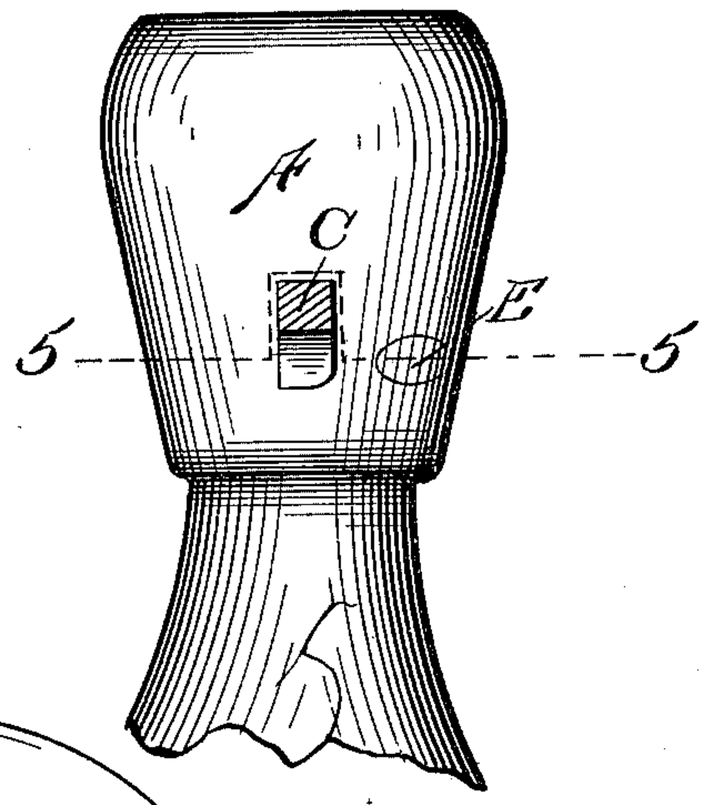
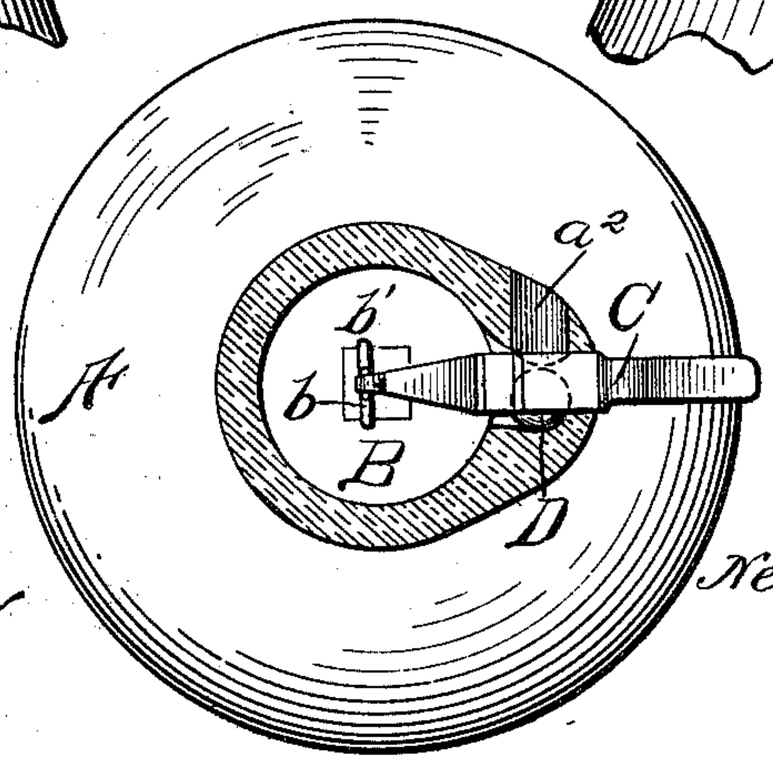


Fig. 5.



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No. 735,439. Patented August 4, 1903.

UNITED STATES PATENT OFFICE.

NELSON DEAN ASDELL, OF LAKEVIEW, OREGON.

BOTTLE.

SPECIFICATION forming part of Letters Patent No. 735,439, dated August 4, 1903.

Application filed May 4, 1903. Serial No. 155,540. (No model.)

To all whom it may concern:

Be it known that I, NELSON DEAN ASDELL, a citizen of the United States, residing at Lakeview, in the county of Lake and State of Oregon, have made certain new and useful Improvements in Bottles, of which the following is a specification.

The object of my invention is to provide an improved means for the protection of manufacturers of medicines or beverages who desire to sell their goods in sealed bottles and prevent resealing of the same in the original manner.

According to my invention the bottle is closed and sealed by a cork or other equivalent stopper inserted in the lower portion of the neck, and a laterally-projecting lever is connected with such stopper, so that it may be used to dislodge the latter, and thus unseal the bottle. The fulcrum of the lever is movable, it being preferably a soft-metal ball, and when dislodged it serves to hold the lever in an abnormal position, from which it cannot be shifted.

The invention further includes other features of construction, arrangement, and combination of parts, as hereinafter described and claimed, reference being had to accompanying drawings, in which—

Figure 1 is a longitudinal central section of a bottle neck and nozzle provided with my improved sealing attachment. Fig. 2 is a similar section showing the sealing-cork raised from its normal position and the lever thereof locked in the abnormal position. Fig. 3 is a vertical section on the line 3 3 of Fig. 1. Fig. 4 is a side view of the bottle-neck, the lever of the sealing-cork being in section 4 4. Fig. 5 is a horizontal section on the line 5 5 of Fig. 4.

The bottle-neck A, together with the nozzle or mouth thereof, is preferably constructed somewhat larger than those of bottles of ordinary pattern. A sealing-cork B or other form of elastic stopper is inserted in the lower portion of the neck, as shown in Fig. 1. A lever C is connected with such cork at its inner end and extends through a slot in the side of the bottle-neck. Its outer end or projecting portion may have any desired curvature. The fulcrum of said lever is a soft-metal ball or shot D, which is normally seated, as shown in Fig. 1, in a hemispherical socket *a*, formed in the bottom of the slot. The lever is provided with a corresponding recess for receiving the upper portion of the ball D. On the inner side of the socket *a* is formed another, *a'*, into which the ball D is received when the cork B is dislodged, as shown in Fig. 2. The bottle is closed and sealed when the cork B is in the position shown in Fig. 1. Another cork B' may be inserted in the mouth or nozzle of the bottle-neck, as indicated in Fig. 1, or such cork B' may be employed after the bottle has been unsealed by dislodgment of the cork B, as shown in Fig. 2. In other words, the cork B' is not essential to sealing the contents of the bottle, but may be used at will, either before or after the unsealing, as when the bottle is used in the ordinary way for containing any kind of liquid. In order to unseal the bottle, the outer and longer arm of the lever C is depressed into the position indicated in Fig. 2, whereby the cork B is dislodged and raised, while the metal sphere D is pushed out of the socket *a* into the inner socket *a'*, in which position the lever is locked so that the cork cannot be replaced by manipulation of the lever. As indicated in Figs. 1 and 2, the edge of the shoulder on the outer side of the socket *a* is beveled, and the corresponding shoulder or flange *c* of the lever C is so beveled or rounded that when the lever is manipulated to dislodge the cork B such shoulder or flange *c* passes down within the opposite shoulder of the bottle-neck, and thus becomes engaged or locked therewith when the sphere D reaches the position indicated in Fig. 2. It will be understood that the softness and compressibility of the ball D is a factor in permitting the passage of the same from one socket to the other.

In place of the outer arm of the lever projecting laterally to the extent indicated in dotted lines, Figs. 1, 2, and 5, it may be curved and extended upward practically parallel with the side of the bottle-neck, which position renders it less liable to come in contact with exterior objects and is preferable for packing and shipping. The inner end of the lever is formed with a hook *c'*, which engages a wire loop *b*, suitably attached to the cork B. The attachment is made by means of a wooden block *b'*, which is set and cemented in a socket

in the top of the cork B. The ends of the wire loop *b* pass down in grooves formed in the sides of the block *b'* and are clasped or bent under the bottom of the same, as shown. The hook *c'* of the lever is engaged with the cork-loop *b* after the cork has been passed into the cavity in the bottle-neck.

The ball D is inserted in its place between the lever and the socket *a'* through a tangential opening a^2, (see Fig. 5,) which is formed in the thickened side or portion of the bottle-neck. This opening or hole is subsequently closed by means of a glass plug E, (see Figs. 3 and 4,) the same being cemented in place and its outer end being beveled or rounded corresponding to the contour of the bottle-neck. As indicated in Fig. 3, the side of the lever C adjacent to the plug E is beveled to favor insertion of the ball D in place, as there shown.

The bottle-neck is formed with a shoulder, as indicated, in order to provide for attachment of a wire or string that may be employed to secure the outer cork B'.

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

1. The combination, with a bottle, of a sealing-cork, and a lever connected therewith and extending through and having its fulcrum in a slot in the side of the bottle-neck, substantially as shown and described.

2. The combination, with a bottle-neck having a lateral slot, of a sealing-cork adapted for seating in the neck below the slot, a lever which is loosely connected with the cork and extends laterally through said slot, and a movable fulcrum for the lever, the same being adapted to move inward from its normal position when the lever is depressed for unsealing the bottle, substantially as shown and described.

3. The combination, with a bottle-neck having a lateral slot having adjacent sockets in its lower side, and a cork adapted for seating in the neck below said slot, of a lever connected with the cork and extending laterally through the slot, and a movable fulcrum consisting of a device adapted to be seated in the outer socket and to pass into the inner socket when the lever is tilted, substantially as shown and described.

4. The combination, with a bottle-neck having a lateral slot provided with a socket in its lower side and an adjacent shoulder exterior thereto, of a cork adapted to be seated in the neck below said slot, a lever connected therewith and projecting through the latter and provided on its under side with a flange which is shaped and located substantially as indicated, so that, when the lever is tilted, it passes below the shoulder of the neck and engages the same, and a movable fulcrum for said lever, the same being adapted to shift from the normal position to one in which it is adapted for holding the lever in the locked position by which the cork is held dislodged, substantially as shown and described.

5. The combination, with a bottle-neck having a lateral slot provided with two sockets in its lower side and a shoulder adjacent to the outer slot, of a cork adapted to be seated in the neck below said slot, a lever connected with the cork and projecting through the slot and provided with a flange adjacent to the shoulder of the neck and adapted to engage the latter when the lever is tilted downward, and a soft-metal ball forming the fulcrum of the lever, the latter having a socket to receive the upper side of the same, substantially as shown and described.

6. The combination, with a bottle-neck having a lateral slot and sockets formed adjacently in the lower side of the same, of a sealing-cork and a lever projecting through the slot and having a socket in its under side, a soft-metal ball which is normally held in the socket of the lever and the socket of the bottle-neck, and adapted to be shifted by the lever when the latter is tilted for unseating the cork, substantially as shown and described.

7. A bottle having a lateral open slot provided in its lower side with two adjacent sockets for receiving a movable lever-fulcrum, and a tangential passage communicating with said slot to provide for insertion of the lever-fulcrum, as specified.

8. An improved bottle having a lateral slot, and a horizontal tangential passage which communicates therewith, a plug inserted and cemented in such passage, a sealing-cork, a lever connected therewith and passing through the lateral slot, and a ball seated beneath and forming the fulcrum of said lever, the ball being of less diameter than the tangential passage, substantially as shown and described.

9. A sealing-cork having a central socket in its upper side, a wooden block inserted and cemented therein, and a wire loop engaging the said block, substantially as shown and described.

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Witnesses:
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JAS. I. MAXWELL.