

W. H. BRYAN.
BOTTLE LOCK.
APPLICATION FILED NOV. 6, 1908.

940,125.

Patented Nov. 16, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

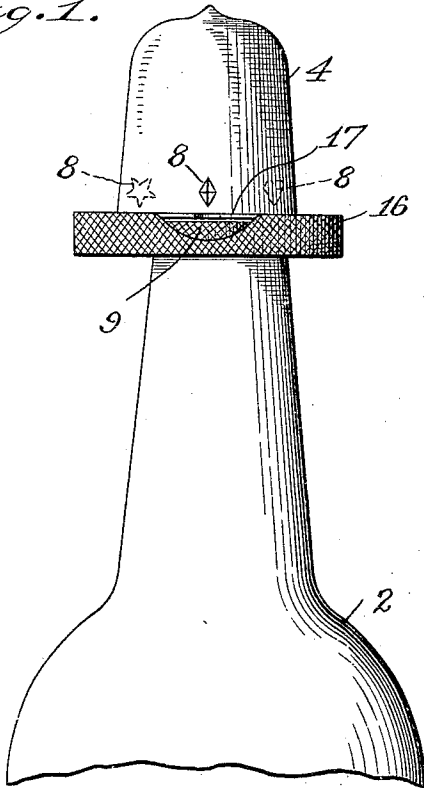


Fig. 2.

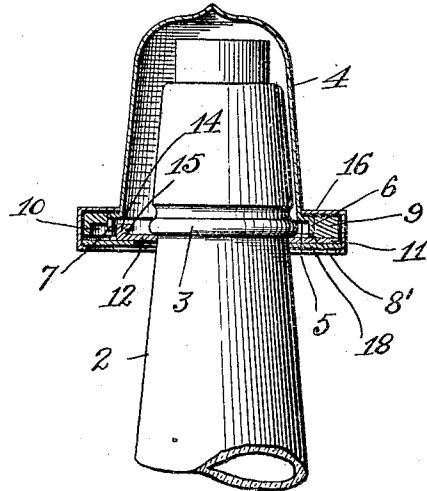


Fig. 3.

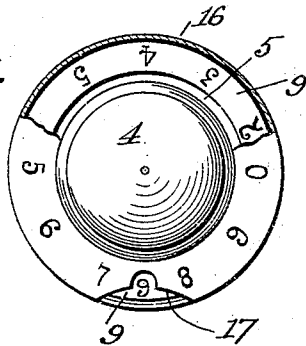


Fig. 4.

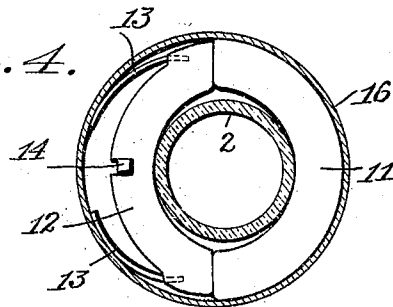


Fig. 5.

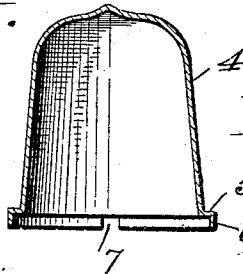


Fig. 6.

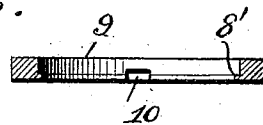
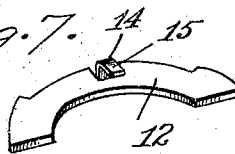


Fig. 7.



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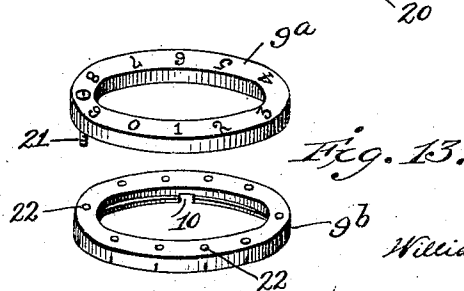
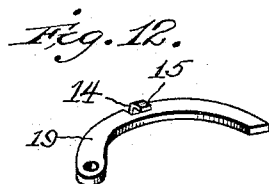
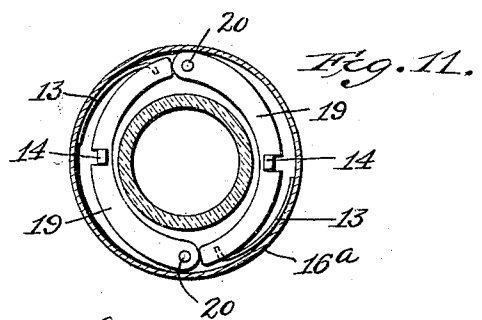
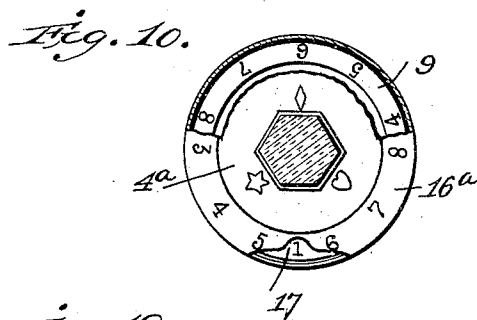
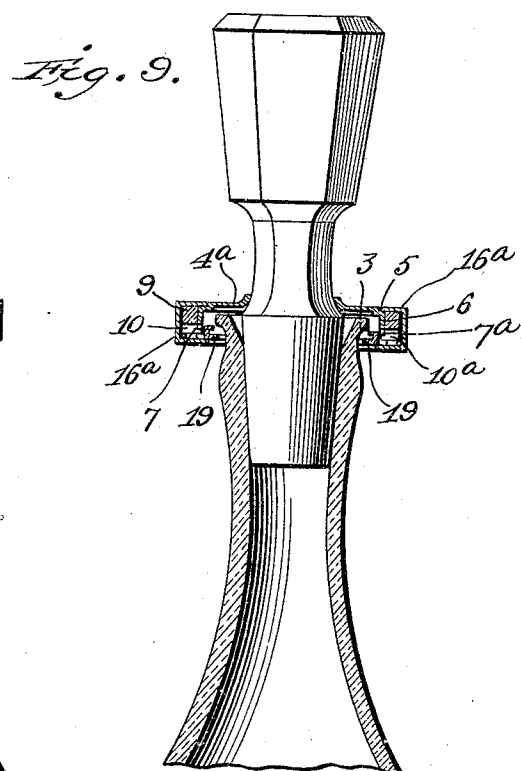
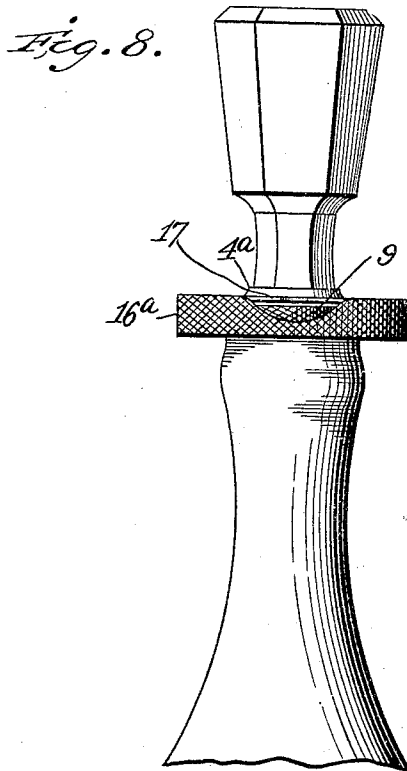
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WILLIAM H. BRYAN, OF BALTIMORE, MARYLAND.

BOTTLE-LOCK.

940,125.

Specification of Letters Patent.

Patented Nov. 16, 1909.

Application filed November 6, 1908. Serial No. 461,372.

To all whom it may concern:

Be it known that I, WILLIAM H. BRYAN, a citizen of the United States of America, and a resident of Baltimore, Maryland, (whose post-office address is No. 218 East Pleasant street, city of Baltimore, State of Maryland, United States of America,) have invented certain new and useful Improvements in Bottle-Locks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to bottle locks and has for its object to provide a simple and effective lock, preferably of the permutation type, in which all the members thereof are connected together and removable as a unit, thereby avoiding the necessity of requiring one or more members of the locking mechanism to be secured to the neck of the bottle.

Referring to the drawings, in which like parts are similarly designated, Figure 1 is an elevation of one form of my device comprising a cap capable of taking over and inclosing the stoppered bottle neck. Fig. 2 is a vertical central section through the bottle lock. Fig. 3 is a plan thereof having part of the casing that unites the several parts cut away. Fig. 4 is a plan view of the members of the lock. Fig. 5 is a section through the cap or cover. Fig. 6 is a section through the permutation ring and Fig. 7 is a perspective view of a locking member or bolt. Fig. 8 is an elevation of a modification showing the device applied to a decanter. Fig. 9 is a section of the same. Fig. 10 is a plan view similar to Fig. 3. Fig. 11 is a plan view similar to Fig. 4. Fig. 12 is a perspective of a modified locking member or bolt and Fig. 13 is a view showing a movable two-part permutation ring.

Referring more particularly to Figs. 1 to 7, I have shown a bottle lock capable of being applied to any of the well known forms of whisky or wine bottles 2, provided with the customary bead 3. In this form of bottle lock one of the movable members of the lock is formed as a cap or cover 4, capable of inclosing the top of the bottle and its stopper, and I have shown this cover or cap

as being sufficiently high to leave room between the lip of the bottle and the under face of the cap to allow the cork to project slightly from the bottle.

In Fig. 5, I have shown the cover cap 4 in section which is preferably, but not necessarily, made in one piece of spun or drawn metal and is provided with an off-set 5 having a depending flange 6, the flange being notched or cut through at one point of its periphery, as at 7, for the reception or passage of a portion of the locking member or bolt. On the sides of the cap 4 and adjacent the off-set 5 I place one or more index characters 8 in order to set the cap 4 to the combination, which cap 4 forms one of the rotatable permutation members of the lock.

The end of the flange 6 of the cap 4 seats on the rabbet 8' on the inner wall of the permutation ring 9. The rabbet 8' on the ring 9 may be dispensed with, but I have found that when the rabbet is used the cover 4 will slide or rotate much easier with respect to the ring 9. The ring 9 is provided with a notch or slot 10 extending almost entirely through the ring, from its center to its outer periphery and said slot is capable of registering with the slot or notch 7 in the cap 4. The permutation ring 9 is provided with indices, here shown as numerals and rests on a filler piece 11 preferably, but not necessarily, semi-circular in form and more clearly shown in Fig. 4, and also on the movable locking member or bolt 12, whose inner periphery fits the bottle neck. The movable locking member 12 is provided with two springs 13, that urge the locking member or bolt against the bottle neck, and a struck up lug 14, said lug being dimensioned to pass into the slots 7 and 10 when said slots are in register. This lug 14 is preferably integral with the locking member 12 and has its free end 15 turned back substantially parallel with and over the locking plate or bolt 12 as shown in Fig. 7, so that when the lug 14 is opposite the registering notches 10 and 7, by simply pulling on the cap 4, the bead 3 on the bottle neck will act to cam over the locking bolt or plate 12 and in so doing the lug 14 will enter the registering notches, but its overturned end 15 will not pass beyond the flange 6 of the cap 4. This will prevent the cap 4 and the permutation ring 9 from rotating with respect to one another during the unlocking

movement, *i. e.* when removing the assembled device from the bottle.

A metal casing 16 is provided that carries a set of numbers and whose upper face contains a notch or cut-away portion 17 through which the numerals or indices on the movable permutation ring 9 closed within it are visible and through which the milled periphery of this permutation ring can be engaged by the finger so that its numeral can be set with respect to the notch. This casing serves the double purpose of a carrier for the numbers to which the cover 4 is set and as a means for holding the parts assembled. The plate 11 is held stationary by friction or otherwise and in the example illustrated the milling of the exterior edge of the casing assists in holding the plate in place inasmuch as the plate makes a close fit with the interior of the casing 16. Below the filler piece 11 and the locking member 12 is an annular plate 18 forming part of the casing and held in place by turning over or spinning over the lower edge of the casing 16.

In those locks that I have made one of the indices 8 on the cap 4 is spaced with respect to the notch so as to set opposite one of the numerals or indices on the upper face of the casing 16 and the movable permutation ring is made so that one of its numbers or indices appearing at the cut-away portion 17 will cause the two notches 7 and 10 to register so that any one knowing the combination can open the lock.

In Figs. 8 to 12 I have shown a modification as applied to a decanter in which the cover or movable cap 4^a has its stop cut off and the metal forced into engagement with the angular, glass stopper of the decanter and instead of being provided with only a single notch it is provided with two notches 7 and 7^a opposite one another. The permutation ring 9 is also provided with two notches 10 and 10^a diametrically opposite one another. The ring 9 in this form rests on two arcuate locking members 19 more clearly shown in Fig. 11 and pivoted at 20 to the bottom of the casing 16^a which in this particular instance is shown in a single piece. Each of the pivoted locking members 19 is provided with a spring 13 and a locking lug 14 having its end 15 bent over said member as heretofore described with respect to Fig. 7. The case 16^a is provided with the cut-away portion or notch 17 through which the milled edge of the permutation ring 9 can be turned. The operation is identical with that of Fig. 1 with the exception that there are two locking members 19 that are spread apart by the bead on the top of the bottle when pulling the stopper from out of the bottle. The stopper itself acts as a handle to rotate the cover 4^a.

In Fig. 13 I have shown a modification of

the permutation ring 9 in which this ring is made in two parts. The upper one 9^a being separable from the lower part 9^b and held thereto by a screw 21. The lower portion of the ring 9^b contains the notch or notches 10 and also contains a number of equally spaced screw holes 22. The head of the screw 21 is located between two indices or numerals on the upper portion 9^a of the ring 9 and can be removed when the ring is rotated to bring the screw at the notch 17 in the casing 16^a. By removing the screw and rotating the lower portion 9^b of the ring with respect to the one 9^a one or more divisions and reinserting the screw the combination can be readily changed by the user, as this shifts the numerals or indices on the ring 9^a with respect to the notch 10.

When the bolt or locking member or members are held in engagement with or against the bottle neck under the bead 3 on the bottle by the spring or springs and one or both permutation members and, the cover 4^a or the ring 9, is turned the lug 14 cannot be forced back by pulling up the cover, as the solid portion of the flange 6 of the cover lies behind the lug, or if it should happen that the notch 7 does lie behind it then the solid wall of ring 9 will do so, thus doubly preventing the movement of the bolt or bolts.

I claim:—

1. A bottle lock comprising a cover, a permutation locking mechanism including a bolt capable of engaging a bead on the exterior of the bottle, said cover, locking mechanism and bolt removable from the bottle as a unit.

2. A bottle lock comprising a cover, a permutation mechanism and a spring actuated bolt urged into locking position, said permutation mechanism controlling the movement of the bolt, said cover permutation mechanism and bolt removable from the bottle as a unit.

3. A bottle lock comprising a cover provided with a notch, a permutation ring having a notch capable of registering with that in the cover, a locking member having a lug capable of entering the registering notches and a casing inclosing the locking member and ring and rotatably securing them to the cover.

4. The combination with a stopper and a notched cover secured thereto, said cover forming a permutation member of a lock; of a permutation ring also having a notch capable of registering with the notch in the cover, and a locking member having a lug capable of entering the notches when registering.

5. The combination with a permutation locking mechanism having a plurality of co-operating relatively movable members and adapted to engage a continuous bead on the exterior of the bottle; of a stopper con-

nected to one of the relatively movable members of said mechanism to operate the same.

6. The combination with a stopper and a cover secured thereto, of a locking mechanism rotatably secured to the cover, said cover forming an element of the locking mechanism, and the stopper acting as a handle to actuate the cover.

7. A bottle lock comprising a cover having a depending flange, said flange having a notch, a permutation ring surrounding the flange and having a notch capable of registering with the notch in the flange, an arcuate spring urged bolt to take under the bead in the bottle neck, a lug on the bolt capable of entering the notches when in register and a casing to rotatably secure the parts together.

8. A bottle lock comprising a cover having an off-set and a depending flange on the off-set provided with a notch, a casing having a cut-away portion taking over the off-set and flange, a permutation ring having a rabbet on which said flange seats and a notch capable of registering with the notch in the flange, said ring located between the flange and casing, a spring urged arcuate locking bolt below the ring and flange and a lug on the bolt.

9. A bottle lock comprising a cover having a depending flange provided with a notch, a permutation ring having a notch, said notches capable of being brought into register, a casing inclosing the ring and flange, a spring urged locking bolt pivoted to the casing and a lug on the bolt capable of entering the notches when in register.

10. The combination with a stopper, of a cover secured thereto and having a flange provided with two notches, a permutation ring having two notches capable of registering with those in the cover, a casing in-

closing the flange and ring and having a cut-away portion to expose the ring, two arcuate spring urged locking bolts in the casing, said bolts pivoted to the casing at substantially diametrical points and a lug on each bolt capable of entering registering notches.

11. A bottle lock comprising a cover element having a notch, a movable locking bolt having a lug, and a two-part permutation ring having a notch capable of registering with that in the cover and into which the lug is movable and means adapted to secure the parts of the ring in different angular relation to alter the combination.

12. A bottle lock comprising a cover and a permutation locking mechanism rotatably secured thereto and capable of engaging a continuous bead on the bottle neck, said cover forming a rotatable permutation member of the locking mechanism.

13. A bottle lock comprising a cover and a cooperating permutation member rotatable with respect thereto, and a member movable transversely thereto, said transversely movable member capable of engaging a bead on the exterior of the bottle neck.

14. In a bottle lock, the combination with a cover and a ring cooperating therewith; of a member movable transversely of the cover and ring and capable of engaging a bead on the exterior of the bottle neck, said cover, ring and member capable of independent movement and removable from the bottle as a unit when said member disengages the bead on the bottle.

In testimony that I claim the foregoing as my invention, I have signed my name, in presence of two subscribing witnesses.

WILLIAM H. BRYAN.

Witnesses:

J. HOOPER EDMONDSON,
ALFRED G. GOODFELLOW.