No. 709,201. Patented Sept. 16, 1902.

W. J. BYCRAFT.

BOTTLE CLOSURE.

(Application filed Dec. 11, 1901.)

(No Model.)

Fig. 1.

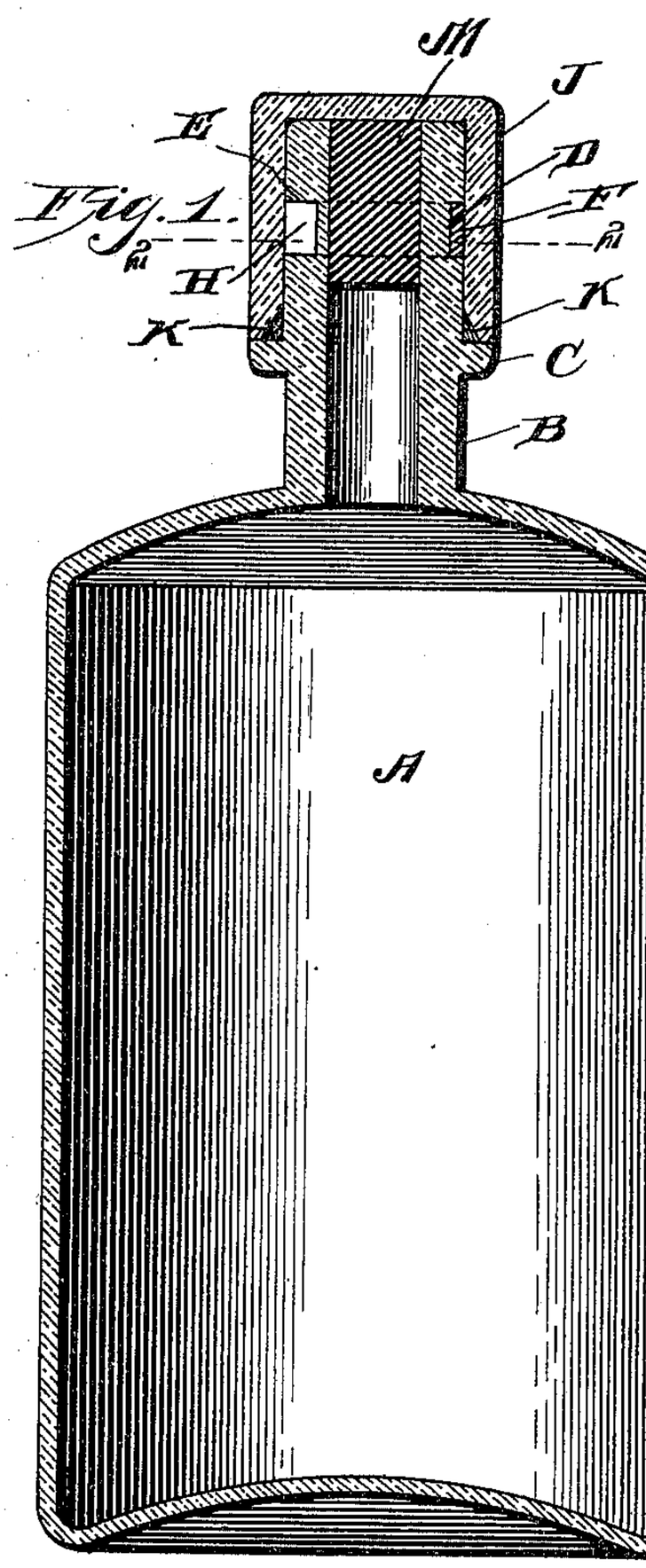


Fig. 4.

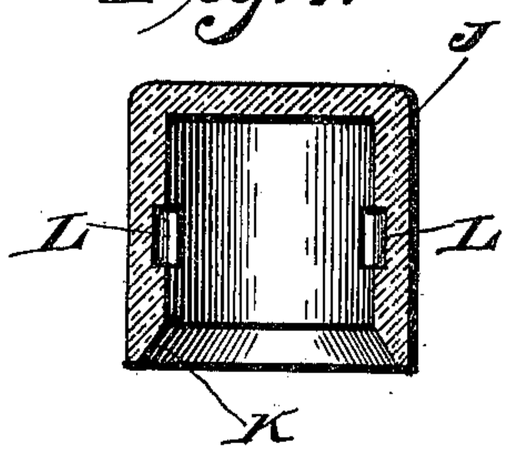


Fig. 2.

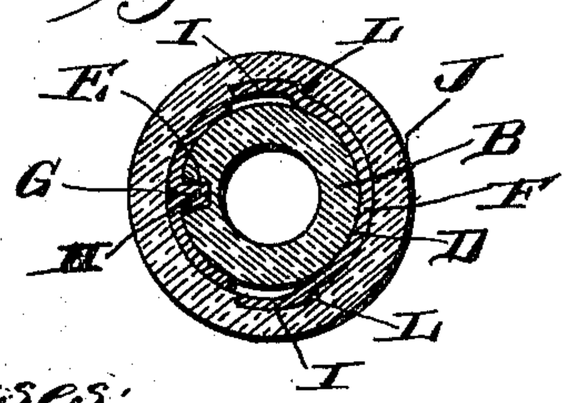
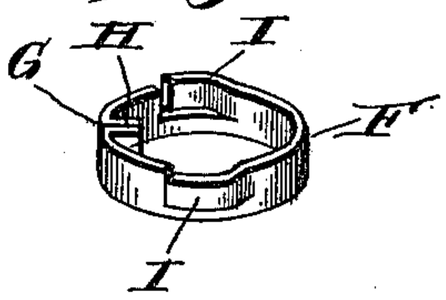


Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM J. BYCRAFT, OF NEWTON, INDIAN TERRITORY.

BOTTLE-CLOSURE.

SPECIFICATION forming part of Letters Patent No. 709,201, dated September 16, 1902.

Application filed December 11, 1901. Serial No. 85,467. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. BYCRAFT, a citizen of the United States, residing at Newton, Chickasaw Nation, Indian Territory, have invented a certain new and useful Improvement in Bottle-Closures, of which the following is a specification.

My invention relates to a new and useful improvement in bottle-closures, and has for its object to provide a device of this description whereby the bottle cannot be opened without breaking the closure, and thereby notifying the users that the bottle has been opened, and therefore the contents may have been tampered with.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claim.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a longitudinal section of a bottle with my device applied thereto; Fig. 2, a section on the line 2 2 of Fig. 1; Fig. 3, a perspective view of the locking-ring, and Fig. 4 a sectional view of the cap which closes the bottle.

In carrying out my invention as here embodied, A represents the bottle, and B the neck thereof.

C is an annular rim or shoulder formed around the neck of the bottle.

D is an annular groove formed in and around the neck of the bottle between the mouth thereof and the shoulder C. Within this groove a notch E is formed in the neck of the bottle for the purpose hereinafter described.

F is a locking-ring, which is slit at the point G and the ends turned in, as represented at H. This ring has portions I cut from the same and punched outward, so as to form retaining-springs. This locking-ring is placed around the neck of the bottle within the groove D, and the turned-over ends H are inserted within the notch E, thereby securing the ring against movement.

J is a cup-shaped cap, which is made of any brittle substance—such as glass, porcelain, or the like—and the lower interior edge of this cap is beveled, as indicated at K, so that when this cap is slipped over the neck of the bottle the beveled surfaces K will engage the spring-tongues I and press the same inward until they come opposite the notches L, formed upon the interior of the cap J. These springs I will then spring into these notches L, and thus the cap J will be held against removal. The cap J is also prevented from being rotated by reason of the springs I pointing in the opposite direction, for if it were tried to rotate the cap J the end of either one of the notches would come in contact with the ends of the springs, depending upon the direction in which the cap is rotated. Before the cap J is placed in position a cork M may be inserted in the mouth of the bottle, if desired. For the purpose of gaining access to the contents of the bottle the cap J must first be broken and removed, which fact at once notifies the users that the bottle has been opened. By reason of the lower edge of the cap resting upon the shoulder C no instrument can be inserted between the neck of the bottle and the interior of the cap for the purpose of trying to release the springs.

The advantage of my invention is that while I provide an exceedingly effective device for the closing of bottles such device only consists of two parts, which will not add materially to the cost of the bottle.

Another advantage of my invention is that all of the apparatus being placed upon the outside of the bottle the liquid does not come in contact with any of the parts, and this device does not disfigure the bottle, but in fact ornaments the same, and if the cap is made of glass a seal can be placed upon the top of the neck of the bottle over the cork before the cap is placed in position, and then the seal would be in plain view and could not be tampered with.

Of course I do not wish to be limited to the exact construction here shown, as slight modifications could be made without departing from the spirit of my invention.

Having thus fully described my invention, what I claim as new and useful is—

In combination with a bottle having an an-

nular shoulder formed with and around the neck thereof, and also an annular groove formed in and around the neck between the mouth and the shoulder, said neck of the bottle also provided with a notch formed within the annular groove, a cap composed of brittle substance adapted to fit over the neck of the bottle, said cap provided with notches formed upon the interior thereof, said notches adapted to register with the annular groove in the neck of the bottle, said cap provided with a beveled surface formed upon the interior lower edge of the same, a ring adapted to lie within the annular groove of the neck, portions of said ring punched outward to form springs, said springs adapted to lie within the notches upon the interior of the cap, and the free ends of said springs adapted to prevent the cap from being rotated in either direction, a projection formed with said ring and extending into the notch within the annular groove upon the neck of the bottle, as and for the purpose specified.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

WILLIAM J. BYCRAFT.

Witnesses:
ARTHUR GRABOWSKY,
BEN ROSS.