

No. 808,559.

PATENTED DEC. 26, 1905.

H. R. LOVEJOY.
BOTTLE.

APPLICATION FILED MAR. 24, 1905.

Fig. 1.

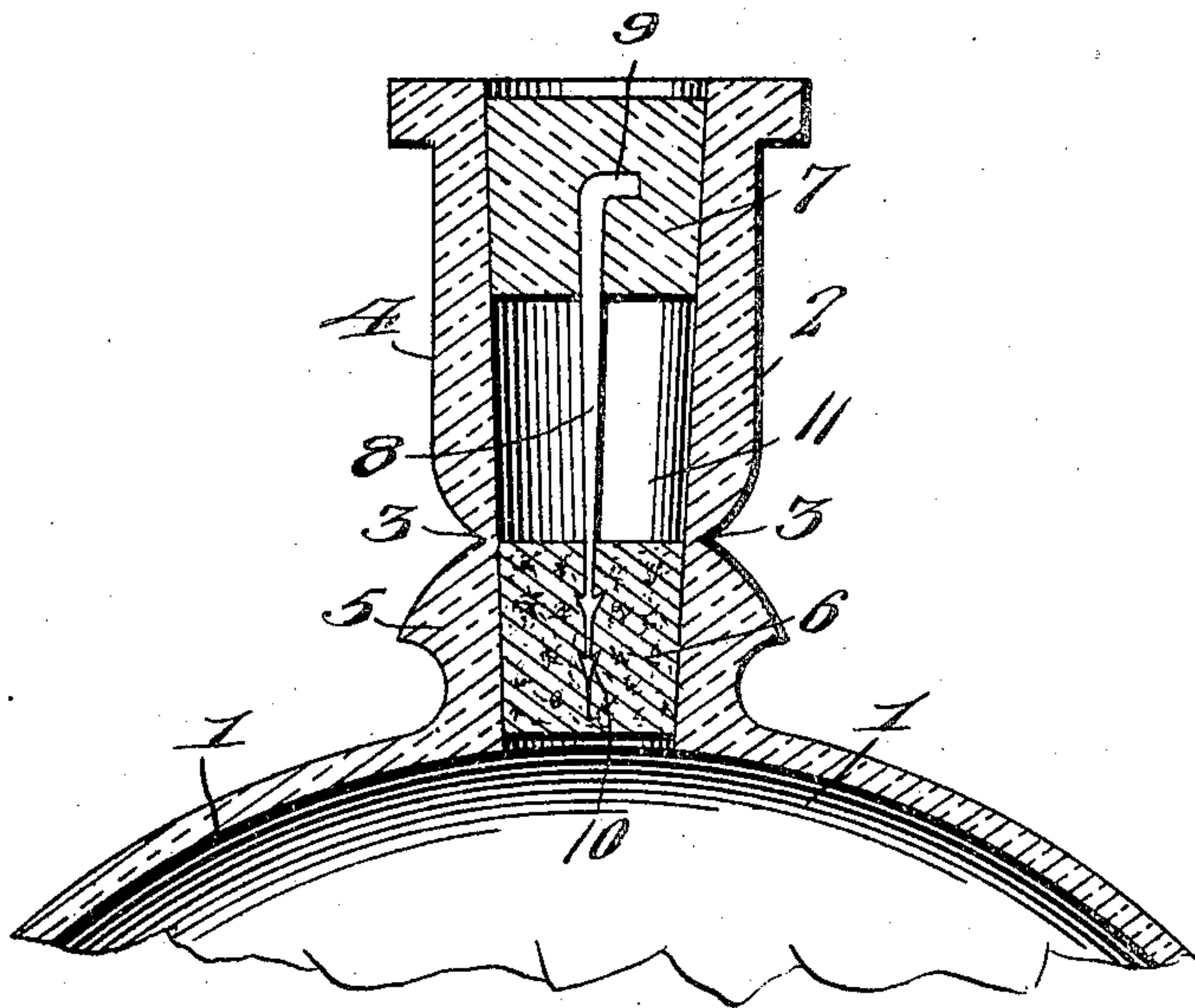
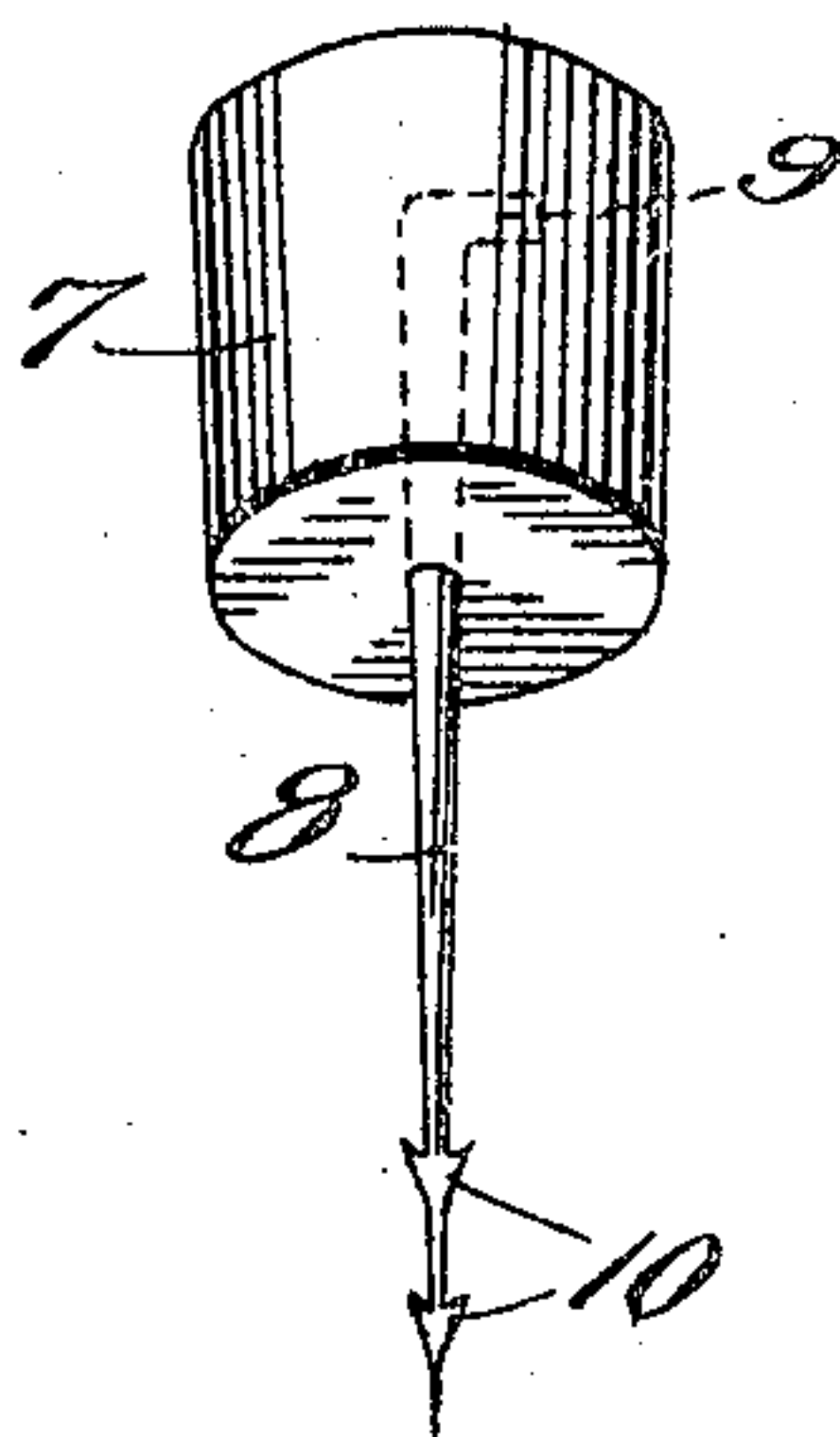


Fig. 2.



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HERBERT R. LOVEJOY, OF BRATTLEBORO, VERMONT.

BOTTLE.

No. 808,559.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HERBERT R. LOVEJOY, a citizen of the United States, residing at Brattleboro, in the county of Windham and State of Vermont, have invented new and useful Improvements in Bottles, of which the following is a specification.

This invention relates to improvements in bottles, the object of the invention being to provide a bottle so constructed that a portion of the neck thereof must be broken off before the contents can be discharged, thus giving visual evidence of the fact that the bottle has once been filled and opened for the discharge of its contents.

The preferred embodiment of the invention is illustrated in the drawings, in which—

Figure 1 is a longitudinal section of the upper portion of the body and the neck of a bottle embodying my invention, and Fig. 2 is a detail view of the upper stopper and the spurred stem or connecting member carried thereby.

Referring now more particularly to the drawings, the numeral 1 represents the body of the bottle, which may be of any preferred form and construction and which is provided with a neck 2, the bore or passage of which is slightly tapered or flared. This neck 2 is provided with an annular groove forming a weakened or frangible portion 3, connecting the upper and lower portions 4 and 5 of the neck. A stopper 6, preferably of ordinary cork, fits tightly in the lower portion 5 of the neck and closes the lower end of the neck-passage. This stopper frictionally engages the tapered wall of the neck-passage to a sufficient degree to prevent it from being casually forced down into the bottle and is arranged wholly below or with its top portion disposed in alinement with the frangible portion 3 of the neck.

Arranged above the stopper 6 is a stopper 7, which closes the upper end of the neck bore or passage. This stopper 7 is preferably made of glass or of some other suitable hard material which cannot be broken without breaking the neck portion 4. Carried by the stopper 7 is a metallic stem 8, preferably composed of a piece of wire shaped to produce the construction hereinafter described, the upper end of said stem being embedded in the stopper 7 and provided with an angularly-bent end or shoulder 9 to hold it from casual disconnection therefrom. The lower

end of the stem 8 is tapered or gradually reduced and is embedded in the stopper 6 and provided with barbs or spurs 10, preferably arrow-shaped, to hold it from withdrawal. By means of this stem the two stoppers 6 and 7 are firmly connected, so that they mutually coöperate to hold each other from movement. The stopper 7 may be secured by cement in the upper end of the neck, but is preferably simply fitted tightly therein slightly below the upper end of the neck, so that it cannot be gripped and withdrawn, the stem 8 being sufficient through its connection with the stopper 6 to prevent the stopper 7 from being engaged and withdrawn in any known manner without sufficient force or pressure which would cause breaking of the frangible portion 3 and the removal of the upper neck-section, thus giving visual evidence of the fact that the bottle has been tampered with.

After the bottle has been filled the stopper 6 is inserted to close the lower neck portion 5, after which the stopper 7 is inserted to close the neck portion 4, the introduction of the stopper 7 with the stem 8 applied thereto causing the barbed end of the stem 8 to be forced into the stopper 6, thereby connecting the two stoppers together. This mode of closing the stopper-neck may be varied by initially connecting the stoppers and simultaneously inserting them in an obvious manner. The bottle will then be securely sealed, and its contents can only be discharged by first striking the neck portion 4 with or against a hard object, thus breaking the frangible portion 3 and detaching the neck portion 4, whereupon said portion may be removed with the stopper 6 and the contents discharged. During this operation of breaking the frangible portion 3 and the subsequent removal of the neck portion 4 the stopper 6 will prevent the entry of any small particles of broken glass into the body portion 1. The stopper 6 may then be detached or another stopper used to close the neck portion 5 during the further use of the bottle. It will thus be seen that the bottle can only be opened by breaking a portion of the neck thereof, so that visual evidence of the fact that the bottle has once been filled and opened will be given. The stopper 7 is preferably arranged some distance above the stopper 6, so as to leave an intervening space 11 in which a strip of paper or card or disk of any suitable material bearing the trade-mark of

the manufacturer may be inserted, so that it will be visible to the exterior through the transparent wall of the neck-section 4. This arrangement will prevent the removal of the
5 trade-mark without breaking the neck of the bottle. Thus the trade-mark device cannot be applied after the section 4 is detached by the breaking of the portion 3 and used a second time in connection with the same bottle,
10 thus further defeating any attempt to defraud.

The upper or rim edge of the section 5 of the neck is preferably made convexed or rounded in order to form a surface over which the contents of the bottle may freely flow when discharged from the bottle.

It will be observed that the invention provides a simple and effective construction of means for preventing fraudulent refilling
20 which may be employed in practice without

materially enhancing the cost of the bottle over a bottle of ordinary construction.

Having thus described the invention, what I claim as new is—

A bottle having a neck composed of upper 25 and lower sections connected by an intermediate frangible portion, stoppers closing said sections above and below the frangible portion, said stoppers being separated to provide an intervening space, and a stem having 30 a shouldered end embedded in the upper stopper and having a barbed end to engage and be embedded in the lower stopper.

In testimony whereof I affix my signature in presence of two witnesses.

HERBERT R. LOVEJOY.

Witnesses:

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