

(No Model.)

J. FAWCETT.

DEVICE FOR DETECTING FRAUDULENT REFILLING OF BOTTLES.

No. 578,320.

Patented Mar. 9, 1897.

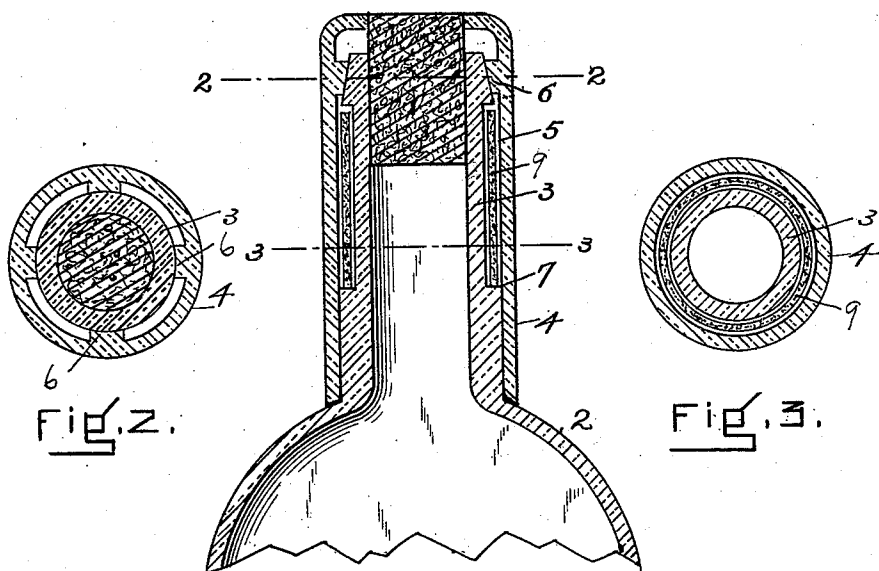


Fig. 1.

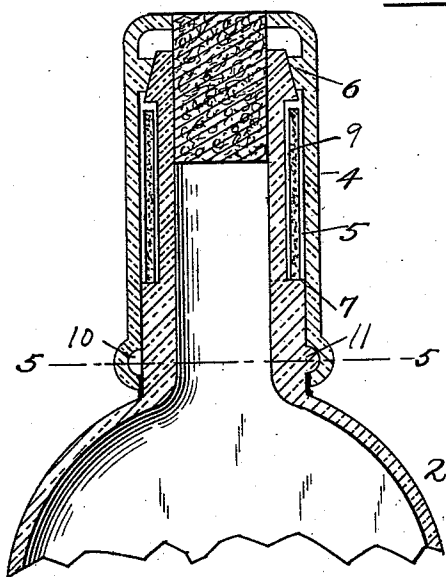


Fig. 4.

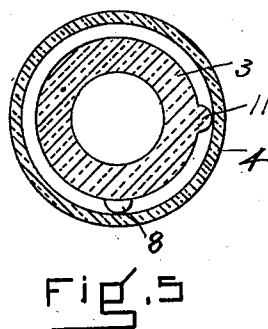


Fig. 5.

WITNESSES:

Ernest S. Chadwick.
Ellen B. Tomlinson.

INVENTOR

John Fawcett
by Alex. P. Browne,
attorney.

UNITED STATES PATENT OFFICE.

JOHN FAWCETT, OF BOSTON, MASSACHUSETTS:

DEVICE FOR DETECTING FRAUDULENT REFILLING OF BOTTLES.

SPECIFICATION forming part of Letters Patent No. 578,320, dated March 9, 1897.

Application filed May 20, 1896. Serial No. 592,248. (No model.)

To all whom it may concern:

Be it known that I, JOHN FAWCETT, a citizen of Great Britain, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Devices for Detecting Fraudulent Refilling of Bottles, of which the following is a specification.

The object of my invention is to provide a simple and effective means of preventing the refilling of a bottle without detection after it has once been emptied of its contents. To this end I provide a bottle having a chamber or compartment so arranged that its contents are at all times readily visible and yet cannot be reached without practically destroying the bottle, said compartment having communication with the neck of the bottle, through which the liquid contents are poured. In this compartment I place some material which, when wet by the contents of the bottle, will be defaced or otherwise changed in such manner as will be instantly and plainly visible, the above parts being so arranged that it is impossible to empty the bottle without introducing some of its contents into the said compartment.

A preferred form of my invention is shown in the accompanying drawings, in which—

Figure 1 is a central vertical section of the neck of a bottle with my improvements applied thereto. Figs. 2 and 3 are cross-sections of the same, taken on lines 2 2 and 3 3 of Fig. 1. Fig. 4 is a view similar to Fig. 1, showing a modified means of securing the parts of my device in place. Fig. 5 is a cross-section taken on line 5 5 of Fig. 4.

In the drawings the numeral 2 indicates a bottle provided with a neck 3, which, as in the case of an ordinary bottle, is unobstructed as to its interior and through which the bottle can readily be filled and emptied. Around this neck is placed a cylinder 4, of glass, which is enough larger than said neck to leave an annular chamber or compartment 5 between it and the said cylinder, the latter being kept in position by means of the shoulders 6 and 7 at the upper and lower ends thereof, which shoulders may be formed either on the bottle-neck or on the interior of the cylinder, as desired.

A means of communication is provided between the interior of the bottle-neck and the annular compartment, which may be done by prolonging the upper end of the cylinder slightly beyond the neck of the bottle and turning the edge inward, as shown in the drawings, spaces being left between the shoulders 6, or holes may be formed directly through the neck of the bottle. Within the compartment is placed some substance which will be discolored or otherwise visibly defaced by contact with the liquid contained in the bottle. This substance may conveniently consist of a strip of blotting-paper 9, on which any desired matter, such, for instance, as the trade-mark of the bottler, is printed in copying or similar ink.

The parts of my device are assembled by placing the blotting-paper or other substance in the annular compartment and then slipping the cylinder down over the neck of the bottle and securing it in place in such manner that it cannot be detached without breaking it or the bottle. For the purpose of securing the cylinder in place its lower end may simply be cemented to the neck of the bottle, or, if preferred, a groove 10 may be formed around the interior of the lower end of the cylinder and a corresponding stud 11 provided upon the bottle, a passage-way for the stud into the groove being provided, as at 8. In using this construction the cylinder is slipped into place and is then partially rotated and cemented, the stud and groove in this manner preventing any possible removal thereof. In use my improved bottle is filled and corked in the usual manner. When it is to be emptied, the cork is withdrawn and the liquid poured out in the ordinary manner, but in so doing some of it necessarily gets into the annular compartment and discolours the substance contained therein, so that it will be impossible for any one to again fill the bottle and sell the same without the fraud being detected.

I claim as my invention—

1. A bottle provided with a visible compartment containing a substance adapted to be visibly defaced by contact with the contents of the bottle, and an opening connecting the neck of the bottle and said compartment in such manner that a portion of the liq-

uid contents of the bottle must pass through said opening when the bottle is poured from, substantially as described.

2. A bottle having a neck, a cylinder surrounding the same and providing a compartment between itself and the neck, an opening connecting the interior of the neck and said compartment in such manner that a portion of the liquid contents of the bottle must pass through said opening when the bottle is poured from and a substance arranged in said compartment to be visibly defaced by contact with the liquid contents of the bottle, all substantially as described.

3. A bottle having a neck, a closed cylinder surrounding the same and supported by

suitable shoulders, said cylinder being secured to the bottle, an opening connecting the interior of the neck of the bottle with the space surrounding the exterior thereof in such manner that a portion of the liquid contents of the bottle must pass through said opening when the bottle is poured from, and a substance within said cylinder adapted to be defaced by contact with the liquid contents of the bottle, for the purpose set forth.

In testimony whereof I have hereunto subscribed my name this 18th day of May, 1896.

JOHN FAWCETT.

Witnesses:

ALEX. P. BROWNE,
GEORGE LEMIST CLARKE.