

O. SORGAN.
NON-REFILLABLE BOTTLE.
APPLICATION FILED JULY 13, 1911.

1,004,488.

Patented Sept. 26, 1911.

Fig. 1.

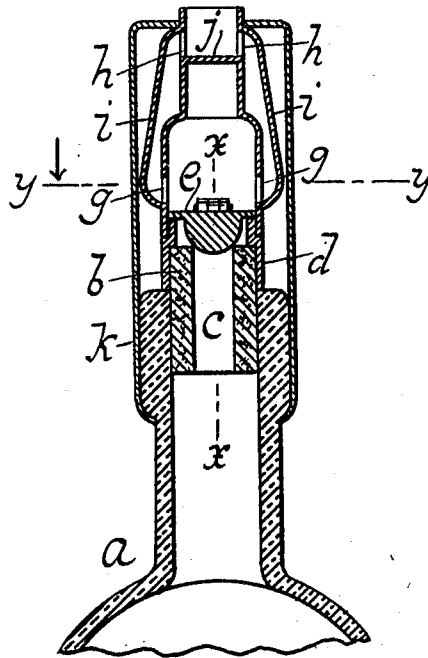


Fig. 2.

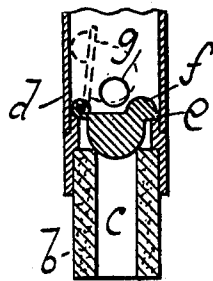
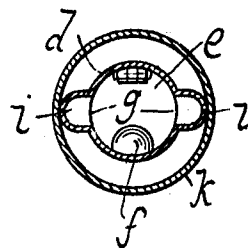


Fig. 3.



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UNITED STATES PATENT OFFICE.

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NON-REFILLABLE BOTTLE.

1,004,488.

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To all whom it may concern:

Be it known that I, OTTO SORGAN, a citizen of the United States, residing at New York, county of New York, and State of New York, have invented new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

This invention relates to a non-refillable bottle, which consists essentially of a shell attached to the neck of the bottle and a flap valve arranged in the shell adapted to normally close the mouth of and prevent surreptitious filling of the bottle after the original contents have been consumed. The shell is provided with a cork at its lower end for insertion into the mouth of a bottle. The shell has a set of upper and lower lateral openings located above the valve with connecting conduits for the passage of the liquid. A baffle plate is located above the valve and forms a barrier to prevent tampering with the valve. The flap valve is weighted and has a stop to prevent excessive opening of the valve.

The novel features of the invention are more fully described in the following specification and claims and illustrated in the accompanying drawing in which:

Figure 1 represents a vertical section of a device embodying this invention. Fig. 2 is a detail section of the valve taken along the line *x x* Fig. 1. Fig. 3 is a horizontal section along the line *y y* Fig. 1.

In this drawing the letter *a* designates a bottle of ordinary construction. In the mouth of this bottle is inserted a cork *b* provided with a central opening *c* for the liquid to pass through. The cork has fixed to it a tubular shell *d* extending above the mouth of the bottle. Within this and above the cork is pivoted a metallic flap valve *e* having a weighted lower part and a stop *f* situated at the upper part of the lid. This stop by striking on the inner wall of the shell limits the opening movement of the valve and forms an auxiliary weight to rapidly close the valve. The shell is provided with a set of lateral openings *g* located above the valve and a set of openings *h* situated near the top of the shell. These openings are connected together by conduits or pipes *i* for the passage of the liquid. Below the openings *h* and within the shell is fixed a baffle plate *j*. This plate effectively closes the shell below the upper openings and prevents a tool

from being inserted into the shell, manipulation of the valve from the outside is thus prevented. A cap *k* is slipped over the top of the shell and its lower portion is fastened or clamped to the neck of the bottle. The cap when secured in place prevents lateral as well as longitudinal movement of the shell. When the flap valve is open to its fullest extent it assumes a position at an inclination toward the valve seat (see Fig. 2). In this position the valve will rapidly close when the bottle is upright or when an attempt is made to pour liquid into the mouth of the bottle. As shown in the drawing the pivot point of the flap valve is located at right angles to the lower openings so that when the valve is open the openings are unobstructed and the liquid can flow freely out of the mouth of the shell.

I claim:—

1. The combination with a bottle of a tubular shell having a tubular stopper fixed to the lower portion of the shell and adapted for insertion into the mouth of the bottle, a flap valve pivoted in the shell and provided with a weighted lower portion to coact with the upper portion of the tubular stopper while the flap portion of the valve rests on a seat in the shell, a baffle plate located near the top of the shell, said shell having openings above and below the plate and conduits leading from each of the lower to the upper openings.

2. The combination with a bottle of a tubular shell having a tubular stopper fixed to the lower portion of the shell and adapted for insertion into the mouth of the bottle, a flap valve pivoted in the shell and provided with a weighted lower portion to coact with the upper portion of the tubular stopper while the flap portion of the valve rests on a seat in the shell, said valve having a stop to engage the wall of the shell, a baffle plate located near the top of the shell, said shell having openings above and below the plate and conduits leading from each of the lower to the upper openings.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

OTTO SORGAN.

Witnesses:

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