No. 763,914. PATENTED JUNE 28, 1904.

E. E. LEWIS.

BOTTLE.

APPLICATION FILED DEC. 5, 1903.

NO MODEL.

Fig. 1.

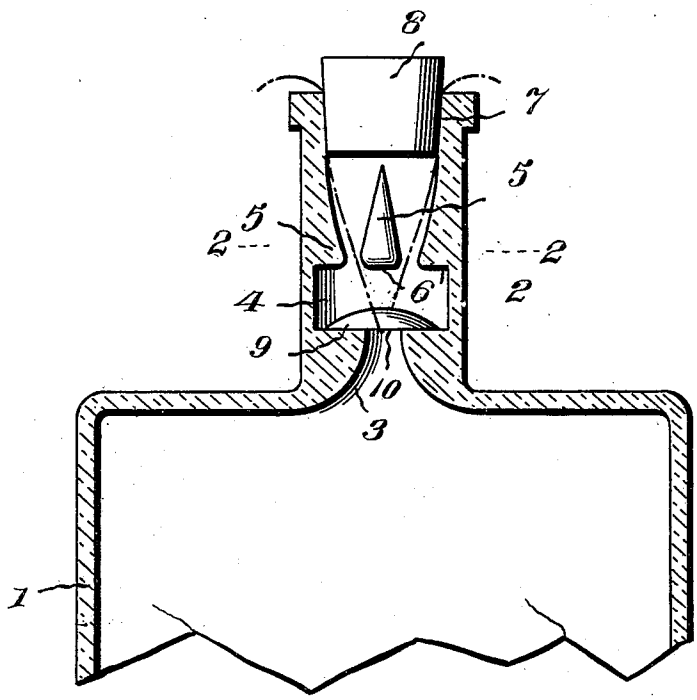
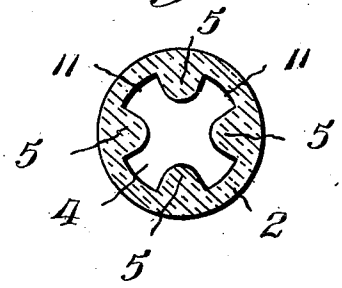


Fig. 2.



Witnesses
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No. 763,914. Patented June 28, 1904.

UNITED STATES PATENT OFFICE.

EDGAR E. LEWIS, OF ARDMORE, INDIAN TERRITORY, ASSIGNOR OF ONE-HALF TO S. M. DOUGLAS, OF ARDMORE, INDIAN TERRITORY.

BOTTLE.

SPECIFICATION forming part of Letters Patent No. 763,914, dated June 28, 1904.

Application filed December 5, 1903. Serial No. 183,936. (No model.)

To all whom it may concern:

Be it known that I, EDGAR E. LEWIS, a citizen of the United States, residing at Ardmore, in the county of Pickens, Indian Territory, have invented new and useful Improvements in Bottles, of which the following is a specification.

This invention relates to that class of bottles or similar vessels for holding liquids which are provided with a valve operating to permit the discharge of the liquid through the necks or outlets, but materially obstructing the refilling of a bottle or vessel.

The object of the present invention is to improve the prior construction of bottles or vessels of this class and prevent such bottles or receptacles from being filled with liquids of a spurious nature after the original contents have been fully dispensed.

The invention consists in the construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

In the drawings, Figure 1 is a vertical section showing the upper portion of a bottle and its neck and embodying the features of the invention. Fig. 2 is a horizontal section on the line 2 2, Fig. 1.

Similar numerals of reference are employed to indicate corresponding parts in the views.

The numeral 1 designates a bottle-body having a neck 2, molded to form a reduced throat 3, communicating with the body, and an enlarged valve-chamber 4. Above the chamber 4 the interior of the neck is also formed with a series of diametrically-disposed projections 5, gradually diverging toward their lower extremities, where abrupt shoulders 6 are produced over the upper part of the chamber 4. The upper portion of the neck 2 above the projections 5 has the usual bore or throat 7 to receive a stopper 8.

At the time the neck 2 is formed a valve 9 is disposed in the chamber and is preferably made from marble. This valve is plano-convex in form to provide a lower flat face 10 and is of materially greater diameter than the diameter of the throat 3 where the latter communicates with the chamber 4. The valve 9 is also of such dimensions that it cannot be turned and withdrawn between the projections 5, and in the primary filling operation of the bottle constructed as just set forth a cord or wire is slipped under the valve, and the latter is held up or open until the bottle is filled with the liquid desired to be placed therein. After such filling operation has been completed the cord or wire, as shown by Fig. 1, is withdrawn and the stopper applied, as shown. In using the bottles to dispense the contents thereof the stopper 8 is removed and the bottle turned or canted, so that the valve will be thrown away from its seat and permit the liquid to flow through the chamber 4 into the bore 7. When the bottle is restored to erect position, the valve 9 will immediately close, and such operation is continued until the original contents of the bottle have become entirely exhausted. Any attempt to refill the bottle with a substitute liquid will be obstructed, as the valve will remain on its seat and, being of a heavy nature, cannot be practically floated away from its closing device.

It will be observed that there are no parts in the present improved bottle structure that will become corroded or injured, and the invention may be practically employed in connection with bottles containing acids, especially in view of the material employed in the construction of the valve 9. When the original contents of the bottle are dispensed, no obstruction will be encountered in the outpouring of the same at a point above the location of the valve in view of the fact that channels or grooves 11 are formed between the projections 5, as clearly shown by Fig. 2.

Changes in the proportions and dimensions may be resorted to without departing from the spirit of the invention.

Having thus fully described the invention, what is claimed as new is—

A bottle having a neck with an enlarged valve-chamber therein, a throat leading from the bottle-body to the center of said chamber and contracted where it enters said chamber, the neck at the upper terminal of the valve-chamber having integral diametrically-op-

posed projections gradually diverging from their upper terminals to their lower ends to provide inwardly-projecting abutments or shoulders, and a plano-convex valve formed of material impervious to the action of acid, the said valve having its convex surface uppermost.

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

EDGAR E. LEWIS.

Witnesses:
C. L. LONDON,
J. C. THOMPSON.