

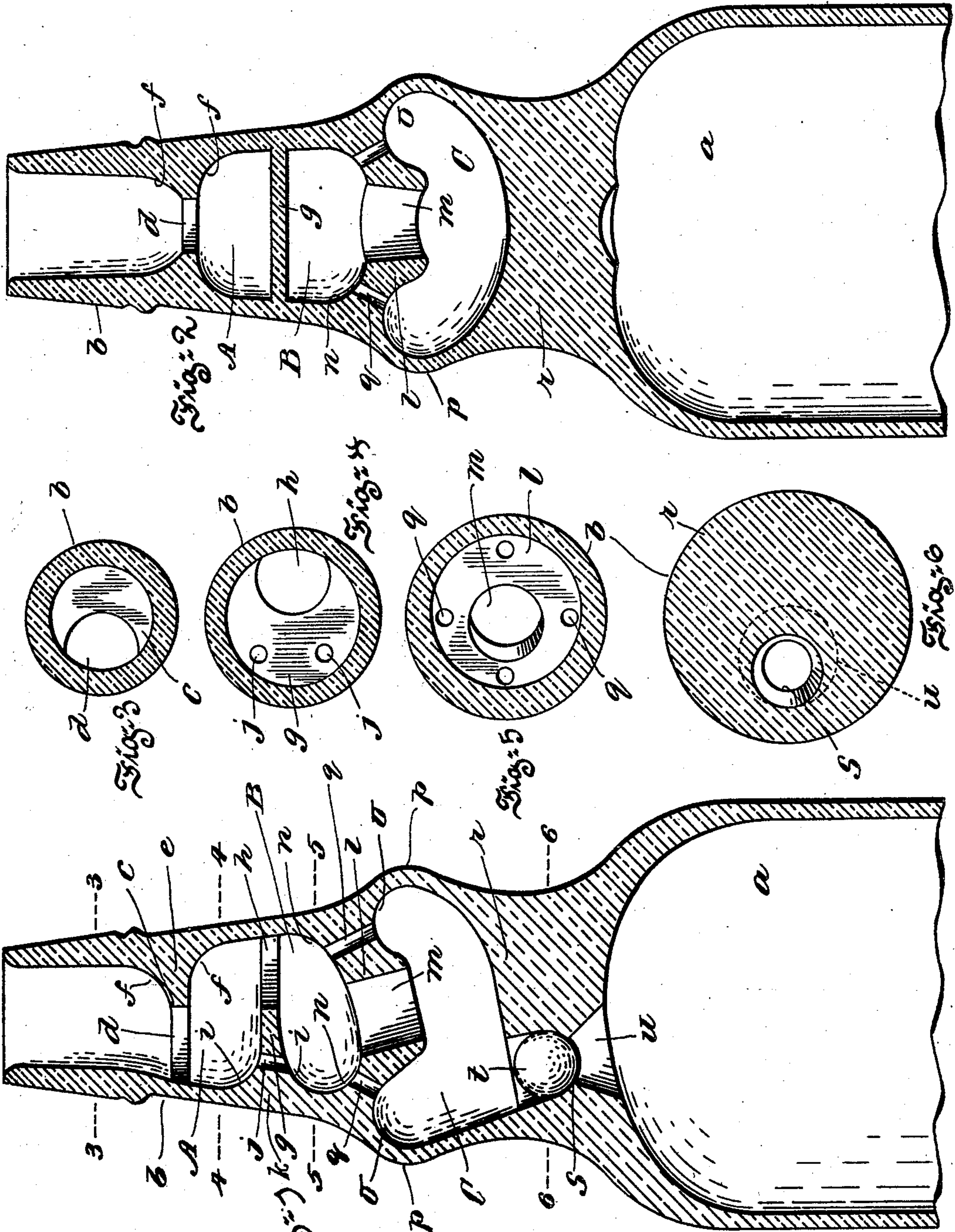
No. 876,961.

PATENTED JAN. 21, 1908.

C. H. HAUPTLE & J. J. SCHEUERER.

NON-REFILLABLE BOTTLE.

APPLICATION FILED OCT. 31, 1907.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

CHARLES H. HAUPTLE AND JOSEPH J. SCHEUERER, OF PHILADELPHIA, PENNSYLVANIA.

## NON-REFILLABLE BOTTLE.

No. 876,961.

Specification of Letters Patent.

Patented Jan. 21, 1908.

Application filed October 31, 1907. Serial No. 400,093.

*To all whom it may concern:*

Be it known that we, CHARLES H. HAUPTLE and JOSEPH J. SCHEUERER, both citizens of the United States, and residents of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have jointly invented a certain new and useful Non-Refillable Bottle, of which the following is a specification.

This invention relates to that class of bottles in which it is intended to prevent the fraudulent refilling of the same after the original contents have been exhausted, and the principal object of the present invention may be said to reside in the providing of a bottle which shall prove more efficient for the purpose than those hitherto devised, and which at the same time shall be molded to produce a bottle the various parts of which are formed integral with the same, with the exception of a movable stopper, thereby reducing the cost of manufacture to a minimum.

Other objects will appear hereinafter.

The invention stated in general terms comprises the improvements to be presently described and finally claimed.\*

The nature, characteristic features and scope of our invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof, and in which

Figure 1, is a central sectional view of the upper portion of a bottle embodying the invention. Fig. 2, is a similar view, illustrating the bottle turned around ninety degrees. Fig. 3, is a sectional view taken upon the line 3—3 of Fig. 1. Fig. 4, is a sectional view taken upon the line 4—4 of Fig. 1. Fig. 5, is a sectional view taken upon the line 5—5 of Fig. 1, and Fig. 6, is a sectional view taken upon the line 6—6, of Fig. 1.

In the drawings there is shown a bottle body *a*, having a generally tapered neck *b*. These parts together with certain other parts hereinafter to be described are of glass and in manufacture are molded so as to provide a non-refillable bottle that shall, with the exception of a movable stopper, be in one piece. Formed integral with the neck of the bottle and below its mouth, is a horizontally arranged diaphragm *c*, comprising a baffle-disk, provided with a peripherally arranged aperture *d*, therein. As shown this diaphragm is so formed with relation to the bottle neck that there is present an increased thickness as at *e*, due to the concaved por-

tions *f*. Immediately below this diaphragm is a second diaphragm *g*, also horizontally arranged and formed integral with the bottle neck and provided with a peripherally arranged aperture *h*. Like the upper diaphragm it merges with the bottle neck by means of concaved walls *i*, which tend to increase the thickness of the wall of the bottle neck at *k*. Extending through the diaphragm *g*, in juxtaposition to the part *k*, are comparatively small openings *j*. Next below this diaphragm is a third diaphragm *l*, of comparatively greater thickness than the aforesaid diaphragms and while generally speaking it is horizontally arranged, it is somewhat aslant, and is provided with a centrally arranged angularly disposed opening *m*. This diaphragm also merges with the bottle neck by means of concaved portions *n* and *o*. The walls of the cavity *o*, cause the neck of the bottle to bulge as at *p*. Extending through the diaphragm *l*, and arranged in a circle around the opening *m*, are a series of small openings *q*. Below the last mentioned diaphragm is the fourth and final diaphragm *r*, which is of greater thickness than any of the others. It also is arranged slightly aslant and is provided with a vent *u*, and a valve seat *s*, which is angularly disposed with relation to the bottle, and is adapted for the reception of a movable valve *t*, shown as being a spherical stopper, preferably of glass. As shown the walls of the valve seat are of the configuration of cone frustums and their meeting edges form a sharp ledge against which the valve may rest to make an air tight closure.

The above described partitions or diaphragms thus form three chambers A, B and C, the interior walls of which are principally curved and aslant and always drain toward the bottle interior. The openings *d*, *h*, *m*, and *u*, are all arranged out of line of one with the other and form a tortuous passage for the flow of liquid.

In practice the bottle is filled with liquid and the valve *t*, is then inserted within the neck and caused to gravitate by the tortuous passage to its valve seat. It may be readily caused to leave its seat when desiring to remove the contents of the bottle, but by means of the peculiar construction of the bottle neck and more especially the slanting contour of the interior walls of the chamber C, will readily reseal itself should it be attempted to refill the bottle. Obviously it



cannot be removed from the bottle. The small openings are efficient in draining the neck of the bottle.

What we claim is:

- 5 1. A non-refillable bottle, having a port between the body and neck, a movable valve-body adapted to rest within and close said port, and a series of separated partitions arranged within and formed integral with the  
10 said bottle neck, the said partitions being arranged above the said port and being provided with apertures of equal size sufficient to admit of the insertion therethrough of the valve body, the said openings being arranged  
15 in staggered relation with respect to one another.

2. A non-refillable bottle having a port between the body and neck, a valve-body

adapted to rest within and close said port, and a series of separated partitions arranged 20 within and formed integral with the bottle neck, the said partitions being located above the port and provided with apertures of equal size sufficient to admit the insertion therethrough of the valve-body, the said 25 openings being arranged in staggered relation with respect to one another and some of said partitions being equipped with additional drain apertures.

In testimony whereof, we have hereunto 30 signed our names.

CHAS. H. HAUPTLE.

JOSEPH J. SCHEUERER.

Witnesses:

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