

No. 791,136.

PATENTED MAY 30, 1905.

J. C. CONDO.
NON-REFILLABLE BOTTLE.
APPLICATION FILED SEPT. 13, 1904.

Fig. 1.

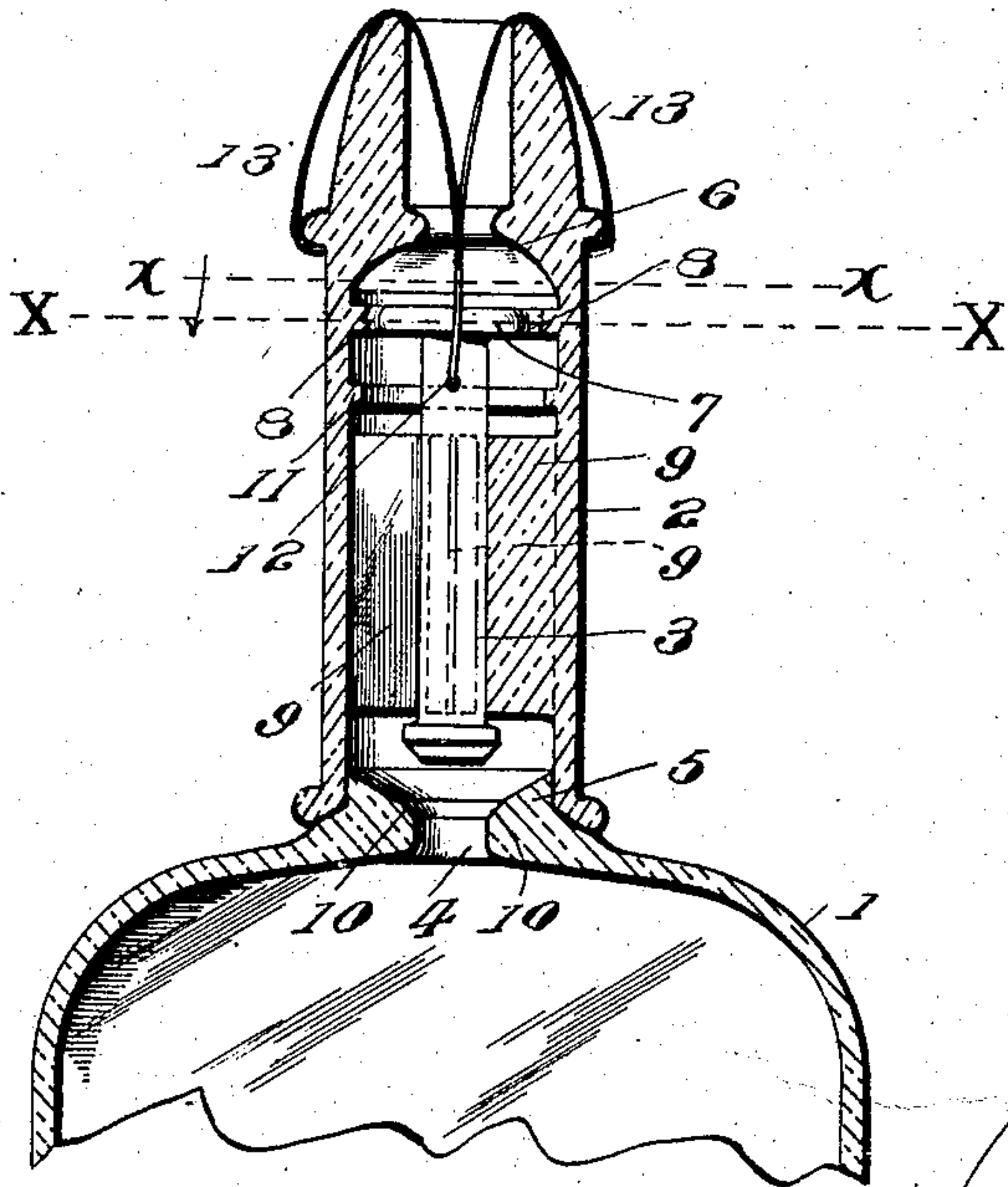


Fig. 4.

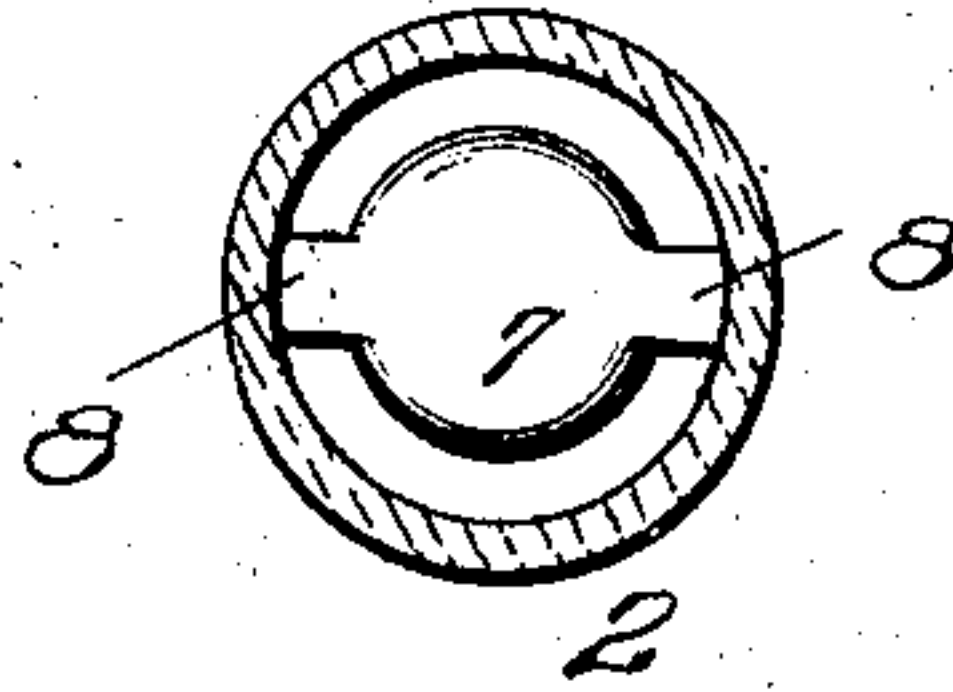


Fig. 3.

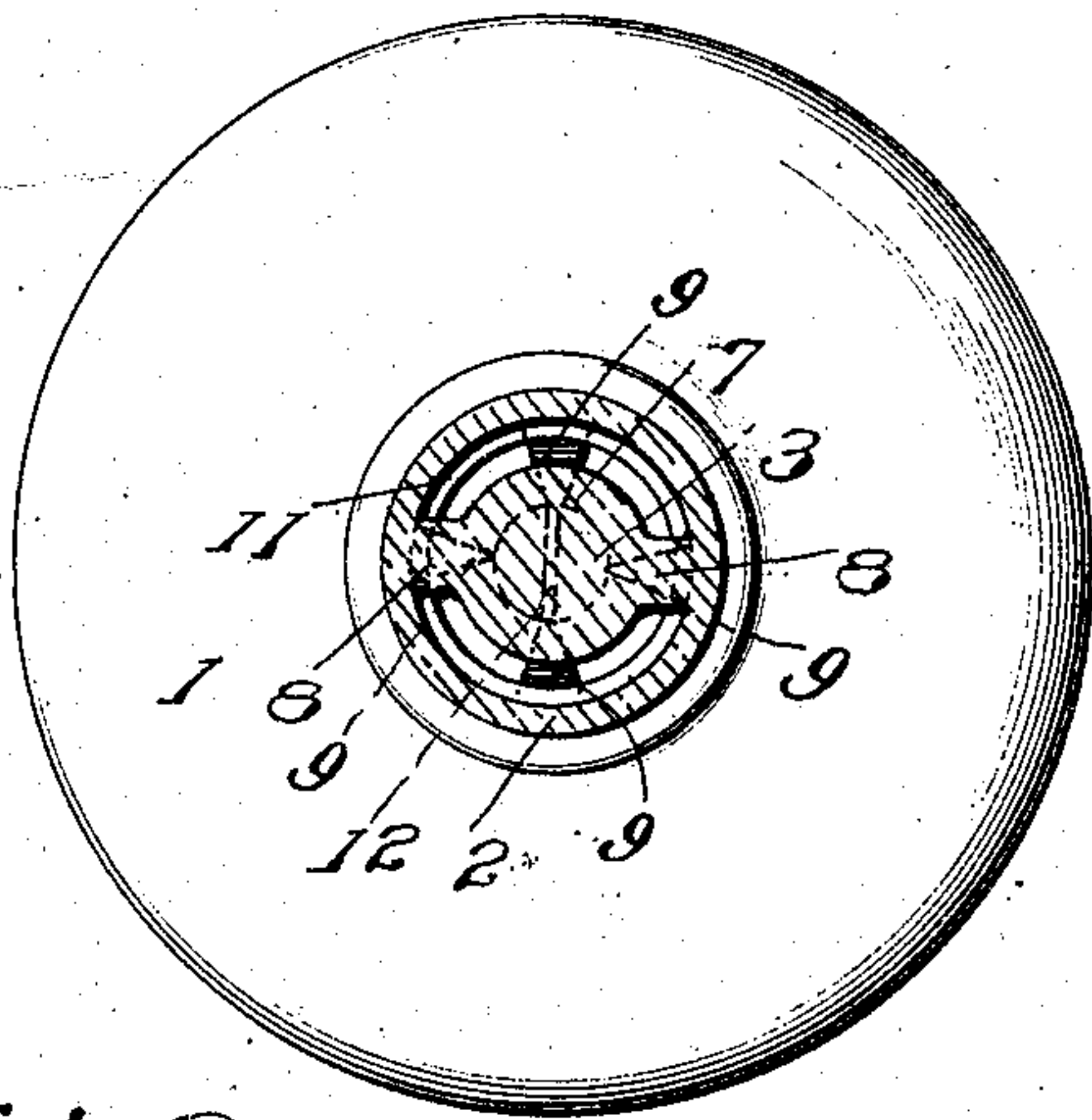
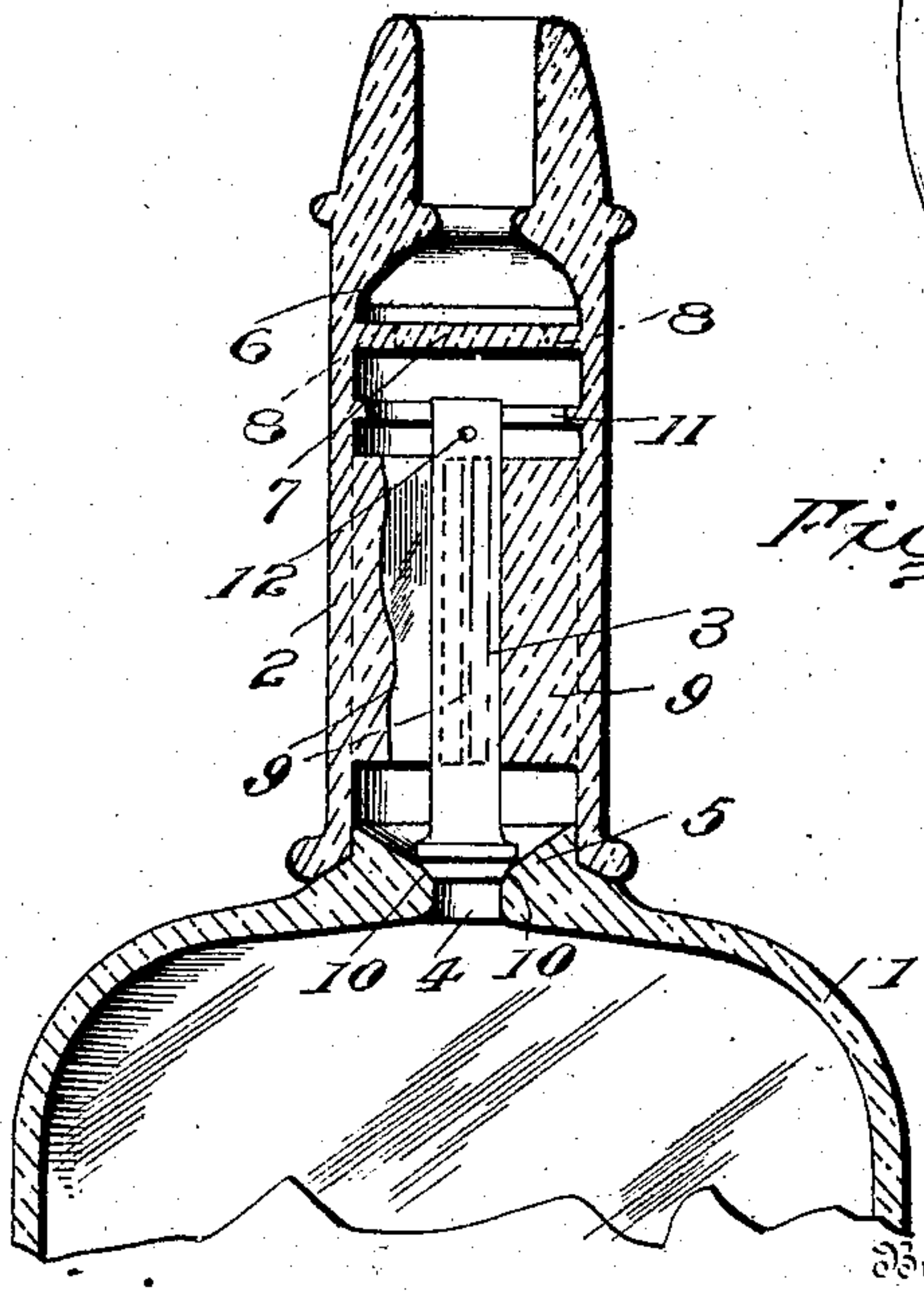


Fig. 2.



Witnesses

J. M. Collier,
W. A. Collier.

Inventor

J. C. Condo.

R. A. Macey, Attorneys

UNITED STATES PATENT OFFICE.

JOSEPH C. CONDO, OF ALEXANDRIA, INDIANA.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 791,136, dated May 30, 1905.

Application filed September 13, 1904. Serial No. 224,316.

To all whom it may concern:

Be it known that I, JOSEPH C. CONDO, a citizen of the United States, residing at Alexandria, in the county of Madison and State of Indiana, have invented certain new and useful Improvements in Safety-Bottles, of which the following is a specification.

This invention embodies a novel form of receptacle of that type commonly called "non-refillable bottles;" and the object of the invention is to provide a special means whereby likelihood of a fraudulent refilling of the bottle after the contents thereof have been withdrawn is obviated.

The invention involves, primarily, a special construction of neck for the receptacle, together with guard means and a peculiarly-mounted valve in the neck, the latter admitting of free egress of a fluid from the receptacle, but preventing second filling thereof in a manner which will appear more fully as the description proceeds.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a vertical sectional view showing the upper portion of a bottle having the invention applied thereto, the valve being supported in open position as disposed preparatory to the original filling of the receptacle. Fig. 2 is a view similar to Fig. 1, showing the position of the valve and adjacent parts when the bottle has been filled. Fig. 3 is a horizontal sectional view taken about on the line X X of Fig. 1 looking downwardly. Fig. 4 is a section of the neck on the line *xx* of Fig. 1 with all omitted below the guard.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The invention is applicable more especially

to receptacles of the necked type, and, referring to the drawings, the body of the bottle is designated 1, and the neck 2. The neck 2 is made separate from the body 1 of the receptacle in order that the valve 3 may be readily placed therein and in order to facilitate the formation of the interior parts of the neck by molding the same. The body 1 of the receptacle is provided at its upper portion with an opening 4, and an annular flange 5 projects from the part 1 at the opening 4, the lower extremity of the neck 2 being adapted to be fused or otherwise attached to the member 5 aforesaid in making the parts 1 and 2 a single article. Adjacent the mouth of the neck 2 the interior walls thereof are converged or thickened at a point between the ends of the neck, as shown at 6, and just below the thickened portion 6 is located a guard 7 for the valve 3. The guard 7 preferably consists of a flat disk of somewhat circular formation, having projections 8 connected with the body of the neck, as shown most clearly in Fig. 3 of the drawings. The guard 7 is preferably molded in the neck and made of glass or of the same substance from which said neck is formed. It will be noted that the peripheral portion of the guard 7 is spaced from the interior walls of the neck 2, the contents of the receptacle being adapted to pass out of the neck through the space between the guard 7 and said neck. The valve 3 is movable longitudinally in the neck 2 and operates between a plurality of ribs or partitions 9 integrally formed with the neck 2 and extending lengthwise thereof. The parts 9 project from the inner peripheral portion of the neck 2 and extend from a point adjacent the lower extremity of the neck to a point adjacent the guard 7, before described. The ribs or projections 9 form guides directing the movement of the valve 3 so that the lower end of said valve will accurately seat itself upon the valve-seat 10, formed in the body 1 of the bottle adjacent the opening 4. The guide members or ribs 9 are spaced from each other, having a circular arrangement, owing to the form of the neck with which said parts 9 are molded. The contents of the receptacle pass through the spaces between the several ribs

or partitions 9 when removed from the receptacle, and in order that the contents may flow freely the sides of the several ribs or partitions 9 converge toward the outermost longitudinal edges thereof, the exact formation of these parts being advantageous in increasing the space between the same without interfering with the guide function of the partitions relative to the valve 3. Below the guard 7 and also preferably integral with the neck of the bottle is formed an annular bead 11 interiorly of the neck, which bead, it will be seen, is located below the space formed between the peripheral portion of the guard 7 and the neck 2. The bead 11 coöperates with the guard to prevent tampering with the valve, whereby proper operation of this part might be interfered with in a fraudulent attempt to refill the receptacle. For instance, it would be difficult to introduce a wire into the neck 2, for the reason that the thickened portion 6 of the neck overhangs the peripheral portion of the guard 7, and even though the wire were forced into the space between the guard and the neck the same would be inflected by the bead 11 in such a manner as to prevent the wire from engaging the valve 3 to prevent working thereof. The wire in the operation as above premised upon would have to curve beneath the thickened portion 6 and then re-curve toward the valve 3 after being projected below the guard 7, and it is very obvious that the above would be very impracticable.

In the actual use of the invention the valve 3 is provided with an opening 12 at the upper extremity thereof, through which a suspending-wire 13, as shown in Fig. 1, is passed, being extended through the neck 2 and attached to the body 1 of the receptacle. The wire 13 is utilized to suspend the valve in an open

position before the bottle has been filled, and the contents of the receptacle are introduced into the same when the valve is off of its seat, as shown in Fig. 1 of the drawings. When the bottle is filled, the wire 13 is removed or detached from the valve 3, and this valve then closes down upon its seat. It is clear that upon inversion of the bottle the contents will readily pass therefrom, the valve opening in this operation, and since the valve will close down upon its seat 10 should any attempt be made to refill the receptacle such an attempt would be frustrated. The wire 13 is preferably of thread-like form.

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

In a bottle or like necked receptacle, the combination of a neck having the walls thereof converged or thickened interiorly at a point between its ends and adjacent its mouth, a guard below the thickened portion of the neck and comprising a disk having the peripheral portion thereof spaced from the neck and projections connected with the said neck, a valve disposed below the guard, a plurality of spaced partitions projected from the interior of the neck and forming guides for the valve, a bead projected from the inner peripheral portion of the neck just below the guard, the valve being provided with an opening adjacent its upper end, the body of the bottle being provided with a valve-seat adjacent the point of jointure of the neck therewith.

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

JOSEPH C. CONDO. [L. s.]

Witnesses:

JOSEPH E. JEFFRIES,
WILLIAM CONDO.