

No. 771,502.

PATENTED OCT. 4, 1904.

H. R. SACRAY.
NON-REFILLABLE BOTTLE.
APPLICATION FILED FEB. 18, 1904.

NO MODEL.

FIG. 1

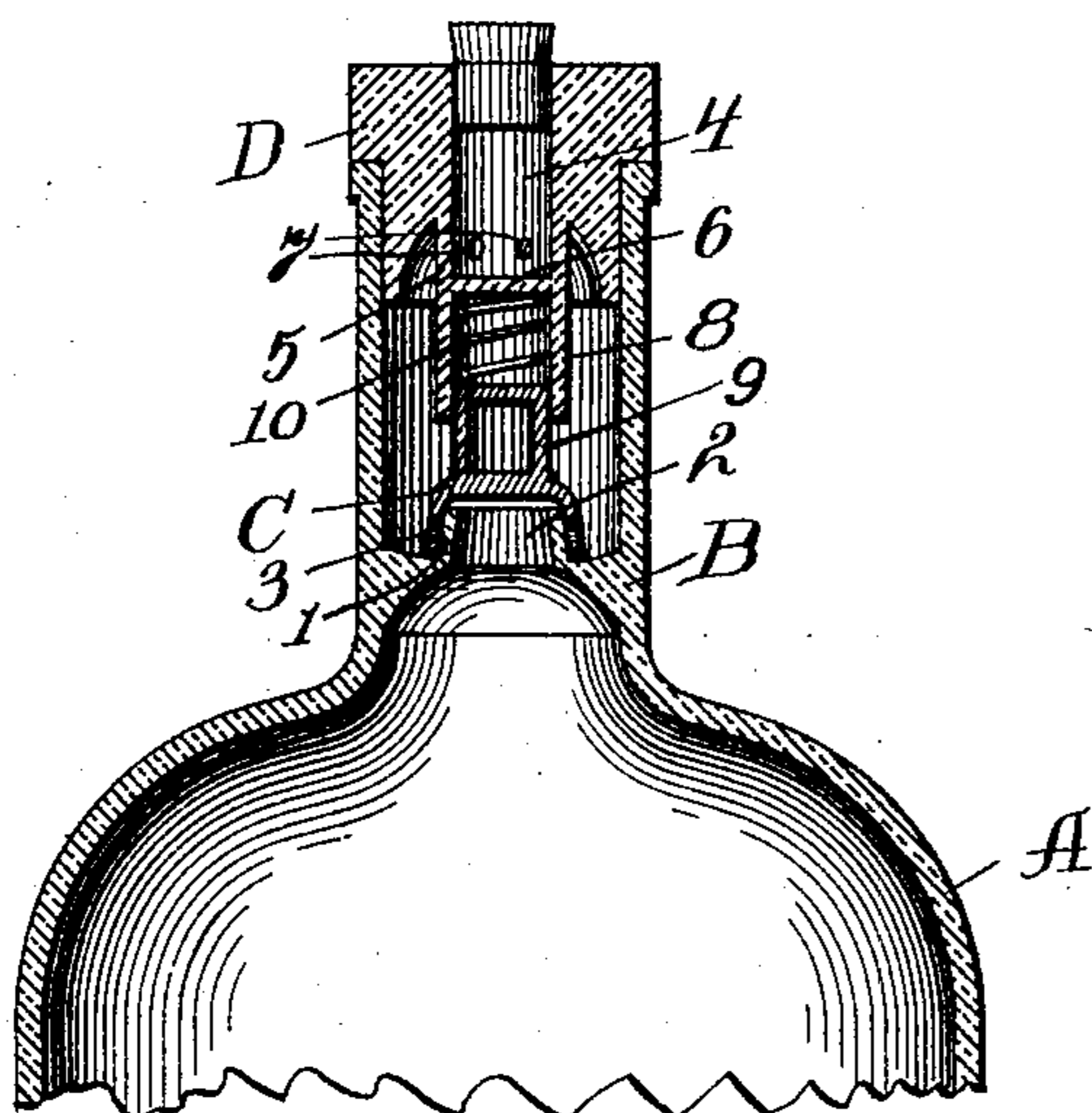


FIG. 2.

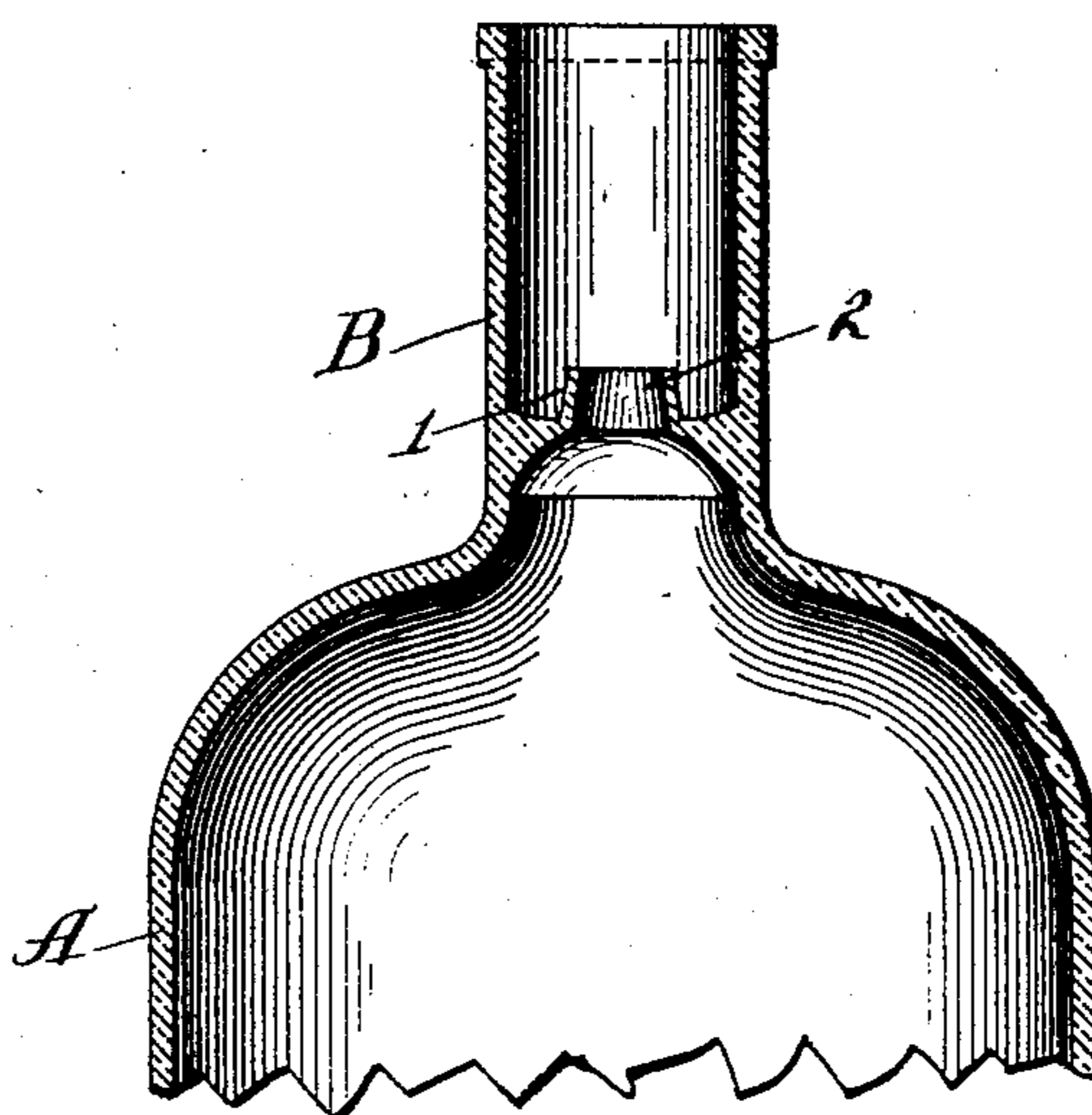


FIG. 3.

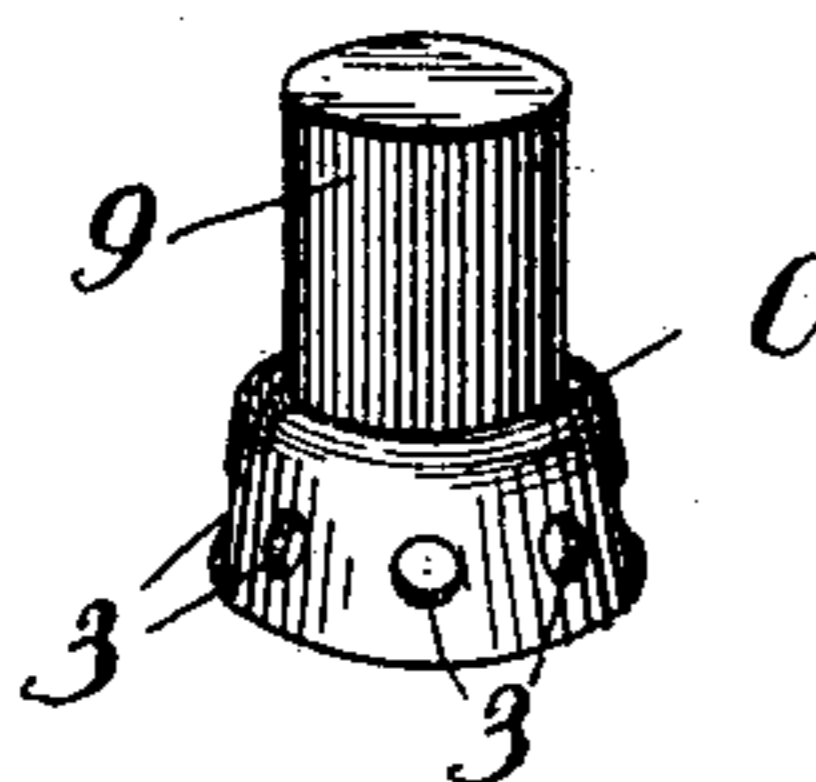


FIG. 4

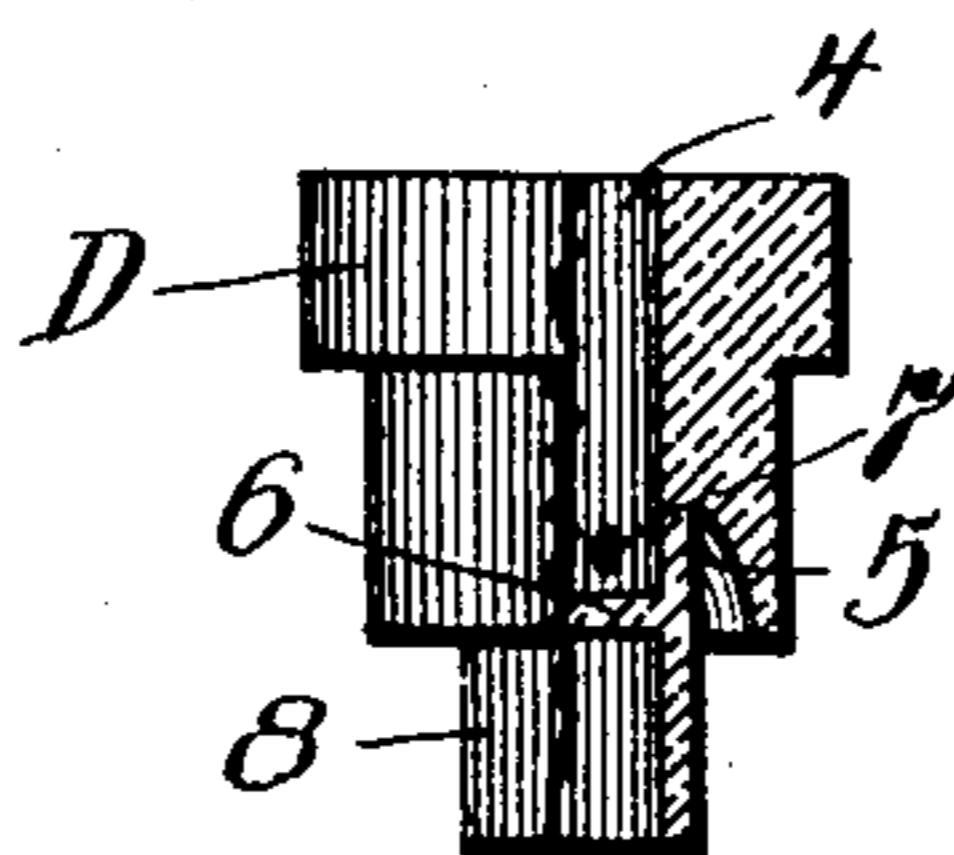
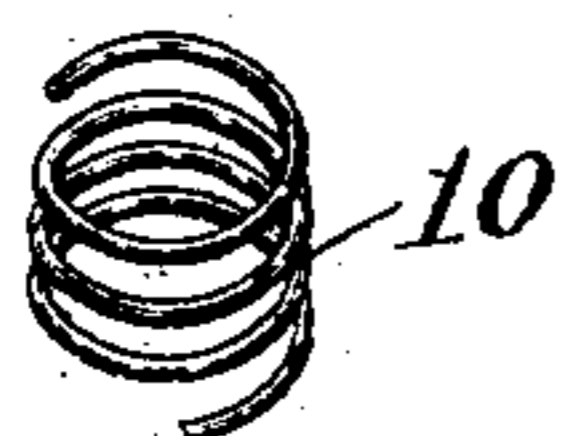


FIG. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

HENRY R. SACRAY, OF MONROE CITY, INDIANA.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 771,502, dated October 4, 1904.

Application filed February 18, 1904. Serial No. 194,199. (No model.)

To all whom it may concern:

Be it known that I, HENRY R. SACRAY, a citizen of the United States, and a resident of Monroe City, in the county of Knox and State of Indiana, have invented a new and useful Improvement in Non-Refillable Bottles, of which the following is a specification.

My invention relates to an improvement in non-refillable bottles, the object being to provide a simple and inexpensive bottle which will be effectual in the prevention of refilling and reuse; and it consists in certain novel features of construction and combinations of parts, which will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in vertical section, showing the parts assembled and the stopper complete. Fig. 2 is a detached view, in vertical section, of the neck. Fig. 3 is a view of the valve. Fig. 4 is a view in side elevation of the sealing-cap, partly in section; and Fig. 5 shows the spring.

A represents a bottle, and B is the neck, the latter having a conical valve-seat 1 formed in its lower end, in the upper end of which is the orifice 2.

A valve C has a cup-shaped lower end which is adapted to fit over the orifice 2 and close the latter when the valve is seated, outlets 3 3 being provided for the escape of the liquid contents of the bottle when the bottle is tipped and the valve is unseated.

D is a glass cap adapted to be fitted and cemented in the bottle-neck after the latter is filled. This cap has an orifice 4 and a sleeve 5, which forms a downward extension of the orifice. This sleeve has a partition 6 in it, whereby its ends are separated, and the upper end is provided with holes 7 7, while the lower end 8 receives the shank 9 of the valve, the two fitting each other, thus forming a centering-guide for the valve in its upward and downward movement in the operation of the bottle.

A comparatively weak spiral spring 10 is preferably confined between the partition 6 and the upper end of the shank 9 of the valve, the function of which spring is to insure the seating of the valve when the bottle is in its upright position, and this spring 10 is suffi-

ciently weak so that it readily yields to the pressure of liquid from above when the bottle is tipped or overturned to pour out the contents. Of course it is perfectly obvious that this spring might surround the shank 9 and press upon the lower end of section 8 of the sleeve 5.

From the foregoing it will be understood that the bottle is filled by pouring the contents in before the valve and cap are placed. After being filled the valve is placed upon its seat, the spring is put in place, and the cap inserted and sealed. The movements of the valve are between the seat and partition 6, and when unseated in the operation of pouring the liquid the latter flows out through holes 3 3, thence into the holes 7 7, and out of the bottle; but the bottle cannot be refilled, because when in its upright position the valve is always closed by the spring. When the bottle is filled and ready for the market, a cork may be inserted in the orifice 4 in the usual manner.

Slight variations might be made without material departure from the spirit and scope of the invention, and hence I do not care to be specifically limited thereto; but,

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A non-refillable bottle comprising a bottle-neck having a valve-seat therein with an orifice, a valve fitted thereto and adapted to be normally seated thereon, said valve having a cup-shaped lower end with holes therein, and a shank at the upper end, and a cap provided with an orifice, and a sleeve, the lower end of which guides and centers the valve and is provided with openings for the escape of the liquid in one direction.

2. A non-refillable bottle comprising a bottle-neck having a valve-seat therein with an orifice, a valve fitted thereto and adapted to be normally seated thereon, said valve having a cup-shaped lower end with holes therein, and a shank at the upper end, and a cap provided with an orifice, and a sleeve, the lower end of which guides and centers the valve and is provided with openings for the escape of the liq-

uid in one direction, and a spring interposed between the valve and cap for insuring the seating of the valve.

3. A non-refillable bottle comprising a bottle-neck having a valve-seat at its lower end with an orifice therein, a valve adapted to be normally held yieldingly upon this seat, and having holes therein, at the lower end, and a shank at the upper end, a cap provided with an outlet-orifice, said cap having a sleeve which constitutes an extension of the outlet-

orifice, said sleeve having a partition formed transversely therein, with holes above it and its lower end constituting a centering-guide for the shank of the valve.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

HENRY R. SACRAY.

Witnesses:

ISSIC D. SACRAY,

MALVENA RICHARDSON.