

No. 764,904.

PATENTED JULY 12, 1904.

T. H. STECK.  
NON-REFILLABLE BOTTLE.  
APPLICATION FILED DEC. 30, 1903.

NO MODEL.

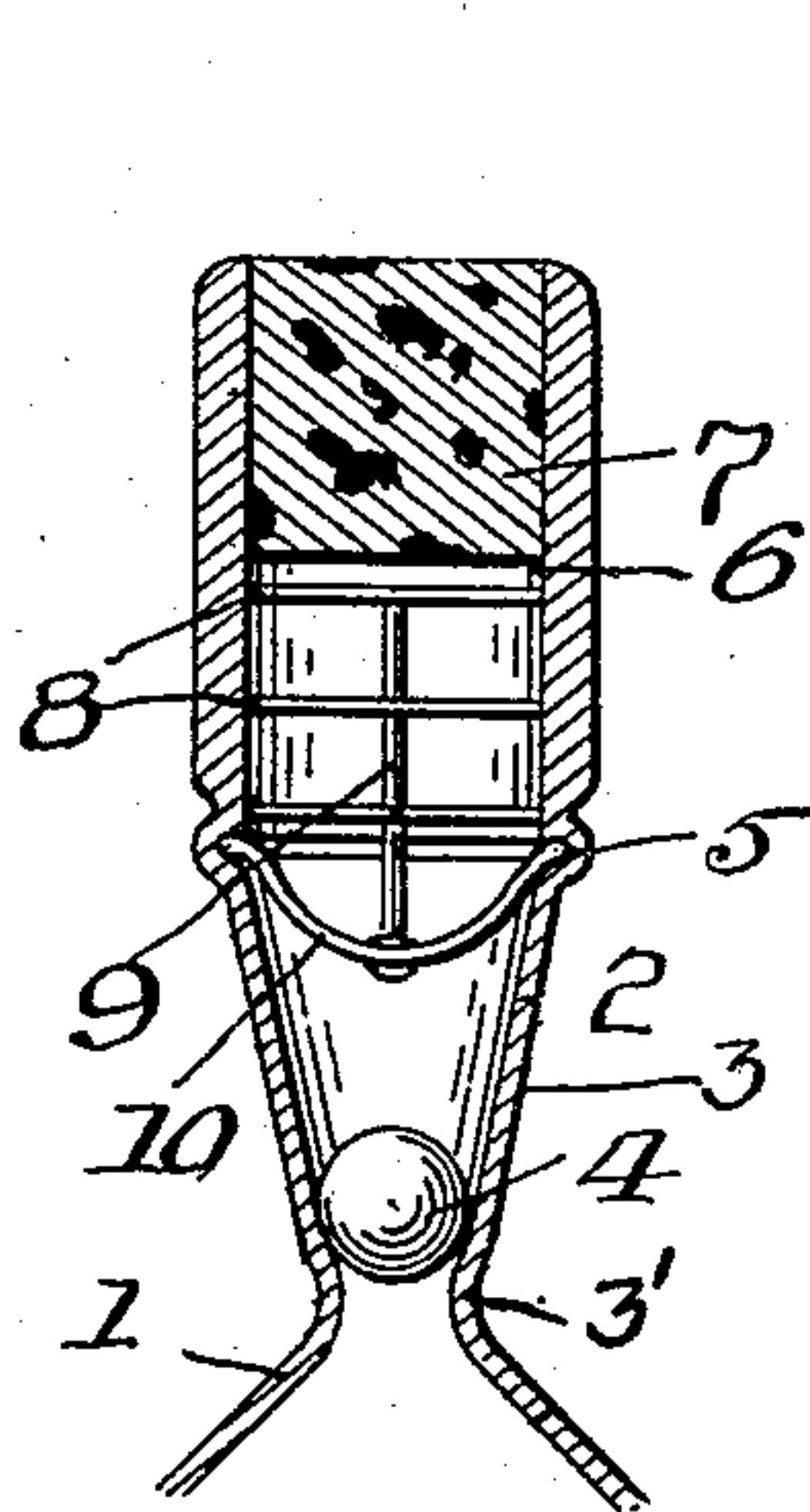


Fig. 1.

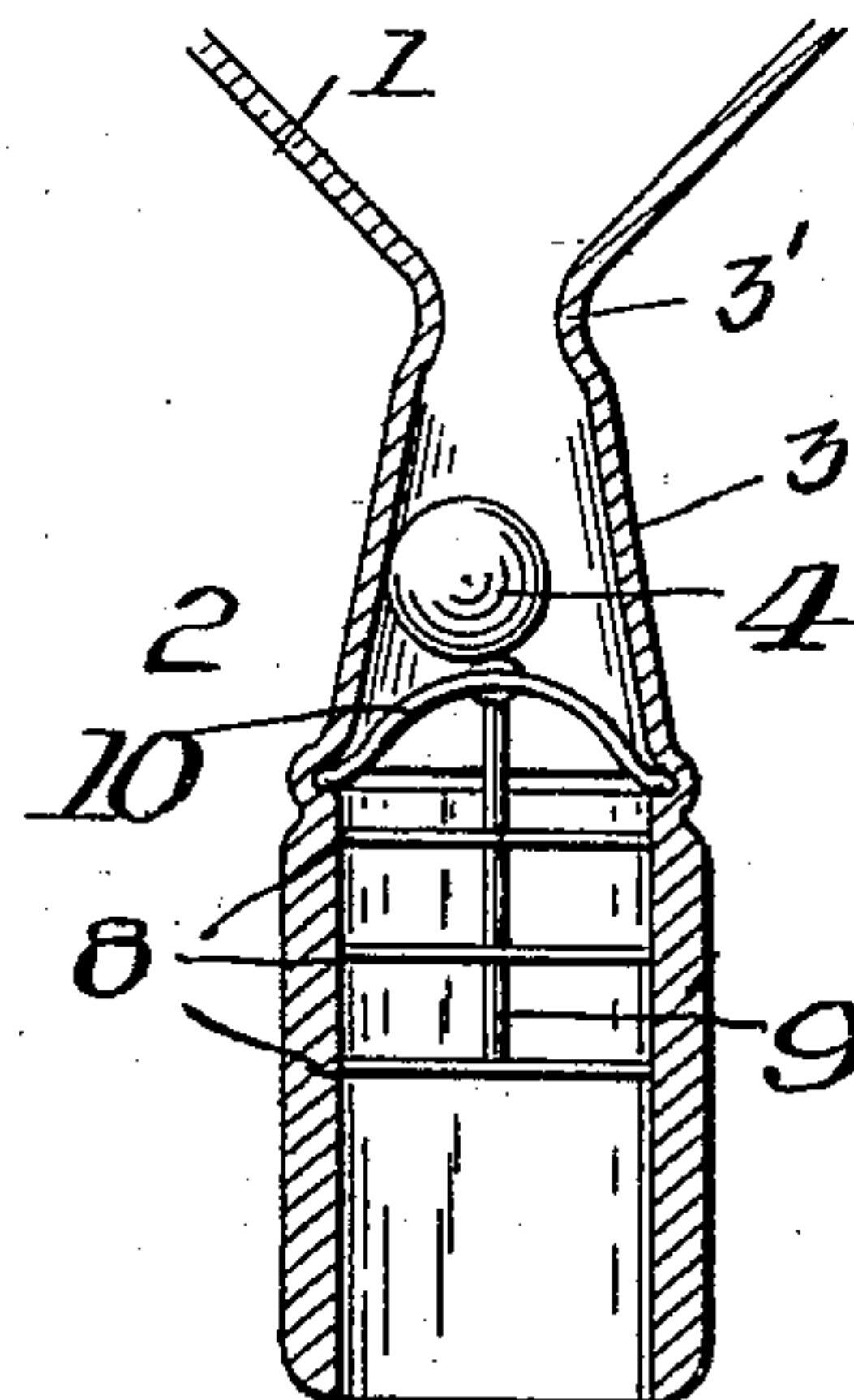


Fig. 2.

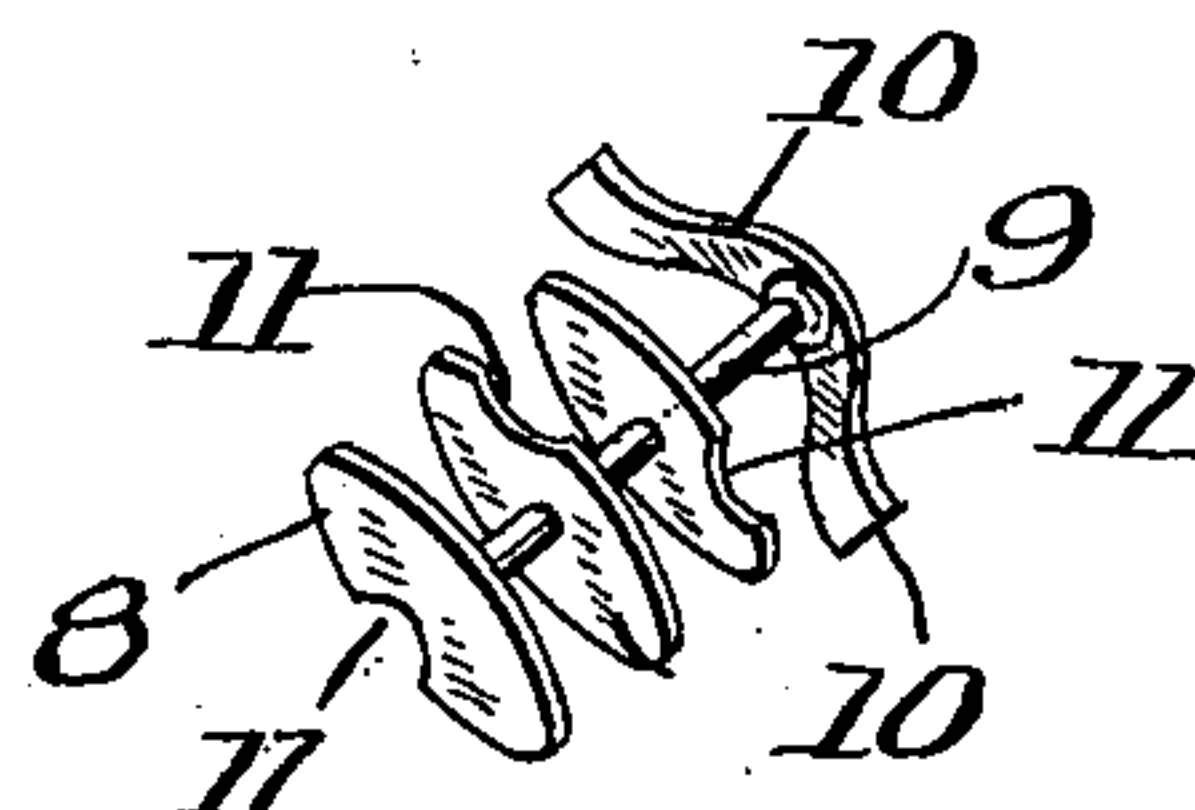


Fig. 3.

Witnesses,  
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# UNITED STATES PATENT OFFICE.

THOMAS H. STECK, OF ALLEGHENY, PENNSYLVANIA.

## NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 764,904, dated July 12, 1904.

Application filed December 30, 1903. Serial No. 187,130. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS H. STECK, a citizen of the United States, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Non-Refillable Bottles, of which improvement the following is a specification.

My invention relates to bottles; and its object is to provide a bottle which being once filled and closed cannot be used a second time.

My invention consists of certain novel forms of details and arrangements of parts herein-after fully described, illustrated in the accompanying drawings, and claim.

In the aforesaid drawings like characters refer to like parts in the several views.

Figure 1 is a section of the neck of my bottle when filled. Fig. 2 shows the position of the parts in pouring therefrom. Fig. 3 is an enlarged detail of my diaphragms and the parts pertaining thereto.

In my device I provide a bottle 1, having a neck 2 formed thereon, the said neck being provided with a constricted portion 3' between itself and the body of the bottle. In the diametrically larger portion 3 of the neck, immediately above this constricted portion, is held a ball 4, which forms with the constricted portion a ball-valve. It will now be apparent that when the ball is seated, as in Fig. 1, it will be impossible to introduce any liquid into the body of the bottle. It will also be obvious that the ball, the seat for the same, or both, may be ground to cause a closer contact and that the ball may be made of any desired material. An annular groove 5 is formed interiorly of the neck above this valve, and I preferably reduce the thickness of the neck therearound, as shown. Above this annular groove is formed a cork-seat 6, adapted to receive and hold a cork 7 of ordinary form, as shown in Fig. 1.

In order to prevent the ball-valve from being tampered with, I provide a plurality of diaphragms 8, mounted on a stem 9, which has a bow-shaped leaf-spring 10 attached to the end thereof. Openings 11 are formed in the diaphragms to prevent the passage of liquid from the bottle, and these openings are

spirally staggered to interrupt the passage of a tool to the ball-valve or spring.

In operation the bottle is filled and the diaphragms pushed down till the spring catches, as shown, in the annular groove. The ordinary cork is then inserted and the bottle and contents are ready for sale. It will be plain that the cork may be drawn and the bottle emptied; but it is also obvious that any attempt to remove the ball for refilling will be frustrated by the diaphragms and that any attempt to forcibly remove the latter will cause the spring to break off the upper part of the bottle-neck.

I thus provide a simple and efficient device of the character described and for the purpose specified.

It is obvious that changes may be made in my device without affecting the principles thereof. For instance, I may change the number or arrangement of the diaphragms on the stem.

I do not therefore desire to confine myself to the exact form herein shown and described, but wish to include all such as properly come within the scope of my invention.

Having thus described my invention, I claim—

In a device of the type set forth, a bottle having its neck formed with a tapering portion terminating in a constricted portion, the upper portion of the neck being of uniform diameter, the tapered portion at its top being formed with an interior groove, a stem carrying a diaphragm at its one end and a bow-shaped leaf-spring at its other end, said spring having its ends received in said groove and its central portion extending downwardly into the tapered portion, the diaphragm having a portion of its edge cut away, and forming a stopper-seat, and a ball-valve seating in said constricted portion.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses.

THOMAS H. STECK.

In presence of—

K. H. BUTLER,  
H. J. LEVIS.