No. 674,982. Patented May 28, 1901.

B. T. PATTERSON.

NON-REFILLABLE BOTTLE.

(Application filed Aug. 17, 1899.)

(No Model.)

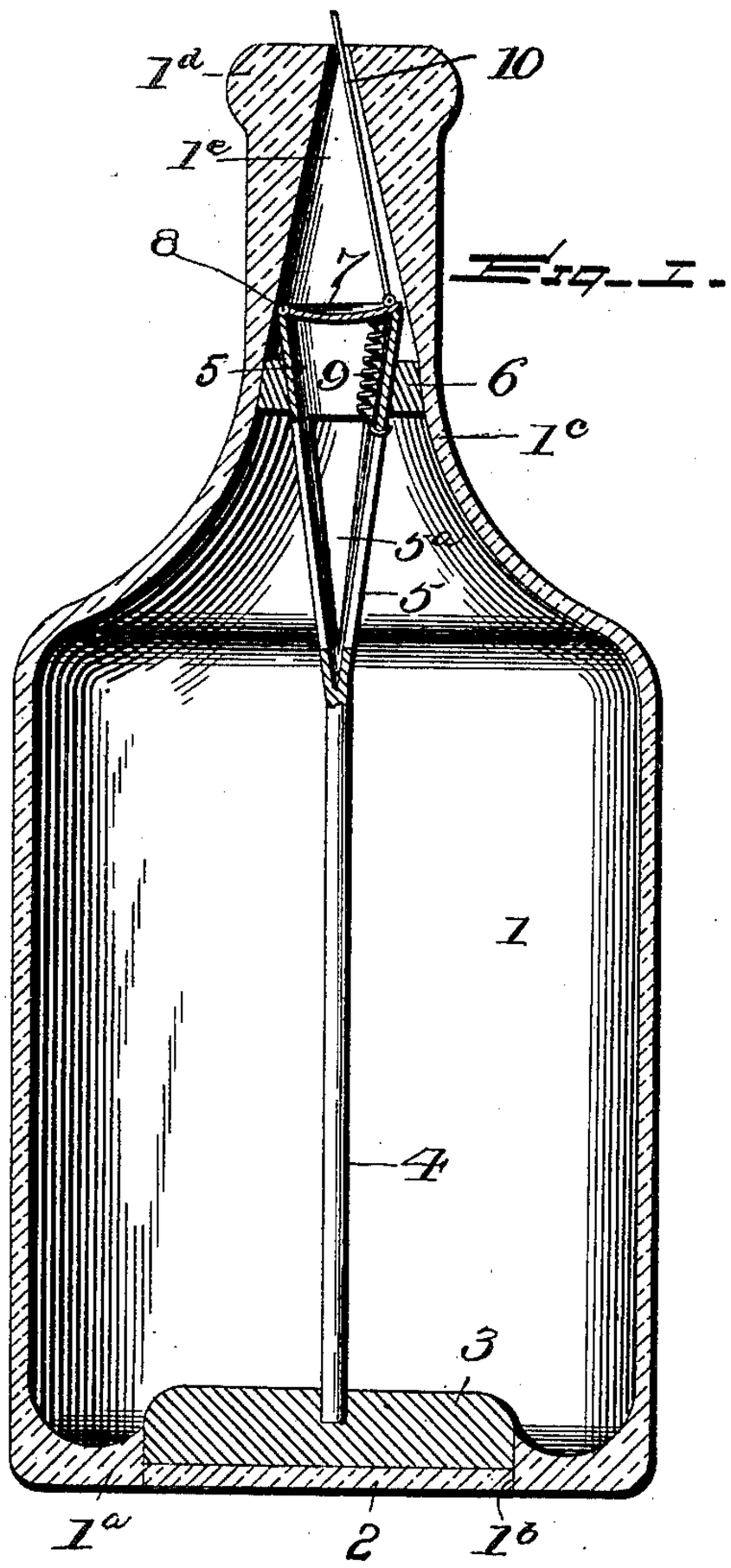

Fig. I.

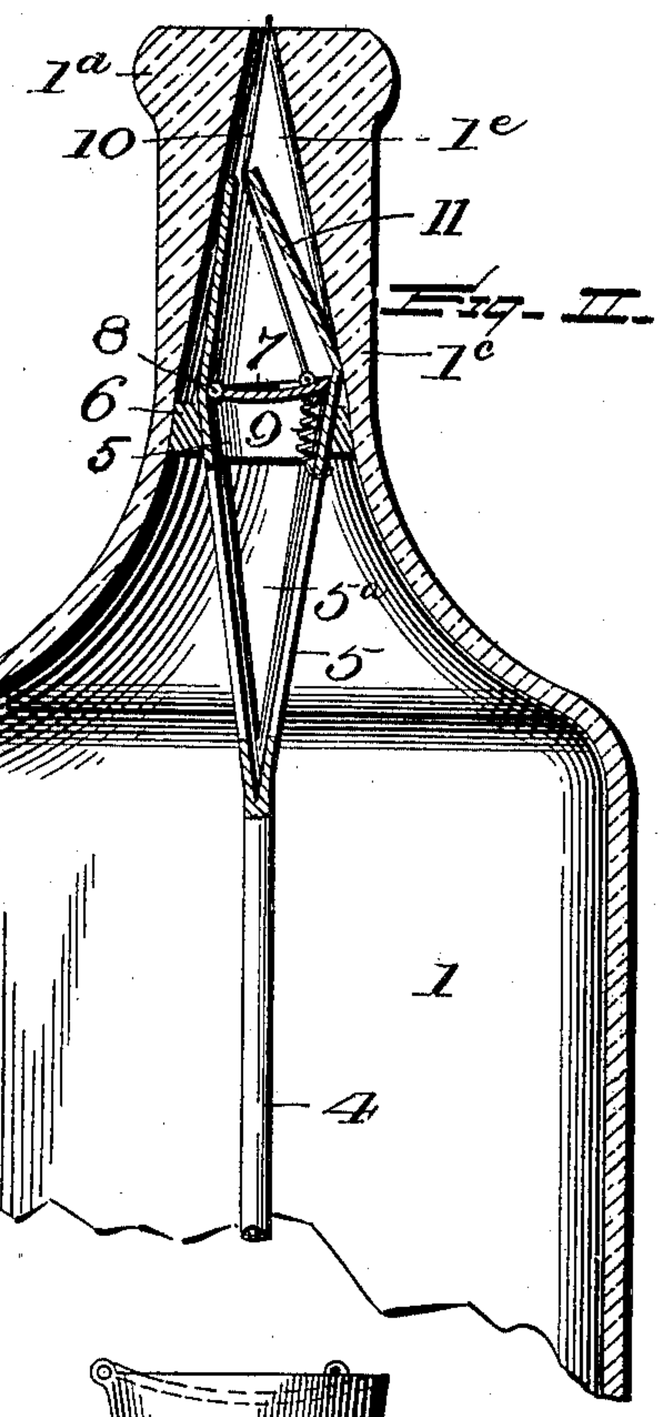

Fig. II.

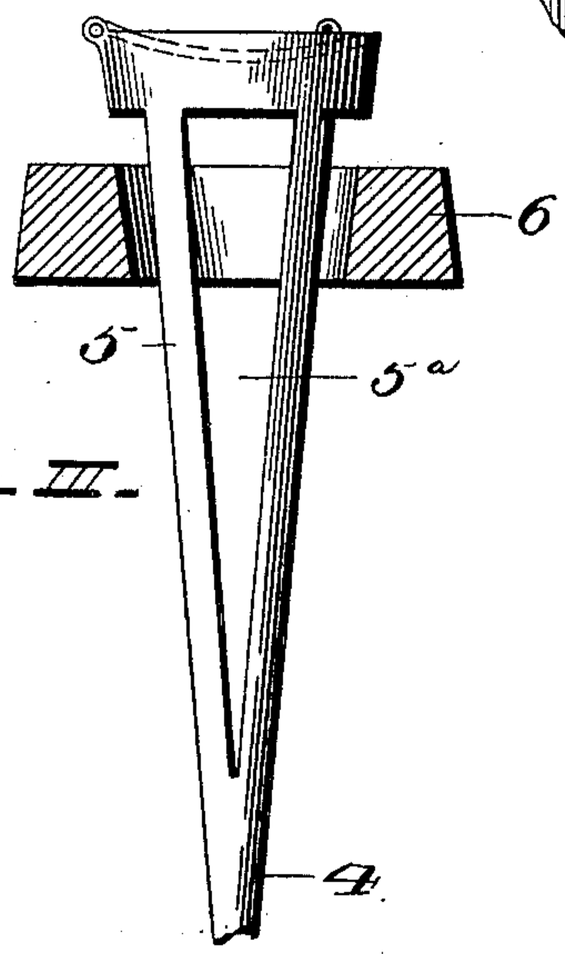

Fig. III.

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BALAAM THEOPHILUS PATTERSON, OF CHICAGO, ILLINOIS.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 674,982, dated May 28, 1901.

Application filed August 17, 1899. Serial No. 727,608. (No model.)

To all whom it may concern:

Be it known that I, BALAAM THEOPHILUS PATTERSON, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

My invention is an improvement on those non-refillable bottles which are closed against refilling by means of a spring-valve.

The object of my invention is to provide a non-refillable bottle that is certain to contain that which is first placed in it, in order to protect the manufacturer from imitations being substituted for the original contents.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure I is a longitudinal section of my improved non-refillable bottle, the valve being closed. Fig. II is a similar view showing a modified form of the receiver. Fig. III is a detail view of the receiver shown in Fig. I.

My bottle is formed with a body 1, with a bottom 1^a, having a central opening 1^b, with a neck 1^c, and with a top 1^d, having a conical combined inlet and outlet 1^e. The central opening 1^b in the bottom 1^a is closed by an outer disk 2 and an inner plug 3. Secured to the plug 3 is a centrally-located stem or rod 4, furnishing a support for an inverted conical receiver 5, having longitudinal openings 5^a, through which the liquid passes in and out. The outer end of the receiver is supported within a washer 6, fitted in the neck of the bottle.

7 is a valve connected by a hinge 8 to the upper end of the receiver, on which it is adapted to seat. The valve is closed by a coil-spring 9, secured at its lower end to the receiver and at its upper end to the valve. A string 10 is fastened to the valve and extends through the conical combined inlet and outlet for opening the valve when the bottle is filled. This string is broken off near the valve after the filling operation is completed.

11 is a conical mouthpiece secured to the upper end of the receiver and adapted to discharge onto one side of the conical combined inlet and outlet in the top of the bottle, and thus control the removal of the contents. The conical mouthpiece also has the function of providing a guard to the valve.

The strength of the spring 9 for closing the valve depends upon the nature of the contents of the bottle.

The material used in the construction of the interior parts of my bottle also depends upon the nature of the contents of the bottle.

In assembling the parts together the receiver, with its supporting-washer and its supporting stem or rod, is secured by its rod to the inner plug and is then passed through the central opening in the bottom of the bottle and pressed with its supporting-washer into the neck of the bottle. At the same time the inner plug is pressed into the central opening, thus keeping the receiver in place. The outer disk is then secured over the inner plug, so as to prevent access to the stem or rod. When the receiver is in place, the string projects through the small opening in the top of the bottle. To fill the bottle, the valve is opened by pulling on this string and the liquid is led through into the small opening in the top and passes through the receiver into the body of the bottle. When the bottle is full, the string is broken off and the spring closes the valve down on the receiver.

When it is desired to remove a part or the whole contents, the bottle is inverted and the weight of the liquid pushes the valve open. As soon as the bottle is set up the spring pulls the valve to its seat.

Nothing can pass into or out of the bottle except through the receiver.

When the bottle has been used once, it is thrown away, as it cannot be filled again.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. A non-refillable bottle comprising a body formed with a top having a conical combined inlet and outlet, an inverted conical receiver provided with openings in the side thereof, and having a spring-valve adapted to close the receiver, and a rod and a washer whereby the receiver is supported in the body and neck of the bottle respectively.

2. A non-refillable bottle comprising a top formed with a conical combined inlet and outlet, an inverted conical receiver provided with

openings in the side thereof, and having a spring-valve, adapted to close the receiver, and a conical mouthpiece secured to the upper end of the receiver, and means whereby the receiver is supported in the neck of the bottle.

3. A non-refillable bottle comprising a body having a top formed with a conical combined inlet and outlet, a bottom formed with a central opening, a plug adapted to close the central opening, a centrally-arranged rod secured to the plug, a disk secured outside of the plug, a receiver supported on the rod, provided with openings in the side thereof and having a spring-valve, adapted to close the receiver, and means whereby the receiver is supported in the neck of the bottle.

BALAAM THEOPHILUS PATTERSON.

Witnesses:
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