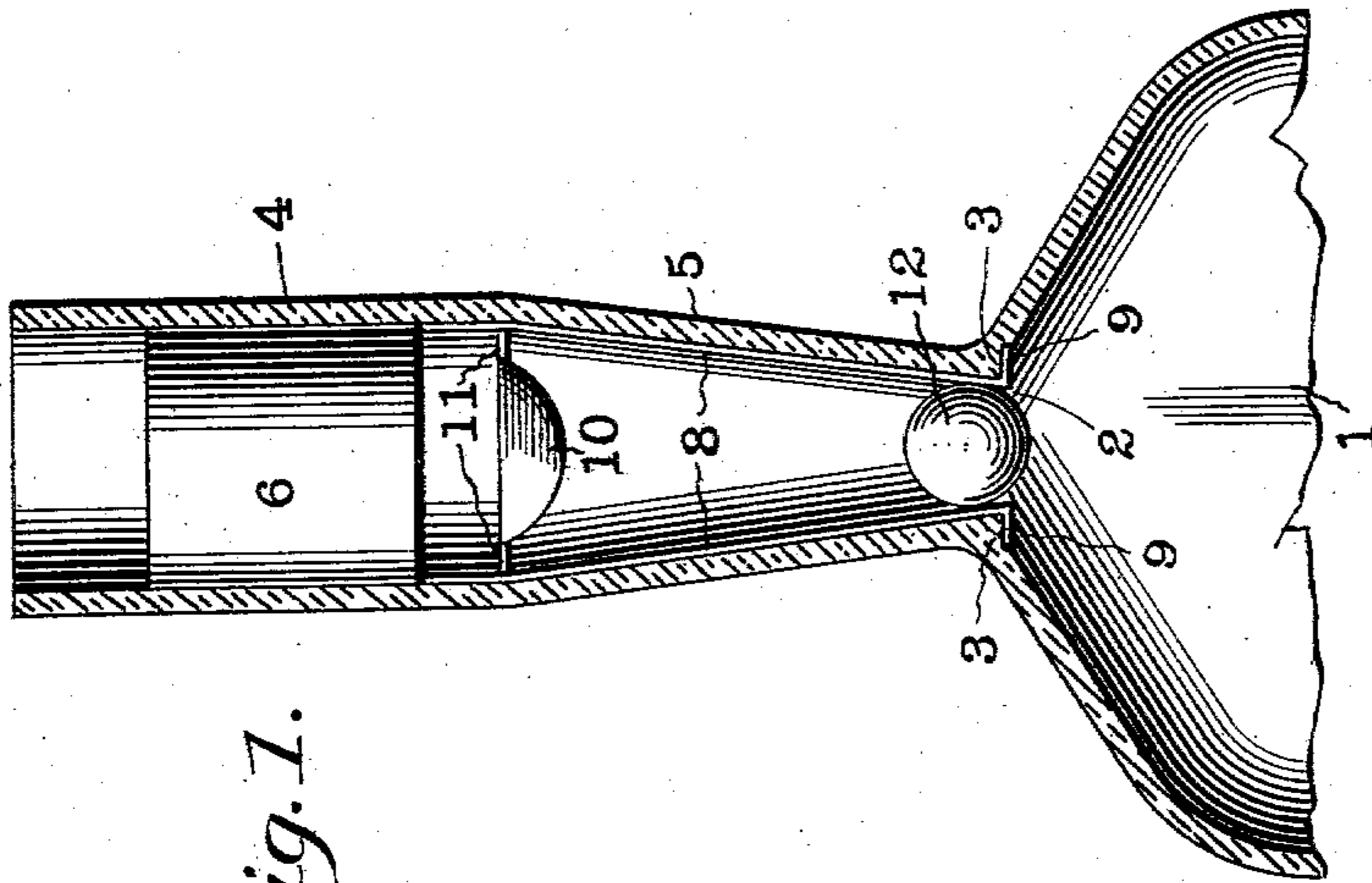
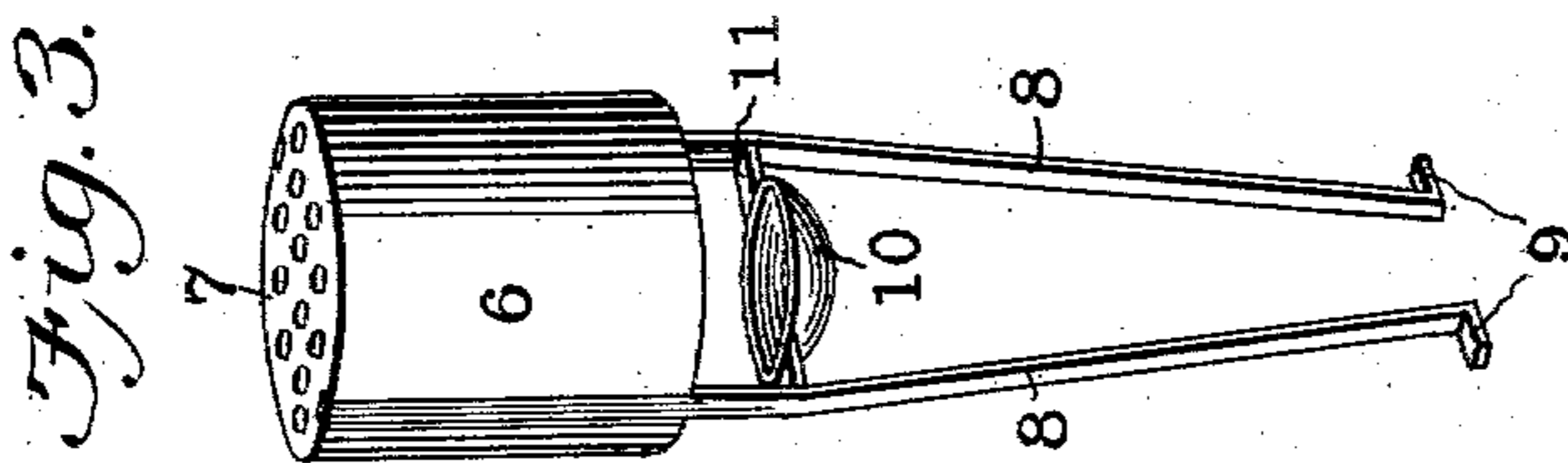
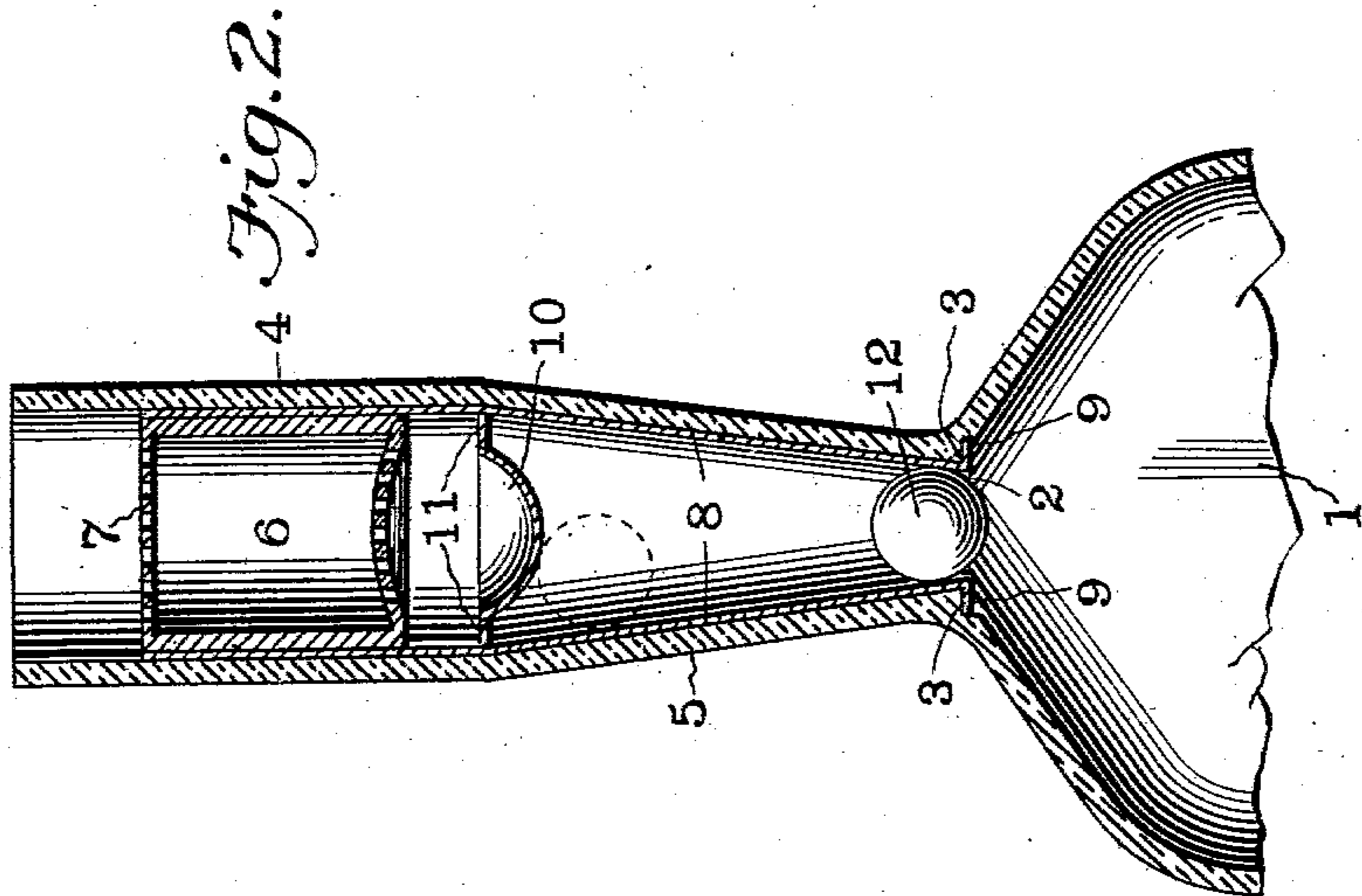


No. 743,974.

PATENTED NOV. 10, 1903.

W. B. COCKRELL.
NON-REFILLABLE BOTTLE.
APPLICATION FILED FEB. 27, 1903.

NO MODEL.



Inventor

Wyrle Burr Cockrell,

Witnesses

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UNITED STATES PATENT OFFICE.

WYVLE BURR COCKRELL, OF COLUMBUS, OHIO, ASSIGNOR OF ONE-HALF TO
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NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 743,974, dated November 10, 1903.

Application filed February 27, 1903. Serial No. 145,443. (No model.)

To all whom it may concern:

Be it known that I, WYVLE BURR COCKRELL, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

My invention relates to improvements in non-refillable bottles; and its object is to provide a bottle having a neck of peculiar form within which is adapted to be inserted a valve and guard so constructed as to prevent the refilling of the bottle.

A further object is to so construct said guard as to permit the same to be permanently locked within the neck of the bottle after the same has been once inserted thereinto.

With the above and other objects in view the invention consists in providing a bottle the inlet of which is surrounded by a square shoulder, from which extends a neck which is preferably cylindrical at the outer end and tapers inward toward said inlet. A cylindrical plug formed of non-corrodible material is adapted to be arranged within the cylindrical portion of the neck, said plug being hollow and provided with a perforated top and bottom. Straps extend downward from the plug and are provided at their lower ends with laterally-extending arms adapted when the plug is inserted into the neck to spring out under the square shoulders inclosing the bottle-inlet, and thereby lock the plug in position. A cup is arranged between the straps at a point below the plug to prevent the insertion of a wire or other similar article through the apertures in the plug and into the inlet of the bottle. A ball-valve is loosely arranged within the neck of the bottle and below the cup and is adapted to be normally seated within the inlet and prevents the introduction of liquid to the bottle.

The invention also consists in the further novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a vertical section through the neck of a bottle having my improved plug and

valve therein. Fig. 2 is a similar view showing said plug in section, and Fig. 3 is a detail view of the plug detached.

Referring to the figures by numerals of reference, 1 is a bottle having an inlet 2, inclosed by a square shoulder 3. The neck of the bottle is preferably cylindrical at its upper end 4 and tapers downward, as shown at 5, to the inlet 2. This neck is adapted to receive a guard of novel construction comprising a hollow cylindrical plug 6, the ends of which are provided with a series of apertures 7. The bottom of the plug is preferably concave, as shown in Fig. 2, whereby a wire or other similar article introduced through the plug will be directed toward the center of the neck. Straps 8 are secured to opposite sides of plug 6 and extend downward therefrom, and at the lower ends thereof are laterally-extending arms 9, which are adapted when the plug is inserted into the neck of the bottle to spring outward under the square shoulder 3 and lock said plug in position. A cup 10 is arranged below plug 6 and is connected to the straps by means of cross-strips 11. This cup is preferably of greater diameter than the perforated portion of the bottom of plug 6, and it is obvious that if a wire or similar article is inserted through the plug it will be received by cup 10, and thereby be prevented from being moved farther into the neck of the bottle. A ball 12 is located in the inclined portion 5 of the neck and is adapted to be normally seated within the inlet 2.

After liquid has been introduced into the bottle the ball 12 is placed in the neck and the guard is inserted until the arms 9 upon straps 8 spring into engagement with the shoulder inclosing the inlet. When it is desired to pour the liquid from the bottle, the same is tilted as ordinarily and ball 12 will automatically roll from position in the inlet 2. The liquid will then flow around the cup 10 through the apertures 7 in plug 6. The plug and cup will, as hereinbefore stated, prevent the insertion of any object whereby the ball may be moved from the inlet, and it is therefore obvious that it will be impossible to fill the bottle after the plug has once been locked within the neck thereof. An

ordinary cork may, if desired, be inserted into the neck above the plug 6.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing any of the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

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

1. In a device of the character described, the combination with a bottle having an inlet, an angular shoulder inclosing the inlet, and a neck extending therefrom; of a hollow plug within the neck and having apertures in the ends thereof, straps depending from the plug and adapted to engage the shoulder and lock the plug in the neck of the bottle, a cup interposed between the straps and below the plug, and a ball-valve in the inlet and below the cup.

2. In a device of the character described, the combination with a bottle having an inlet inclosed by an angular shoulder, and a neck extending from said inlet; of a hollow plug within the neck and having apertures in the ends thereof, the lower end being concave, straps depending from the plug, arms at the ends thereof adapted to engage the shoulder inclosing the inlet, a cup interposed between the straps and below the apertures

in the plug, and a ball-valve normally seated within the inlet.

3. In a device of the character described, the combination with a bottle having an inlet inclosed by an angular shoulder, and a neck extending from said inlet; of a hollow plug within the neck and having apertures in the end thereof, the lower end of said plug being concave, whereby articles inserted there-through will be directed toward the center of the neck, straps depending from the plug, arms at the ends thereof adapted to engage the shoulder inclosing the inlet, a cup below the apertures in the plug, strips connecting said cup with the straps, and a ball-valve below the cup and normally seated in the inlet.

4. In a device of the character described, the combination with a bottle having a neck extending therefrom; of a hollow plug within the neck and having apertures in the ends thereof, the lower end of said plug being concave, straps depending from the plug, a cup below the apertures in the plug, strips connecting said cup with the straps, means for securing the plug and straps within the neck of the bottle, and a valve below the cup and within the neck.

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

WYVLE BURR COCKRELL.

Witnesses:

LENNA BINGAMAN,
HENRY Z. ROCKEL.