

E. L. BECK.
BOTTLE STOPPER.
APPLICATION FILED MAY 27, 1909.

973,616.

Patented Oct. 25, 1910.

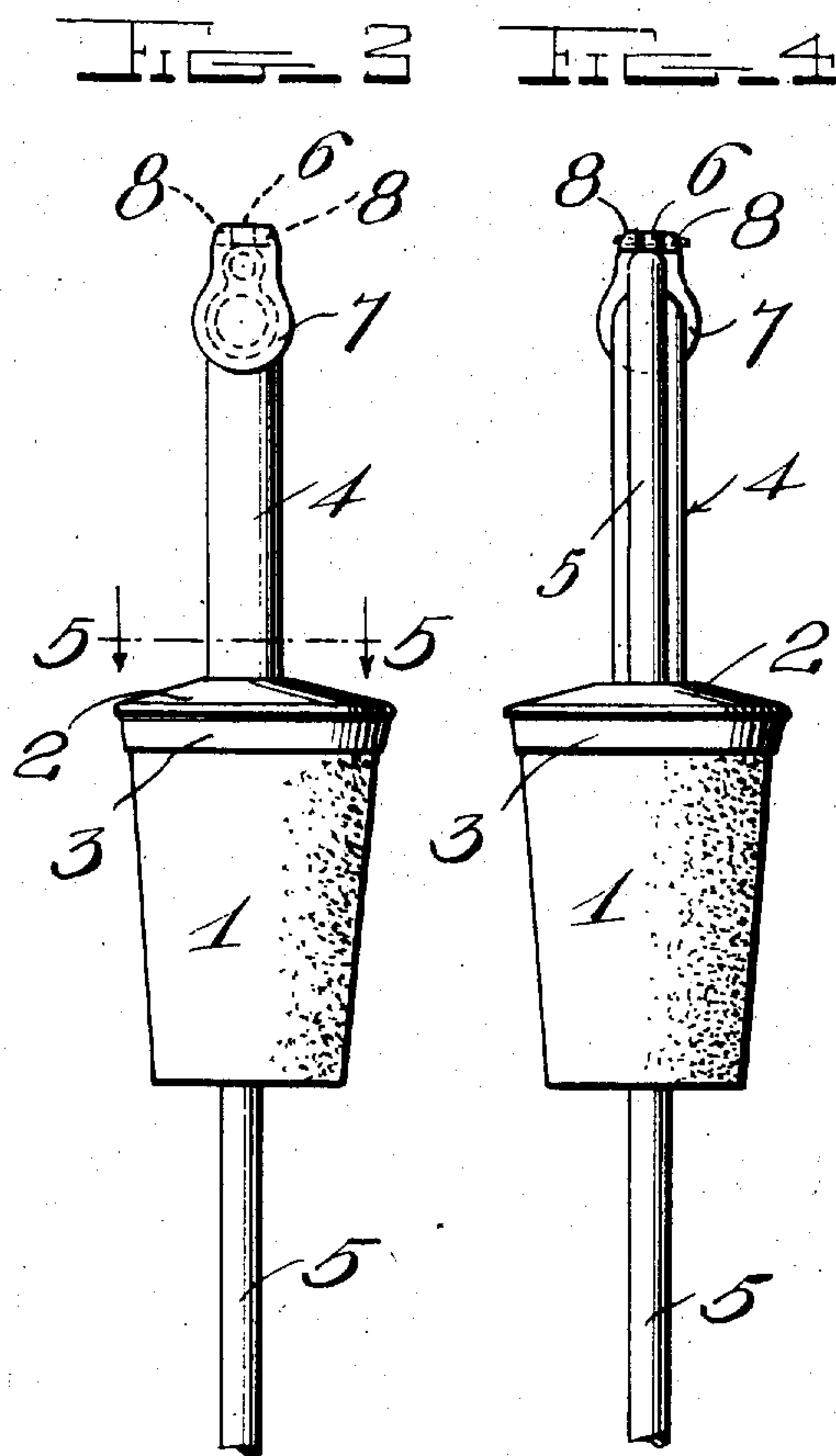
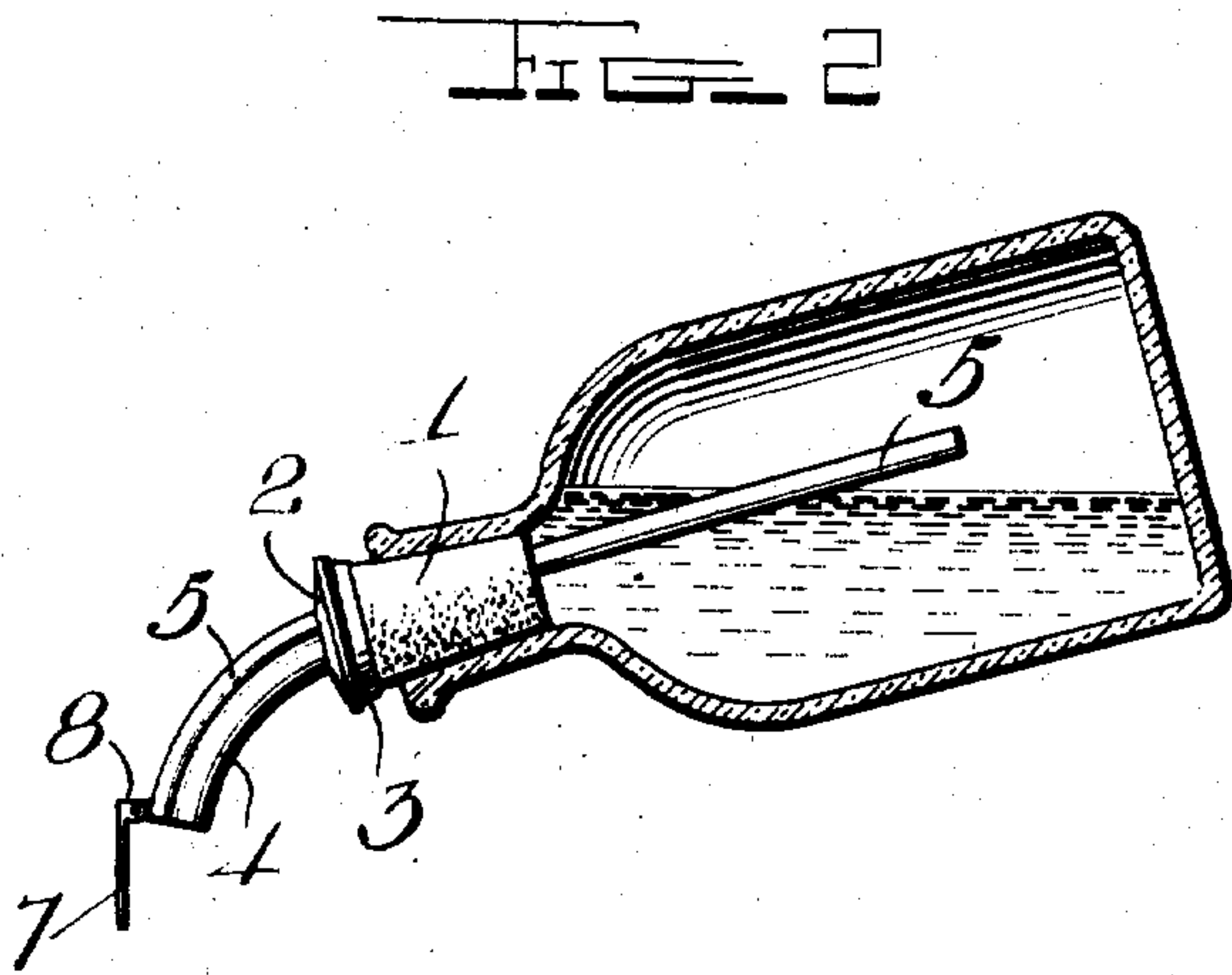
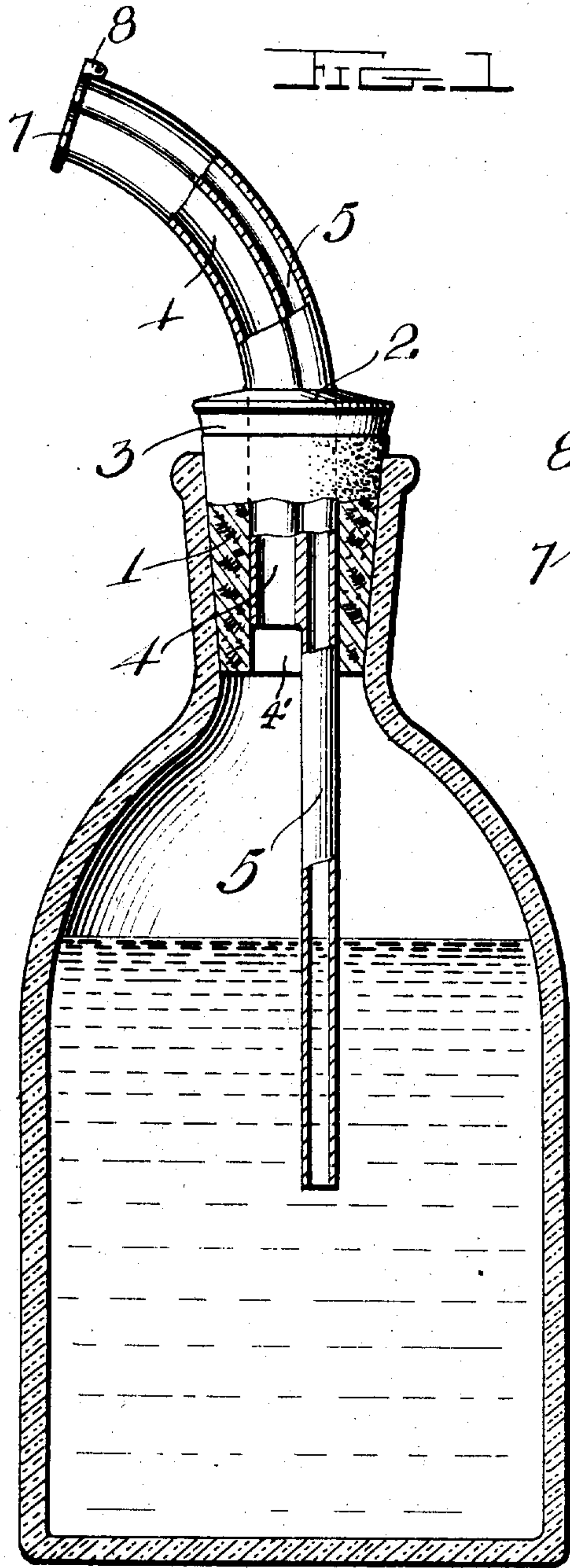
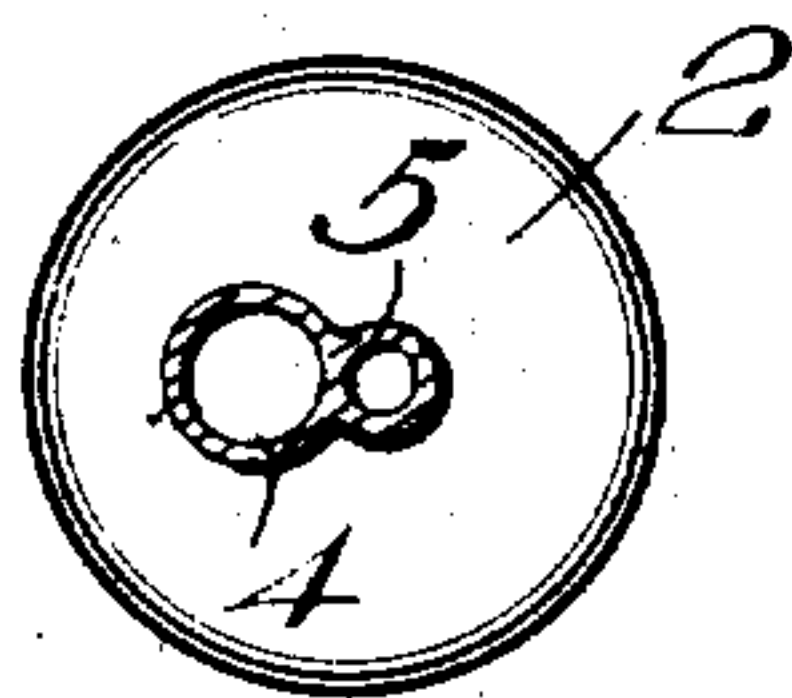


FIG. 5



Witnesses

[Signature]

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UNITED STATES PATENT OFFICE.

ERNEST LEWIS BECK, OF NEW YORK, N. Y., ASSIGNOR, BY MESNE ASSIGNMENTS, TO
THE DODGE AND DENT MFG. CO. INC., OF NEW YORK, N. Y.

BOTTLE-STOPPER.

973,616.

Specification of Letters Patent.

Patented Oct. 25, 1910.

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To all whom it may concern:

Be it known that I, ERNEST LEWIS BECK, a subject of the King of Great Britain, residing at Manhattan, in the county of New York and State of New York, have invented certain new and useful Improvements in Bottle-Stoppers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in bottle stoppers.

One object of the invention is to provide a bottle stopper having arranged therein a discharge tube and a vent tube, whereby air is admitted to the container to which the stopper is applied to cause the contents of the container to be freely discharged through the discharge tube of the stopper.

Another object is to provide means to automatically close the open outer ends of the discharge and vent tubes when the container is in an upright position and to open the same when the container is tilted to discharge the liquid therefrom.

With these and other objects in view, the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be more fully described and particularly pointed out in the appended claim.

In the accompanying drawings, Figure 1, is a side view of my improved stopper, showing the same applied to a bottle, the latter being in section and in an upright position. Fig. 2, is a similar view, showing the bottle in an inclined position for discharging liquid therefrom. Fig. 3, is a front view of the stopper. Fig. 4, is a rear view of the same. Fig. 5, is a cross sectional view on the line 5—5 of Fig. 3.

Referring more particularly to the drawings, 1 denotes the stopper which may be formed of cork, rubber, or any suitable material, and is adapted to be inserted into the neck of the bottle or retainer in the usual manner. On the outer end of the stopper 1, is arranged a cap 2, which is formed of any suitable metal is provided with a downwardly projecting annular flange 3, which is clenched into engagement with the upper portion of the stopper to securely fasten the cap thereon. In the cap 2, is arranged a discharge tube 4, the inner end of which is

inserted in the passage formed through the stopper and projects a suitable distance into the passage, as shown. Secured to one side of the tube 4, is a vent tube 5, said vent tube may be secured to the discharge tube in any suitable manner, or may form part of the same. The vent tube is of less diameter than the discharge tube, and the inner end of the vent tube extends entirely through the stopper and projects a suitable distance in the bottle or retainer, as shown. The outer portions of the vent and discharge tubes project a suitable distance beyond the outer side of the cap and are preferably curved, as shown, to facilitate the pouring of the liquid through the discharge tube. On the upper side of the vent tube, adjacent to its outer end, is formed an upwardly projecting apertured bearing lug 6, to which is pivotally connected a closing plate or disk 7, said plate or disk having a shape corresponding somewhat to the out line of the discharge and vent tubes and is slightly larger than the outside dimensions of the ends of the tubes. The plate or disk is provided on its inner side adjacent to its upper end with spaced apertured lugs 8, which engage the lug 6, and through the apertures of said lugs is inserted a pivot pin, whereby the plate or disk 7, is loosely hinged to the vent tube and is adapted to swing freely into and out of engagement with the ends of the tubes when the bottle or container is brought to an upright position or tilted for discharging the liquid therefrom. By means of the closing plate or disk 7, the outer open ends of the vent and discharge tubes will be automatically closed after each discharge of liquid from the container, thus preventing the entrance of dust or insects to the container.

I wish it to be understood that by inserting the discharge tube 4 part way in the opening of the stopper an air space 4' is provided, which communicates with said tube 4 so as to permit of the contents of the bottle to more readily pass through said tube 4.

A bottle stopper constructed as herein shown and described, is adapted for use in connection with bottles containing spirituous liquors or in connection with other forms of bottles from which the contents are discharged at frequent intervals, thus obviating the necessity of removing and replacing the

stopper each time any of the contents of the bottle is removed.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Having thus described my invention, what I claim is:

- 10 The combination with a bottle, of a stopper connected to the neck thereof, and having an opening extending through the same, a flanged cap secured to the stopper having a discharge and vent tube inserted through
- 15 the same, said vent tube being inserted through the opening of the stopper and into the body of the bottle, the discharge tube being inserted part way into said opening

so as to provide an air space in the stopper which communicates with the discharge tube 20 so as to permit of the contents of the bottle to readily pass through said discharge tube, said discharge and vent tubes being joined together and curved above the cap and having on their outer ends a hinged disk which 25 is adapted to automatically open and close said outer ends of said tubes substantially as specified.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses. 30

ERNEST LEWIS BECK.

Witnesses:

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ARNEE E. CAVEN.