

J. L. BAIR.
BOTTLE.

APPLICATION FILED NOV. 9, 1903.

NO MODEL.

Fig. 2

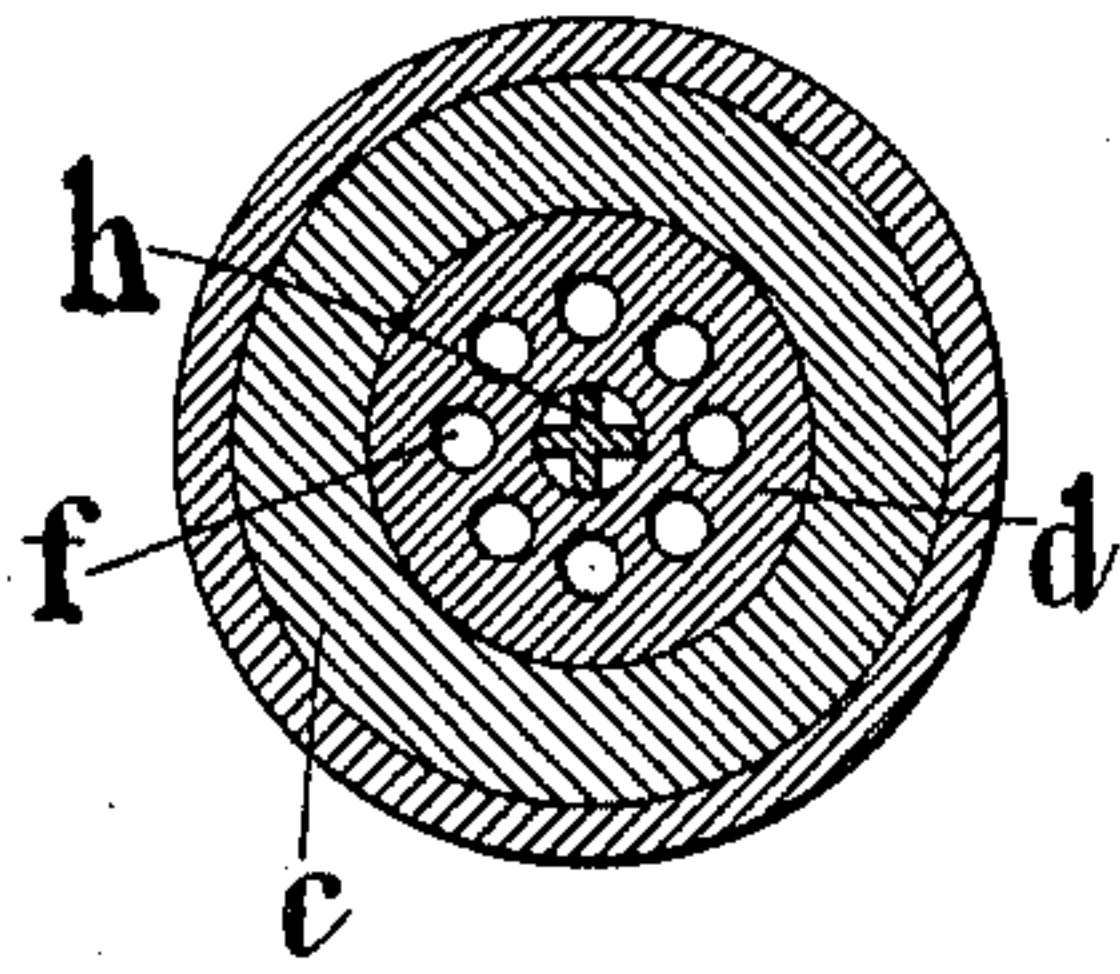


Fig. 4

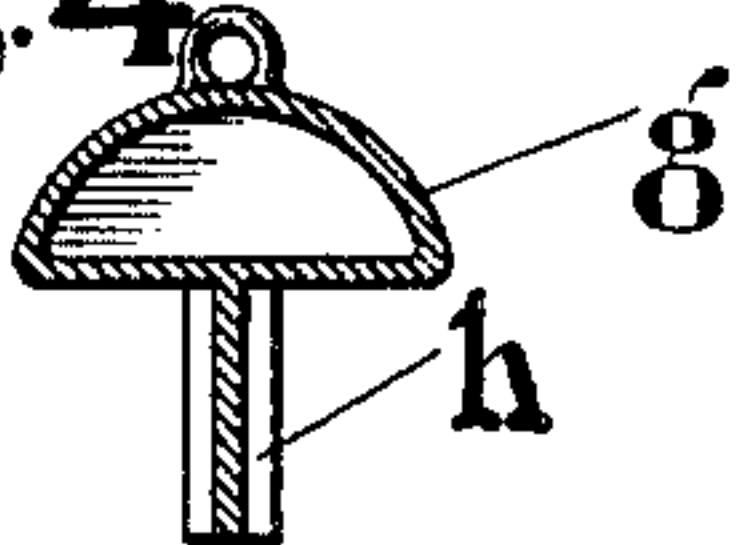


Fig. 5

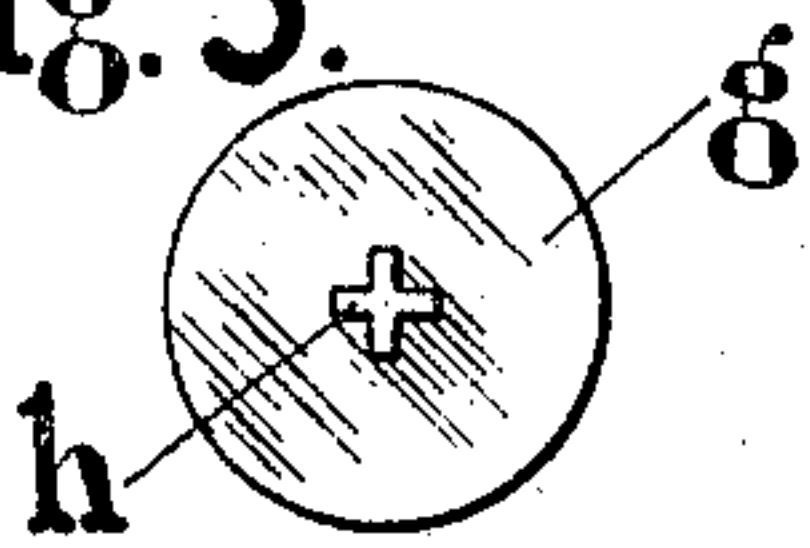


Fig. 1.

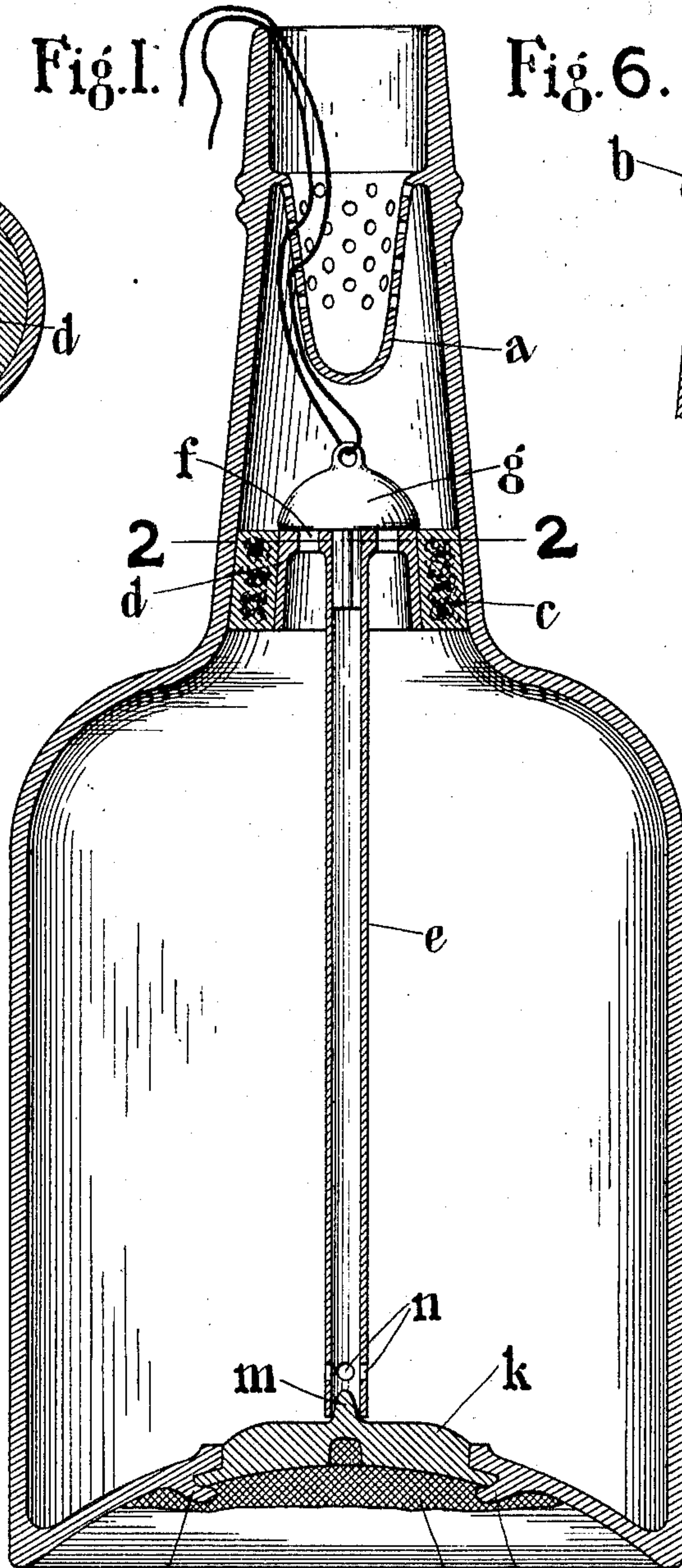


Fig. 6.

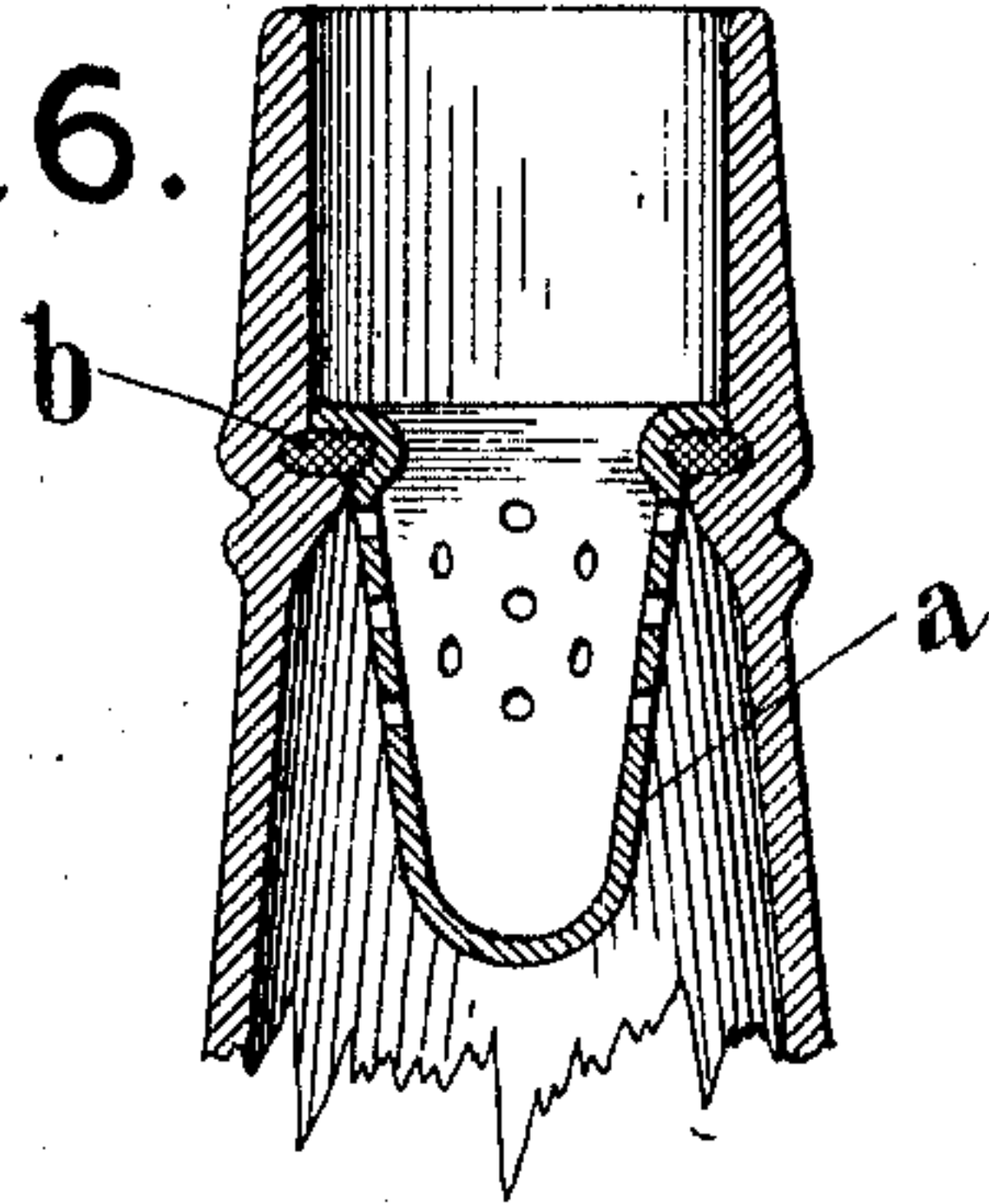
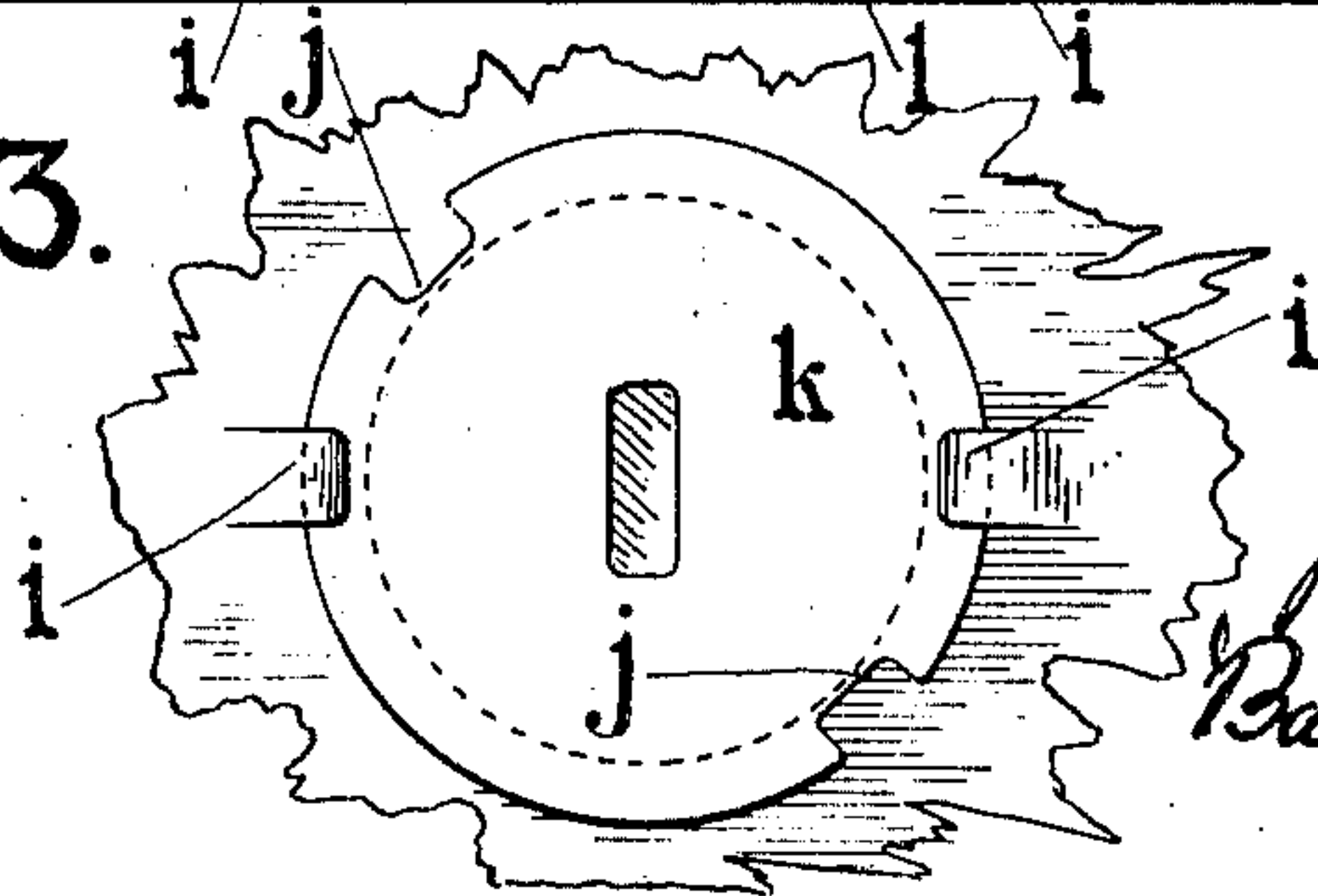


Fig. 3.



WITNESSES:
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JOSEPH L. BAIR, OF NEW YORK, N. Y.

BOTTLE.

SPECIFICATION forming part of Letters Patent No. 776,484, dated December 6, 1904.

Application filed November 9, 1903. Serial No. 180,415. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH L. BAIR, a citizen of the United States, residing in the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Bottles, of which the following is a specification.

The object of this invention is to provide a bottle that cannot be refilled, at least by means of any appliances ordinarily available by those who would be likely to practice such deception.

To this end the invention comprises an arrangement of parts hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a vertical central section of a bottle constructed in accordance with this invention; Fig. 2, a section on the line 2 2 of Fig. 1; Fig. 3, a bottom view; Fig. 4, a vertical section of the valve; Fig. 5, a bottom plan view thereof; and Fig. 6 illustrates a modification.

The bottle has secured in the neck below that part to be occupied by the cork stopper a cup or thimble *a*, having perforations in its sides, but imperforate in its bottom portion. This thimble may be formed in the bottle-neck, as indicated in Fig. 1, or may be separately formed, as in Fig. 6, and secured in the neck of the bottle—for instance, by cement *b*, occupying an annular groove in the bottle-neck and a corresponding groove extending around the upper part of the thimble. Within the neck below the thimble is secured a valve-seat comprising an annular ring *c*, of cork, carrying centrally a valve-seat *d*, forming part of or attached to a tube *e* and having openings *f* for the discharge of the contained liquid. The valve-seat and tube may be and preferably are of glass. Since in the construction shown the bottle-neck tapers upwardly, the tube, valve-seat, and surrounding cork are inserted through an opening in the bottom of the bottle. Cement may be applied to the face of the cork, if desired.

Between the valve-seat and the thimble works a valve *g*, preferably of glass, made hollow and having a stem *h*, that is guided in the upper end of the glass tube. This valve is placed in position before the valve-seat is

inserted and may be formed with an eyepiece through which a cord passing through apertures in the thimble may be passed, the cord serving the purpose of holding the valve up in the neck of the bottle until after the valve-seat is inserted, when the cord may be withdrawn.

The aperture in the bottom of the bottle may be formed with lugs *i* at its sides, which pass through notches *j* in the flange of the stopper or closure-piece *k*, which latter is then given a partial rotation and may be made entirely secure by a layer of cement or wax *l*, upon which may be impressed the seal of the proprietor or bottler.

The lower end of the glass tube is supported in position by a projection *m* on the inner face of the part *k* and is preferably formed with apertures *n* for admission of air.

The bottle being filled and sealed, it is obvious that when the stopper is withdrawn the contents will be freely discharged, air being permitted to pass to the bottom of the bottle through the glass tube *e*. Access to the valve is prevented by the perforated thimble, the apertures in which may be made very small. They are shown as comparatively large for clearness of illustration. The bottom of the thimble is formed without apertures, thereby avoiding passages of any kind by which a wire might be inserted and brought into direct contact with the valve. In practice, however, the apertures are made so small as to render impossible the insertion of a wire or any implement by which it might be possible to lift the valve for the purpose of refilling the bottle.

I claim as my invention—

1. A non-refillable bottle having secured in its neck a valve-seat provided with a discharge-opening, a valve having a valve-stem, a perforated cup secured in the bottle-neck above the valve, and an air-supply tube extending from the valve-seat downward into the bottle into which the valve-stem extends and by which it is guided.

2. In a non-refillable bottle, the combination with an apertured valve-seat secured in the neck thereof, a valve seating thereon, a valve-stem projecting from the valve, a tube extend-

ing downwardly from the valve-seat and in which the valve-stem is guided, a perforated cup secured in the bottle-neck above the valve and means located at the bottom of the bottle
5 for holding the tube in position.

3. In a non-refillable bottle, the combination of a bottle having a tapered neck and formed with an opening in its bottom, a valve-seat tapered toward the top of the neck, a tapered
10 stopper into which the tapered valve-seat projects, a valve resting on the valve-seat, a stopper for closing the opening in the bottom of the bottle, and a tube extending from said stopper to the valve-seat and supporting it.

15 4. In a non-refillable bottle, the combination of a bottle formed with an opening in its bottom, a valve-seat and valve adapted to be passed through said opening into the bottle-neck, a tube extending downward from the
20 valve-seat and a stopper for closing the opening in the bottom of the bottle having a projection on its inner face that enters and holds in position the tube.

5. The combination of a bottle having an
25 aperture in its bottom, a valve-seat, a tube

projecting downwardly therefrom, a cork ring surrounding the valve-seat and fitting the neck of the bottle, a valve resting on the valve-seat, a cup secured to the bottle above the valve
30 having perforations in its sides but impermeable at the bottom, and means for closing the aperture in the bottom of the bottle and for supporting the tube.

6. In a non-refillable bottle, the combination of a bottle formed with an opening at the bot-
35 tom and with lugs adapted to interlock with a stopper, a stopper for closing the opening in the bottom and having parts that interlock with said lugs, means for hermetically sealing the stopper after its insertion, a valve-seat
40 and valve and a tube supported on the stopper at the bottom of the bottle and supporting the valve-seat.

In testimony whereof I have hereunto subscribed my name.

JOSEPH L. BAIR.

Witnesses:

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LILLIE F. BROWNING.