

No. 797,940.

PATENTED AUG. 22, 1905.

C. M. CONLEY.
NON-REFILLABLE BOTTLE.
APPLICATION FILED MAR. 25, 1906.

Fig. 1.

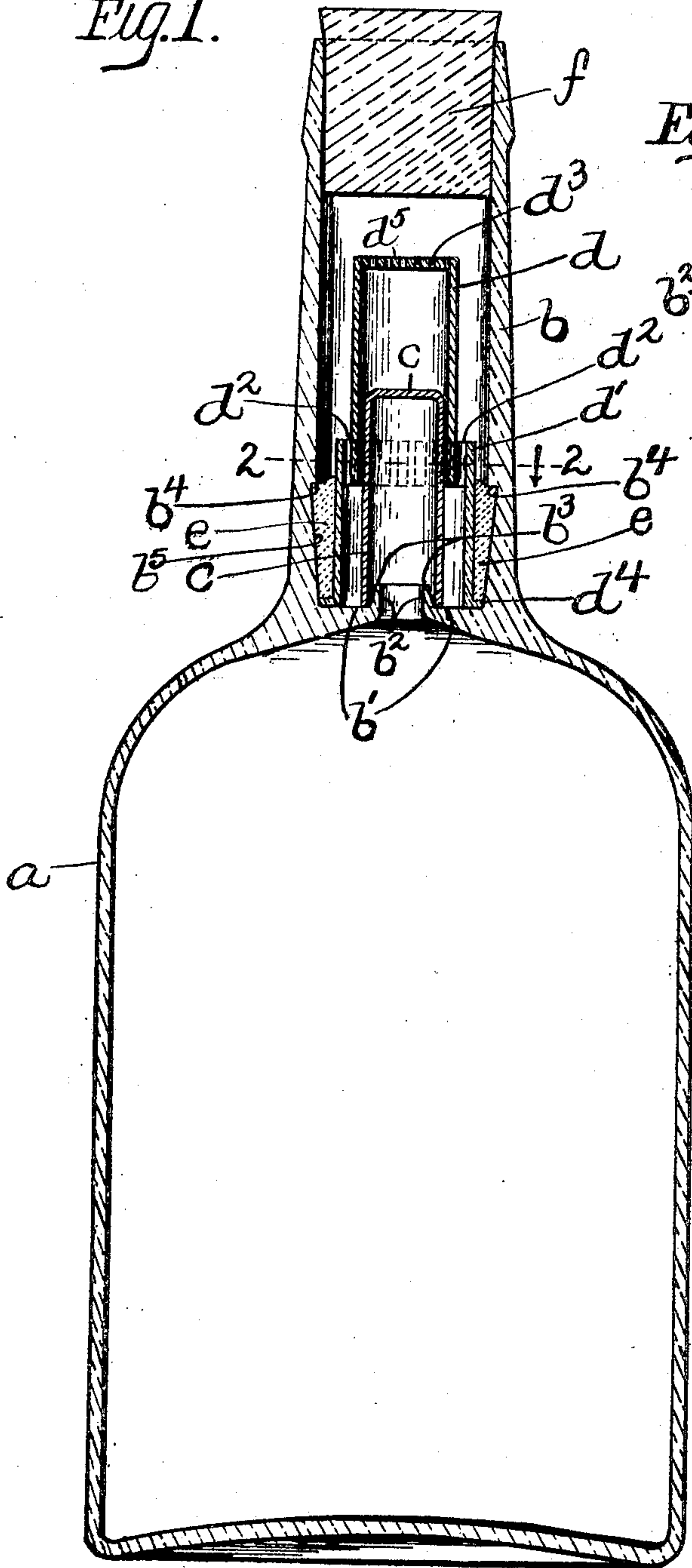


Fig. 2.

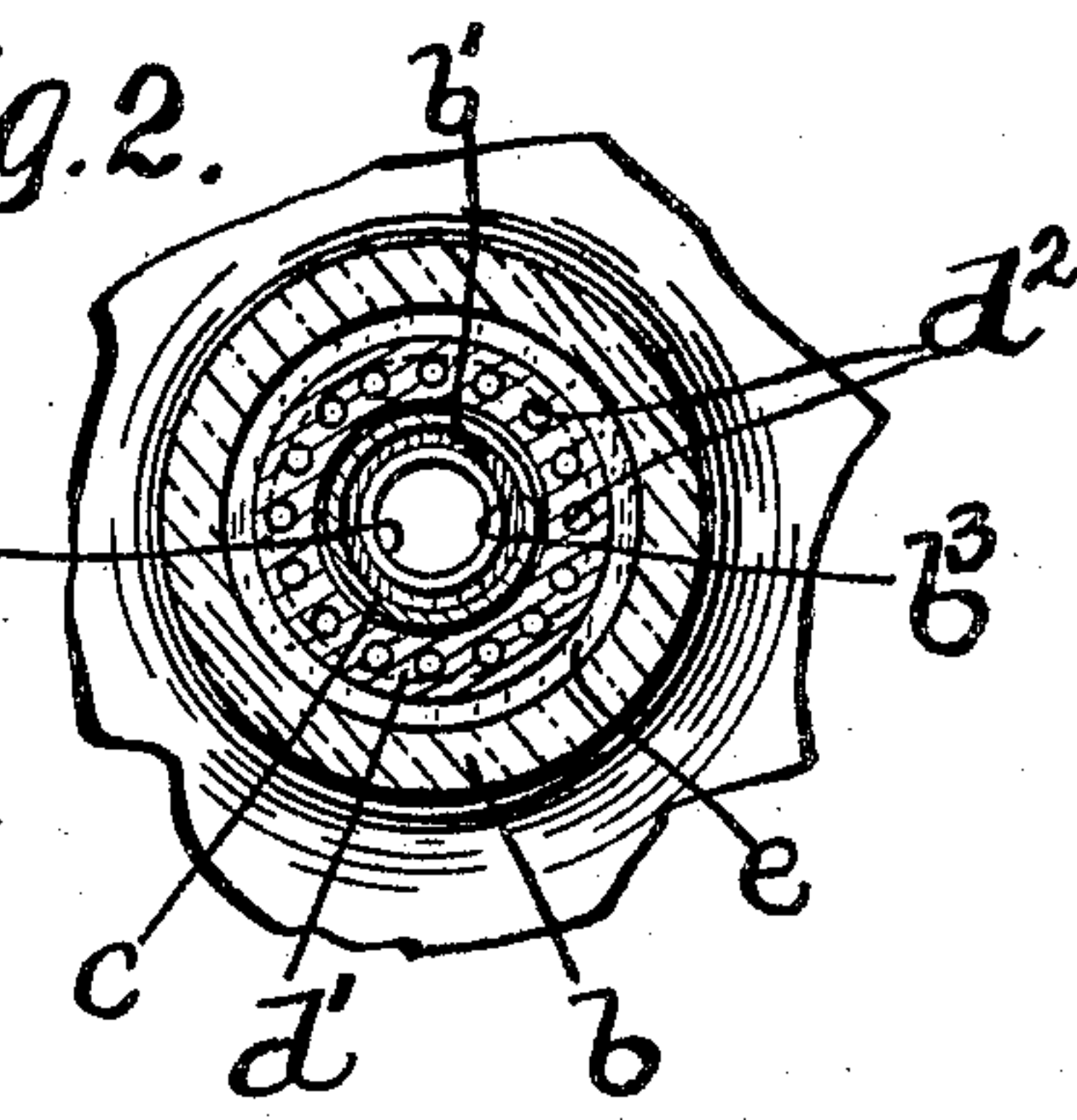
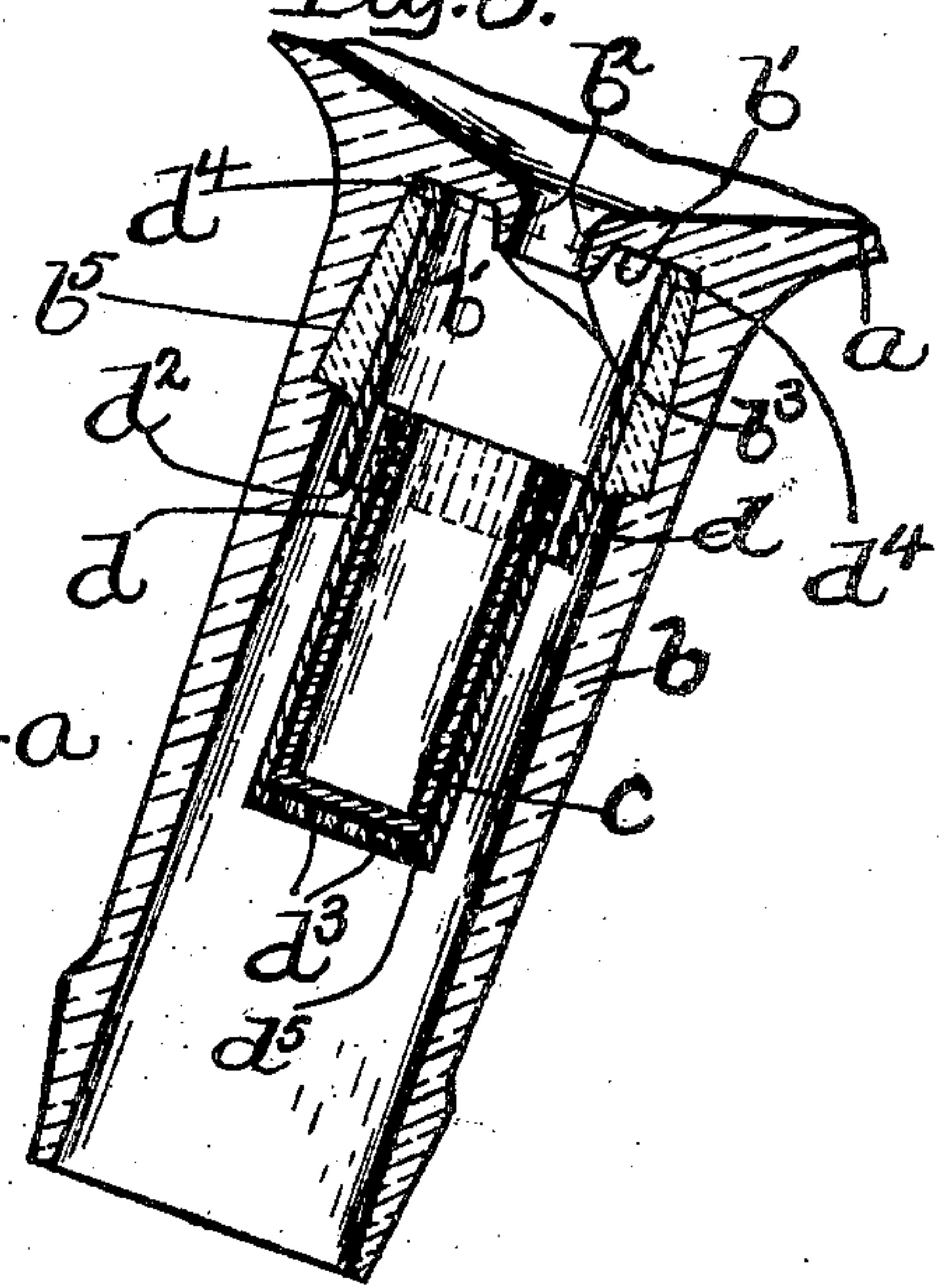


Fig. 3.



WITNESSES:

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NON-REFILLABLE BOTTLE.

No. 797,940.

Specification of Letters Patent.

Patented Aug. 22, 1905.

Application filed March 25, 1905. Serial No. 251,975.

To all whom it may concern:

Be it known that I, CHARLES M. CONLEY, a citizen of the United States of America, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Non-Refillable Bottles; and I hereby 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 pertains to make and use the same.

This invention relates to improvements in non-refillable bottles.

The object of this invention is to provide a bottle of this character which is very simple in construction and which has such an arrangement of parts as will effectually prevent the refilling of the bottle after the bottle has been assembled, but which will in no way impede the flow of the liquid from the bottle.

My invention therefore consists in the features of construction and combination of parts, as hereinafter illustrated in the drawings, described in the specification, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a central section of a bottle embodying my invention. Fig. 2 is a section on line 2-2, Fig. 1. Fig. 3 is a view of the upper portion of the bottle inverted.

Again referring to the drawings, *a* represents the body of the bottle, and *b* the upper or neck portion thereof. A seat *b'* is formed at the junction of the body portion and neck portion, in which is formed an opening *b²* for the passage of the liquid from the body of the bottle into the neck portion. Around the opening *b²* is formed a vertical flange *b³*. Above the seat *b'* the channel of the neck *b* is enlarged, as at *b⁵*, and a shoulder *b⁴* is formed therein.

Within the neck *b* is arranged a small cylinder or tube *c*, preferably formed of glass and closed at its upper end. This cylinder *c* is arranged to rest on the seat *b'* and inclose the vertical flange *b³*. Around the cylinder *c* is arranged a tube or cylinder *d*, which has a cap *d⁵* at its upper end. The upper part of the cylinder *d* is smaller in diameter than the lower part, but is of sufficient diameter to allow the cylinder *c* to slide freely therein. At the point where the cylinder *d* begins to be reduced in size the walls of the cylinder are thickened and a shoulder *d'* is formed. In the shoulder *d'* are formed vertically-arranged

holes *d²*, which communicate with the interior of the said cylinder *d*. These holes *d²* are comparatively long and narrow, so as to prevent any instrument being inserted therein and brought into contact with the tube *c*. In the cap *d⁵* of the tube *d* are formed openings *d³*. On the lower end of the cylinder *d* is formed a flange *d⁴*.

e represents a filling of cork or other suitable material arranged around the cylinder *d* and adapted to be compressed into the enlargement *b⁵* in the neck of the bottle and abut against the flange *d⁴* on the cylinder *d* and the shoulder *b⁴*, formed in the neck of the bottle, thereby forming a lock, which prevents the cylinder from being withdrawn from the neck of the bottle. The mouth of the bottle can be closed in the usual manner by a cork *f*.

When using the bottle, the bottle is first filled with the liquid and then the cylinders *c* and *d* are inserted, so as to rest on the seat *b'*, and the filling *e* is compressed and forced down into the neck, so as to rest on the flange *d⁴* of the cylinder *d* and lock the said cylinder on the seat *b'*.

When it is desired to pour the liquid from the bottle, the bottle is inverted and the liquid enters the inside cylinder *c*, causing it to move down and occupy the position shown in Fig. 3. After the cylinder *c* has been filled with the liquid the liquid will overflow and run out through the holes *d²*, formed in the cylinder *d*. When the bottle is replaced on its base or bottom, the cylinder *c* will move down and again occupy its first position on the seat *b'*.

If an attempt is made to refill the bottle, the liquid poured in at the mouth of the bottle will pass into the opening *d³* in the cap of the cylinder *d* and remain on top of the cylinder *c*, and the added weight of this liquid will hold the cylinder more firmly on the seat *b'*, and although some of the liquid will pass through the holes *d²* into the space between the cylinder *d* and cylinder *c* it will not be able to pass down into the bottle.

What I claim is—

1. In a non-refillable bottle, the combination with the bottle of a seat formed in the channel of the neck portion, a tube closed at its top and arranged to rest on said seat and close said channel, an outer tube having openings in its side and a cap at its upper end and arranged to inclose said first-mentioned tube so

as to allow the said first-mentioned tube to slide freely therein and means for locking said outer tube in the neck of the bottle.

2. In a non-refillable bottle, the combination with the bottle of a seat formed in the channel of the neck portion, a tube closed at its top and arranged to rest on said seat and close said channel, an outer tube provided with openings and having a cap at its upper end and arranged to rest on said seat and inclose the first-mentioned tube so as to allow the said first-mentioned tube to slide freely therein, a flange formed on the lower end of said outer tube and means for locking said flange on said seat.

3. In a non-refillable bottle, the combination with the bottle proper of a seat formed in the channel of the neck portion, a shoulder formed on the wall of said channel above said seat, a tube closed at its top and arranged to rest on said seat and close said channel, an outer tube having openings formed in its side and a cap at its upper end and arranged to rest on said seat and inclose said first-mentioned tube so as to allow said first-mentioned tube to slide freely therein, a flange formed on said outer tube and a filling arranged around said outer tube and abutting against said flange and said shoulder so as to lock said outer tube on said seat, substantially as described and for the purpose set forth.

4. In a non-refillable bottle, the combination with the bottle proper of a seat formed in the lower part of the neck portion, said seat being provided with a central orifice, a vertical flange arranged around said orifice, a shoulder formed in said neck above said seat, a tube closed at its upper end and arranged to rest on said seat around said vertical flange, a perforated outer tube arranged to inclose said first-mentioned tube so as to allow said first-mentioned tube to slide freely therein, a flange formed on the lower end of said outer tube and a filling arranged around said outer tube

and abutting against said flange and said shoulder, substantially as described and for the purpose set forth.

5. In a non-refillable bottle, the combination with the bottle proper of a seat formed in the channel of the neck portion, a tube closed at its top and arranged to rest on said seat and close said channel, an outer tube arranged to rest on said seat and inclose said first-mentioned tube so as to allow the said first-mentioned tube to slide freely therein, which said outer tube has a greater diameter at its bottom than at its top and has its walls thickened where the wide portion merges into the narrow portion, and is provided with vertically-arranged holes formed in the thickened portion of said wall and communicating with the interior of said tube and means for locking said outer tube in the neck of said bottle, substantially as described and for the purpose set forth.

6. In a non-refillable bottle, the combination with the bottle proper of a seat formed in the lower part of the neck portion, said seat being provided with a central orifice, a vertical flange arranged around said seat, a tube closed at its upper end and arranged to rest on said seat around said vertical flange, a shoulder formed in said neck above said seat, an outer tube provided with openings arranged to inclose said first-mentioned tube so as to allow said first-mentioned tube to slide freely therein, a flange formed on the lower end of said outer tube and a filling arranged around said outer tube and abutting against the said flange and the said shoulder formed in the neck portion, substantially as described and for the purpose set forth.

In testimony whereof I sign the foregoing specification in the presence of two witnesses.

CHARLES M. CONLEY.

Witnesses:

VICTOR C. LYNCH,
N. L. McDONNELL.