

No. 824,447.

PATENTED JUNE 26, 1906.

W. F. SMART.

BOTTLE.

APPLICATION FILED APR. 18, 1906.

Fig. 1.

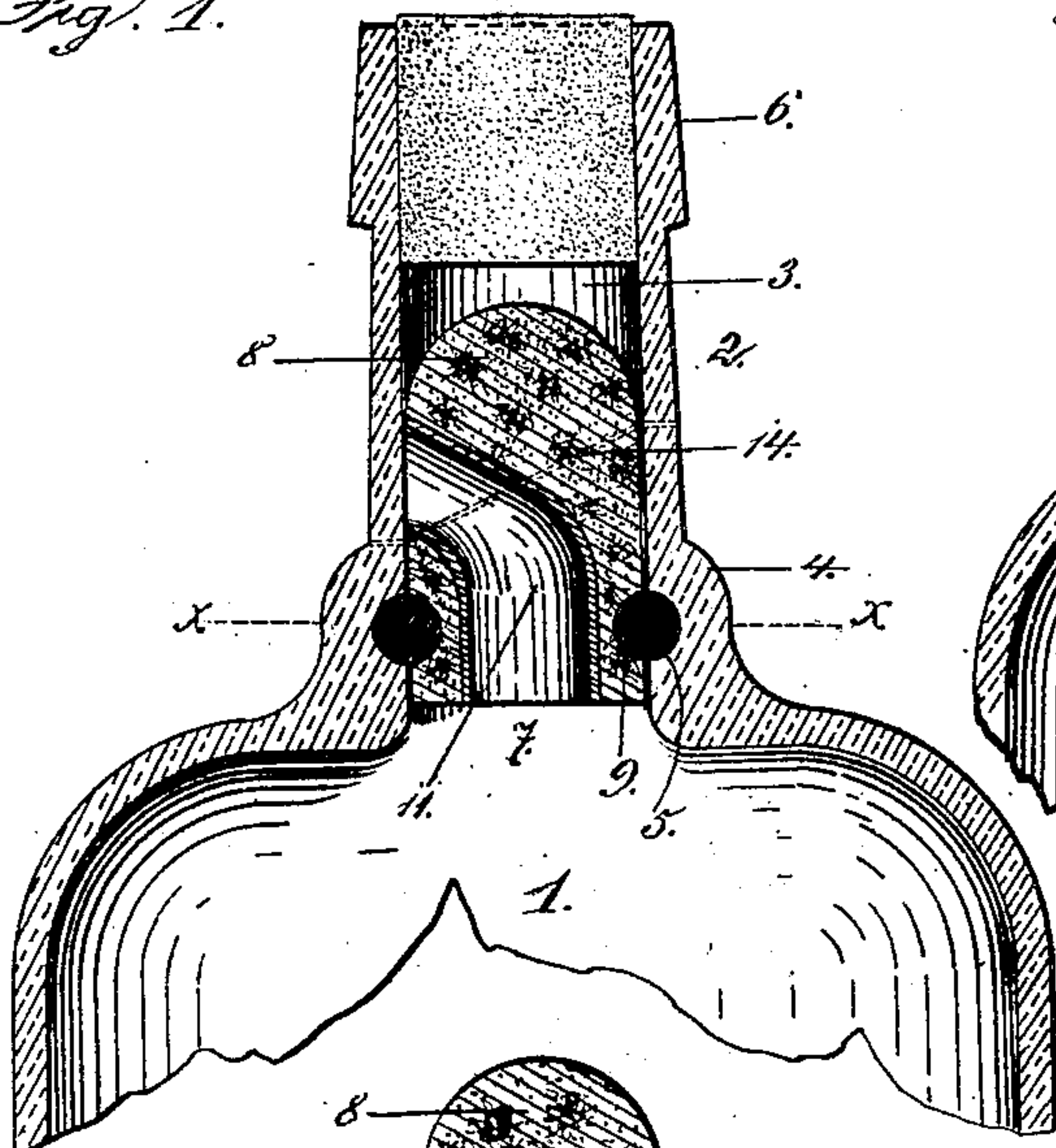


Fig. 2.

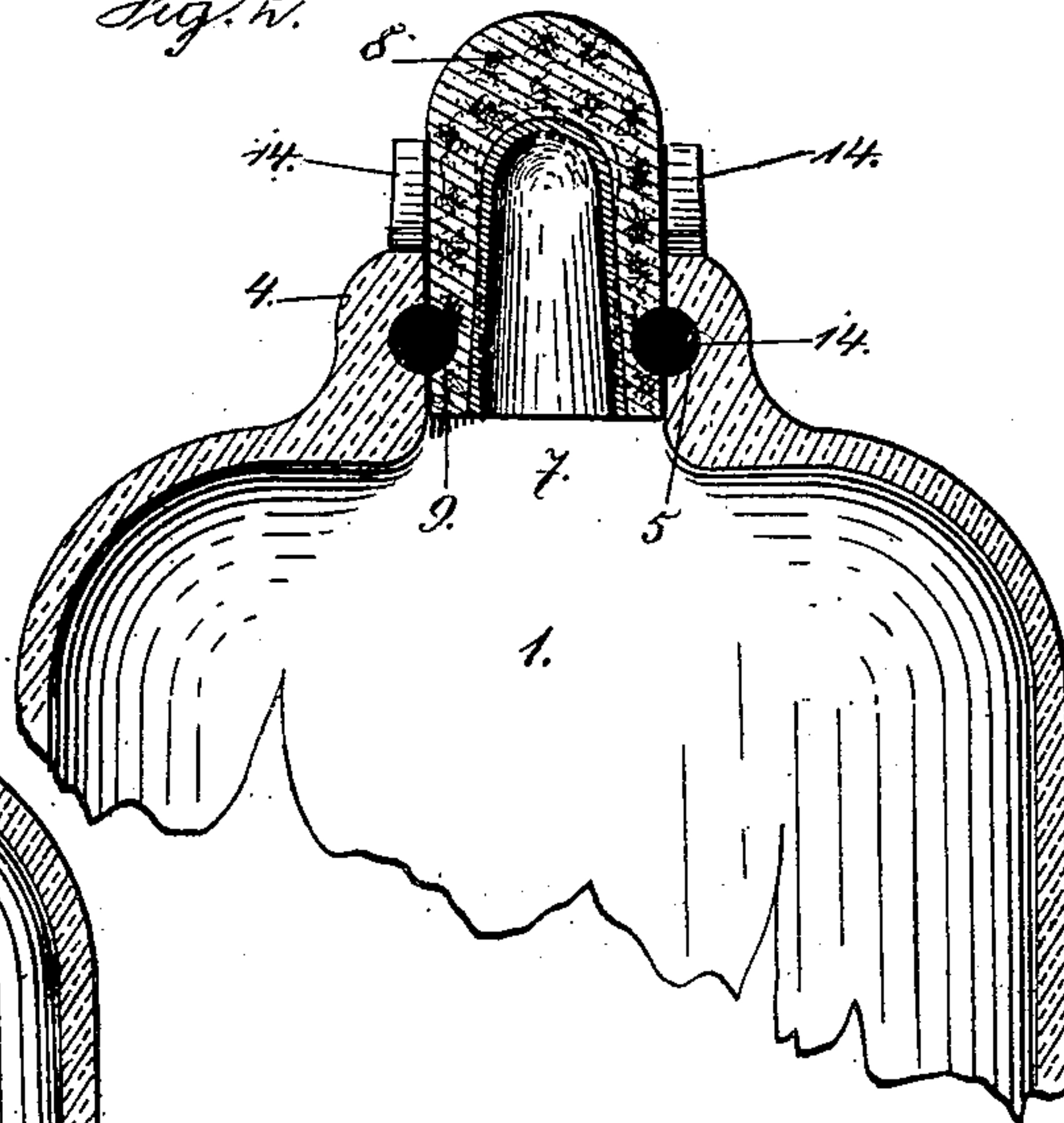


Fig. 3.

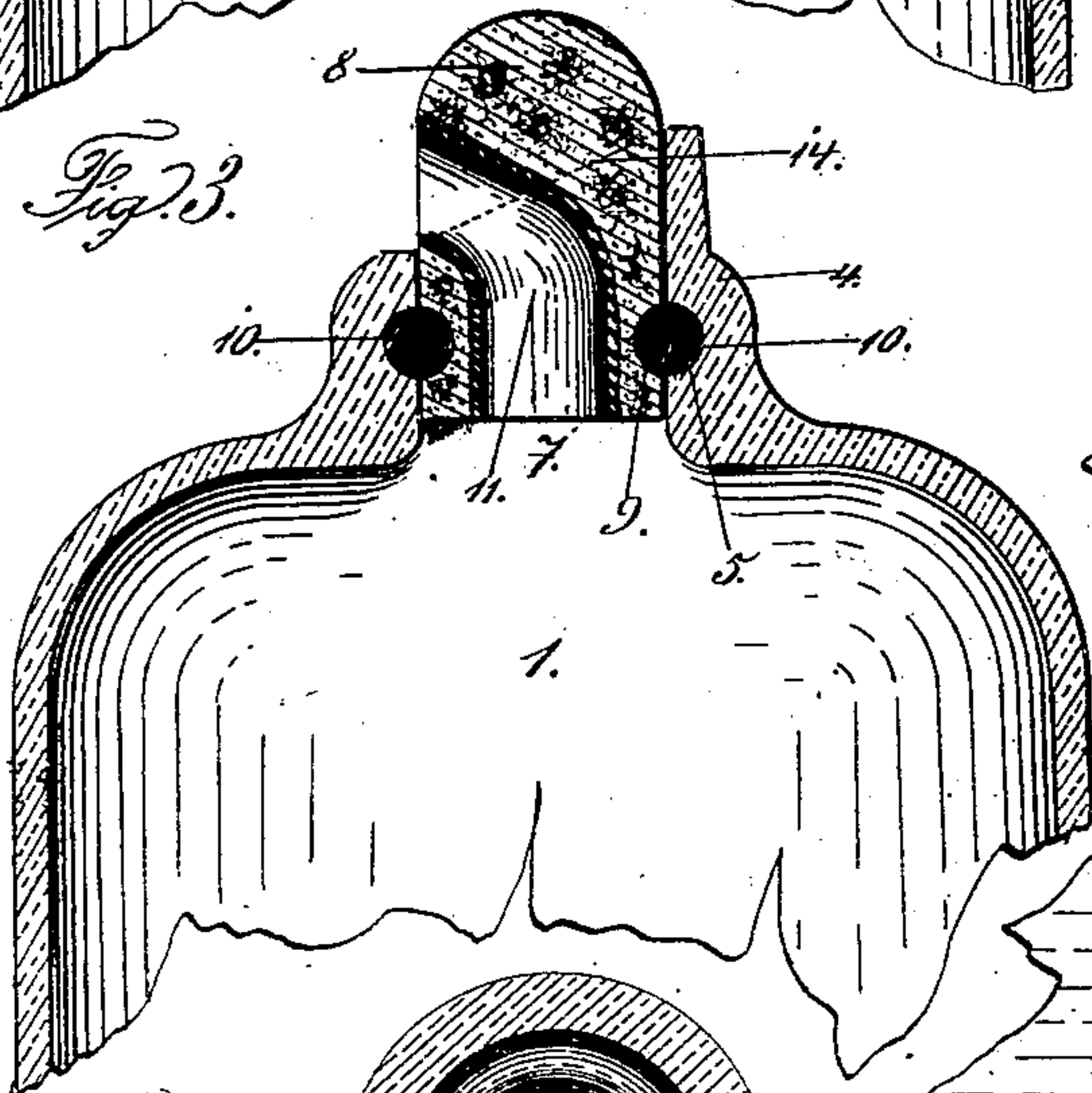


Fig. 4.

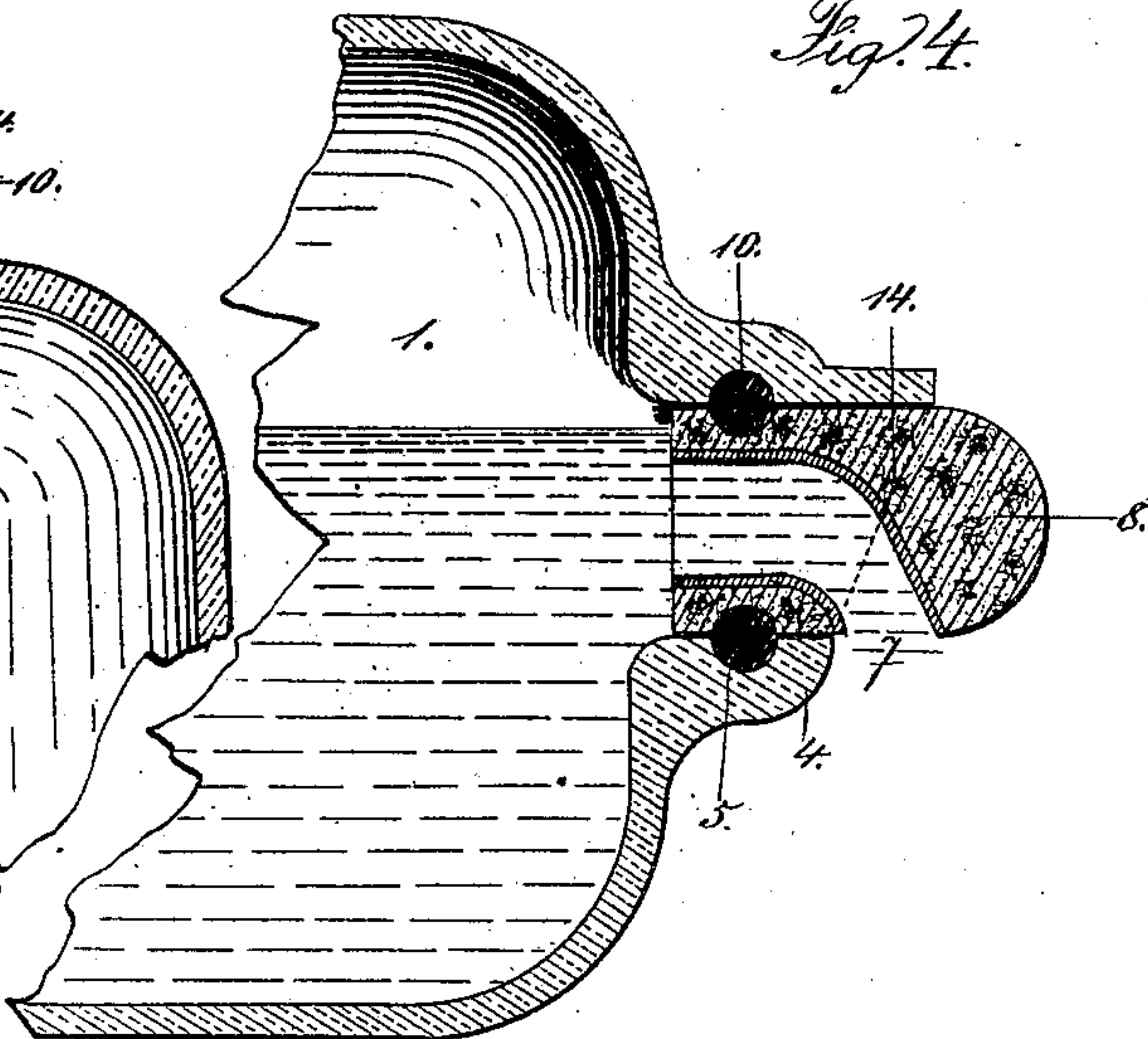
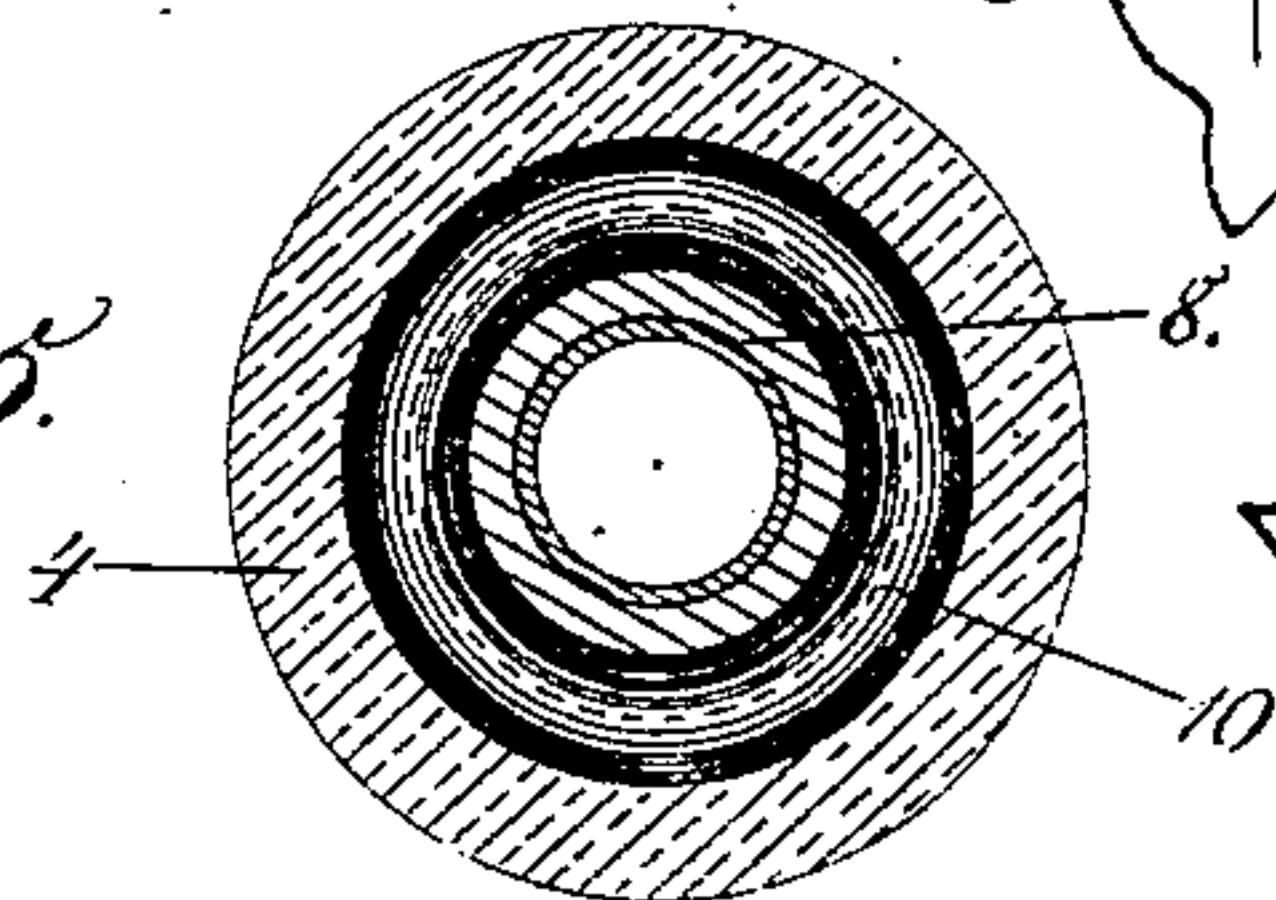


Fig. 5.



Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM FULLER SMART, OF PITTSBURG, PENNSYLVANIA.

BOTTLE.

No. 824,447.

Specification of Letters Patent.

Patented June 26, 1906.

Application filed April 18, 1906. Serial No. 312,359.

To all whom it may concern:

Be it known that I, WILLIAM FULLER SMART, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Bottles, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain new and useful improvements in bottles and similar receptacles; and the invention relates more particularly to that type of bottle commonly known as a "non-refillable" bottle.

15 The invention has for its primary object the provision of novel means in connection with a bottle to prevent the bottle from being refilled after it has once been used. To this end I have devised a simple and inexpensive form of bottle which cannot be surreptitiously
20 opened and then refilled. In this connection my invention aims to eliminate the nefarious practice of some merchants in refilling bottles of popular brands of liquids with a
25 cheaper product and disposing of the same as if the bottle contained the original liquid.

The invention further aims, besides breaking up the fraudulent practice of some merchants, to provide a bottle particularly adapted
30 for poisonous liquids or compounds, thus preventing a great many accidents from occurring by the bottles being used again for other liquids or compounds.

35 Further, the invention aims to provide a simple and inexpensive non-refillable bottle highly efficient for the various purposes for which it can be used.

40 With the above and other objects in view, which will more readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts to be hereinafter more fully described and claimed, and, referring to the drawings accompanying
45 this application, like numerals of reference designate corresponding parts throughout the several views, in which—

50 Figure 1 is a vertical fragmentary sectional view of a bottle constructed in accordance with my invention. Fig. 2 is a cross-sectional view of the same, illustrating the neck of the bottle detached therefrom. Fig. 3 is a vertical sectional view of the same. Fig. 4 is a similar view illustrating the manner of emptying the bottle. Fig. 5 is a horizontal sectional view taken on the line $x x$ of Fig. 1.

To put my invention into practice, I use a bottle 1, having a neck portion 2, said neck portion having the usual vertically-disposed opening 3 formed therein, through which the contents of the bottle are adapted to pass
60 when filling said bottle. The base of the neck portion 2 is provided with an annular enlargement 4 and with an interior horizontally-arranged annular groove 5, the object
65 of which will be presently described. The upper end of the neck portion 2 is flanged, as at 6, to strengthen and protect the upper end of the neck portion 2 of the bottle 1.

In the neck portion 2 of the bottle 1 is
70 mounted an auxiliary stopper or closure 7, having a rounded or suitably-ornamented upper end 8. The stopper or closure 7 near its lower end is provided with an exterior horizontally-disposed annular groove 9, similar
75 to the groove 5 of the enlargement 4, these grooves registering with one another when the stopper or closure 7 is within the neck portion 2 of the bottle 1. To retain the stopper or closure 7 within the neck portion 2, I
80 use a resilient annulus or ring 10, as rubber, said annulus or ring seating in the groove 9 of the stopper or closure and being compressed therein while the stopper or closure is being forced into the neck portion 2 of the
85 bottle, said annulus or ring expanding when the grooves 5 and 9 register.

The stopper or closure 7 is provided with a by-path 11, formed of a bent tapering tube, said by-path extending upwardly from the
90 bottom of the closure or stopper 7 and terminating in the side of said stopper or closure, as clearly illustrated in Figs. 1 and 3 of the drawings.

After the stopper or closure 7 has been
95 placed in the neck portion 2 of the bottle 1 and locked therein by the annulus or ring 10 a conventional form of cork 12 is placed in the upper end of the neck portion 2 of the bottle 1. The neck portion of the bottle 1 is
100 then provided with an angularly-disposed fracture or scratch 14, whereby when the neck portion 2 of the bottle 1 is slightly tapped or struck against an object or by a suitable instrument the neck portion 2 will be severed
105 from the bottle 1, thereby exposing the upper end of the stopper or closure 7. The bottle 1 can then be tilted, as illustrated in Fig. 4 of the drawings, to permit of its contents passing through the by-path or angular pas-
110 sage 11.

From the foregoing it will be observed that

it will be impossible for the neck portion 2 of the bottle to be replaced upon the same and used without the same being observed or detected. The stopper or closure 7 is preferably made of cork or a similar material, and I desire it to be understood that the stopper or closure can be used in connection with various types of bottles or receptacles other than that illustrated.

10 Such changes in the construction and operation as are permissible by the appended claims may be resorted to without departing from the spirit and scope of the invention.

What I claim, and desire to secure by Letters Patent, is—

15 1. The combination with a bottle having a neck portion, of an annular enlargement carried by said neck portion and having an interior horizontally-arranged annular groove formed therein, a stopper or closure adapted to fit within said neck portion, said stopper or closure having an exterior horizontally-disposed annular groove formed adjacent its lower end adapted to register with the groove

of said enlargement, said stopper or closure 25 having a by-path formed therein normally closed by the neck of said bottle, a cork adapted to fit in the neck of said bottle over said stopper or closure, and means mounted within the groove of said stopper or closure to retain the same within the neck portion of said 30 bottle, substantially as described.

2. The combination with a bottle having a neck portion, of a stopper or closure adapted to fit in said neck portion, said stopper or closure having an angular by-path formed therein, a cork adapted to fit in said neck portion above said stopper or closure, and means to retain said stopper or closure within said neck portion, said bottle-neck being weakened to adapt it to be easily broken, substantially as described. 40

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

WILLIAM FULLER SMART.

Witnesses:

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A. M. WILSON.