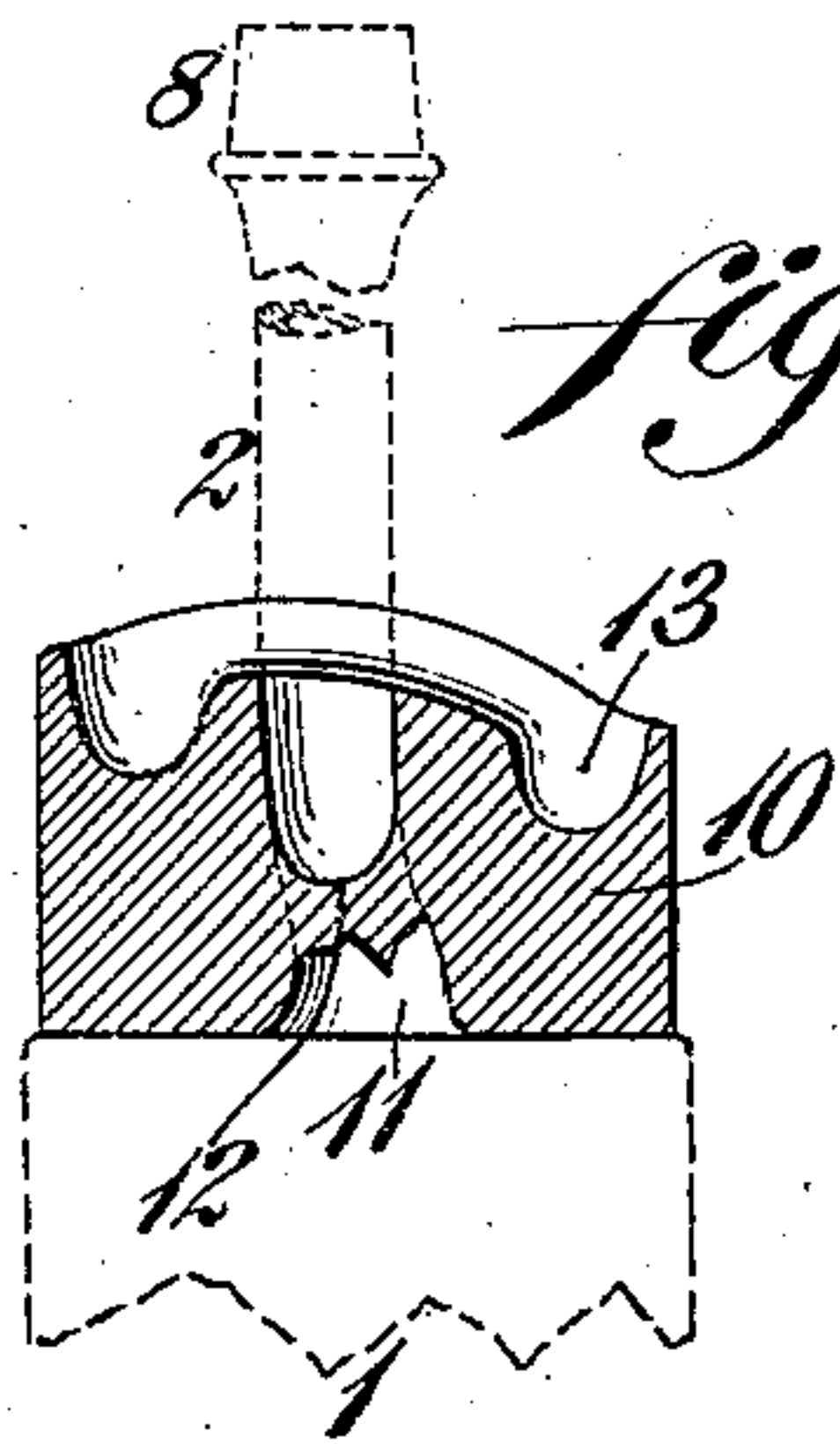


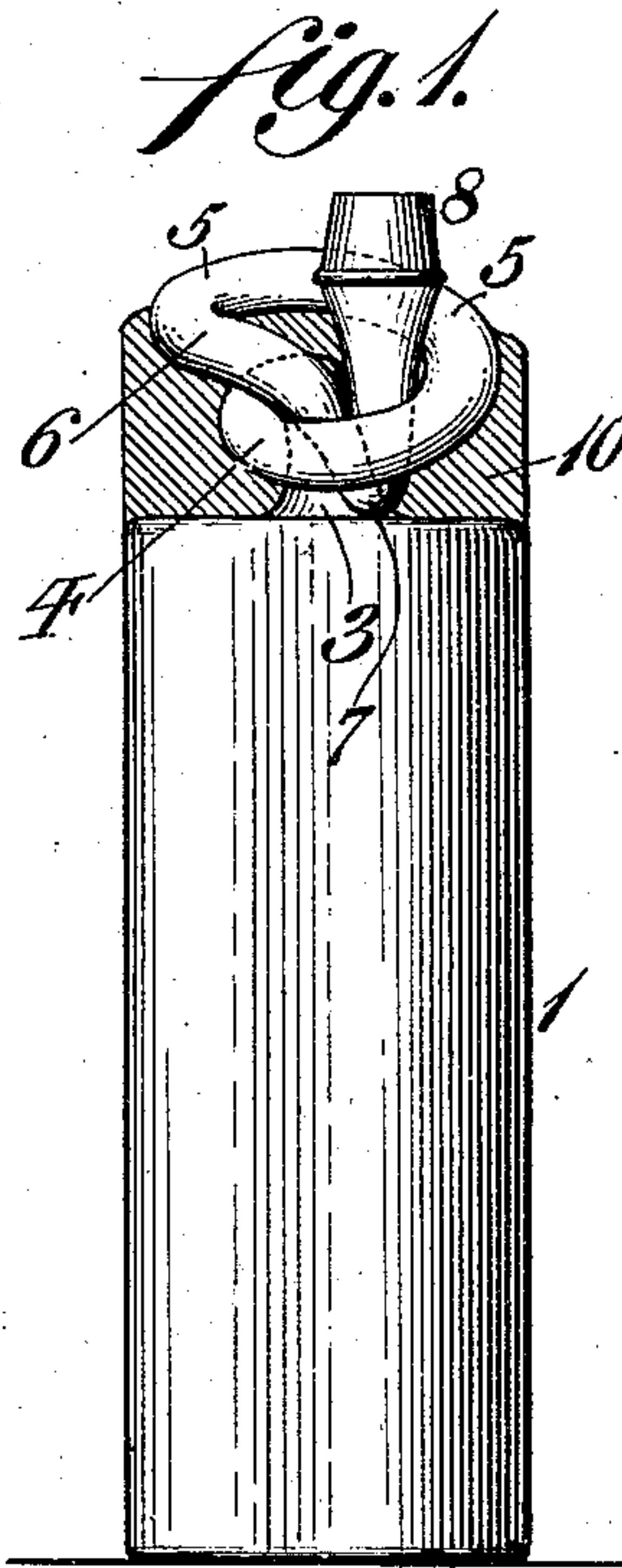
No. 842,605.

PATENTED JAN. 29, 1907.

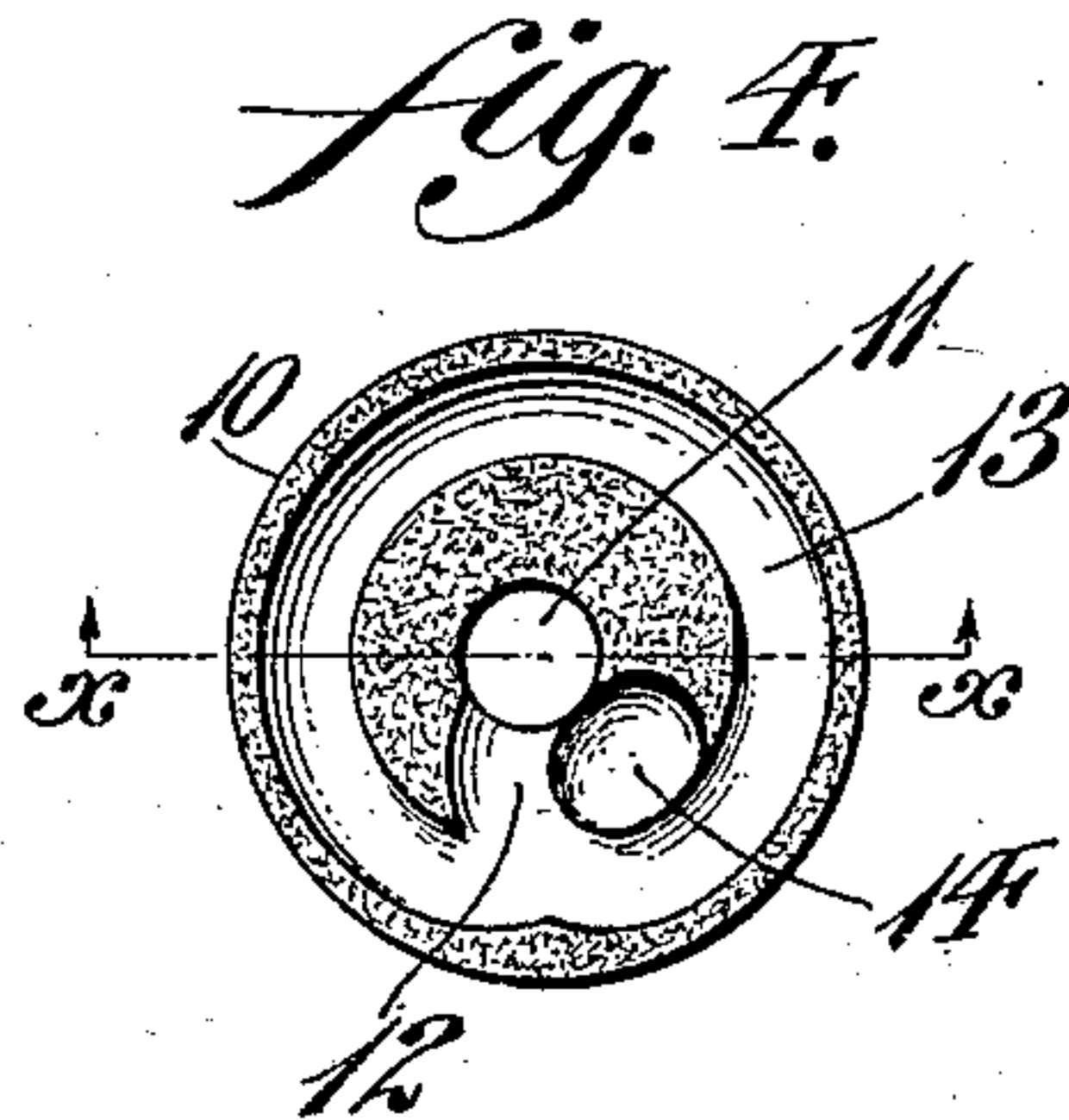
F. W. ABBOTT.  
NON-REFILLABLE BOTTLE.  
APPLICATION FILED MAY 19, 1906.



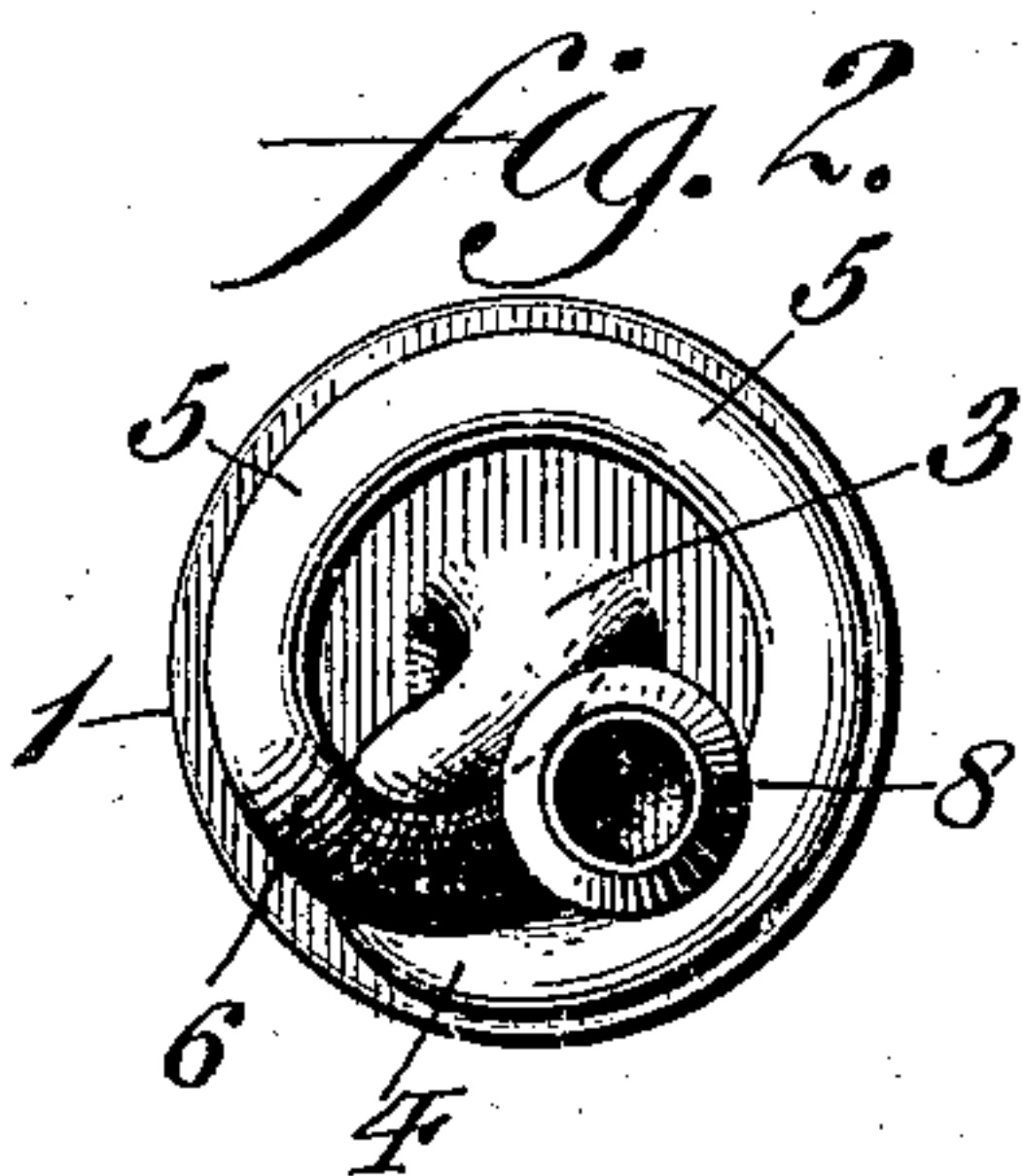
*fig. 3.*



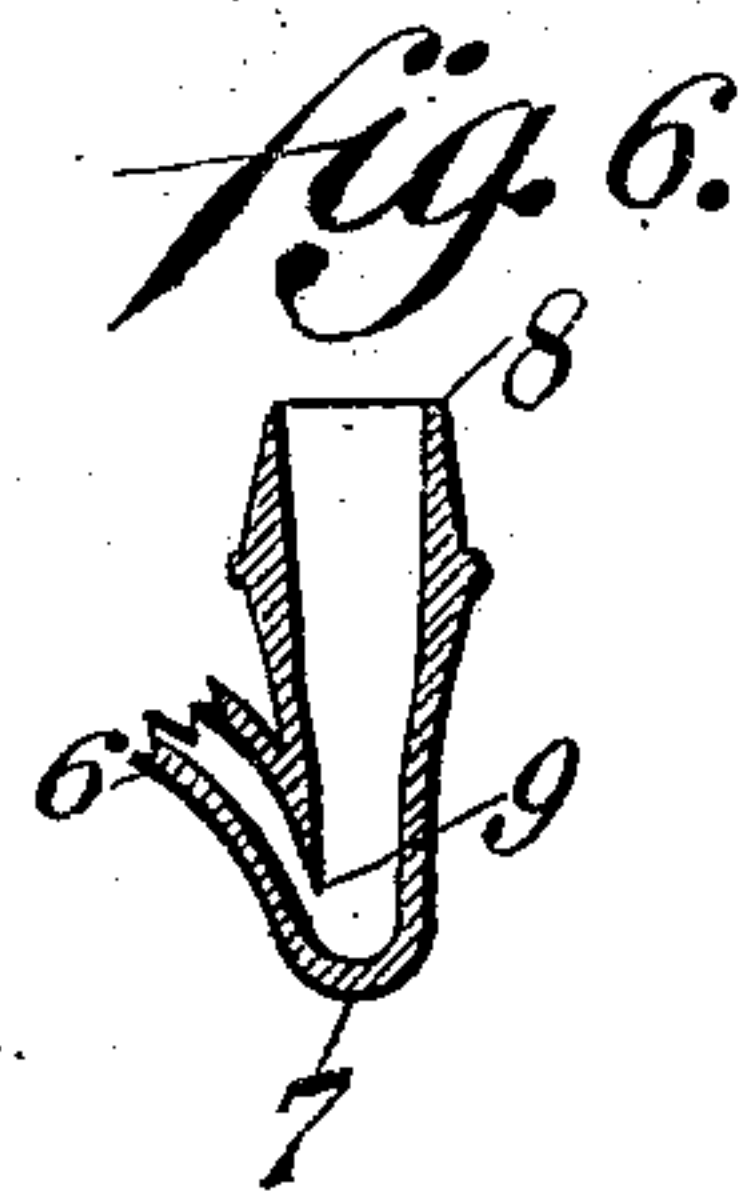
*fig. 1.*



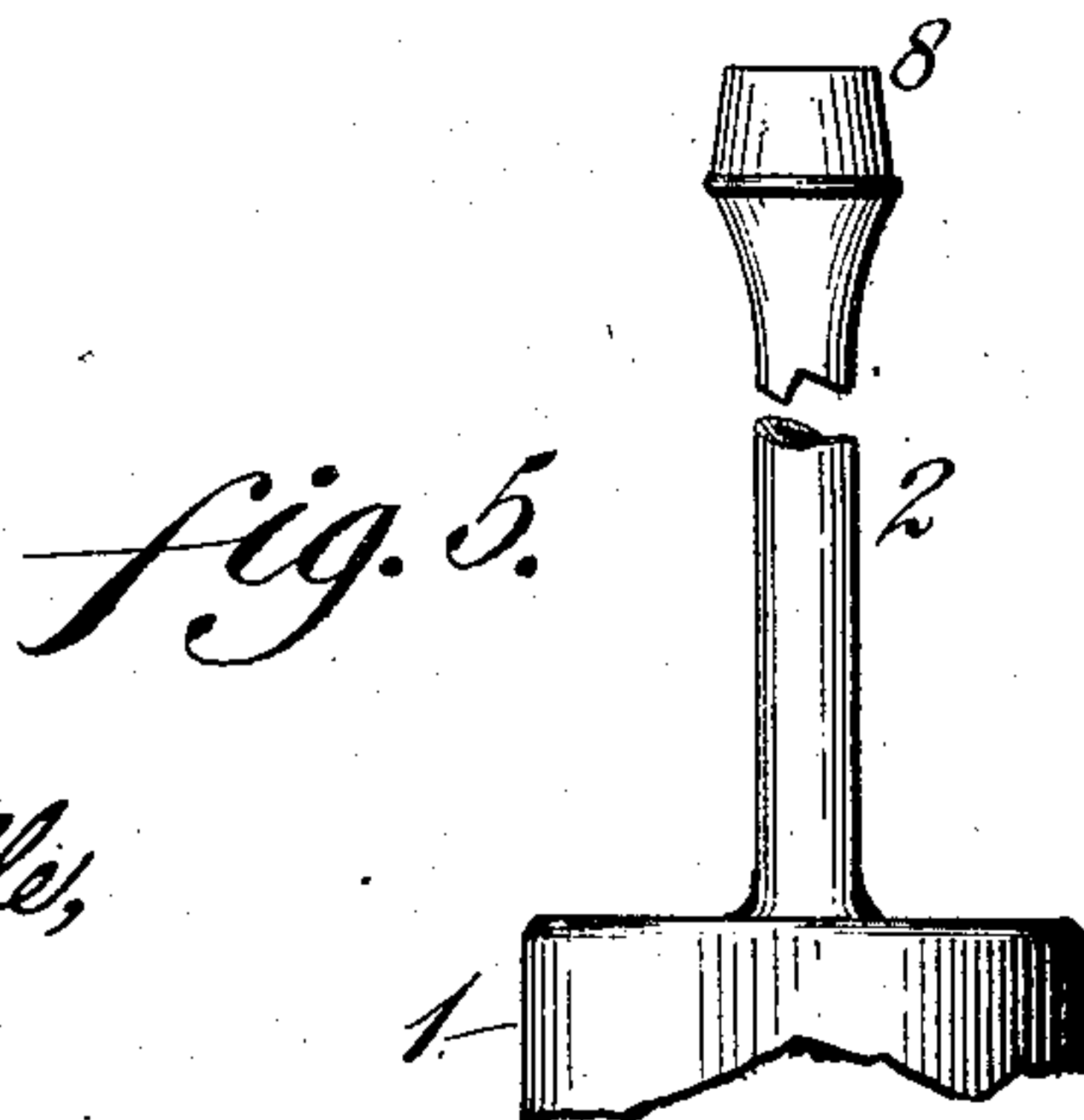
*fig. 4.*



*fig. 2.*



*fig. 6.*



*fig. 5.*

Witnesses  
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# UNITED STATES PATENT OFFICE.

FREDERICK W. ABBOTT, OF PHILADELPHIA, PENNSYLVANIA.

## NON-REFILLABLE BOTTLE.

No. 842,605.

Specification of Letters Patent.

Patented Jan. 29, 1907.

Application filed May 19, 1906. Serial No. 317,798.

*To all whom it may concern:*

Be it known that I, FREDERICK W. ABBOTT, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Non-Refillable Bottle, of which the following is a specification.

My invention relates to a new and useful non-refillable bottle; and it consists in providing a discharge-passage from the bottle, which is curved and arranged in such a manner that an air-trap is formed in said passage in no matter what position the bottle is held.

It further consists in providing a short angular turn at one point in the passage in order to prevent the insertion of an instrument or a rubber tube for the purpose of filling the bottle.

It further consists in providing a support for the passage, so that the same will be positively held.

It further consists of other novel features of construction, all as will be hereinafter fully set forth.

Figure 1 represents a partial side elevation and partial sectional view of a non-refillable bottle embodying my invention. Fig. 2 represents a plan view of the bottle seen in Fig. 1. Fig. 3 represents a sectional view of the support, showing a portion of the bottle and the neck in dotted lines. Fig. 4 represents a plan view thereof. Fig. 5 represents a side elevation of a portion of the bottle, showing the discharge-tube before it has been curved or bent. Fig. 6 represents a sectional view of a portion of the passage.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings, I have found that in order to obtain a non-refillable bottle it is necessary that an air-trap be formed in the passage leading to the interior of the bottle in no matter what position the bottle is placed, so that no material can enter said bottle, and it is further necessary to prevent the insertion of an instrument or other devices for the purposes of filling, and while I have shown in the drawings the preferred form that I may employ it will be apparent that other means may be used for accomplishing the same result.

1 designates a bottle, which may be of any desired size or shape, and from the same extends the tube or passage 2, said tube start-

ing, as at 3, at a suitable point in the upper portion of the bottle and extending upwardly and outwardly and is turned, as at 4, following substantially the contour of the bottle, as at 5 5, until it reaches a point 6, where it is bent downwardly and between the convolutes of itself, it being noted that the downward extension will continue until the point 7 is reached, when the tube is bent upwardly at a sharp angle, forming the discharge-mouth 8 of the device. As stated, the bend at 7 is at a sharp angle, so that the wall 9 is formed between the upwardly-extending passage leading to the mouth 8 of the bottle and the passage leading to the interior of the bottle, so that said wall forms a means for preventing the insertion of an implement as well as the insertion of a rubber tube, for should the latter be able to be bent sufficiently to pass upwardly into the passage beyond 9 the bend in the rubber will be so short that it will practically close the rubber tube and prevent the passage of any liquid or air therethrough, thus forming a lock or stoppage in said tube.

10 designates a support or former for the discharge-tube of the device, and it will be apparent that this former can be either permanently used in the finished article or can be used only in conjunction with the bottle when the convolutions of the tube 2 are being made. The former can be made of glass or other suitable material and is provided with a central passage-way 11 and the cross-passage 12, leading to the circular passage 13 and the depression 14 therein for receiving the portion 7 of the tube. When the former is used in conjunction with the bottle, it can be fused or otherwise rigidly secured thereto, and in this event it forms a support and a protector for the convolutes of the passage or tube and prevents breakage of the same. If it is not desired that the former be used after the tube 2 has been heated and bent properly into the shape desired, the former can be removed from the bottle.

It will of course be understood that in order to initially fill the bottle it is necessary that a vent be employed at a suitable point in the bottle, said vent to be afterward closed in any desired manner, or any other means for initially filling the bottle may be employed, as desired.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A non-refillable bottle having a later-  
5 ally and longitudinally curved discharge-  
passage leading therefrom, the curves being  
such that air-traps are formed thereby, in no  
matter what position the bottle is held.
2. A non-refillable bottle having a curved  
10 discharge-passage, the curves being such as  
to form air-traps, in no matter what position  
the bottle is held, and an angular bend  
formed in said passage for preventing the in-  
sertion of an instrument.
- 15 3. In a device of the character described, a  
curved tube, and a former for supporting the  
convolutions of said tube.

4. In a device of the character described, a  
curved tube forming a discharge-passage  
from the bottle, a former connected with said 20  
bottle and serving to support said tube, and  
an angular bend formed in said tube for pre-  
venting the insertion of an instrument there-  
in.

5. In a non-refillable bottle, a curved tube 25  
forming a discharge-passage from the bottle,  
said tube being curved laterally and longitu-  
dinally and forming a complete convolution  
laterally.

FREDERICK W. ABBOTT.

Witnesses:

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