

No. 785,656.

PATENTED MAR. 21, 1905.

N. E. BOOTH.
BOTTLE.

APPLICATION FILED MAY 7, 1904.

Fig. 4.

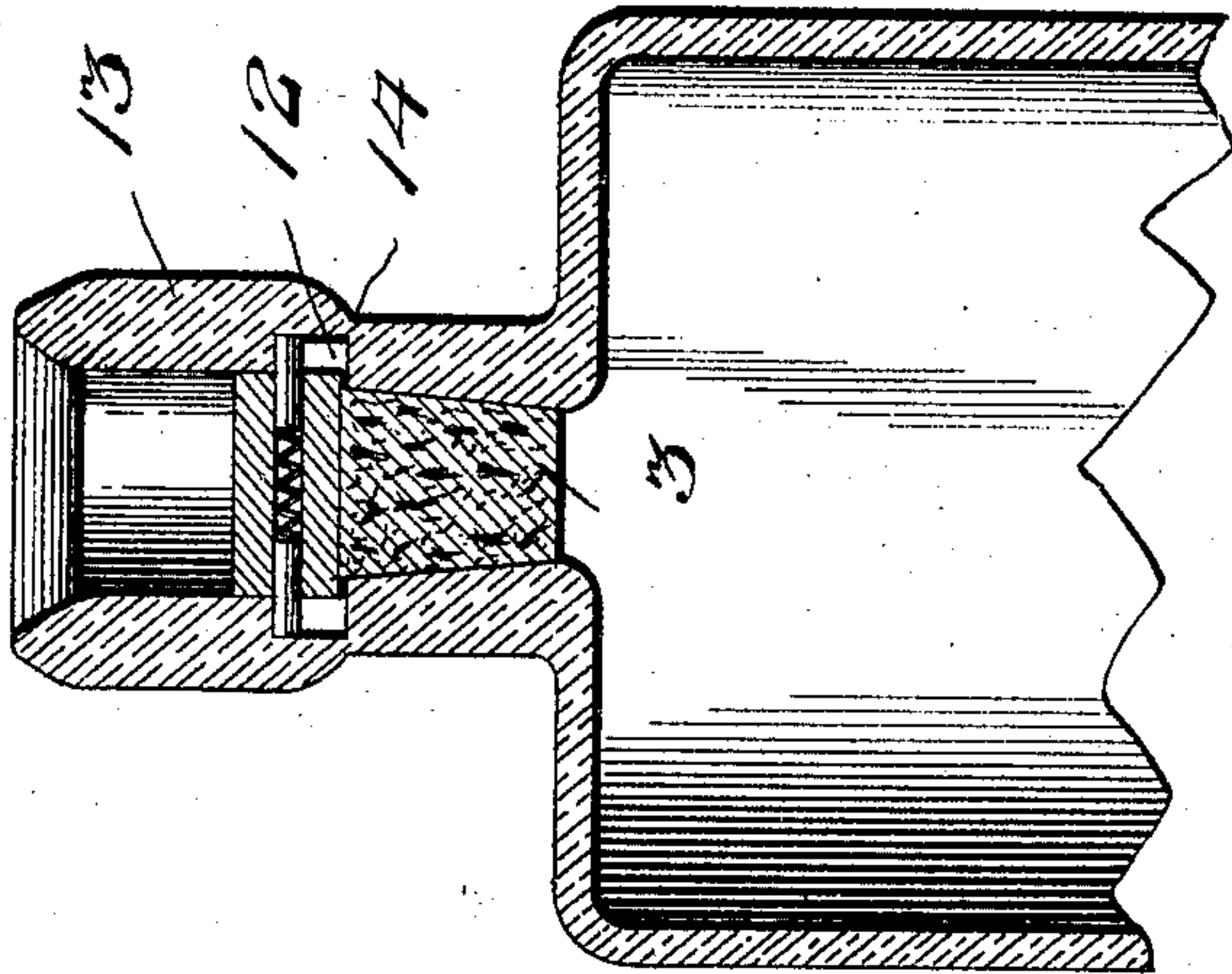


Fig. 3.

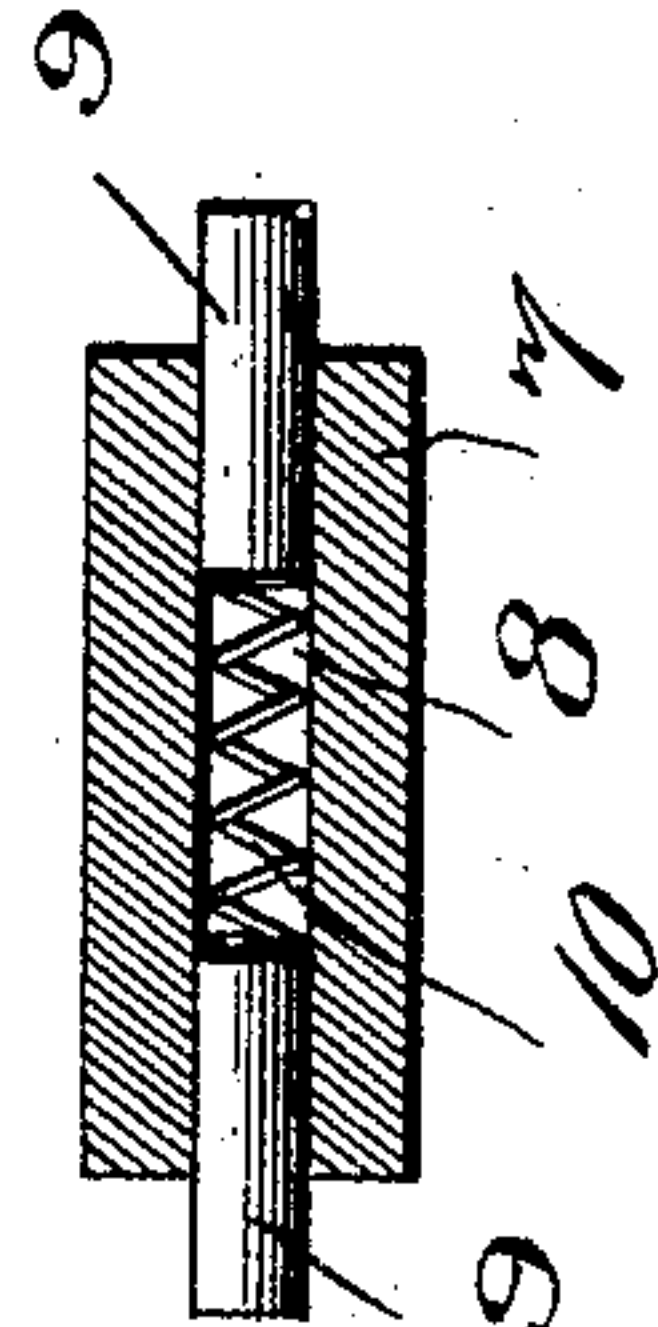


Fig. 5.

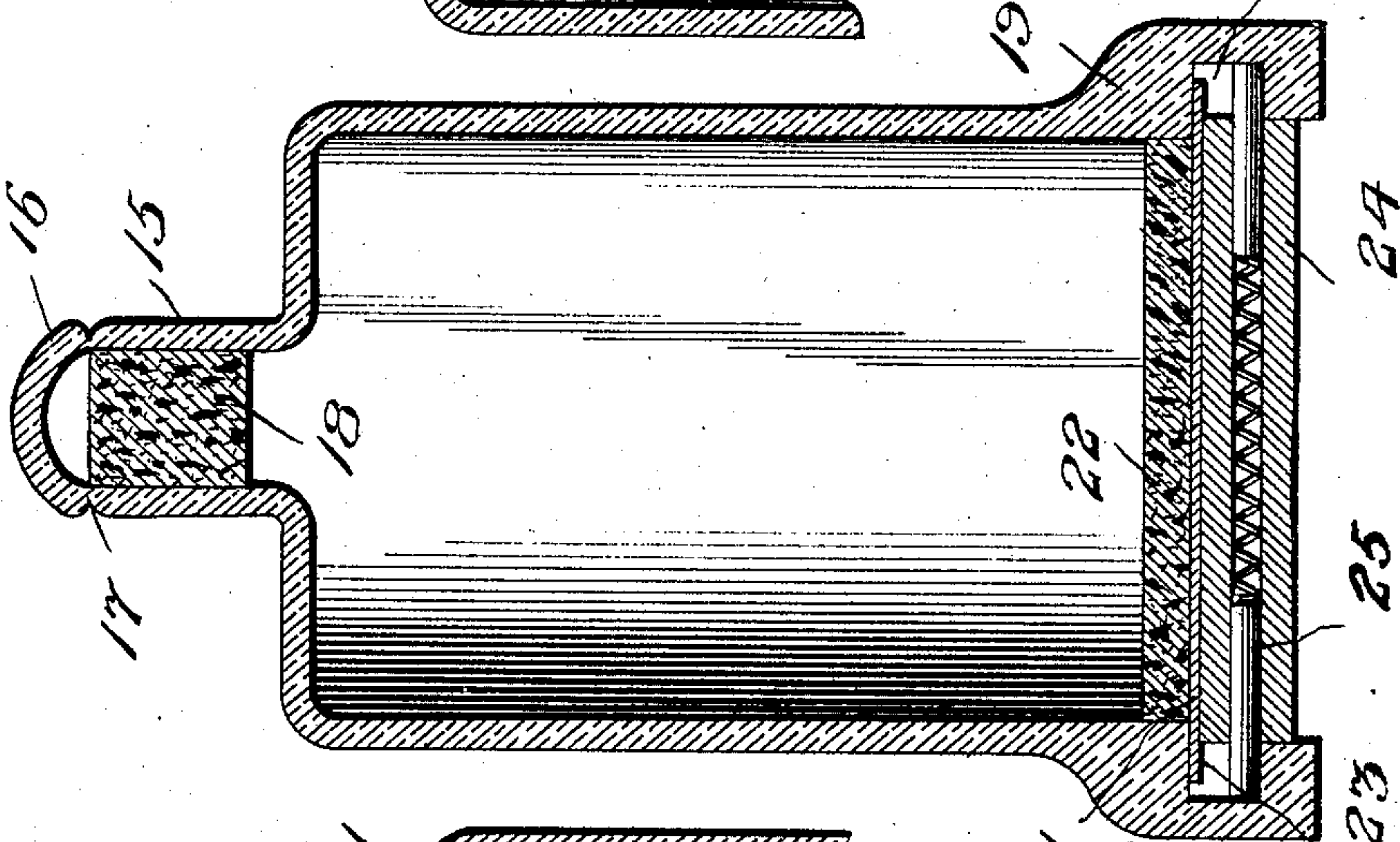


Fig. 1.

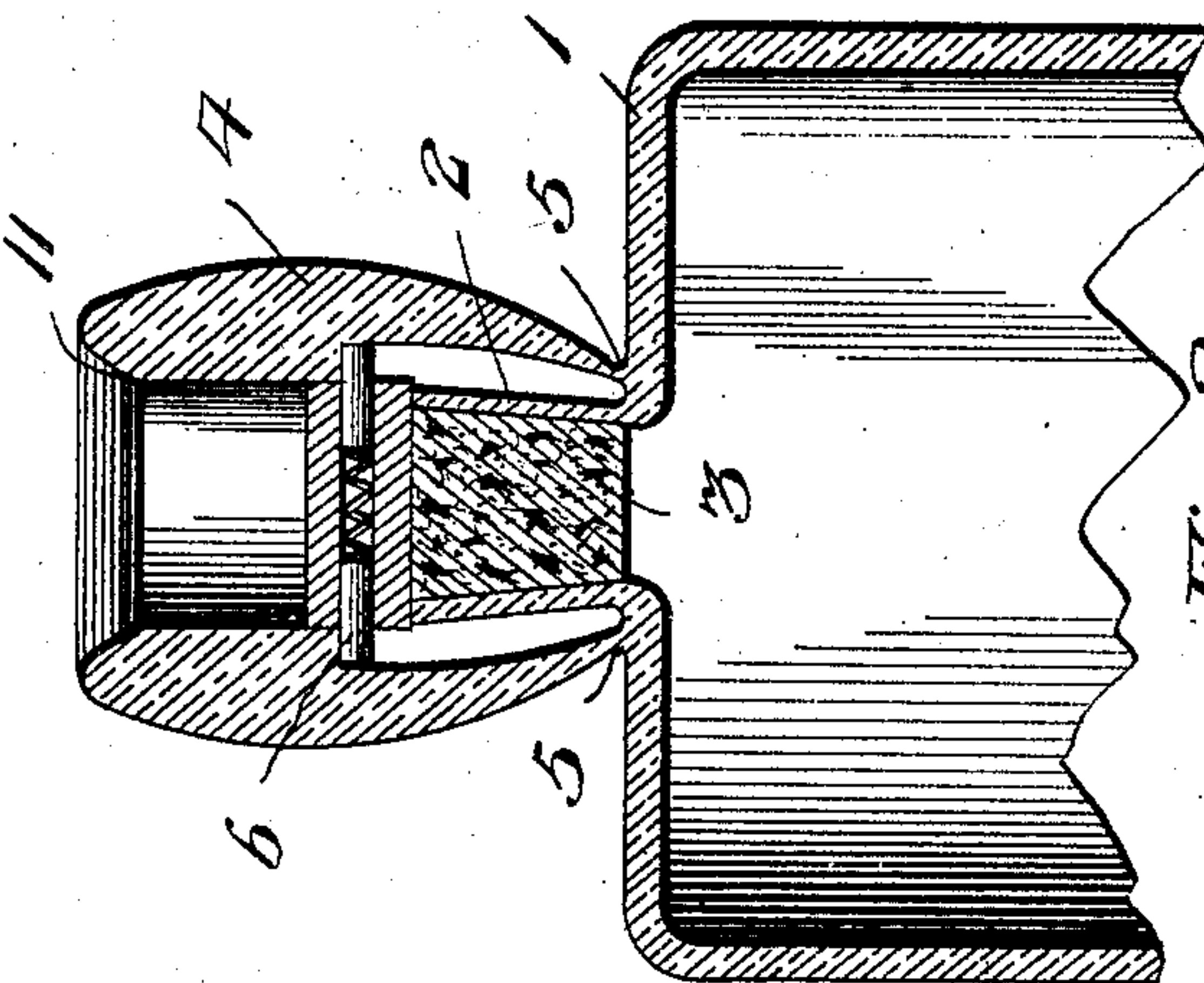
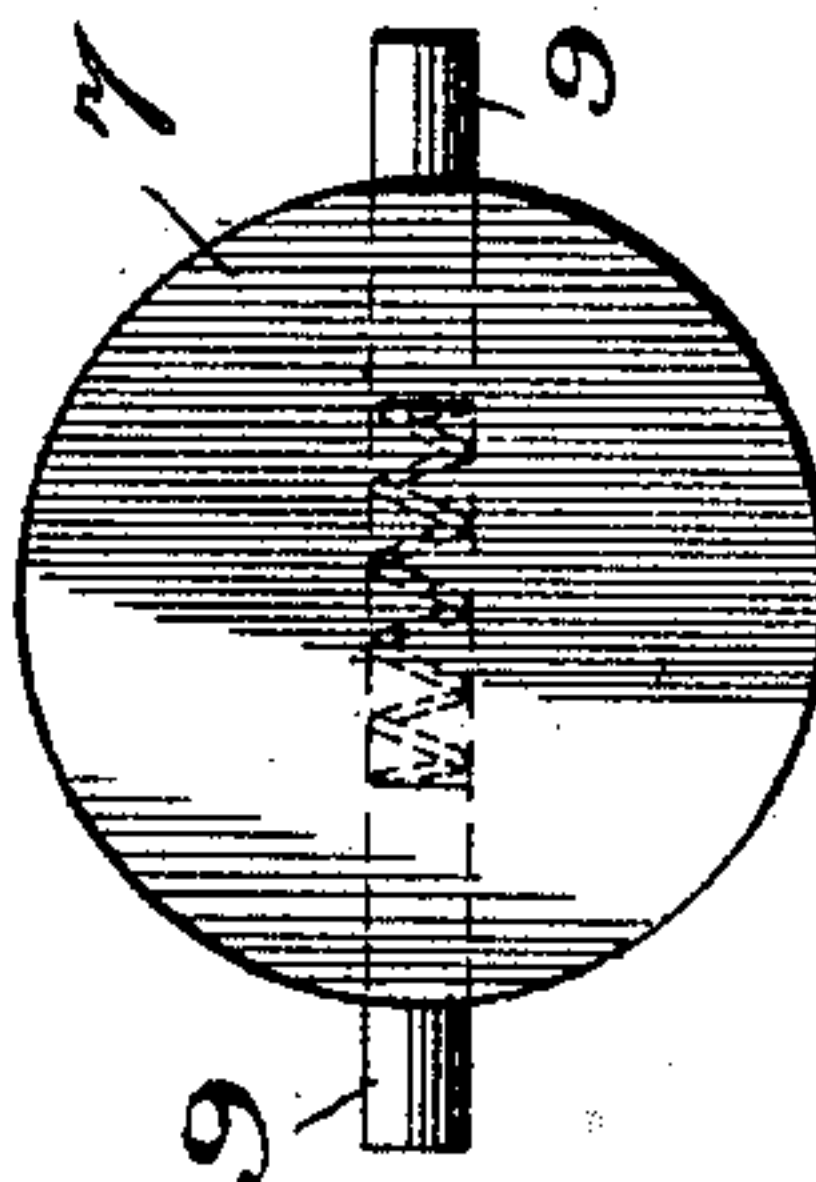


Fig. 2.



Witnesses

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NATHANIEL E. BOOTH, OF SOUTHOLD, NEW YORK.

BOTTLE.

SPECIFICATION forming part of Letters Patent No. 785,656, dated March 21, 1905.

Application filed May 7, 1904. Serial No. 206,902.

To all whom it may concern:

Be it known that I, NATHANIEL EDWARDS BOOTH, a citizen of the United States, residing at Southold, Long Island, in the county of Suffolk and State of New York, have invented new and useful Improvements in Bottles, of which the following is a specification.

My invention relates to new and useful improvements in receptacles for liquids or powders; and its object is to provide a device of this character having means whereby the same cannot be opened without detection after the initial contents have been sealed therein.

The invention consists of a body having a neck extending therefrom adjacent which is a frangible portion adapted to be broken for the purpose of removing the closure within the neck.

The invention also consists of a sealing device having spring-pressed catches mounted therein which are adapted to automatically engage opposite sides of the receptacle and which prevent the bottle from being opened except by breaking the neck thereof.

The invention also consists of the further novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a vertical longitudinal section through the upper portion of the bottle having my improved closure therein. Fig. 2 is a top plan view of the closure. Fig. 3 is an enlarged vertical transverse section through the closure. Fig. 4 is a view similar to Fig. 1 and showing a modified form of bottle; and Fig. 5 is a central vertical section through another form of bottle, showing a different arrangement of the closure.

Referring to the figures by numerals of reference, 1 is a bottle having a neck 2 extending therefrom and in which is arranged a cork 3 or other suitable sealing device. Extending from the bottle and inclosing the neck is a jacket 4, formed of frangible material and which is integral with the bottle and is very thin at its point of connection therewith, as shown at 5. The jacket has an annular shoulder 6 therein at a point above the end of the

bottle-neck 2, and this shoulder is adapted to inclose a disk 7, of metal or other suitable material, in which is arranged a transversely, extending passage 8, having pins 9 located in the ends thereof. A coiled spring 10 is interposed between the pins and is adapted to hold them normally projected from the periphery of the disk. The inner wall of the jacket 4 is beveled at its outer end, as shown at 11, so that when the disk 7 is inserted into said jacket said beveled portion of the wall will press the pins 9 inwardly, and they will be held in such position until the disk 7 arrives in place upon the end of neck 2. The spring 10 will then promptly project the pins 9 into position under the shoulder 6 and it will be impossible to remove the disk 7 and the cork 3 unless the jacket 4 is broken away from the bottle. This is readily done by hitting one side of the same, thereby fracturing it at the thinnest portion 5 thereof. It will thus be seen that after the bottle has once been opened in this manner the same cannot be refilled and such refilling remain undetected.

In Fig. 4 I have shown another modified form of bottle in which the jacket 4 is dispensed with and instead an annular groove 12 is formed within the bottle-neck 13 to produce a thin portion 14 of the bottle-neck. The disk when inserted into the neck 13 will become locked therein when the pins 9 are automatically projected into the groove 12, and when it is desired to open the bottle the neck is broken along the thin portion thereof, and the cork 3 can then be extracted.

Still another modification has been shown in Fig. 5, where the bottle-neck 15 is shown provided with an integral cap 16, which extends entirely thereover and is inclosed at its base by an annular groove 17. A cork 18 or other suitable sealing device is arranged within the neck 15 below cap 16. The base of the bottle is enlarged, as shown at 19, and is open, and an annular groove 20 is formed within the base and in alinement with a shoulder 21, formed within the bottle. When the bottle is to be filled, the same is inverted, and after the proper contents have been placed therein a disk 22, of cork or light material, is inserted into the base of the bottle, so as to be inclosed

by shoulder 21, and a disk 23, of rubber, oiled paper, or other suitable material, is placed over the cork disk and within the groove 20. Disk 24, which is similar to the disk hereinbefore described, is then inserted into the base, so as to bear upon the disk 23, and the pins 25 of said disk 24 are then projected automatically into the groove 20, and the parts are thus locked securely and permanently in position. The bottle can then be inverted and remain sealed until the cap 16 has been broken along groove 17. Cork 18 can then be removed; but, as is obvious, the bottle cannot again be refilled and present its original appearance. While this device has been described as applicable to bottles, it will be understood that it can also be used upon jars, demijohns, and, in fact, any form of receptacle formed of frangible material.

20 In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing any of

the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

Having thus described the invention, what is claimed as new is—

The combination with a receptacle having a neck extending therefrom, of a jacket integral with the receptacle and inclosing the neck, said jacket having a shoulder therein above the end of the neck, a sealing device within the neck, a disk arranged in the jacket and seated upon the neck over the sealing device, said disk having a passage therethrough, and oppositely-extending spring-pressed locking-pins within the passage and adapted to engage the shoulder in the jacket to hold the disk upon the neck.

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

NATHANIEL E. BOOTH.

Witnesses:

HARRY W. KOCH,
DONALD B. STERRITT.