

No. 775,786.

PATENTED NOV. 22, 1904.

J. F. SPITT.
NON-REFILLABLE BOTTLE.
APPLICATION FILED JULY 26, 1904.

NO MODEL.

Fig. 1.

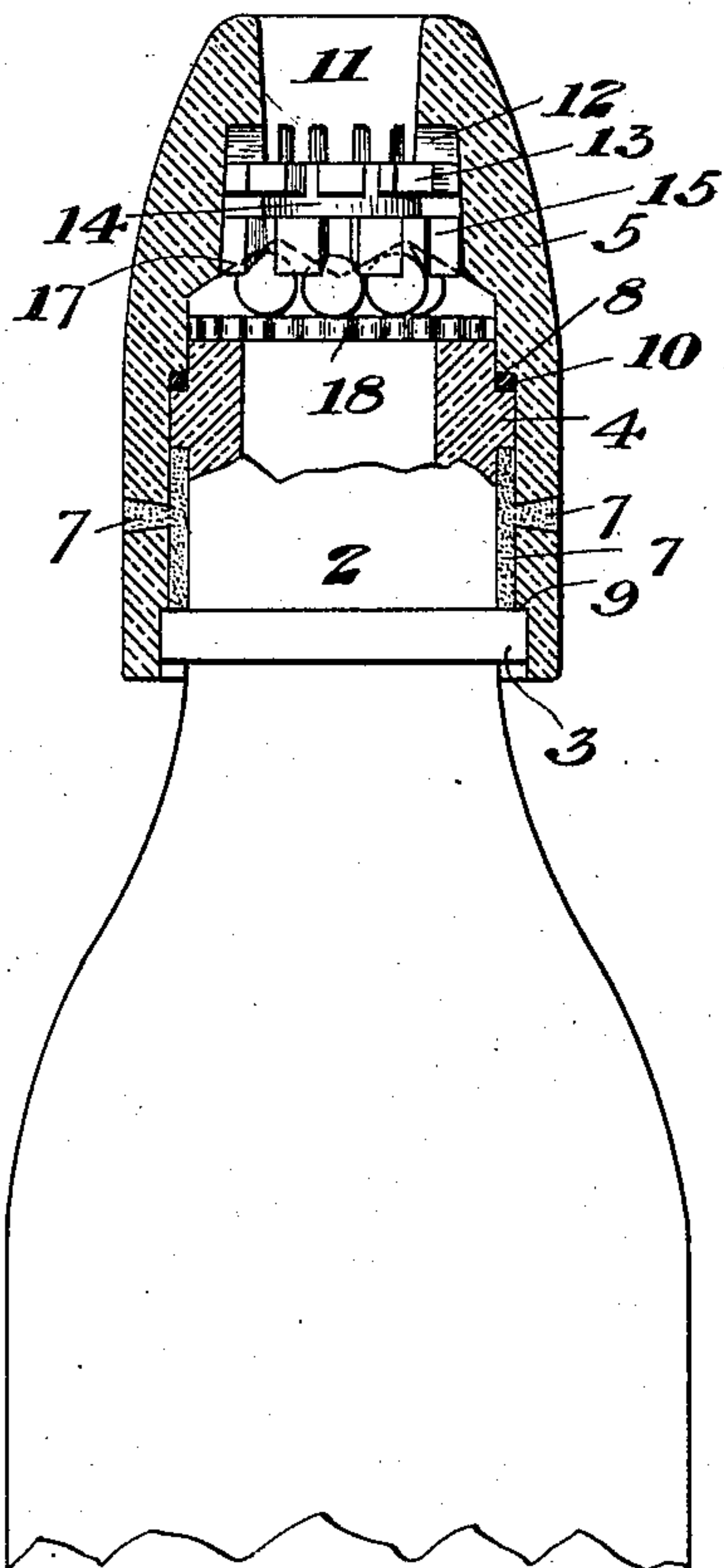


Fig. 2.

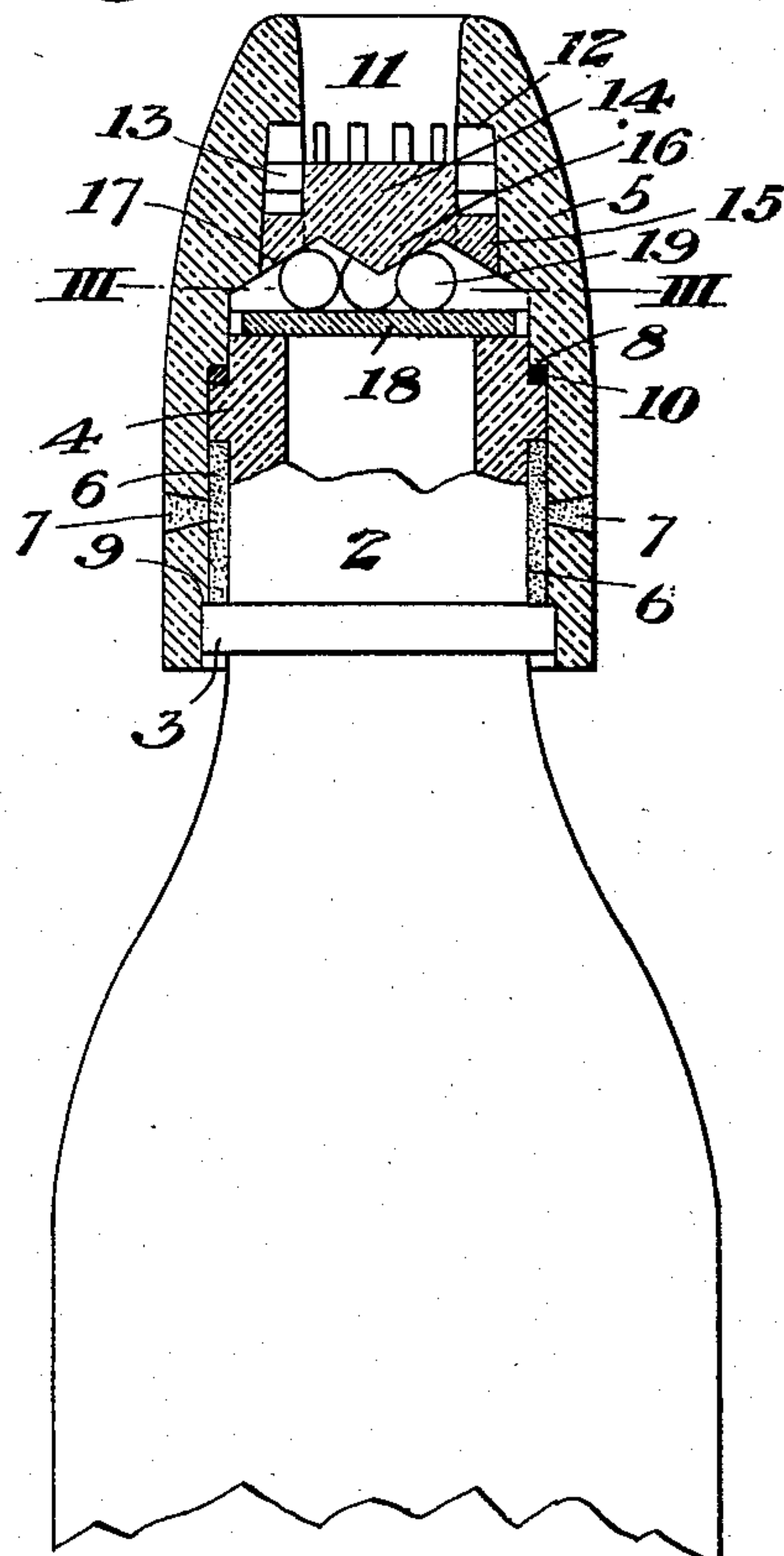


Fig. 4.

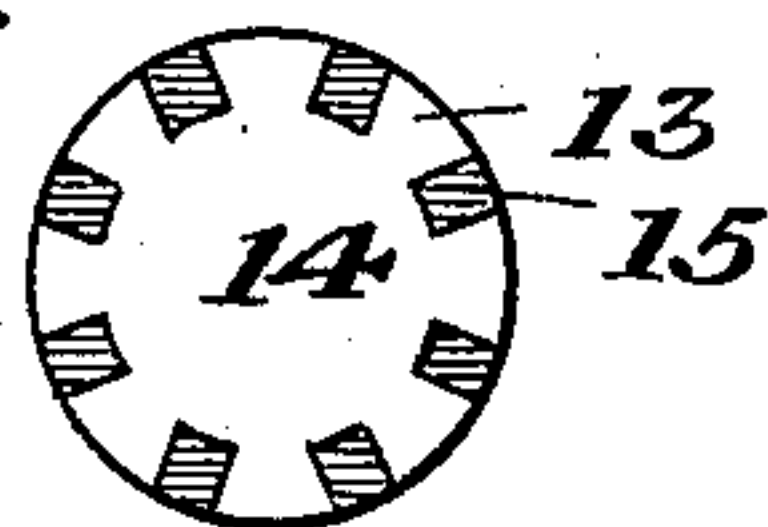


Fig. 5.

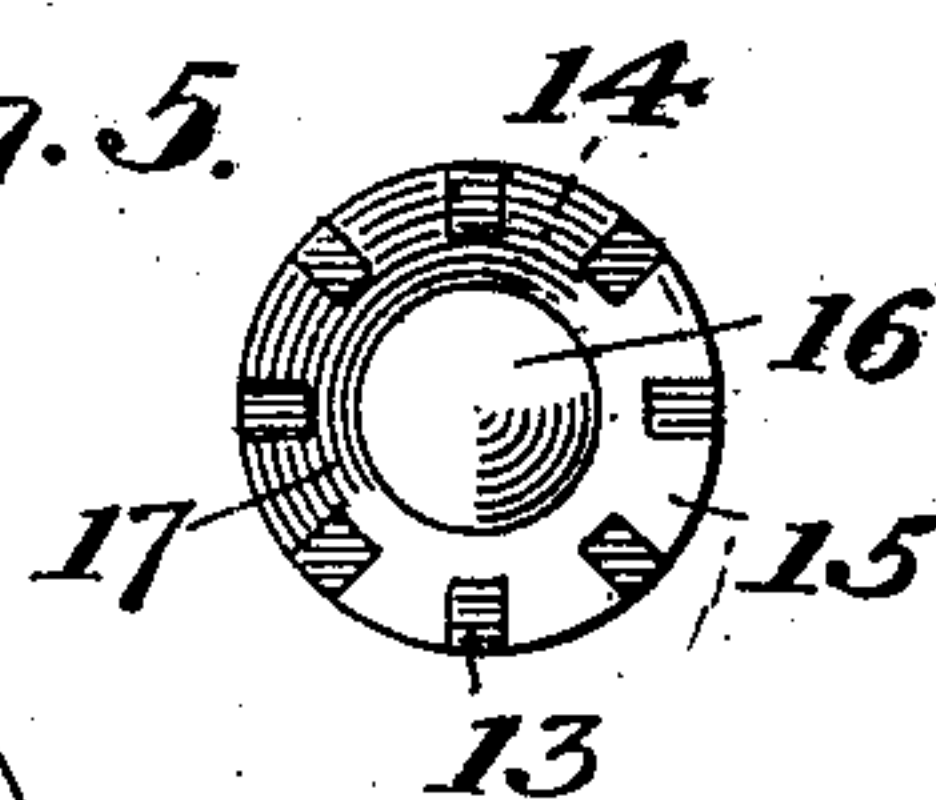
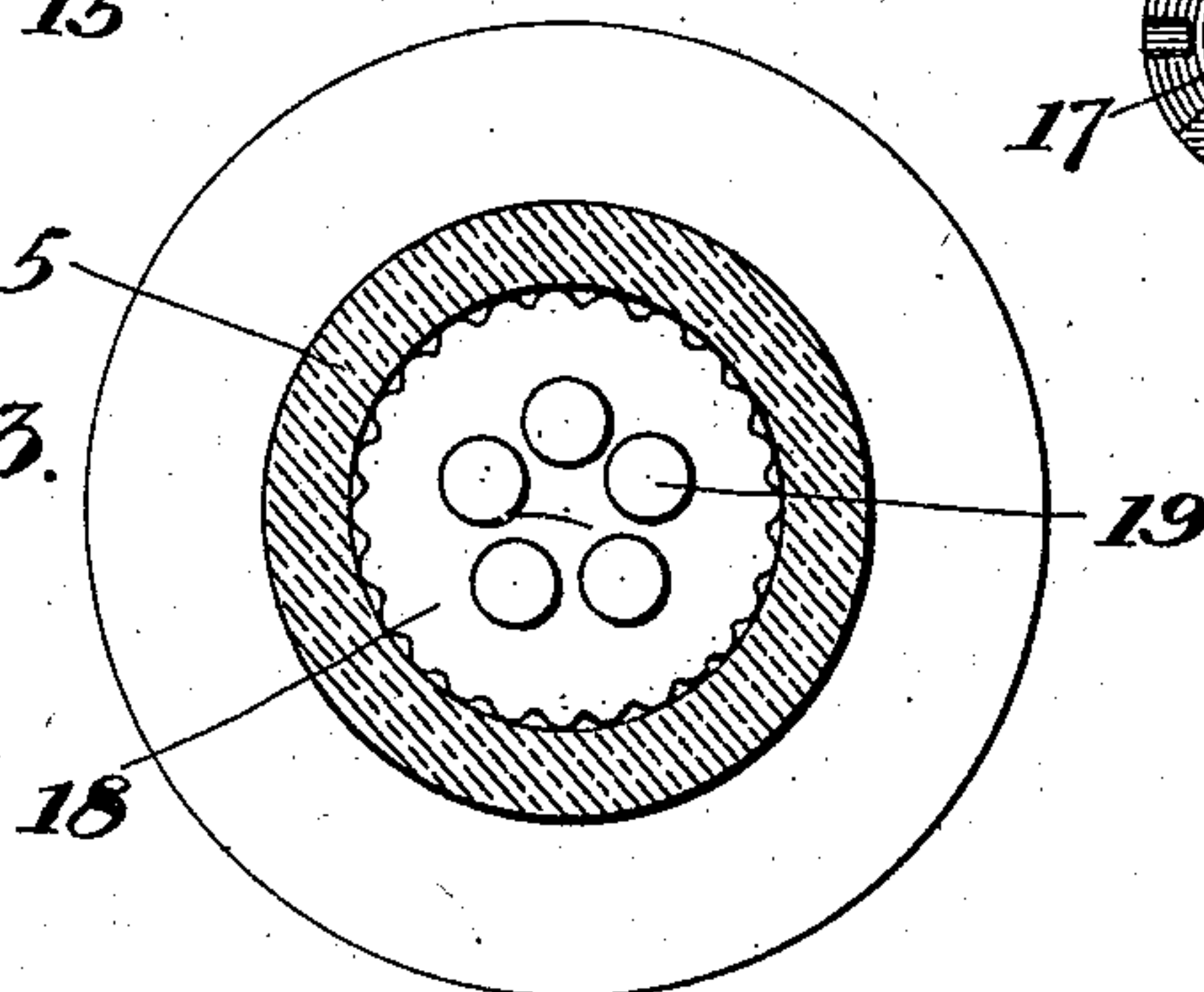


Fig. 3.



WITNESSES

WITNESSES
J.A. Comer
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INVENTOR

John F. Spitt
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UNITED STATES PATENT OFFICE.

JOHN F. SPITT, OF ALLEGHENY, PENNSYLVANIA.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 775,786, dated November 22, 1904.

Application filed July 26, 1904. Serial No. 218,242. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. SPITT, of Allegheny, Allegheny county, Pennsylvania, have invented a new and useful Non-Refillable Bottle, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical section showing the cap and upper portion of my improved bottle. Fig. 2 is a vertical central section of the mouth portion of the same. Fig. 3 is a cross-section on the line III III of Fig. 2; and Figs. 4 and 5 are top and bottom plan views, respectively, of the stopper-plug.

My invention relates to the class of non-refillable bottles, and is designed to provide a bottle structure which will prevent refilling and can be cheaply and easily made and applied.

In carrying out the invention, I preferably employ a bottle having a neck portion 2, with a lower projecting ring 3 and an upper projecting ring 4 of smaller diameter. A long cap 5 is secured around the neck and projecting beyond it, preferably by means of cement 6, introduced into the recesses between the shoulders 3 and 4, preferably through openings 7 in the cap. The cap is shouldered on its interior, as shown at 8 and 9, the shoulder 8 fitting on a packing 10, between it and the ring 4, while the shoulder 9 fits upon the ring 3 of the bottle-neck.

The upper portion of the cap is provided with a mouth 11 to receive an ordinary cork, and the lower part of this mouth is provided with separated radial prongs 12, having open spaces between them. Against the lower ends of the prongs the prongs 13 are fitted, these prongs projecting radially from the upper portion of a solid block 14, having also lower prongs 15, the ends of both prongs fitting neatly against the inner surface of the cap. The lower prongs are staggered relatively to the upper prongs to prevent the insertion of a wire or tool for pulling out the closing-disk.

The main body of the plug is of conical form, as shown at 16, and the upper edge of this conical surface forms an apex with an oppositely-inclined annular surface 17, which

is preferably formed partly on the plug and partly on the inner surface of the cap, as shown in Fig. 2. A chamber is thus formed between the double inclined lower face of the plug and the loose toothed disk 18, which rests on the flat upper end of the bottle-neck, and in this chamber lie a plurality of small balls 19. These balls are of such a size that when the bottle is tipped upside down they will rest at the circular apex between the two inclined surfaces and allow the disk 18 to drop away from the mouth of the bottle. The fluid will then flow out through the spaces between the prongs 15 and 13, and thence through the spaces between the prongs 12 and out through the mouth. In a horizontal or tilted position of the bottle the balls will rest against the inclined surfaces of the plug in such a manner as to press the disk against the bottle-mouth and hold it closed. This action will take place no matter in what direction the bottle is tilted, and hence the bottle cannot be refilled by sinking it in liquid and endeavoring to force the liquid in through the cap.

The advantages of my invention result from the simple and efficient construction, which can be easily and cheaply made and applied. The cap may be of porcelain and glass or other material.

Changes may be made in the form and arrangement of the bottle-neck, the cap, and other parts without departing from my invention, since I consider myself the first to use the oppositely-inclined surfaces to press the balls against the closing-disk.

I claim—

1. In a non-refillable bottle, a cap having passages therethrough, a disk arranged to fit on the bottle-mouth within the cap, a ball-chamber above the disk and having a roof with opposite inclines, and balls within said chamber; substantially as described.

2. In a non-refillable bottle, a cap arranged to be secured around the bottle-neck, a plug within the cap having passages and provided with a double inclined lower surface, a disk arranged to fit on the bottle-mouth below the plug and balls in the chamber between the plug and disk; substantially as described.

3. In a non-refillable bottle, a cap having

spaced internal projections, a plug seating
against the lower ends of the projections and
having through-passages, a ball-chamber be-
low the plug having double inclined surfaces
5 on its roof portion, a disk fitting on the bot-
tle below the chamber, and balls within said
chamber; substantially as described.

4. In a non-refillable bottle, a ball-chamber
having a central conical roof portion with an
10 oppositely-inclined outer roof portion, a disk

arranged to seat on the bottle-mouth at the
bottom of the chamber, and balls within said
chamber arranged to be forced against the
disk by the inclines; substantially as described.

In testimony whereof I have hereunto set 15
my hand.

JOHN F. SPITT.

Witnesses:

FRANK ZOUHARIA,
JOHN KNOBLACH.