

No. 849,899.

PATENTED APR. 9, 1907.

F. HAYDEN.
BOTTLE.

APPLICATION FILED DEC. 7, 1906.

2 SHEETS—SHEET 1.

Fig. I.

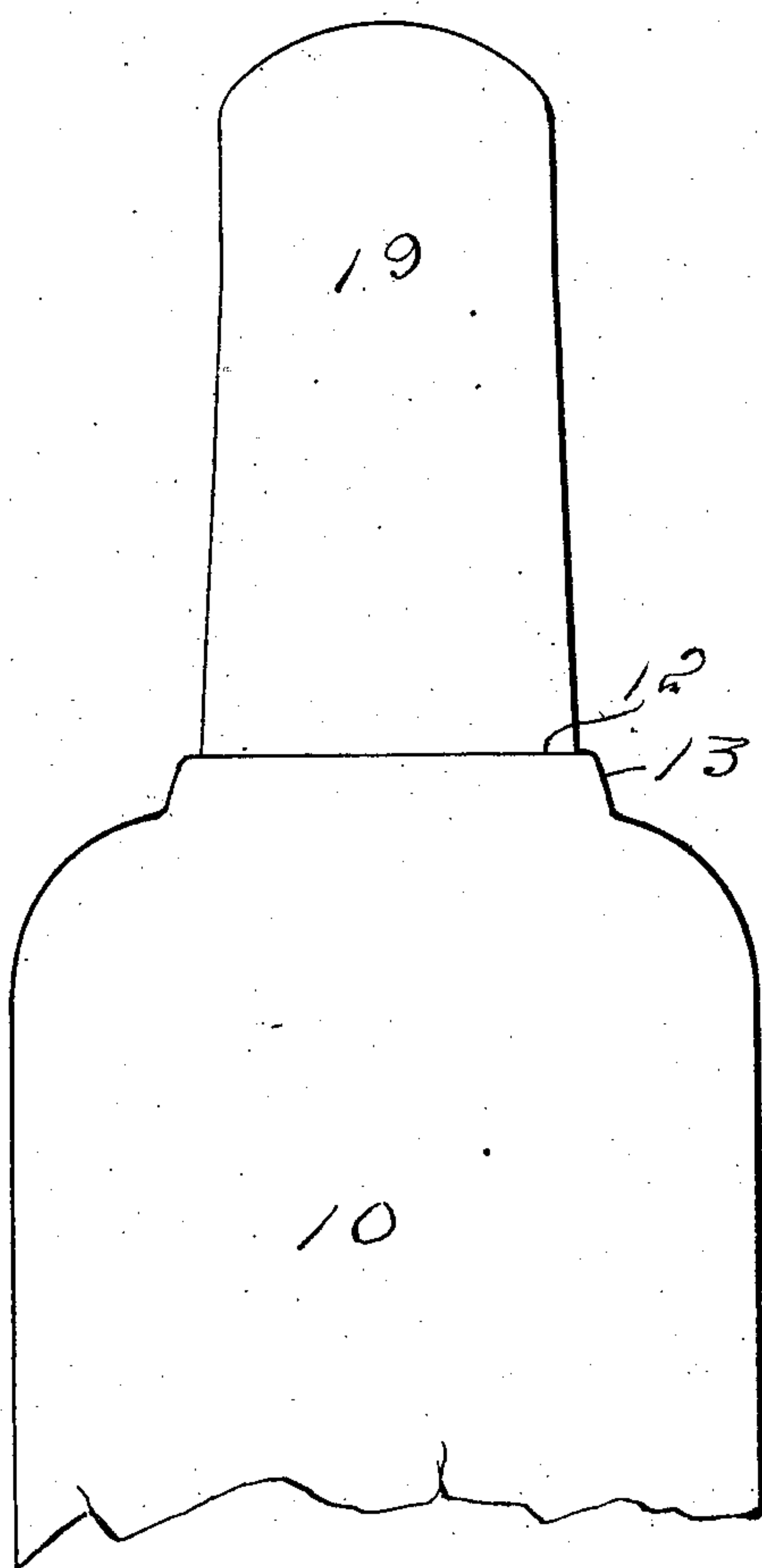
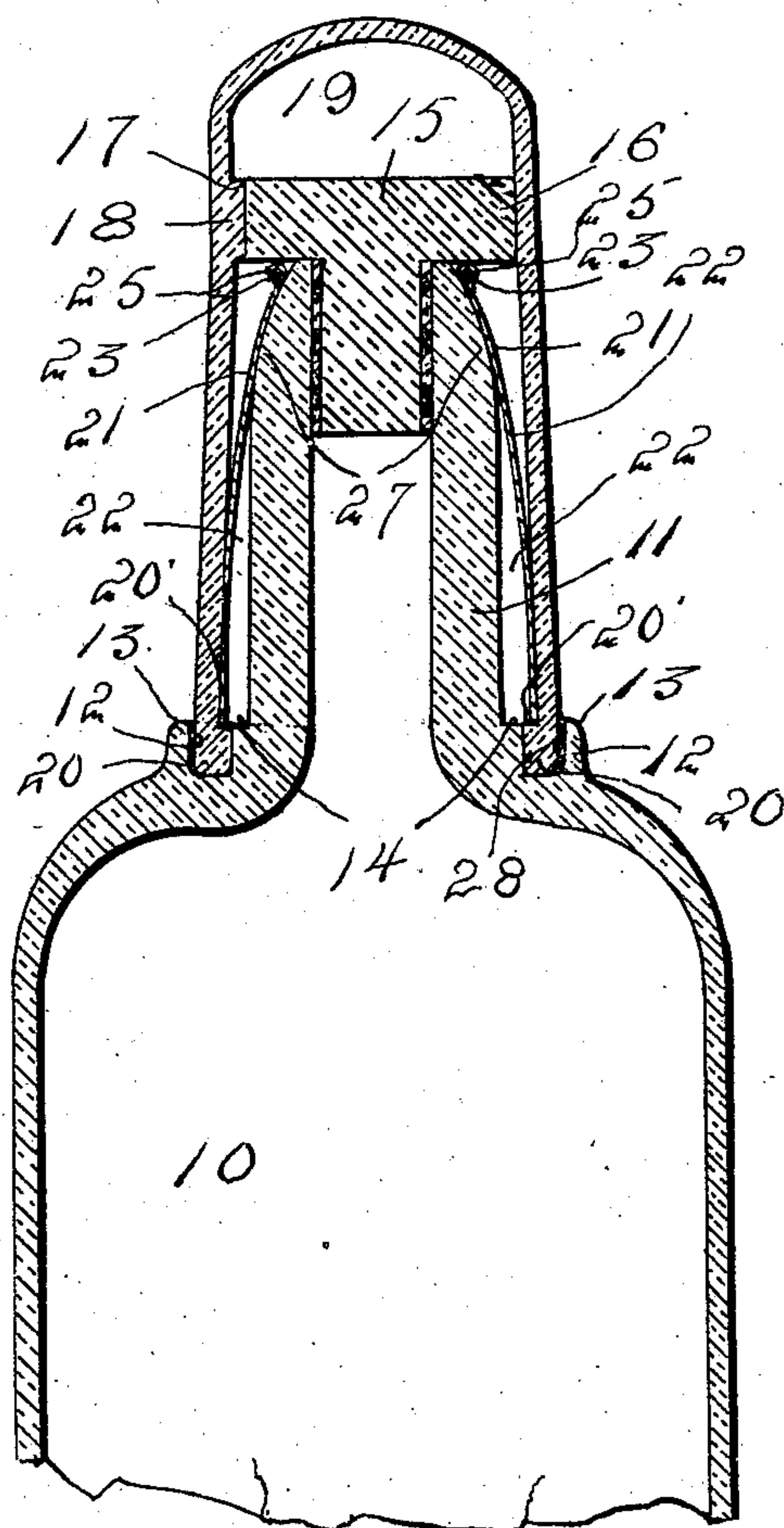


Fig. 2.



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2 SHEETS—SHEET 2.

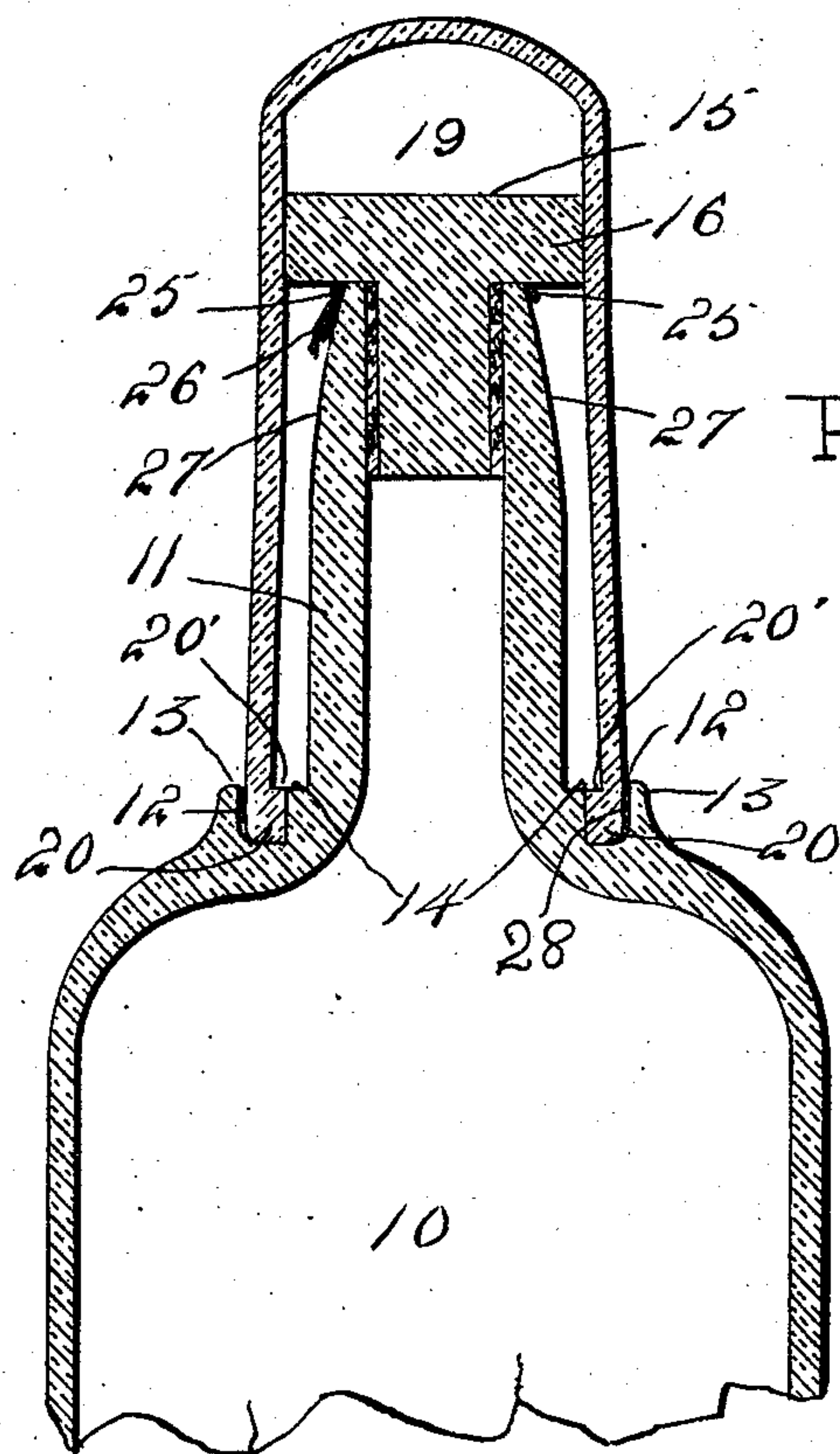


Fig. 3.

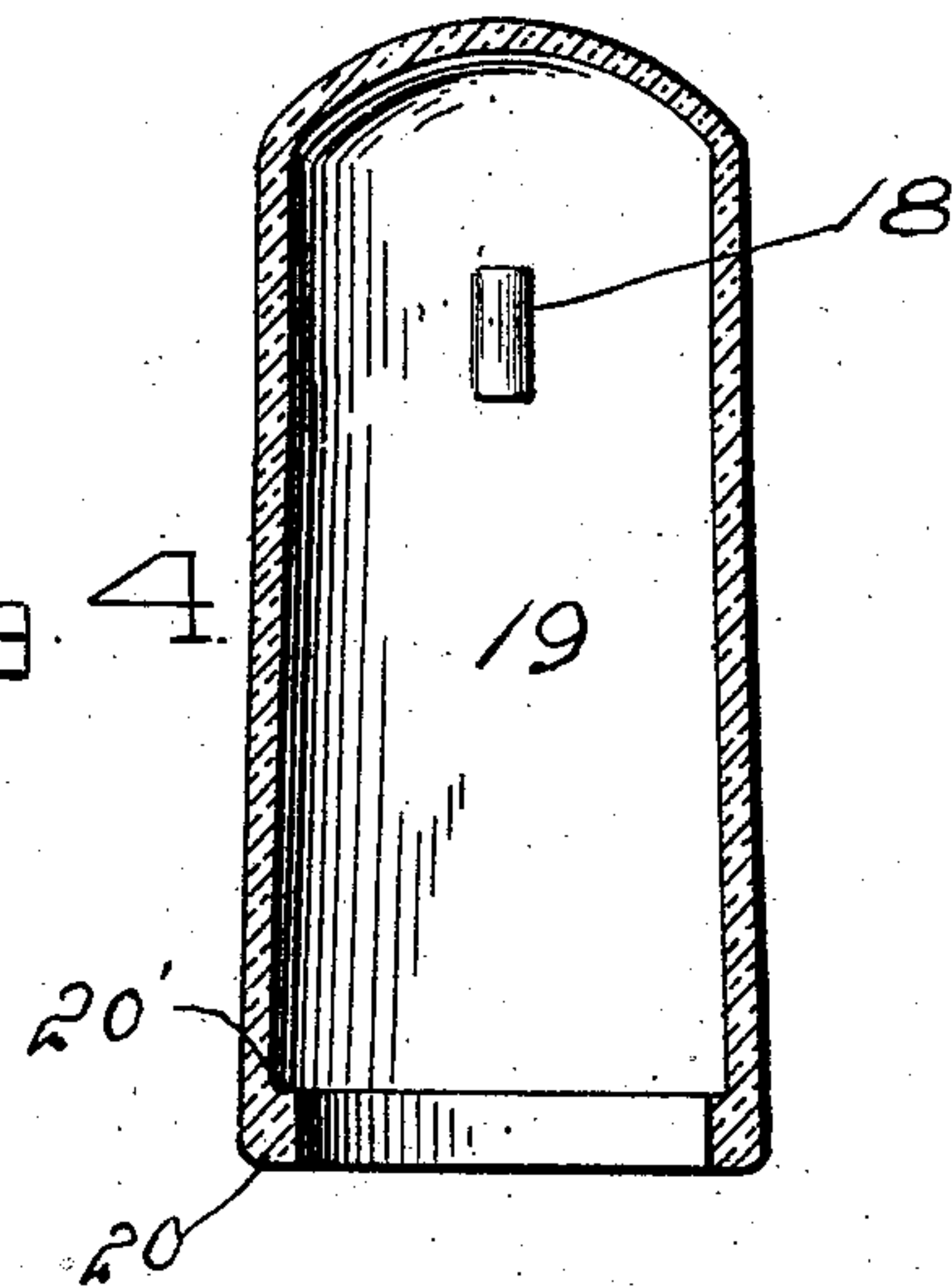


Fig. 4.

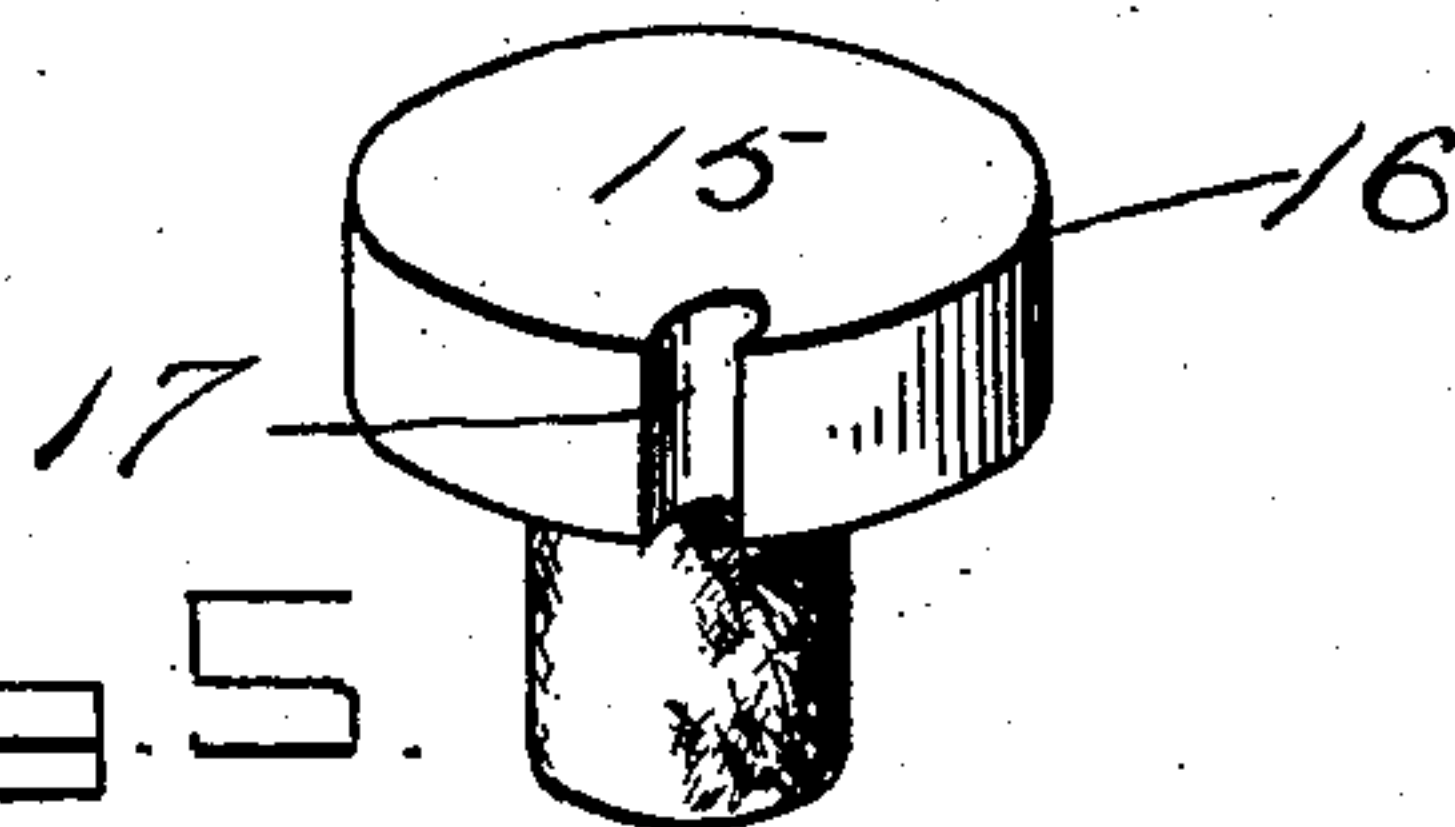


Fig. 5.

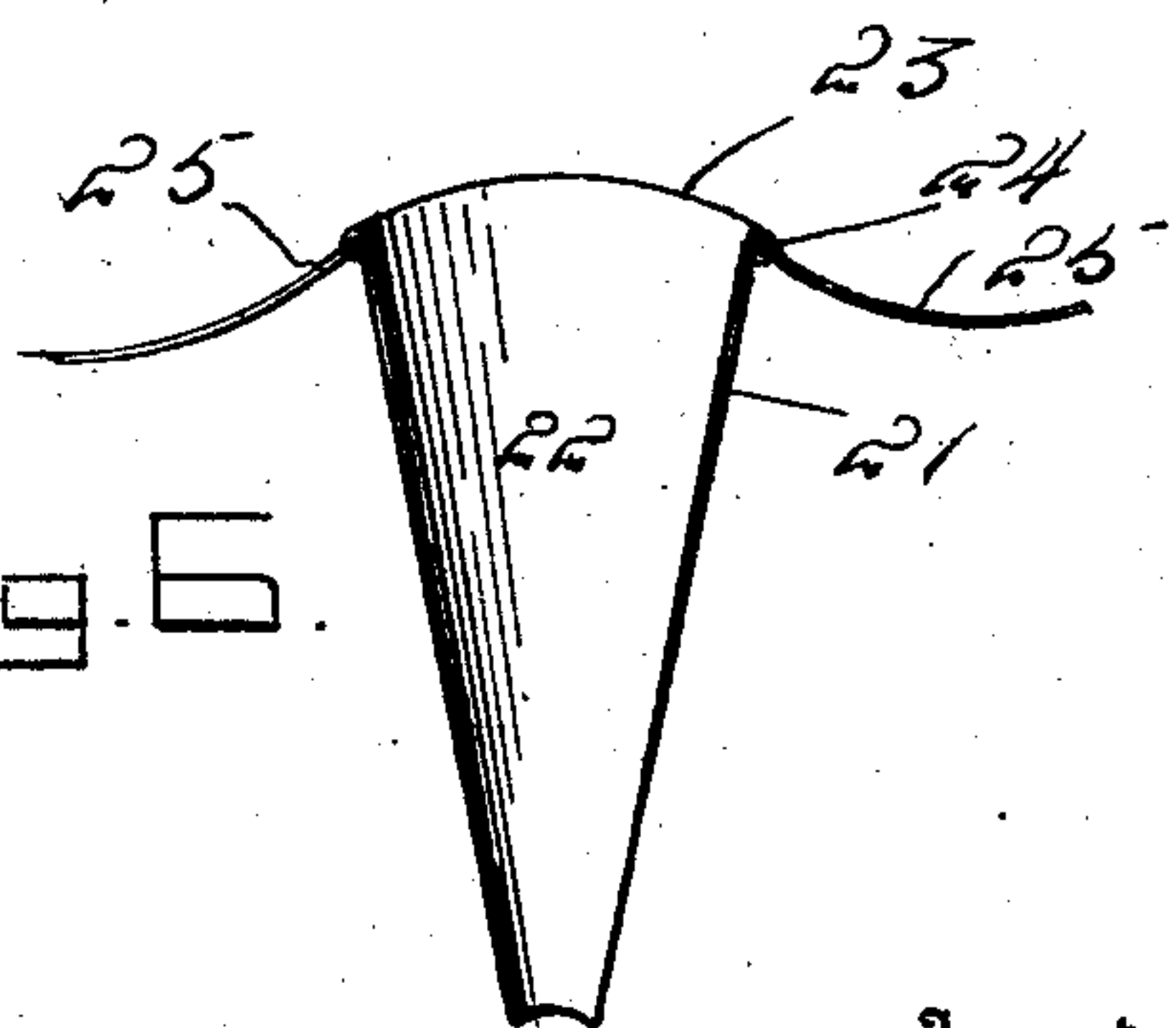


Fig. 6.

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UNITED STATES PATENT OFFICE.

FRANK HAYDEN, OF DEXTER, MISSOURI.

BOTTLE.

No. 849,899.

Specification of Letters Patent.

Patented April 9, 1907.

Application filed December 7, 1906. Serial No. 346,696.

To all whom it may concern:

Be it known that I, FRANK HAYDEN, a citizen of the United States, residing at Dexter, in the county of Stoddard, State of Missouri, have invented certain new and useful Improvements in Bottles; and I do 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 appertains to make and use the same.

The present invention relates to improvements in bottles, and has for its object to provide a bottle so constructed that when once filled its contents may not be tampered with without manifestly evidencing such fact from the partial destruction or modified appearance of the bottle.

To this end the invention, briefly described, resides in the provision upon the bottle-neck of a pair of oppositely-directed metal springs whose free ends bear against the inner face of a cap placed over the bottle-neck, the lower end of the cap fitting in a groove formed on the body of the bottle at approximately its point of swell.

The invention further consists in the construction, combination, and arrangement of parts, all as hereinafter fully described, specifically claimed, and illustrated in the accompanying drawings, in which like parts are designated by corresponding reference-numerals in the several views, and in which—

Figure 1 is a front elevation of a portion of a bottle. Fig. 2 is a vertical diametrical section therethrough. Fig. 3 is a similar view taken at right angles to Fig. 2. Fig. 4 is a vertical diametrical section through the cap, showing the locking-finger formed on its inner face. Fig. 5 is a perspective view of the bottle-stopper. Fig. 6 is a perspective view of one of the locking-springs.

Referring more particularly to the drawings, the bottle is shown therein as comprising a body portion 10 and a neck 11, there being an annular groove 12 disposed at the meeting-point between the body and neck and formed by an upstanding annular shoulder 13, blown in the glass during the construction of the bottle. The neck of the bottle is slightly reduced to form an annular shoulder 14 adjacent the groove 12.

The bottle is further provided with a stopper 15, preferably comprising a depending section of cork or other preferred material and a glass rim 16, having a notch 17 formed in its side face adapted to receive an in-

wardly-extending finger 18, formed on the inner face of a cap 19, of glass or other frangible material. The lower end of the cap is enlarged, as indicated by the reference-numeral 20, such enlarged end fitting in the groove 12, formed in the body of the bottle, the upper face of such enlargement forming a shoulder 20', provided for a purpose hereinafter described, the shoulders 14 and 20' being approximately in alinement with each other.

The bottle-neck has secured thereto a pair of oppositely-disposed metal springs 21, each of which comprises a body portion 22, adapted to conform to the surface or face of the neck, and a bead 23, formed at the upper end thereof, the bead having a bore 24 extending completely therethrough to receive a strand of wire 25, the ends of which after being passed through the beads are tied together, as indicated by the numeral 26, to retain the springs in place upon the neck. The upper end of the bottle-neck is beveled downwardly or inwardly, as indicated by the reference-numeral 27, so that the lower or free ends of the springs will be forced outwardly into bearing contact with the inner face of the cap, which latter is slightly flared toward its lower end to provide a space for such movement of the spring ends.

When the cap is in place and the finger 18 on its inner face is in engagement with the notch 17 in the rim of the stopper, it will be apparent that the free ends of the springs will bear against the inner face of the cap adjacent the shoulder 20', the lower end of the cap fitting in the annular groove 12, formed in the body of the bottle, the said groove being filled with any preferred sealing composition 28 prior or subsequent to the positioning of the cap end therein to prevent any direct removal of the cap.

It will be readily understood from the foregoing that when the parts are in position as above referred to it will be impossible to remove the cap without breaking the same, as the combined action of the springs and the finger 18 will positively prevent any rotation of the cap, the formation of the annular shoulder 13, which extends above the lower end of the cap, preventing any instrument from being inserted around and under the lower end of the cap to disengage the springs. It will likewise be apparent that the undercut or reduced portion of the bottle-neck will form a space into which the springs are

forced when the cap is being moved into place.

The formation of the cap of glass likewise renders it possible for the bottlers' stamp, which is usually placed over the stopper of the bottle, extending at opposite ends downwardly on opposite sides of the bottle-neck, to be clearly visible therethrough, that any disfiguration or mutilation of the stamp may be readily observed.

From the foregoing it will be clearly understood that when the bottle is once sealed, as above described, access to the contents thereof is impossible without breaking the cap, which would at once give notice of such action.

While the bottle-neck is shown as provided with a pair of springs, it will be obvious that more than two may be used.

The invention is likewise capable of further modification and changes within the scope of the claims and without departing from its spirit.

What is claimed is—

1. A bottle provided with a frangible cap fitting over the neck thereof, and a pair of oppositely-disposed metal springs secured at their upper ends to said bottle-neck and bearing at their lower ends against the inner face of said cap, to retain the latter in place thereon, the upper portion of said bottle-neck being inwardly beveled to force the lower ends of said springs outwardly, and means for securing said springs in place on said bottle-neck.

2. A bottle provided with a frangible cap fitting over the neck thereof, and a pair of metal springs secured at their upper ends to said bottle-neck and bearing at their lower ends against the lower face of said cap, to retain the same in place thereon, each spring comprising a body portion adapted to conform to the face of the bottle and a hollow bead formed on the upper end thereof, and means passing through said beads, to hold said springs in place, the upper portion of said bottle-neck being inwardly beveled, to force the lower ends of said springs outwardly.

3. A bottle provided with an annular groove formed at the meeting-point between its neck and body, a frangible cap fitting over said bottle-neck and having its lower end fitting in said groove, and means carried by said neck and bearing against the inner face of said cap to retain the same in place thereon.

4. A bottle provided with an annular groove formed at the meeting-point between its neck and body, a frangible cap fitting over

said bottle-neck and having its lower end fitting in said groove, and oppositely-disposed resilient means carried by said neck and bearing against the inner face of said cap to retain the same in place thereon.

5. A bottle provided with an annular groove formed at the meeting-point between its neck and body, a frangible cap fitting over said bottle-neck and having its lower end fitting in said groove, an inwardly-extending shoulder formed on said cap adjacent the lower end thereof and means carried by said bottle-neck in engagement with said shoulder, to retain said cap in place.

6. A bottle provided with an annular groove formed adjacent the meeting-point between its neck and body, a stopper fitted in the neck of the bottle and provided with a notch formed on its side face, a frangible cap fitted upon said neck and having its lower end fitted in said groove, an inwardly-directed shoulder formed on the inner face of said cap at the lower end thereof, an inwardly-directed finger formed on the inner face of said cap above said shoulder and adapted to be received in the notch in said stopper, and separate means provided upon said bottle-neck for engagement with said shoulder and neck to retain said cap in place.

7. A bottle provided with a stopper having a notch in the side face thereof, a frangible cap fitting over the neck of the bottle, and an inwardly-extending finger formed on the inner face of said cap and adapted to be engaged with said notch, to prevent rotation of the cap.

8. A bottle provided with an annular groove formed adjacent the meeting-point between its neck and body, a cap fitted upon said neck and having its lower end fitted in said groove, an inwardly-directed shoulder formed on the inner face of said cap at the lower end thereof, an inwardly-directed finger formed on the inner face of said cap above said shoulder, a stopper fitting in said bottle-neck and provided with a notch adapted for engagement with said finger, and resilient means carried by said bottle-neck and adapted to bear against the inner face of said cap at the shoulder portion thereof, to retain the same in place.

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

FRANK HAYDEN.

Witnesses:

C. O. BIGGS,

GEO. W. CASY.