

No. 747,978.

PATENTED DEC. 29, 1903.

H. B. KENT.

TOP FOR TOOTH POWDER BOTTLES, CANS, OR OTHER CONTAINERS.

APPLICATION FILED DEC. 4, 1902.

NO MODEL.

Fig. 1.

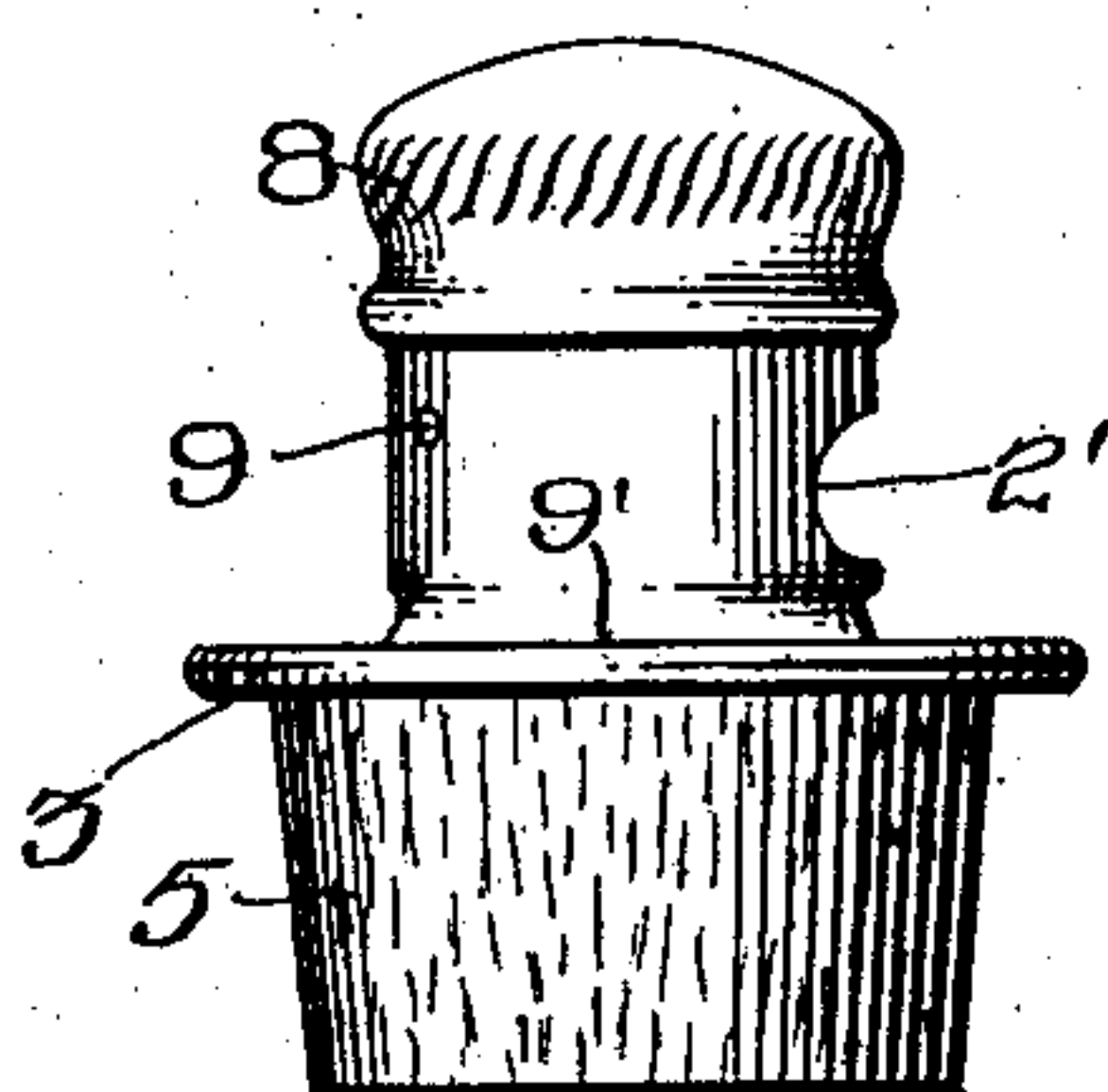


Fig. 2.

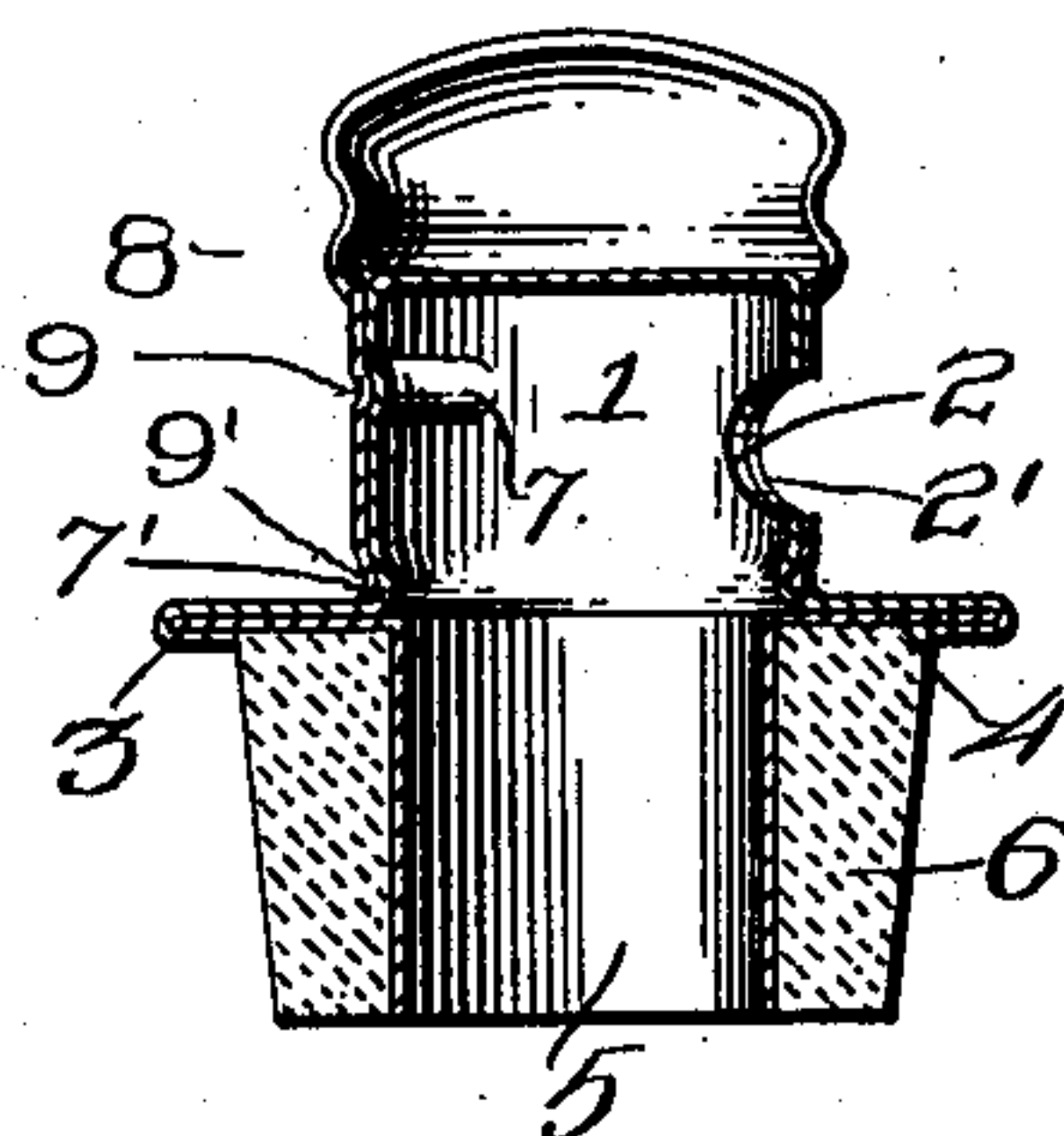


Fig. 3.

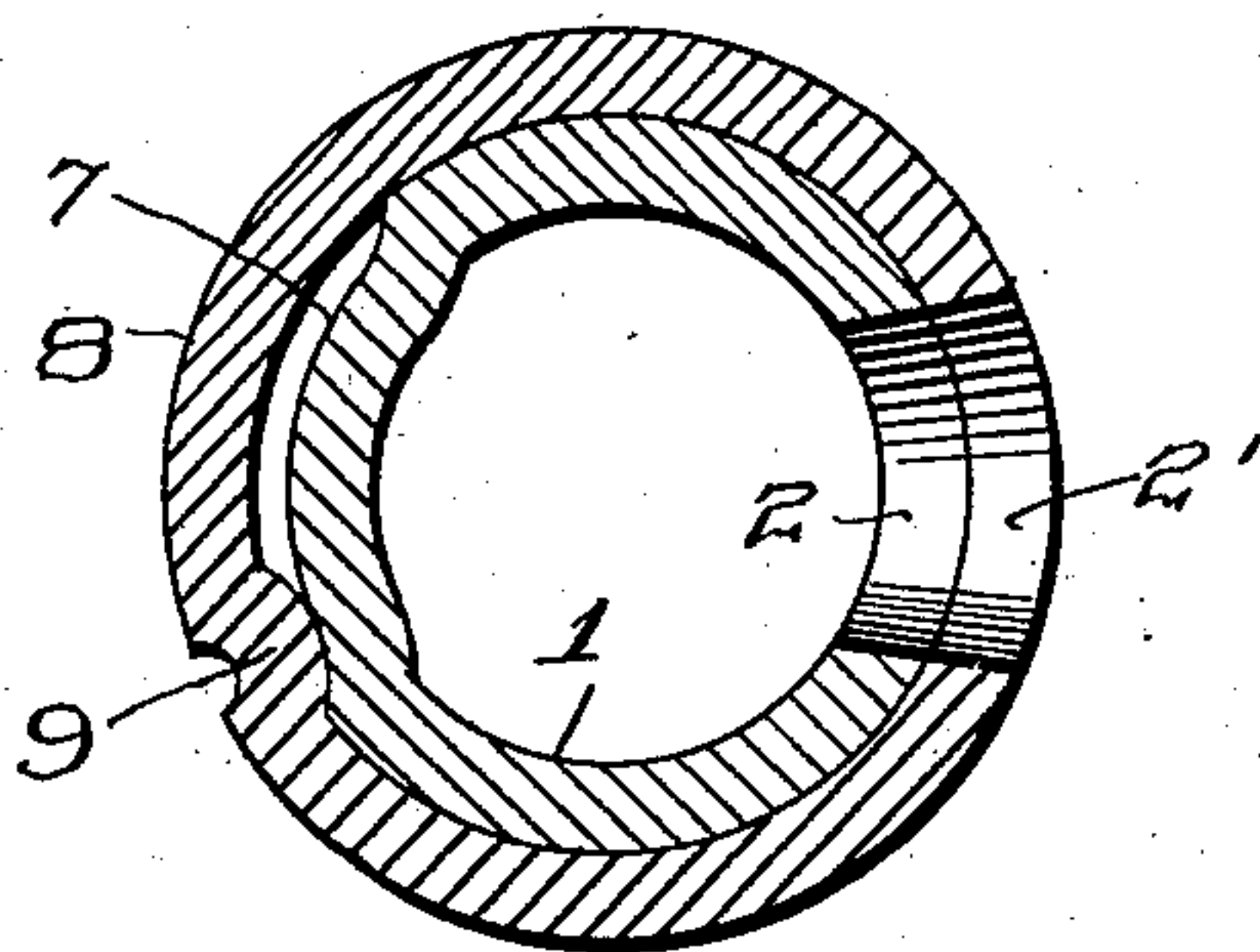


Fig. 4.

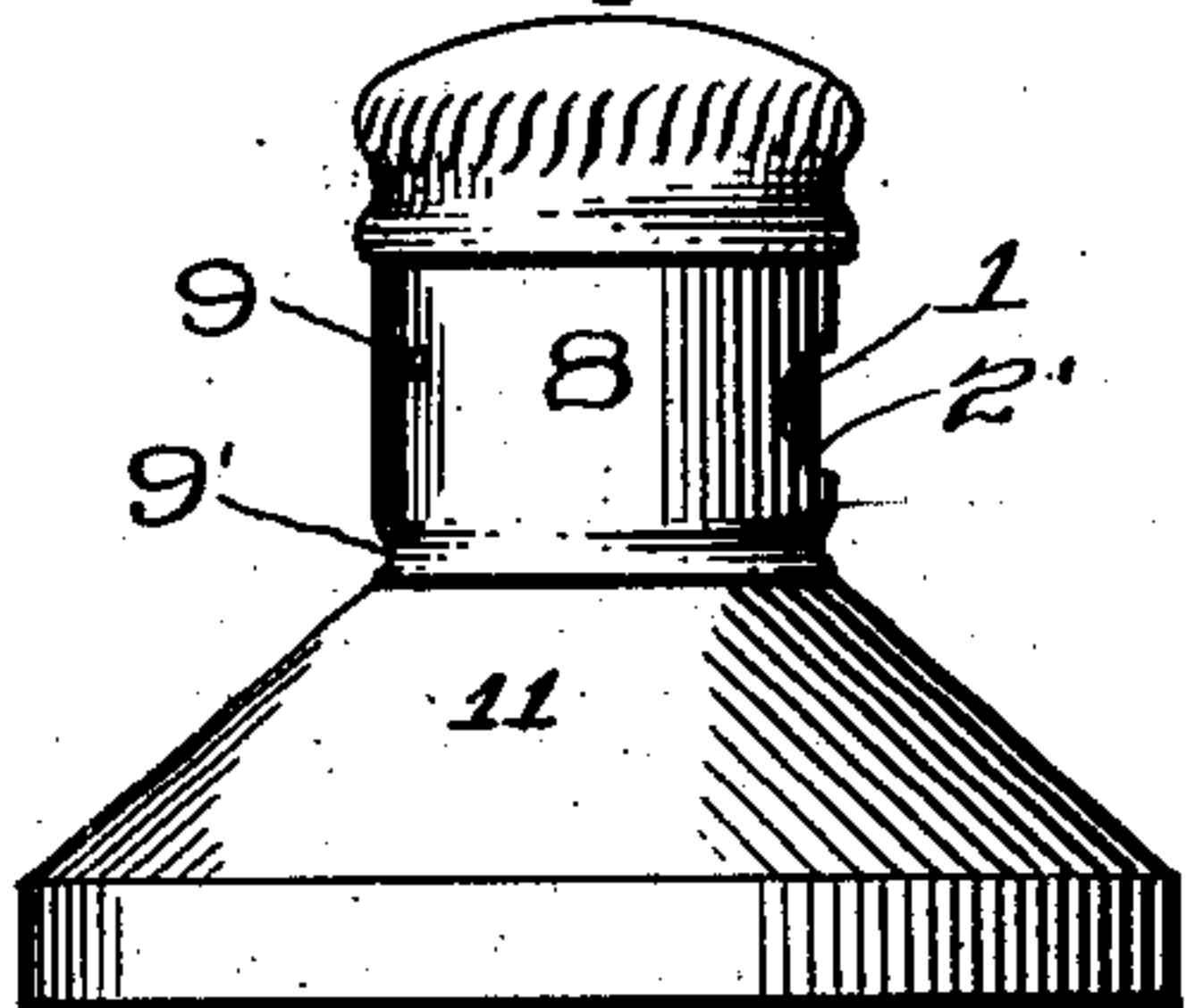
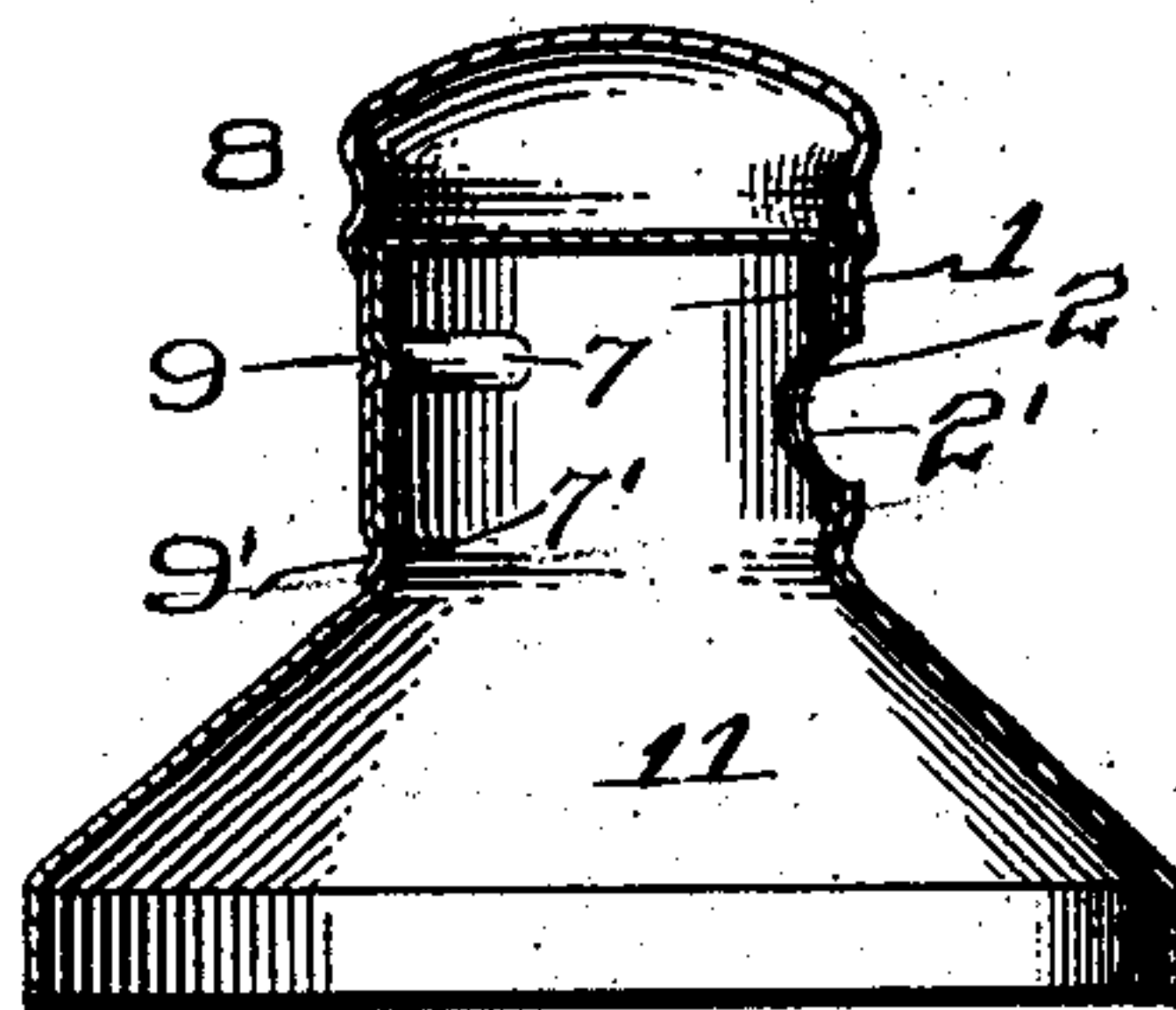


Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

HENRY B. KENT, OF NEW BRUNSWICK, NEW JERSEY.

TOP FOR TOOTH-POWDER BOTTLES, CANS, OR OTHER CONTAINERS.

SPECIFICATION forming part of Letters Patent No. 747,978, dated December 29, 1903.

Application filed December 4, 1902. Serial No. 133,896. (No model.)

To all whom it may concern:

Be it known that I, HENRY B. KENT, a citizen of the United States, residing at New Brunswick, in the county of Middlesex and State of New Jersey, have invented certain new and useful Improvements in Tops for Tooth-Powder Bottles, Cans, or other Containers; and I do 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.

This invention relates to improvements in tops or stoppers for tooth-powder bottles and cans and other forms of containers with which a top or stopper may be employed, and is designed to provide improved means for limiting the movement of the cap upon the neck portion to expose and conceal the opening and for holding said cap against casual displacement.

To this end the invention consists of certain novel features of construction, combination, and arrangement of parts, which will be hereinafter more fully described, and particularly pointed out in the appended claim.

In the accompanying drawings, Figure 1 is a side elevation of the improved top or stopper as designed for use with a tooth-powder bottle. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a horizontal section on the line of the indentation. Figs. 4 and 5 are a side elevation and a vertical section of a top or stopper as designed for use with a tooth-powder can or other container.

Referring now more particularly to the drawings, 1 represents the neck of the stopper provided with a discharge-orifice 2 and having at its lower edge a lateral projecting annular flange 3, which is adapted to be crimped around the edge of an annular flange 4 of a tubular shank portion 5, which carries a cork packing 6.

The neck portion is preferably of true cylindrical form and is provided with a horizontal segmental indentation 7, formed by pressing the metal of said neck portion inwardly at the time the neck is formed by the action of a suitable die.

8 is the cap, which is cylindrical in form to snugly fit the neck and is provided with an inwardly-extending projection 9 to enter

the said indentation 7, said projection being formed by indenting the cap after the latter has been applied to the neck. As shown, the cap 8 is provided with a discharge-orifice 2', which coöperates with the discharge-orifice 2 in the neck portion 1, and the arrangement of the indentation 7 and projection 9 is such as to adapt the cap to turn or oscillate on the neck portion so as to bring the orifices 2 and 2' in and out of register. The indentation 7 and projection 9 provide an adjustable locking connection between the neck and tube, and the indentation is of such length that the end portions thereof form stops to limit the oscillatory movement of the cap on the neck when the openings 2 and 2' are fully in register and out of register, whereby when the cap is turned to the left the projection 9 will abut against one of the end portions of the indentation when the two orifices 2 and 2' are fully in register and when the cap is turned to the right the projection will abut against the other end portion of the indentation when the orifice 2' is moved past the orifice 2, thus fully closing the latter against the outlet of any powder or material contained within the bottle or container to which the stopper is applied.

The indentation and projection afford the desired frictional contact between the cap and neck to permit of the adjustment of the cap to any intermediate extent to regulate the swing of the discharge-opening to allow the escape of any required amount of powder and to hold the cap in its adjusted positions against casual oscillatory movement.

It will of course be understood that the cap is applied to the neck before the projection 9 is formed therein, which is accomplished by the use of a suitable tool, and it will be seen that as the indentation is arranged upon the inner side of the neck portion it is thereby concealed and protected from injury and that as the cap is free from any exterior enlargements or projections a presentable form of cap is provided and all liability of injury to the indentation by the accidental knocking of the cap against an object is entirely obviated.

The locking connection formed by the indentation 7 and projection 9 may be sufficient in ordinary cases to hold the cap from up-

ward movement and casual displacement; but in order to relieve said connection from all strain I preferably provide an additional locking connection in the form of a groove or
5 recess 7' in the neck, receiving a bead or projection 9' upon the cap, said recess and projection being formed by annularly grooving the neck and cap, as shown. By this construction the cap is securely locked against
10 endwise movement on the neck, while allowed to rotate thereon, and any attempt to remove the cap by an endwise pull will be resisted by such additional locking connection, thus avoiding overstrain on the projection 9.

15 In the construction shown in Figs. 4 and 5 I have provided the tubular shank with a flaring body 11, which is adapted to be secured in any suitable manner around the upper end of the can or other container. The
20 other features illustrated are similar to those illustrated in Figs. 1, 2, and 3 and are correspondingly numbered, and the description of Figs. 1, 2, and 3 will answer for that shown in Figs. 4 and 5.

25 From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, 30 and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described my invention, what 35 I claim as new, and desire to secure by Letters Patent, is—

In a device of the class described, a neck having a discharge-opening and a pair of inset grooves, one partially and the other en- 40 tirely circumferential, in combination with a cap partly revoluble on and having a discharge-opening to register with that of the neck, and further provided with an inset projection operating in the partially-circumfer- 45 ential groove of the neck to limit the revoluble movement of the cap, and an inspringing entirely-circumferential bead frictionally engaging the entirely-circumferential groove of the neck to lock the cap against displace- 50 ment and casual revoluble movement.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

HENRY B. KENT.

Witnesses:

J. F. CROPSEY,
JOHN BAMMANN.