

No. 711,052.

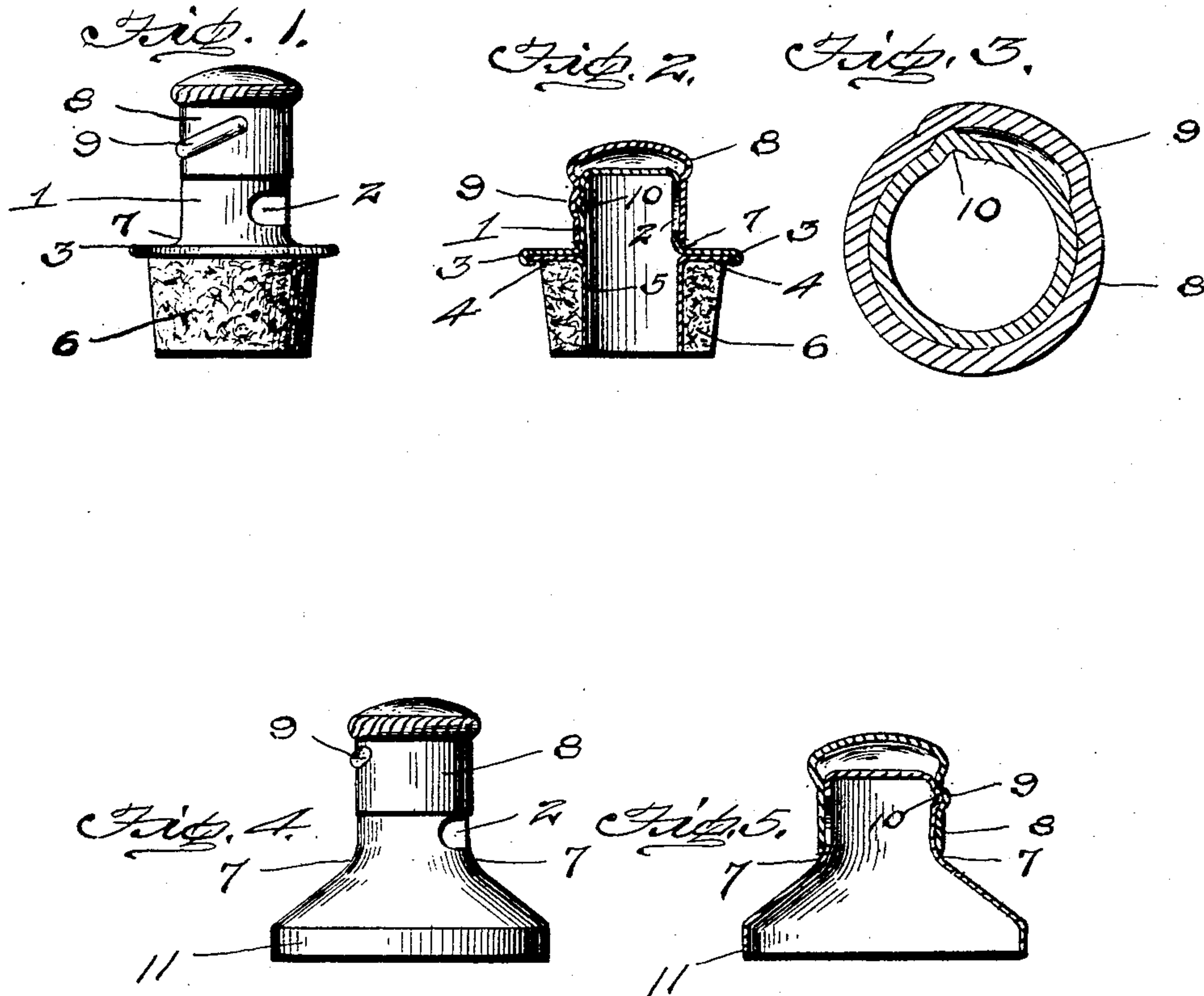
Patented Oct. 14, 1902.

H. B. KENT.

TOP FOR TOOTH POWDER BOTTLES OR CANS OR OTHER CONTAINERS.

(Application filed Aug. 6, 1902.)

(No Model.)



Inventor

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Witnesses

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UNITED STATES PATENT OFFICE.

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

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

SPECIFICATION forming part of Letters Patent No. 711,052, dated October 14, 1902.

Application filed August 6, 1902. Serial No. 118,650. (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 or 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.

My invention relates to improvements in tops or stoppers for tooth-powder bottles and cans and other forms of containers with which the top or stopper may be employed, and is designed as an improvement upon Letters Patent No. 690,737 and No. 701,893, granted to me, by providing a simple and more efficient attaching and adjusting means for preventing the removal of the cap from the neck portion and regulating the discharge of the powder.

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

In the accompanying drawings, Figure 1 is a side elevation of a top or stopper designed for use with a tooth-powder bottle. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a sectional plan view taken diagonally through the cap and tube on the line of the inclined indentation in the cap. Fig. 4 is a side view of a top or stopper designed for use with a tooth-powder can or other container. Fig. 5 is a vertical sectional view through the same.

Referring to Figs. 1 and 2 of the drawings, 1 represents the neck of the stopper, provided with a discharge-orifice 2 and having at its lower edge a laterally-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 cylindrical in form except at its base, where it has an outward flare, as shown at 7, constituting an enlargement upon which the cap is adapted to wedge, as hereinafter described. This flared portion is produced when the neck is formed by the action of a suitable die by which the

neck and its flange are struck up from a piece of sheet metal.

8 is the cap, which is cylindrical in form to snugly fit the neck and is provided with an inclined indentation 9 to receive a projection 10, pressed out from the neck 1, said indentation 9 being formed by pressing the metal of the cap outward at the time the cap is formed by the action of a die employed to strike up the cap from a piece of sheet metal.

The indentation 9 and projection 10 provide an adjustable locking connection between the neck and tube, said indentation acting in the nature of a diagonally-arranged fragment of a screw-thread, whereby upon turning the cap to the left the cap will ride up on the projection 10 to expose the opening 2 and upon turning the cap to the right the cap will screw down on the neck and be held by the projection and indentation from being pulled or moving straight out, thereby obviating any liability of its casual disconnection from the neck 1. The thread or indentation 9 is of such length that the end portions thereof form stops to limit the upward movement of the cap when the opening 2 is fully exposed and to allow the cap to be forced fully down on the flaring neck enlargement 7. When the cap is screwed down, the lower end thereof will wedge upon the flared portion or enlargement 7, thus supplementing the action of the thread 9 and projection 10 to hold the cap securely closed down on the neck portion 1. The thread and projection as constructed permit of the adjustment of the cap to any desired extent to regulate the size of the discharge-opening 2 to allow of the escape of any required amount of powder and secure the cap in its adjusted positions against longitudinal movement.

It will be of course understood that the cap is applied to the neck before the projection 7 is formed in the neck, which is accomplished by the introduction of a tool from below. After this projection has been formed it will be impossible to remove the cap.

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 other features illustrated are similar to those illus-

trated in Figs. 1, 2, and 3 and are correspondingly numbered, and the description of the construction shown in Figs. 1, 2, and 3 will answer for that shown in Figs. 4 and 5.

5 From the foregoing description, taken in connection with the accompanying drawings, it is thought that the construction, operation, and advantages of my improved top or stopper for tooth-powder bottles or cans will be
10 readily understood without requiring a more extended explanation.

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

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

20 1. In a bottle or can top, the combination with a neck portion formed with a discharge-aperture and with an integral projection; of a cap engaging said neck portion and having an inclined outward indentation receiving
25 said projection and serving as a fragment of a thread whereby a rotatory movement of the cap in one direction or the other will move it up or down on the neck portion, said indentation being of such length that the end
30 portions thereof serve as stops to limit the movement of the cap when the discharge-aperture is fully exposed or covered, substantially as described.

2. In a bottle or can top, the combination with a neck portion formed with a discharge- 35 aperture and with an integral projection; of a cap engaging said neck portion and having an inclined outward indentation receiving said projection and serving as a fragment of
40 a thread whereby a rotatory movement of the cap in one direction or the other will move it up or down on the neck portion, substantially as specified.

3. In a bottle or can top, a neck portion having a flared base, a discharge-aperture and 45 an integral projection, combined with a cap engaging the neck portion and adapted when moved down to close the discharge-aperture to wedge upon said flaring base, said cap having an inclined outward indentation re- 50 ceiving said projection and serving as a fragment of a thread whereby a rotatory movement of the cap in one direction or the other will move it up or down on the neck portion, said indentation being of such length that 55 the end portions thereof serve as stops to limit the movement of the cap when the discharge-aperture is fully exposed or covered, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set 60 my hand in presence of two subscribing witnesses.

HENRY B. KENT.

Witnesses:

JASPER F. CROUSEY,
JOHN BAUMANN.