June 29, 1937. P. F. ROACHE 2,085,673

SHAVING CREAM AND TOOTHPASTE DISPENSER

Filed Oct. 22, 1936

Fig. 1.

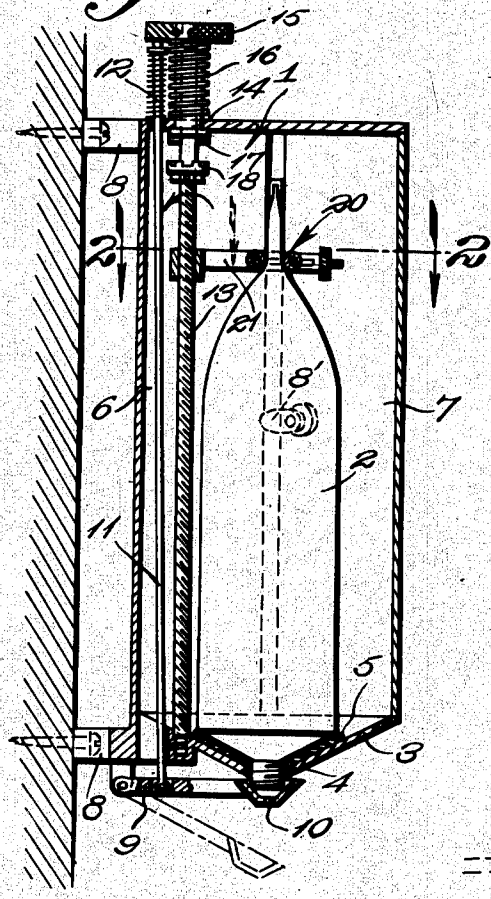


Fig. 3.

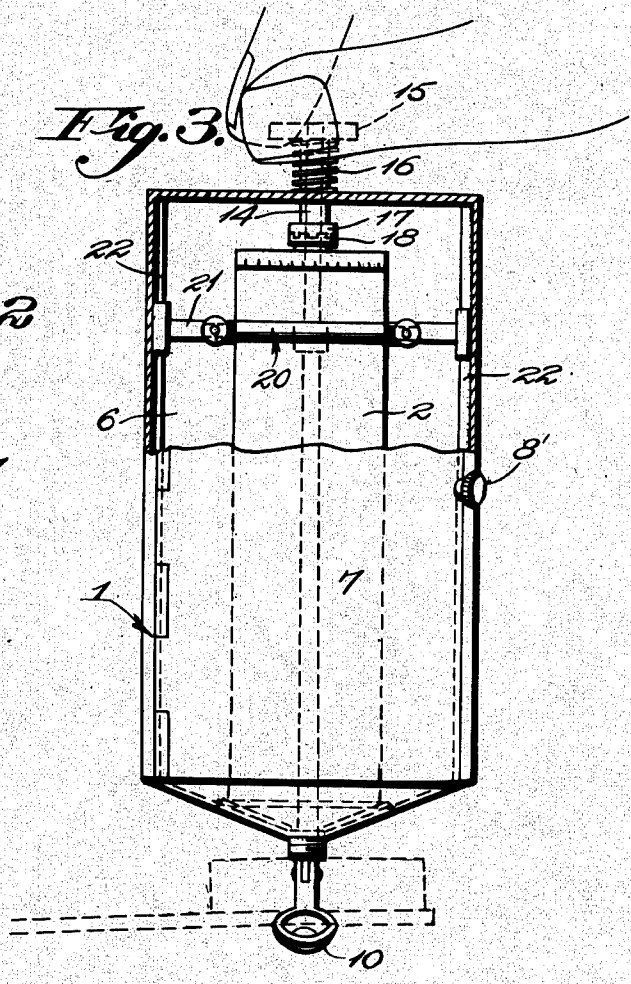
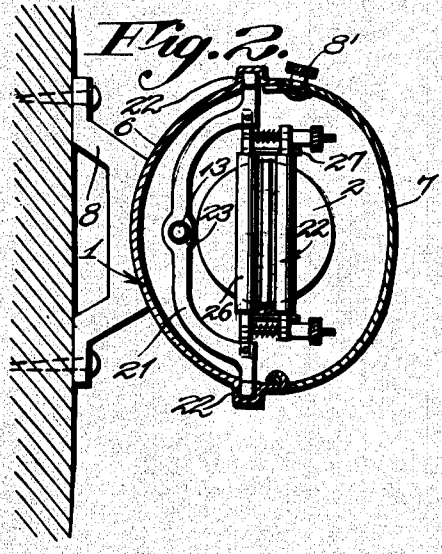


Fig. 2.



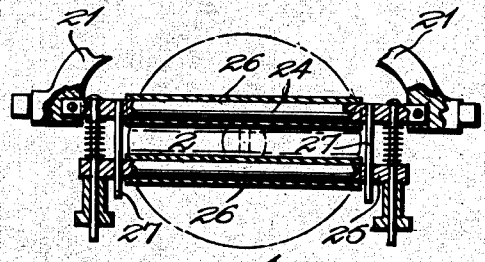


Fig. 4.

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SHAVING CREAM AND TOOTHPASTE DISPENSER

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2 Claims. (Cl. 221—60)

This invention relates to dispensers for toothpaste, shaving creams and other similar substances sold in collapsible containers and has for the primary object the provision of a simple and inexpensive device of this character which will afford a fixed sanitary support for a collapsible container to prevent misplacement of the latter and which may be easily and quickly actuated to first open the collapsible container and then discharge therefrom a desired amount of its contents and automatically close the container when manually released to prevent evaporation of the contents and contamination by foreign matter.

With these and other objects in view, this invention consists in certain novel features of construction, combination and arrangement of parts to be hereinafter more fully described and claimed.

For a complete understanding of my invention, reference is to be had to the following description and accompanying drawing, in which

Figure 1 is a vertical sectional view illustrating a dispenser constructed in accordance with my invention.

Figure 2 is a sectional view taken on the line 2—2 of Figure 1.

Figure 3 is a front elevation, partly in section, illustrating the manual manipulation of the device.

Figure 4 is a fragmentary sectional view illustrating the follower for squeezing and thereby discharging the contents of the collapsible container.

Referring in detail to the drawing, the numeral 1 indicates a casing of a size to accommodate a collapsible container 2 in an inverted position. The bottom of the casing is of conical shape and forms a seat 3 for the discharge end of the container. The conical-shaped seat 3 has an opening 4 to permit the discharge neck of the container to extend therethrough. A suitable cushion 5 is arranged between the seat 3 and the discharge end of the container 2.

The casing 1 includes sections 6 and 7, the section 6 being equipped with brackets 8 for securing the casing to a wall or like support thereby rendering the section 6 fixed. One edge of the section 7 is hinged to one edge of the section 6 thereby converting the section 7 into a door which may be readily opened and closed for inspection or replacement of the container. The section 7 is held in a closed position by a suitable latch 8'.

Pivoted to the lower end of the section 6 is an arm 9 carrying at its free end a cup 10 adapted to act as a closure for the discharge neck 4 of the container 2. A rod 11 is pivoted to the arm 9 and extends through the casing 1 and has connected therewith a coil spring 12 acting to urge the arm in a position for closing the discharge neck of the container. A feed shaft 13 is journaled in the casing and extends through the top wall of said casing and has journaled and slidably mounted thereon a sleeve 14 to which is secured a finger piece 15 overlying the upper end of the rod 11. The spring 12 acts to bring the rod 11 in engagement with the finger piece 15. A coil spring 16 is mounted on the sleeve between the top of the casing and the finger piece 15 and acts to urge the sleeve upwardly. The sleeve enters the casing and has formed thereon a clutch element 17 which also acts as a stop for limiting the upward movement of the sleeve under the influence of the spring 16 by contacting the top of the casing. A clutch element 18 is secured to the feed shaft for cooperation with the clutch element 17 in establishing a driving connection between the finger piece and the feed shaft. The clutch element 17 is brought in engagement with the clutch element 18 by depressing the finger piece 15 and the depressing of the finger piece 15 slides the rod 11 downwardly, swinging the arm 9 on its pivot and thereby disengaging the cup from the discharge neck of the container. As soon as manual pressure is released from the finger piece 15 the springs 12 and 16 restore the rod and finger piece to their initial position which brings the cup into engagement with the discharge neck of the container.

A follower or squeezing means 20 is adapted to the container 2 at the non-discharge end thereof and consists of an arcuately curved yoke 21 having its ends slidably fitted in guide grooves 22 formed in the casing 1. The yoke 21 has integral therewith a feed nut 23 which meshes with the feed threads on the feed shaft 13. A bar 24 is secured to the yoke and adjustably and yieldably connected to the bar 24 is a bar 25. Sleeves or rollers 26 are journaled on the bars 24 and 25 and are arranged to receive therebetween the container 2. Guide pins 27 are arranged between the bars 24 and 25 and by adjusting the bar 25 relative to the bar 24 the pressure of the sleeves on the container may be increased and decreased, as desired. This adjustment can be made by opening the door 7 of the casing. By rotating the feed shaft 13 by the finger piece 15 the squeezing means 20 may be advanced downwardly on the container discharging the contents

of said container as desired. Before the squeezing means can be actuated the finger piece 15 must be depressed which disengages the cup from the discharge neck of the container. Therefore, it will be seen that before pressure is applied to the container by the squeezing means said container is first opened.

Having described the invention, I claim:

1. A dispenser comprising a casing, including a hinged section to permit a collapsible container to be arranged in the casing in an inverted position with the discharge neck thereof extending outwardly of the casing, a closure for said container and pivoted to the casing, squeezing means adaptable to the container, a rod pivoted to said closure and extending through said casing, a feed shaft journaled in said casing and extending exteriorly thereof, a sleeve slidably and rotatably mounted on said feed shaft, a finger piece secured to said sleeve and engaged by said rod, spring means acting on said sleeve, spring means acting on said rod, means connecting the squeezing means to the feed shaft, and a clutch between the feed shaft and said sleeve and engaged by endwise movement of the sleeve on the feed shaft.

2. A dispensing device comprising a casing to receive a collapsible container and having grooves in opposite walls thereof, a feed shaft journaled in said casing, a yoke having reduced ends to form pintles slidably received in said grooves and including intermediate its ends a threaded opening receiving the feed shaft, a bar secured on the yoke between the ends thereof, a second bar paralleling the first bar and adjustably and yieldably connected to said first bar, guide pins secured on the first bar and slidable through the second bar, sleeves journaled on said bars to contact the container at the opposite sides thereof for compressing said container to expel its contents, and means for rotating the feed shaft.

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