

Sept. 20, 1927.

1,642,797

R. B. TRACY

TOOTH PASTE DISPENSER

Filed May 2, 1924

Fig. 1.

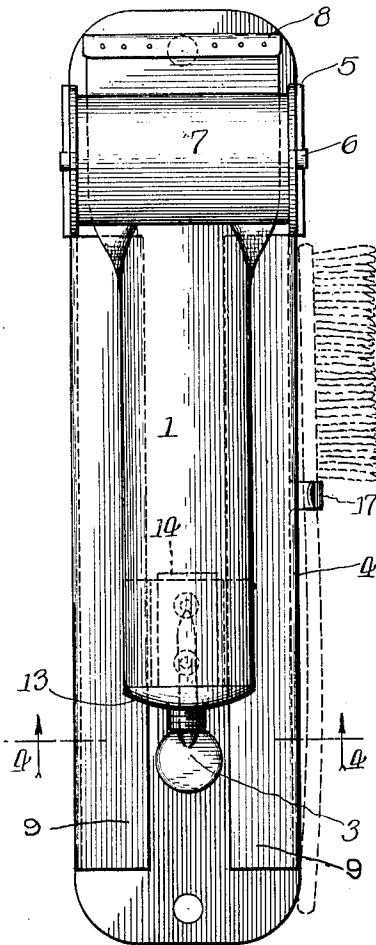


Fig. 2.

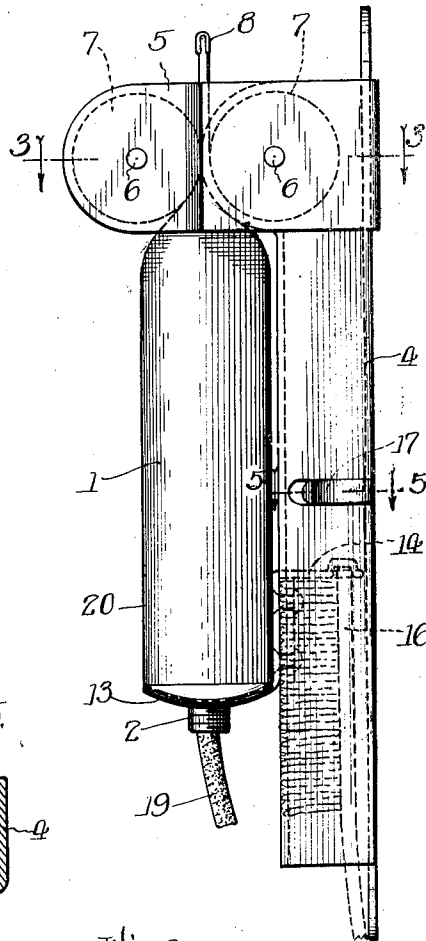


Fig. 5.

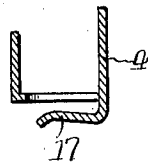


Fig. 4.

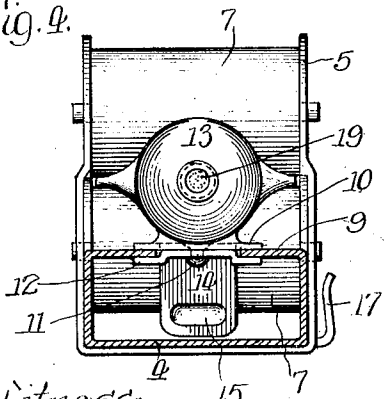
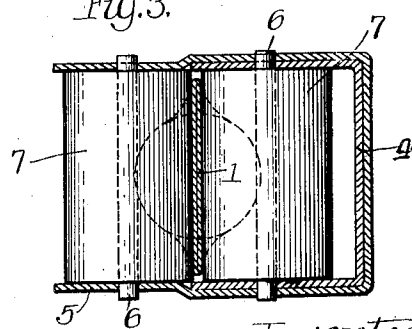


Fig. 3.



Witness:
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TOOTH-PASTE DISPENSER.

Application filed May 2, 1924. Serial No. 710,486.

The object of my invention is to provide a suitable and convenient means of quickly dispensing a dentifrice paste or tooth paste onto a brush, requiring only the use of one hand, and in a rapid and efficient manner.

Reference will be had to the accompanying drawing in which Figure 1 is an elevation of my machine, when same is hung up on the side of the wall, or a plan view where the machine is lying horizontal.

Figure 2 is a side view from that of Figure 1, showing the tooth brush in a different position.

Figure 3 is a cross section of line 3—3 of Figure 2.

Figure 4 is a transverse section on line 4—4 of Figure 1.

Fig. 5 is a fragmentary section on line 5—5 of Figure 2.

Tooth paste or dentifrice is almost exclusively sold in what is known as collapsible tubes and it is the purpose of my invention to furnish an attachment in which these tubes may be placed and the tooth paste served therefrom by simply using the tooth brush as the instrument for the discharging of the paste onto the brush, thus making necessary the use of one hand only, which is a great convenience.

In the drawing 1 indicates the tube and 2 the nozzle end with the screw cap removed and in place thereof there has been put a temporary plug or metal cork 3.

This attachment or device is composed of a base or frame member 4 carrying some side members 5 which furnish the bearings 6 for a set of compression rolls 7, and the end 8 of the tube 1 is pushed in through these rollers 7 and thereby the paste is forced out from the nozzle 2 of the tube 1.

The base member 4 is provided with the guide flanges 9 upon which there is a sliding block 10 (see Figure 4) to which by the rivets 11 there is fastened a guide plate 12. This plate 12 and the block 10 clasp in an elastic fit to the flanges 9 so that the block 10 will not move by gravity only, but will stay wherever put because of a slight frictional contact on the flanges 9. The block 10 is provided with an abutment flange or projection 13 perforated and shaped to fit over the nozzle end 2 of the tube and over the main portion of the tube as shown.

Block 10 has an extension 14, extending downward and between the flanges 9 and is

embossed with a little cavity 15 adapted to receive the end 16 of the tooth brush shown on dotted lines in Figure 2.

A holder for a tooth brush is made by cutting asunder and pressing out a lip or clasp piece 17 out of the side of the frame or base piece 4. This is shown in cross section in Figure 5. A tooth brush is shown with dotted lines held with the clasp 17 in Figure 1.

In the use of this device the person withdraws the plug 3, which is easily done by simply drawing it out, and then inserts the tooth brush as shown in dotted lines in Figure 2, and pushes on the projection 14, which thus pushes the tube bodily toward the rolls 7 and thus brings about collapsible action in tube 1, which forces out the paste in an extruded portion indicated by 19.

In Figure 2 the action of gravity would deflect the extruding paste in a downward inclination as shown at 19 in Figure 2 when the device is laid horizontal, but would naturally extend out in a straight direction downward if the device is mounted in an upright position. In either case whenever sufficient quantity has been discharged from the tube, the brush is withdrawn by swinging the handle dexterously and wiping, as it were, the paste off from the nozzle 2 laying the paste lengthwise onto the bristles of the brush in the manner most desired.

The user pulls the plug, sticks in his brush with a quick dexterous movement and withdraws it with the paste on it and then rapidly replaces the plug again, thus saving much time in the ordinary toilet service of handling these things.

The ordinary person who uses tooth paste with a tube has a habit of squeezing the tube up inside the nozzle end, the region which I designate as 20 in Figure 2, leaving the main bulk of the paste in the rear of the tube until zone 20 is exhausted. Frequently in the collapsing of zone 20 ruptures will be produced in the metal of the tube, thus preventing the balance of the contents of the tube from being utilized. In my method of dispensing the tooth paste the full contents of the tube is obtained with little or no loss, and with greater convenience to the user, and the time consumed brushing one's teeth is very much lessened. Inasmuch as most people do this every day, the item of time consumed in this toilet serv-

ice is quite an item besides the manner of this convenience effected with the use of my device.

What I claim is

5 1. In a device of the class described, the combination with a pair of rollers, of a frame member supporting said rollers with their axes parallel and cylindrical faces adjacent, and a sliding thrust member, said
10 frame member having a guideway for said thrust member extending in the direction of said rollers.

2. In a device of the class described, the combination with a pair of rollers, of a
15 frame member supporting said rollers with their axes parallel and cylindrical faces adjacent, and a sliding thrust member having

an abutment for receiving an end of a brush back, said frame member having a guideway for said thrust member extending in the
20 direction of said rollers.

3. In a device of the class described, the combination with a frame member, of thrust operable means including a roller and a co-
operating element for laterally compressing
25 a collapsible tube, and a thrust member slidable on said frame member provided with means for engaging the discharge end of said tube.

Signed at Chicago, in the county of Cook
and State of Illinois, this 25th day of April,
30 1924.

ROBERT BENEDICT TRACY.