March 29, 1960 A. L. CORBINO 2,930,064

FOUNTAIN BRUSH

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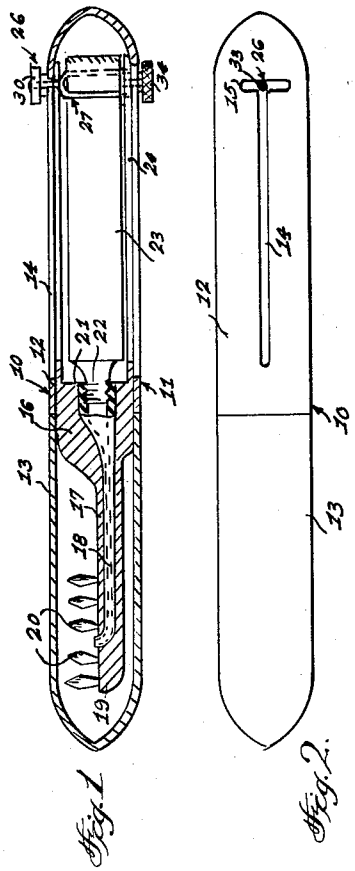

Fig. 1

Fig. 2

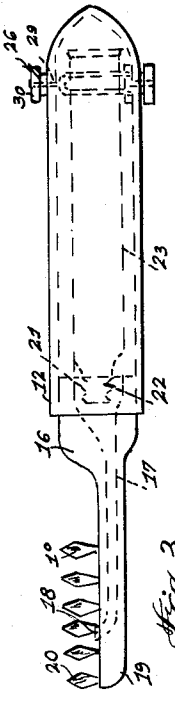

Fig. 3

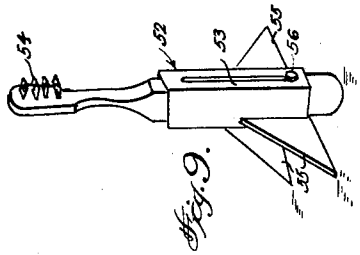

Fig. 9.

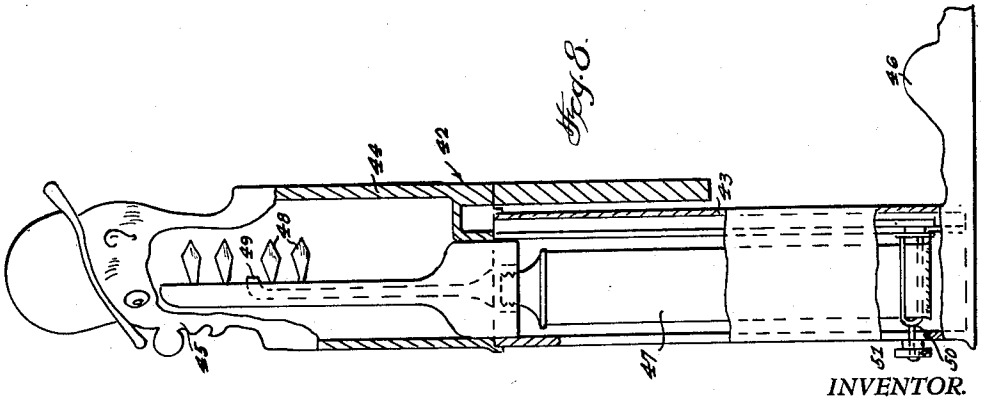

Fig. 8

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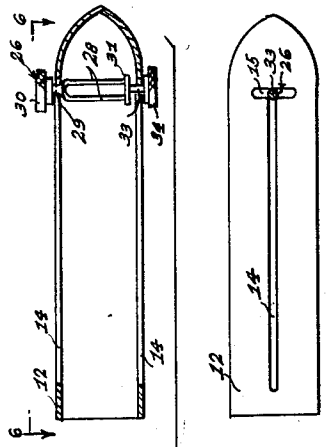


Fig. 6.

Fig. 10.

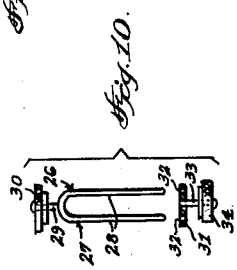


Fig. 7.

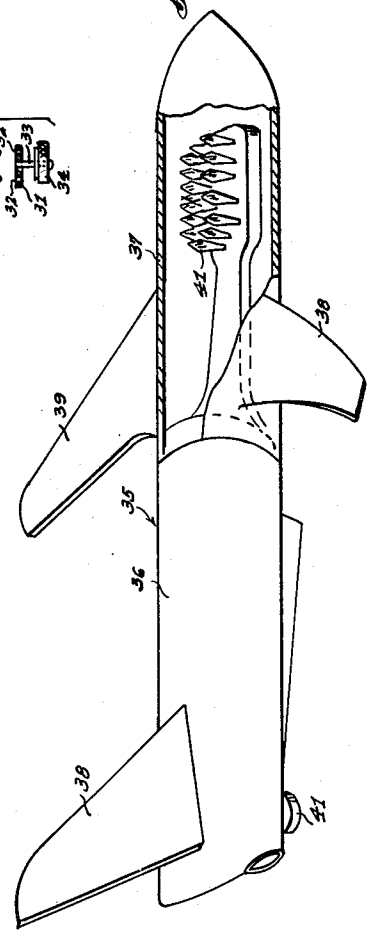


Fig. 4.

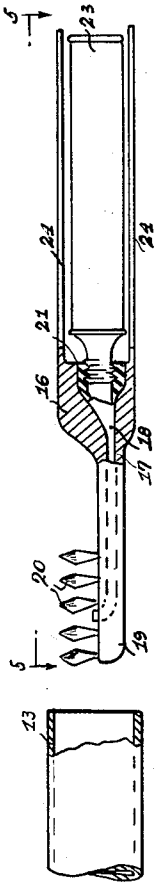
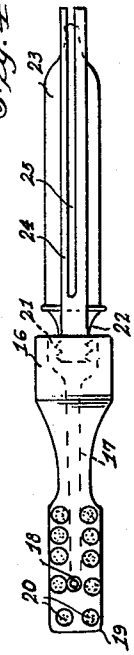


Fig. 5.



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2,930,064

FOUNTAIN BRUSH

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Application January 13, 1958, Serial No. 708,727

1 Claim. (Cl. 15—135)

This invention relates to a fountain brush, and more particularly to a combined toothbrush and tube of tooth paste.

The object of the invention is to provide a fountain brush which is in the nature of a toothbrush that has connected thereto a tube of tooth paste, and wherein there is provided a manually operable means for causing the tooth paste to be discharged onto the bristles of the toothbrush so that the toothbrush can be used for brushing the teeth in the usual manner.

A still further object of the invention is to provide a fountain brush which can be used for handling other types of material besides tooth paste, and wherein when the device is not being used, the brush and tube are enclosed within a housing, and wherein when the toothbrush is to be used for brushing the teeth, the housing can be disassembled sufficiently to permit the bristles to be used as a toothbrush in the usual manner.

A still further object of the invention is to provide a fountain brush which is extremely simple and inexpensive to manufacture.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings, forming a part of this application, and in which like numerals are used to designate like parts throughout the same:

Figure 1 is a longitudinal sectional view taken through the fountain brush of the present invention, and showing the housing in closed position.

Figure 2 is a plan view of the assembly shown in Figure 1.

Figure 3 is a view showing one of the sections of the housing removed, as for example when the toothbrush is to be used for brushing the teeth.

Figure 4 is an elevational view, with parts broken away and in section, showing the parts of the device disassembled.

Figure 5 is a sectional view taken on the line 5—5 of Figure 4.

Figure 6 is a sectional view taken on the line 6—6 of Figure 4.

Figure 7 is a perspective view, with parts broken away and in section, illustrating a modification, wherein the housing resembles an airplane.

Figure 8 is an elevational view of another modification, and showing the housing shaped to resemble a fanciful creature or article.

Figure 9 is a perspective view illustrating the device shaped as a rocket.

Figure 10 is an elevational view illustrating the key assembly for use in manually squeezing the tooth paste from the tube.

Referring in detail to the drawings, and more particularly to Figures 1–6 and Figure 10 of the drawings, the numeral 10 indicates one form of the fountain brush which includese a hollow housing 11. The housing 11 includese a first section 12 and a second section 13, and the sections 12 and 13 are adapted to be arranged in end to end relation with respect to each other.

As shown in the drawings, the first section 12 is provided with a pair of spaced parallel opposed slots 14 which each terminates in an enlarged or transverse portion 15, Figure 2.

Positioned within the housing 11 is a body member 16, and a support portion or elongated shank 19 extends from the body member 16. The support portion 19 is provided with a longitudinally extending bore 17, and a tube 18 extends through the bore 17. One end of the tube 18 terminates adjacent the bristles 20 which are secured to the support portion 19, while the other end of the tube 18 is threaded interiorly as at 21, Figure 1. The threaded portion 21 of the tube 18 is adapted to threadedly receive the threaded neck 22 of a tube 23, and the tube 23 is of conventional construction and is adapted to hold paste such as tooth paste therein. However, it is to be understood that the device of the present invention is not restricted to use for tooth paste, since other types of pasting material or the like can be conveniently used or dispensed as desired.

Extending from an end of the body member 16 is a pair of spaced parallel arms 24, and the arms 24 are provided with cutouts or slots 25 which register with the slots 14 in the section 12 of the housing.

There is further provided a manually operable means which is indicated generally by the numeral 26, and this means 26 is adapted to be used for squeezing the paste from the tube 23 so that such paste will be discharged or dispensed out through the tube 18 and onto the bristles 20. The means 26 is shown in detail in Figure 10 and comprises a bracket 27 which embodies a pair of spaced apart legs 28. Extending from one end of the bracket 27 and secured thereto is a stem 29, and the stem 29 is adapted to extend through one of the registering slots 14 and the adjacent cutout 25. A knob 30 is connected to the outer end of the stem 29, and the knob 30 can be manually rotated so as to wind up the end portion of the tube 23 whereby the paste in the tube 23 will be conveniently dispensed. The legs 28 are adapted to be received in openings 32 which are provided in a disk 31, and extending from the disk 31 is a shank 33 which projects through the other registering slot 14 and cutout 25, there being a manually engageable knob 34 connected to the shank 33. Both of the knobs 30 and 34 may be manually rotated in order to facilitate winding up of the tube 23 so that the paste will be properly dispensed onto the bristles 20.

Referring to Figure 7 of the drawings, there is shown a modified fountain brush which is indicated generally by the numeral 35, and the fountain brush 35 includes a housing that comprises a pair of separable sections 36 and 37. The housing shown in Figure 7 is adapted to resemble an airplane so that it comprises a tail portion 38 and wing portions 39. In Figure 7 the numeral 40 indicates a brush which is adapted to have paste dispensed thereon, when a winding knob 41 is actuated or rotated. When the device shown in Figure 7 is to be used, the section 37 can be removed so as to expose the bristles or brush 40 whereby when the knob 41 is actuated, the paste will be dispensed onto the brush 40 so that the brush 40 can be used in the usual manner. When the device 35 is not being used, the section 37 can be replaced or positioned as shown in Figure 7.

Referring now to Figure 8 of the drawings, there is shown a further modified fountain brush which is indicated generally by the numeral 42. The fountain brush 42 of Figure 8 includes a pair of separable sections 43 and 44 which can be arranged as shown in Figure 8 when the device is not being used. The section 44 may be provided with a portion 45 that resembles a person's head, and the entire device 42 may be made up so that

it has a highly fanciful or ornamental appearance. Thus, the device 42 may be provided with an ornamental base 46 which helps stabilize the device when it is being supported in an upright position or else the portion 46 may constitute a suitable gripping handle. Positioned within the section 43 is a tube 47 of paste, and the numeral 48 indicates a brush portion which is adapted to receive paste through the tube 49. The numeral 50 indicates a key mechanism which may have a construction similar to the parts shown in Figure 10, and the mechanism 50 may consist of a manually operable knob 51 which can be actuated in order to squeeze the paste 47 through the tube 49 and onto the brush 48. When the device 42 is being used, the section 44 can be removed so as to expose the brush 48, and when the device is not being used, the parts are in the position shown in Figure 8.

Referring now to Figure 9 of the drawings, there is shown a further modified fountain brush which resembles a rocket, and the fountain brush of Figure 9 is indicated generally by the numeral 52. The fountain brush 52 includes a section 53, and the numeral 54 indicates a brush which is adapted to receive paste from a tube which may be mounted within the section 53. Wing portions 55 extend outwardly from the section 53 for helping to stabilize the device when the device is being supported in an upright position as shown in Figure 9. The numeral 56 indicates a manually operable means or knob which can be used for dispensing or discharging paste from the tube onto the brush 54.

From the foregoing, it is apparent that there has been provided a fountain brush in the nature of a combined toothbrush and tube of tooth paste. Thus, as shown in Figures 1–6, for example, when the device is not being used, the parts may be arranged so that the sections 13 and 12 are in the position shown in Figures 1 and 2. Thus, the toothbrush and tube of paste will be safely encased or enclosed within the housing 11. Then, when a person wishes to brush his or her teeth, it is only necessary to remove the section 13 which is held in place by a frictional fit. Then, with the section 13 removed, the bristles 20 are exposed as shown in Figure 3 for example. Thus, the knobs 30 and 34 can be rotated so that the tube 23 will be rolled up or squeezed whereby the paste from the tube 23 will pass through the tube 18 and this paste will be discharged onto the bristles 20. Then, the brush or bristles can be used in the usual manner for brushing the teeth. When the device is no longer needed for brushing the teeth, the cover or section 13 can be replaced on the device as shown in Figures 1 and 2, so that the toothbrush and tooth paste will remain in a convenient and sanitary condition.

The key winding mechanism 26 shown in detail in Figure 10, comprises the legs 28 which are adapted to straddle the end portion of the tooth paste tube 23. The bracket 27 which is made up of the leg 28, has the stem 29 extending therefrom, and the stem 29 extends through a pair of the slots 14 and 25. The widened or enlarged portion 15 of the slots 14 provides sufficient clearance whereby the U-shaped bracket 27 can be initially inserted through the portion 15 when the device is being assembled. The shank 33 may be connected to the disk 31 and to the knob 34 in any suitable manner, as for example by means of a threaded connection. The cutouts 25 in the arms 24 act as guides for the stem 29 and shank 33 as the key mechanism 26 is actuated by the knobs 30 and 34, and the registering cutouts and slots provide a means whereby the stem 29 and shank 33 can move therethrough during the process of squeezing the paste from the tube 23. The neck 22 of the tube 23 is arranged in threaded engagement with the portion 21 of the tube or conduit 18. Thus, when the tube of paste 23 is empty, the section 12 can be disconnected and then the old tube 23 can be disconnected and this tube 23 can be replaced by a new or full tube of paste.

Referring to Figure 7 of the drawings, there is shown a fountain brush 35 which resembles an airplane, and the structural features thereof can be the same as previously described in connection with the fountain brush of Figures 1–6 for example. The knob 41 can be actuated to cause the paste to be dispensed onto the bristles 40, and when the brush or bristles 40 are being used, the section 37 is being disconnected or removed. By having the device 35 resemble an airplane, a child will derive increased pleasure therefrom.

In Figure 8 there is shown a further modified fountain brush 42 which is constructed so that it resembles a fanciful creature which may have a head portion 45 thereon. Paste from the tube 47 is adapted to be dispensed through the conduit 49 onto the bristles 48, when the mechanism 50 is actuated by the knob 51.

In Figure 9 the device resembles a rocket, and such fanciful configurations will serve to increase the attractiveness of the device for young users or the like. The knob 56 may be actuated to dispense paste onto the brush 54.

The parts can be made of any suitable material and in different shapes or sizes. As previously described, the tooth paste tube and the brush portion are detachably connected together, so that when the tube becomes empty it can be replaced with a new or fresh tube. The device shown in Figure 8 may be made up so that it resembles a hobo or other fanciful or humorous article or creature.

Thus, it will be seen that there has been provided a combined toothbrush and tooth paste tube wherein the device can be used economically and hygienically and wherein sloppiness will be eliminated and also waste will be eliminated and yet there will be no interference with normal use of the brush. The device can be easily and comfortably used and by combining the toothbrush with the tube of tooth paste, a practical and economical device is provided which will permit a person to brush one's teeth easier, faster and cleaner. Furthermore, the device can be conveniently carried about when a person is traveling around and will take up very little space so that it can be conveniently arranged in a small package. By using the tube 18 which may be made of plastic, the tooth paste is conveyed to the bristles of the toothbrush so that waste will be eliminated and whereby messy brushes will be prevented. This has an important hygienic value, and the tooth paste will remain soft and fresh from day to day. By turning the key shown in Figure 10, the paste is pushed through the tube 18 onto the brush as previously described.

Minor changes in shape, size and rearrangement of details coming within the field of invention claimed may be resorted to in actual practice, if desired.

I claim:

In a fountain toothbrush, a hollow housing including first and second sections arranged in end to end relation with respect to each other, said first section being provided with a pair of spaced opposed slots, each of said slots terminating in a transverse portion, a body member having the rear end thereof positioned within said housing, an elongated shank extending from the front end of said body member forwardly of said housing and provided with a longitudinally extending bore, a plurality of bristles having their longitudinally axes perpendicular to the longitudinal axis of said shank and said bristles extending from the front end of said shank, a tube projecting through said bore and having one end terminating adjacent said bristles, the other end of said tube being threaded interiorly for receiving the neck of a tube of paste, a pair of spaced parallel arms extending from said body member, said arms being provided with opposed cutouts registering with the slots in the first section of said housing, and manually operable means for squeezing material from said tube of paste, and manually operable means comprising a bracket having a pair of legs straddling a portion of the tube of paste, the transverse portion of the slots providing sufficient clearance whereby the

bracket can be initially inserted through the transverse portion when the device is being assembled, a stem extending from said bracket and projecting through a cutout and slot, a first knob connected to said stem, a disc having openings for receiving said legs, a shank extending from said disc and projecting through the other cutout and slot, and a second knob connected to said shank, the cutout in the arms acting as guides for the stem and shank as the manually operable means is actuated by the knob, and the registering cutouts and slots providing a means whereby the stem and shank can move therethrough during the process of squeezing the paste from the tube of paste.

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