

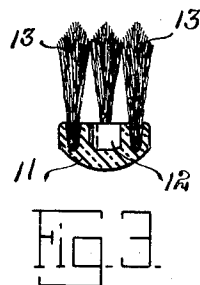
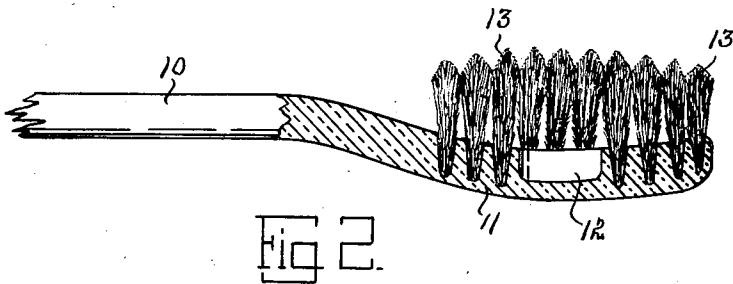
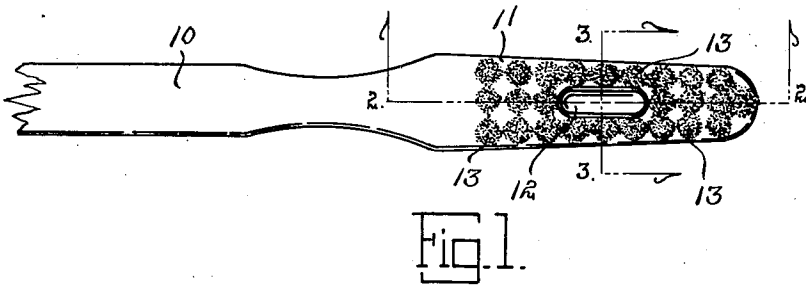
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TOOTHBRUSH

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TOOTHBRUSH

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1 Claim. (Cl. 15—167)

The principal object of my invention is to provide a tooth brush of novel construction wherein the same facilitates the receiving and successful holding of a dentifrice such as powder dentifrice, liquid dentifrice, and paste dentifrice.

More specifically, the object of my invention is to provide a tooth brush having a centrally located receiving area within the bristles and into which the powder or other dentifrice may be easily, quickly and conveniently poured.

A further object of this invention is to provide a tooth brush of novel construction, that is easily washed, and kept in a sanitary condition, economical in manufacture and durable in use.

These and other objects will be apparent to those skilled in the art.

My invention consists in the construction, arrangement and combination of the various parts of the device, whereby the objects contemplated are attained as hereinafter more fully set forth, pointed out in my claim, and illustrated in the accompanying drawing, in which:

Fig. 1 is a bottom view of the main portion of my tooth brush ready for use.

Fig. 2 is a side sectional view of my brush taken on line 2—2 of Fig. 1.

Fig. 3 is a cross sectional view of my tooth brush taken on line 3—3 of Fig. 1 and more fully illustrates its construction.

The use of powder or granular dentifrices on tooth brushes is being used more extensively as time goes on. While powder or granular dentifrices is without doubt the best type of dentifrice to use, it is exceptionally difficult to put onto a tooth brush. If the dentifrice is poured onto the bristles of an ordinary tooth brush it falls off and much of it is therefore wasted. It is impossible to bank and mount a powder dentifrice on a tooth brush as required by most users. Another method of applying the powder dentifrice to the tooth brush is to pour a quantity of the dentifrice in the palm of the hand, wet the tooth brush, and attempt to work the dentifrice into the bristles before brushing the teeth. Obviously, this is messy and unsanitary and undesirable. I have overcome such disadvantages as will be hereinafter appreciated.

Referring to the drawing, I have used the numeral 10 to designate the handle portion of an ordinary tooth brush having the head portion 11. The numeral 12 designates a well formed in the bottom of the head portion 11 as shown in Fig. 2. The numeral 13 designates a plurality of bristles protruding from the bottom of the head portion 11 and surrounding the centrally located well 12

as shown in Fig. 1. By this construction, there is a row of bristles completely surrounding the well 12 and these bristles that surround the well 12 extend at right angles from the head 11 and provide an enlarged opening with the mass of bristles and above the well 12 as shown in the drawing. Obviously with such a constructed tooth brush, the powder or granular dentifrice may be poured into this central opening created by the bristles 13 extending around the well 12. Obviously the bristles provide sides and ends to this receiving area in the bristles, and the powder or granular dentifrices may fall downwardly and be received and held by the well 12. As the surrounding bristles provide also a compartment above the well 12, this central portion of the tooth brush may be filled with the powder to the top of the bristles. Such a tooth brush, therefore, provides a maximum area for receiving and holding the powder dentifrice. Obviously during the pouring of the dentifrice into this provided space, the tooth brush is held so that the bristles extend upwardly as shown in Fig. 2. The surrounding bristles as well as the well 12 will successfully hold this ample amount of powder dentifrice until the brush is within the mouth of the user. By such a constructed brush, a great amount of powder dentifrice may be placed in the tooth brush and very little, if any, powder dentifrice will be spilled or wasted. With my tooth brush, it is not necessary for the brush to be previously dampened nor for any of the dentifrice to touch and soil the hands of the user. The dentifrice will be successfully held in the tooth brush and will not spill out during the time period the brush is placed within the mouth of the user. Due to the successful retaining of the dentifrice during this operation, the dentifrice will not fall and soil the lips, chin or clothing of the user. Due to the great amount of dentifrice that my tooth brush is capable of initially holding, a single subjecting of the tooth brush to the dentifrice is sufficient for a complete brushing of the teeth.

From the above, it will readily be seen that by the use of my tooth brush, powder dentifrice may be used easily and quickly without waste or muss. My brush makes for the economic use of dentifrices and the successful cleansing of the teeth in a minimum amount of time and with a minimum amount of effort.

Due to the fact that an open area is provided in the center portion of the bristle portion, the brush is easily washed and can be kept in a sanitary condition after use. In the manufacture of

the brush, the tufts or bristles surrounding the well 12 should be sufficiently close together as to provide a suitable holding means for the dentifrice placed in the brush.

Although I have described my brush as particularly adaptable for powder or granular dentifrices, it is obvious that it is ideally constructed for paste or liquid dentifrices. When using tube paste dentifrice, it is merely necessary to insert the nozzle portion of the tube into the open area between the bristles and squeeze the tube, thereby placing a quantity of the paste within the opening in the bristles and the well 12. In the place of liquid dentifrices, the construction of my brush makes it a tooth brush that will successfully handle such dentifrices. The liquid is poured downwardly into the tooth brush and the well 12 is filled with this liquid. By such a constructed tooth brush, a suitable amount of liquid will be retained by the brush until it is within the mouth of the user. By the well 12 being closed at all points except its top, it will have a tendency to hold the dentifrice, regardless of the type of the dentifrice, by suction. Another advantage of my brush is that it will, for a considerable length of time, keep furnishing dentifrice to the ends of the bristles during the brushing process,

which is not true in case of ordinary tooth brushes where the dentifrice is merely placed initially on the outer end portions of the bristles.

Some changes may be made in the construction and arrangement of my improved tooth brush construction and method of retaining a dentifrice therein without departing from the real spirit and purpose of my invention, and it is my intention to cover by my claim any modified forms of structure or use of mechanical equivalents which may be reasonably included within their scope.

I claim:

In a toothbrush an elongated head portion generally concave on that face from which the bristles protrude, a well extending inwardly from said concave face into but not through said head portion and bristles surrounding said well so arranged that they do not materially overlap said well but rather are spaced from one another in this particular area to provide a substantial opening for the reception of dentifrice, those bristles which bound the well being sufficiently adjacent one another, however, to form a substantial confinement.

NATHAN J. DAVIDSON.