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TOOTH BRUSH

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Fig. 1.

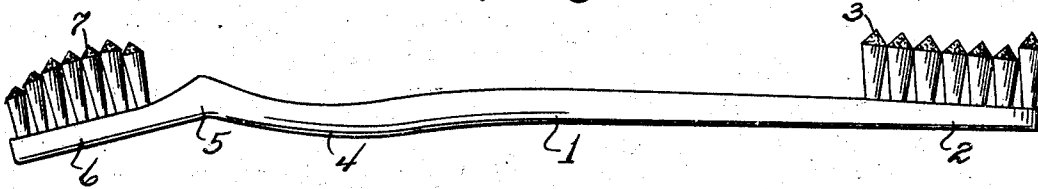
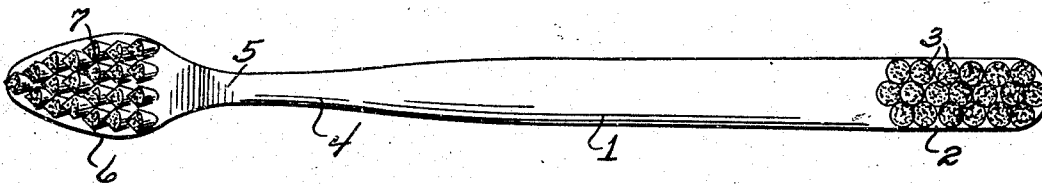


Fig. 2.



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TOOTH BRUSH

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1 Claim. (Cl. 15-167)

This invention relates to tooth brushes, and its general object is to provide a brush which is capable for use in thoroughly brushing the entire surfaces of all the teeth within the mouth, in an easy and expeditious manner, with minimum effort on the part of the user, and particularly the inner vertical surfaces, which cannot be reached with any degree of comfort or certainty with brushes now in general use.

Another object is to provide a tooth brush having the heads and tufts of bristles thereof arranged, to not only facilitate brushing the entire surfaces of the teeth but the tufts are spaced a suitable distance from each other, to facilitate washing and cleaning thereof, so that the brush can be retained in a clean and sanitary condition.

A further object is to provide a tooth brush in which the length of the tufts are graduated in a manner to bring about even wear throughout the life of the brush.

A still further object is to provide a tooth brush of the character set forth, that is simple in construction, inexpensive to manufacture, neat in appearance, and extremely efficient in use and service.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawing and specifically pointed out in the appended claim.

In describing the invention in detail, reference will be had to the accompanying drawing wherein like characters denote like or corresponding parts throughout the several views, and in which:

Figure 1 is a side elevation of the tooth brush which forms the subject matter of the present invention.

Figure 2 is a top plan view thereof.

Referring to the drawing in detail, the reference numeral 1 indicates the handle of my brush, which as shown is substantially straight and relatively flat for the major portion of its length, and merges at one end into a head portion 2 that is provided with a flat inner surface having secured to and extending therefrom tufts 3 of bristles, the bristles being outwardly flared and have their outer ends cut away to present a conical formation, as best shown in Figure 1. The tufts are also spaced apart at their juncture with the head portion 2 to provide a suitable space between the same for the passage of water, to facilitate the cleaning thereof, as will be apparent. The head portion 2 is inclined downwardly toward its outer end, when the brush is

arranged on a horizontal plane, as shown, and the tufts 3 gradually increase in length from the outer to the inner end of the head portion, so that they will tend to wear substantially evenly throughout the life of the brush as the pressure on the bristles will be substantially uniform during the use of the brush, due to the fact that the brush handle is normally held at an inclination with respect to the teeth, as will be apparent. However, the outermost tuft 3 may be longer than the others, and the transverse staggered rows of tufts adjacent to the outermost tuft may be of the same length as the latter, but the remaining tufts 3 gradually increase in length as set forth and clearly shown in Figure 1.

The outer surface of the handle is rounded transversely for the major portion of its length and the handle is curved as at 4, the curved portion gradually tapering inwardly to its outer end, which is slightly thickened as at 5.

Formed on the thickened end of the handle and extending outwardly at an inclination therefrom is a head portion 6, it being obvious that the thickened portion reinforces the point of juncture of the head portion 6 with the handle and the head portion 6 is relatively short and of substantially oval formation in outline as will be noted upon inspection of Figure 2, in that it is elongated and the outer sides thereof converge in rounded formation to a substantially pointed outer end.

The inner surface of the head portion 6 is flat for the major portion of its length, and secured in the head portion 6 and rising from the inner surface thereof are tufts 7 of bristles, which are of the same shape as the tufts 3 but are relatively smaller in diameter.

While the tufts 3 are disposed in transverse staggered rows, the transverse rows of tufts 7 are straight, and the number of tufts in the latter rows decrease from the inner end of the head portion 6 to the outer end thereof, with a single tuft 7 at the extreme outer end, as shown in Figure 2. The lengths of the tufts 7 decrease gradually from the row, next to the innermost row, and the tufts of the latter row are shorter than the row adjacent thereto, with the result it will be seen from Figure 1 that the tufts 7 provide a brushing surface that is substantially curved at a downward inclination from adjacent the inner end of the brush head 6, which is inclined outwardly and downwardly. By that construction, it will be obvious that the brushing surface not only follows the curvature of the inner surface of the teeth, but the pressure against

the bristles will be substantially uniform throughout the brushing surface during the use of the brush, and that therefore the tufts 7 will tend to wear substantially evenly throughout the life of the brush.

5 By providing the curved portion 4 in the handle 1, and inclining the head portion 6 outwardly from the thickened portion 5, it will be apparent that such arrangement will facilitate the use of
10 the tufts 7 with the inner surfaces of the teeth, and the particular shape of the head portion 6 will allow the latter to be readily disposed at the rear portions of the jaws, consequently it will be seen that the entire inner surfaces of all the
15 teeth within the mouth can be readily reached with ease.

While the head which includes the portion 6 and tufts 7, is designed for use with the inner surfaces of the teeth, it of course can be used on
20 the outer surfaces thereof, but the head which includes the portion 2 and the tufts 3 is primarily designed for the outer surfaces of the teeth, due to the particular shape thereof and arrangement with respect to the handle.

25 It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

It is to be understood that changes may be made in the construction and in the combina-

tion and arrangement of the several parts, provided that such changes fall within the scope of the appended claim.

What I claim is:

A tooth brush comprising a handle that is substantially flat and straight for the major portion of its length and having a tapered curved end portion thickened at its outer end, a relatively short head portion formed on the thickened outer end and being of substantially oval
5 shape in outline, said head portion being substantially flat and disposed at an outward inclination with respect to the curved end portion, tufts of bristles secured to the head portion in transverse row formation, the number of
10 the tufts in the rows decreasing from the inner end of the head portion to the outer end thereof, with a single tuft at the outer end, the length of the tufts decreasing from the row next to the innermost row, and the tufts of the latter row
15 being shorter than the tufts of the row adjacent thereto for cooperation with the remaining rows to provide a substantially curved brushing surface disposed downwardly from the inner end of the head portion to the outer end thereof,
20 when the handle is held on a horizontal plane with the tufts projecting upwardly. 25

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