June 24, 1941. A. J. THOMAS ET AL 2,246,867

TOOTHBRUSH

Filed June 22, 1940

Fig. 1.

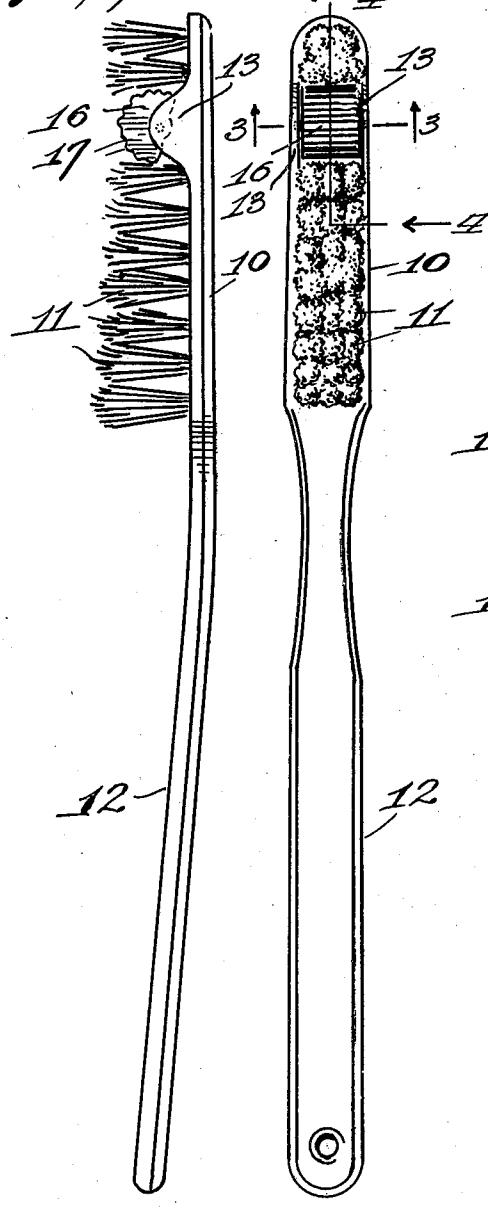


Fig. 2.

Fig. 3.

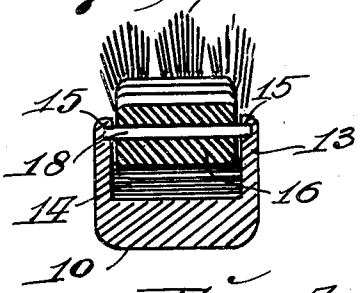


Fig. 4.

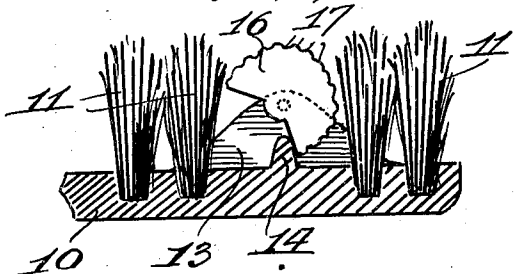
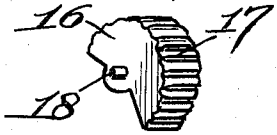


Fig. 5.



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TOOTHBRUSH

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Application June 22, 1940, Serial No. 341,860

1 Claim. (Cl. 15—110)

Our invention relates to a tooth brush and has for its principal objects, to provide a tooth brush wherein the head or brush body carries a plurality of tufts of bristles and said head or body being provided near its end with a combined buffing, polishing and massaging element that is mounted for limited rocking movement on the brush head or body and which element combines with the bristles in cleaning and polishing the teeth and also in imparting gentle massaging action to those portions of the gums immediately adjacent the teeth.

A further object of our invention is, to provide a tooth brush upon which is mounted adjacent the bristle carrying head, a rocking member composed of soft, flexible and preferably elastic material, such as rubber, the active face of which is corrugated so that when the brush is utilized for cleaning the teeth the rocking member will during a part of the backward and forward movement of the brush engage the surfaces of the teeth with rubbing contact, thereby tending to more effectively polish the teeth, and which rocking member is also effective in engaging the gums adjacent the teeth with gentle pressure so as to apply helpful massage to said gums.

With the foregoing and other objects in view, our invention consists in certain novel features of construction and arrangement of parts that will be hereinafter more fully described and claimed and illustrated in the accompanying drawing in which:

Fig. 1 is a side elevational view of a tooth brush constructed in accordance with our invention.

Fig. 2 is a front elevational view of the brush.

Fig. 3 is an enlarged cross section taken on the line 3—3 of Fig. 2.

Fig. 4 is an enlarged detail section taken on the line 4—4 of Fig. 2.

Fig. 5 is a perspective view of the rocking element that is mounted on the forward portion of the bristle carrying head of the brush.

Referring by numerals to the accompanying drawing which illustrates a preferred embodiment of our invention, 10 designates the head or end portion of the brush that carries the tufts of bristles 11 and 12 designates the brush handle.

The head 10 and handle 12 are preferably molded from Celluloid or any of the well known plastics such as Lucite, Catalin, or the like, and formed integral with the forward portion of the head 10 at the sides thereof are thin short walls 13 that provide bearings for the rocking member of the brush. These walls are formed at the sides of the face of the head 10 that carries the tufts of bristles 11 and said walls are positioned in the forward portion of the area that carries said bristles.

Formed integral with the head 10 of the brush between the walls 13 is a transverse rib 14 that provides a stop for the rocking element and to provide bearings for said rocking element, recesses 15 are formed in the inner faces of the walls 13.

The combined buffing and massaging element and which is illustrated in Fig. 5 comprises a segmental-shaped body 16 formed of rubber or other soft, flexible and preferably elastic material, and the arcuate face of said body is provided with small transversely disposed ribs or corrugations 17.

Extending transversely through the body 16 is a pin 18 that provides an axis upon which the body rocks and the ends of this pin projecting slightly beyond the sides of body 16.

During the process of manufacture of the brush or while the walls 13 that form the bearings are soft and flexible, the upper ends of said walls are spread apart a sufficient distance to enable the projecting ends of the pin 18 to be positioned in the recesses 15, after which the walls are pressed or permitted to return to their normal parallel positions and thus, the rocking element is positioned upon the brush so that the ends of the pins are covered.

In the use of our improved tooth brush, the same is manipulated so that the ends of the bristles sweep over the inner and outer surfaces of the teeth so as to clean the same in conventional manner and during this action the body 16 will rock upon its axis, the pin 18, and at the end of the rocking movement or when the end portions of said body engage the transverse rib 14 and the movement of the brush is continued, the corrugated surface 17 of the body will rub over and polish the surfaces of the teeth.

Thus the corrugated periphery 17 of member 16 has both rocking contact and rubbing contact with the teeth while the brush is being used and such action, together with the passage of the ends of the bristles across the teeth, are effective in cleaning the latter and the rubbing contact of member 16 with the teeth tends to buff and polish the same and which action can not be accomplished by the bristles alone.

By proper manipulation of the head portion of the brush, the member 17 may be caused to rock backwardly and forwardly upon those portions

of the gums adjacent the teeth so as to produce a gentle massaging action upon the gums.

Thus it will be seen that we have provided an improved tooth brush that is relatively simple in construction, inexpensive of manufacture and very effective in performing the functions for which it is intended.

It will be understood that minor changes in the size, form and construction of the various parts of our improved tooth brush, may be made and substituted for those herein shown and described, without departing from the spirit of our invention, the scope of which is set forth in the appended claim.

We claim as our invention:

In a tooth brush, the combination with an integral handle and body member, and tufts of bristles projecting from the under side of said body member, of a pair of walls formed on the under side of the forward portion of said body member, a pin having its ends journalled in said walls, a segmental body of soft, flexible material carried by said pin, a transverse rib on the body member between said walls for limiting the rotary movement of said soft, flexible member and the curved periphery of which soft, flexible member is transversely corrugated.

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