Feb. 9, 1954 S. H. GROSSMAN 2,668,308

NONSLIP HANDLE FOR TOOTH OR DENTURE BRUSHES

Filed April 3, 1950

FIG. 1.

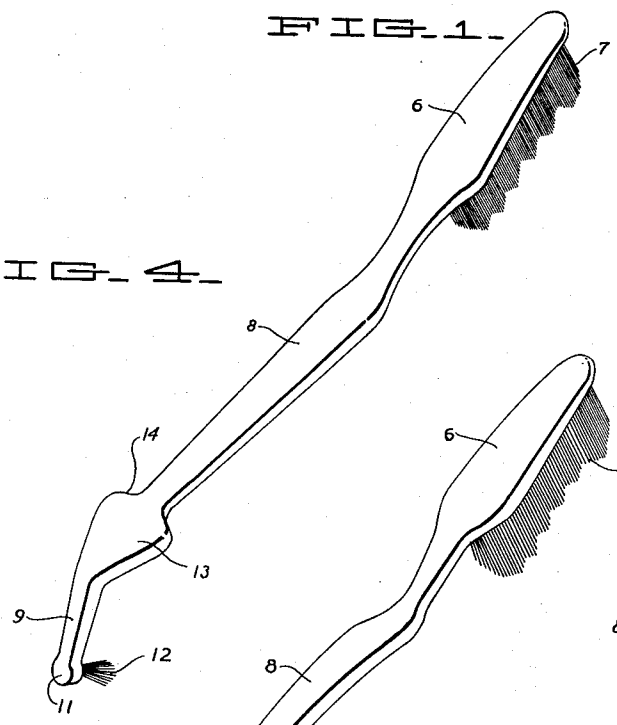


FIG. 4.

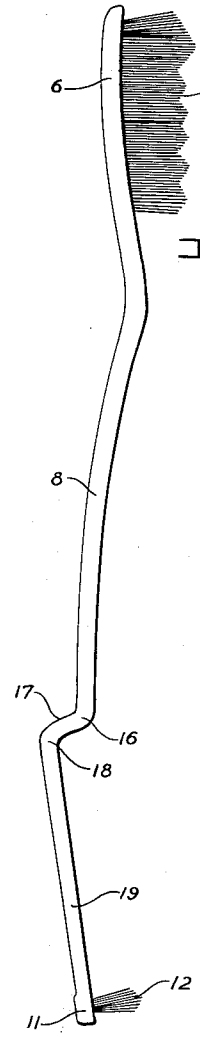
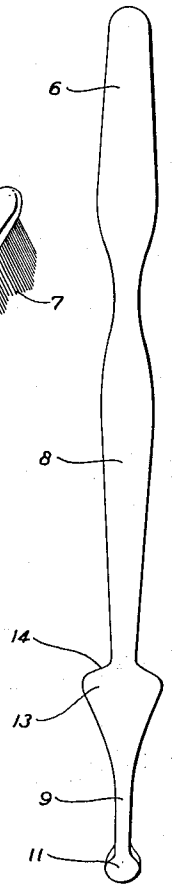


FIG. 3.

FIG. 2.



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NONSLIP HANDLE FOR TOOTH OR DENTURE BRUSHES

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1 Claim. (Cl. 15—106)

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This invention relates to brushes used for cleaning teeth or dentures and has particular reference to the handle structures thereof.

An object of the invention is to provide in an article of the class described a handle member, possessing the usual highly polished surface finish, which is provided with improved means for inhibiting excessive slippage of the user's wet or soapy fingers along the handle during manipulations of the brush, which may cause loss of control of the latter and possible droppage and breakage thereof.

Another object of the invention is to provide in an article of the type referred to which is equipped with a brush element at each end of the handle member thereof, a novel construction of the handle member at a point intermediate the respective brush elements which in normal use of either brush will maintain the other brush away from annoying and possible irritating engagement with portions of the user's fingers or hand.

A further object of the invention is to provide an improved combination tooth and denture brush which may be produced equally as economically as other comparable articles of this type.

The invention possesses other objects and features of advantage, some of which, with the foregoing, will be set forth in the following description of the preferred form of the invention which is illustrated in the drawing accompanying and forming part of the specification. It is to be understood, however, that variations in the showing made by the said drawing and description may be adopted within the scope of the invention as set forth in the claim.

Referring to the drawing:

Figure 1 is a perspective view of a combined tooth and denture brush showing included therein an improved handle member constructed in accordance with the principles of my invention.

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

Figure 3 is a perspective view of a brush of the character referred to showing a modified form of handle member included therein.

Figure 4 is a side elevational view of the structure shown in Figure 3.

In conventional toothbrushes and in particular those special varieties provided with brush elements at opposite ends of the handle member and used interchangeably for regular brushing of teeth, for reaching comparatively inaccessible recesses of bridgework or for facilitating the cleaning of dentures, the usually highly polished handle element is very difficult to grip securely

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particularly if the user's fingers are wet or soapy with the result that the handle may sometimes slip from the fingers, the user may lose control of the brush and the latter may fall to the hard washbasin or floor and possibly become broken. In those types of special-purpose brushes having the conventional large group of bristles at one end of the handle member and a comparatively smaller tuft or group of bristles at the opposite end, the latter are usually so positioned that they may press or rub against the sides of the user's hand or fingers and since the hand may be wet and the skin thereof unusually tender, annoying and sometimes persistently painful chafting, abrasion or actual puncturing of the areas contacted by the bristles may result.

I have provided an improved toothbrush wherein provision is made for positively limiting movement of a user's hand or fingers along the handle member thereof after a proper grip thereon has been secured so as to obviate the aforementioned objectionable features inherent in presently available articles of this general character. In the form of the invention shown in Figure 1 an elongated handle of preferably synthetic resinoid material is provided having at one end a laterally broadened head portion 6, in which the group of filamentary bristles 7 comprising the toothbrush of conventional size and form are secured in a well known manner. From an end of the head portion 6 extends a preferably integral stem or grip portion 8, for engagement by the hand or fingers of the user, provided at its distal extremity with an integral and preferably angularly disposed stem 9 formed with a laterally enlarged or bulbous tip 11 in which an auxiliary brush comprising a smaller group of bristles 12 is suitably secured extending preferably correspondingly with and from the same side of the device as the principal group of bristles 7. At a point on the grip portion 8 intermediate the ends thereof, stop means is provided which is engageable by the side of the user's hand or fingers to definitely position the latter relative to the principal group of bristles and limit movement or slippage of the hand along the handle member and which comprises essentially a pronounced shoulder extending from at least one side or surface of the grip portion 8 at an angle approaching perpendicularity with respect to the grip portion surface so as to minimize any tendency to spread the grip of the user's hand or fingers laterally of the grip portion under a force resulting from movement or pressure tending to move the hand or fingers longitudinally of the grip portion. Such struc-

ture may take one of several desirable forms and as here shown comprises wing members 13 preferably formed as integral parts of the grip portion 8 extending laterally from preferably the narrow sides of the latter and projecting therefrom sufficiently to effectively stop the hand or fingers as aforesaid, the principal requirement being, as previously mentioned, that the mean plane of the shoulder surface 14 intersect the adjacent longitudinal surface of the grip portion 8 at about right angles so that there will be no tendency for the hand or fingers to slip over and beyond the wing members. Another important constructional requirement is that the shoulder surfaces 14 be spaced along the handle away from the bristles 12 sufficiently so that when the grip portion 8 is held in the normal grasp of the user's hand or fingers, the bristle group 12 will be held away from possible engagement with immediately adjacent portions of the said hand or fingers.

In Figures 3 and 4 is shown a modified form of device comprising the functional equivalent of the structure above described. As here illustrated, the head portion 6, the main bristle group 7 and the stem or grip portion 8 are substantially the same as in the structure of Figures 1 and 2. The stem 8, however, at the end thereof remote from the head portion 6 is provided with a laterally directed bend 16 to form a shoulder surface 17 whose mean plane intersects the adjacent longitudinal surface of the stem 8 at about right angles, an opposite and continuing bend 18 being also provided which extends into a comparatively slender arm 19 lying in approximate parallel relation with the stem or grip portion 8 and provided at its distal end with the bulbous tip 11 in which the auxiliary brush bristles 12 are secured. As in the case of the structure shown in Figures 1 and 2 the brush bristles 12 possess at least the same spaced relationship with the shoulder 17 as the bristles bear toward the shoulder surfaces 14. It will be thus seen that when the user's hand or fingers are gripping the stem or grip portion 8 the former may slide along the latter only until the side of the hand or a finger engages and is stopped by the shoulder 17 thus limiting further movement of the hand relative to the handle member.

The above described improvements of my invention will obviously enhance the ability of the user to maintain a secure grip on the toothbrush in order that full control of the latter in the tooth brushing operations may be had regardless of whether or not the grip member may be wet, soapy and slippery and to insure that the hands or fingers do not come into uncomfortable engagement with the auxiliary brush member.

I claim:

A toothbrush comprising an elongated relatively flat stem having an upper and lower surface and provided with an integral end portion angularly related to the general plane of said stem, whereby the lower surfaces of said stem and end portion define an obtuse angle therebetween, said stem having a greater length than said end portion, a first group of bristles secured to the distal end of said end portion on the lower surface thereof, a second group of bristles secured to the distal end of said stem on the lower surface thereof, and integral portions of said stem extending transversely of the longitudinal axis of said stem from the opposed sides thereof to provide a pair of opposed shoulders disposed substantially normal to said axis, said shoulders being disposed adjacent said angular related end portion, and diverging portions of said stem interconnecting the outermost portions of said shoulders and said end portion.

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