May 29, 1934. W. H. COLE 1,960,807

TOOTHBRUSH

Filed Feb. 14, 1933

Fig-1

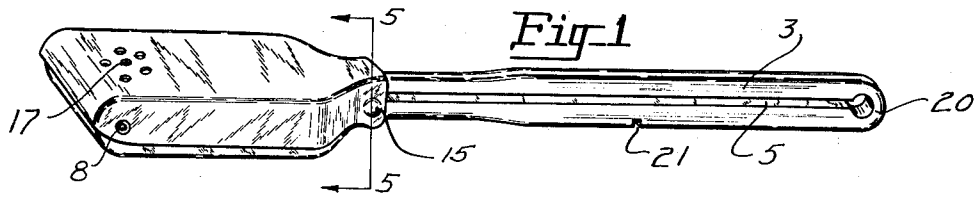


Fig-2

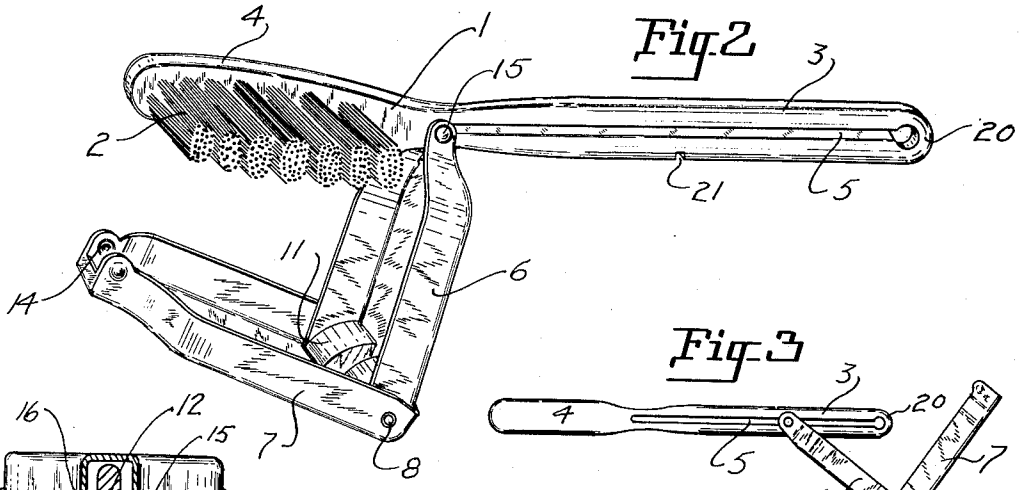


Fig-3

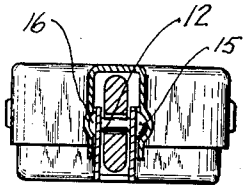


Fig-5

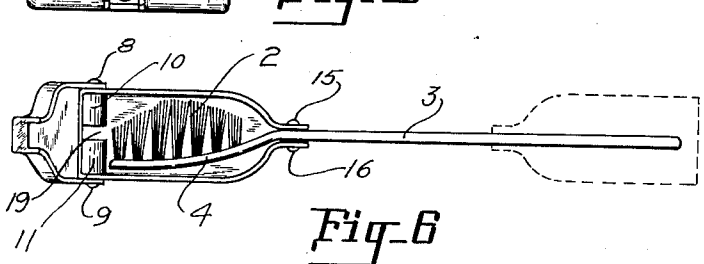


Fig-6

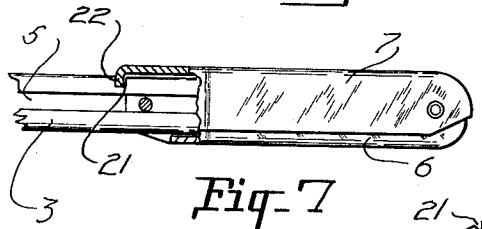


Fig-7

Fig-4

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TOOTHBRUSH

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Application February 14, 1933, Serial No. 656,651

10 Claims. (Cl. 15—185)

My invention is comprised primarily of a tooth brush, the handle end of the back of which is slotted longitudinally for practically its full length. A hood comprised of top and bottom members is adapted to the handle and is so formed and positioned as to form a closure for the bristle end of the tooth brush also and for being moved longitudinally of the handle and to augment the size of the handle. The hood is non-detachable from the tooth brush and is used either as a hood for the bristles of the tooth brush or as an enlarge end of the handle, to facilitate its being grasped by the user.

The primary object of my invention consists in providing a tooth brush that may be safely carried by the user in a hand bag or pocket or otherwise, and that may be hung in exposed places with practical freedom from contamination.

A still further object of my inventiodn consists in providing a tooth brush, the end of which may be enlarged to facilitate its being firmly grasped by the user.

A still further object of my invention consists in providing a hood for the bristle end of a tooth brush permitting the aeration of the same to facilitate the evaporation of moisture collected incident to its use.

A still further object of my invention consists in so positioning the handle engaging end of the brush within the hood that handle structure of the tooth brush is reinforced.

A still further object of my invention consists in so attaching the hood to the handle that it is locked relative thereto by spring action.

A still further object of my invention consists in making the device from materials that are easily kept in a sanitary and clean condition.

And a still further object of my invention consists in so making the device that it is easily and quickly applied in placement and easily and quickly reapplied to a different position upon the handle of the brush.

With these and incidental objects in view, the invention and the method consists in certain novel features of construction and combination of parts, the essential elements of which are set forth in the appended claims, and a preferred form of embodiment of which is hereinafter shown with reference to the drawing which accompanies and forms a part of this specification.

In the drawing:

Fig. 1 is a perspective side view of the brush illustrating the hood in place for protecting the bristle end of the tooth brush.

Fig. 2 is a perspective side view of the tooth brush illustrating the hood as being opened and in position for movement longitudinally of the handle of the brush.

Fig. 3 is a back view of the tooth brush illustrating the hood as having been moved longitudinally of the handle member.

Fig. 4 is a perspective back view of the tooth brush illustrating the hood as having been moved longitudinally of the handle and illustrating the hood as about to be closed about the handle to increase the utility thereof.

Fig. 5 is a sectional end view of the brush as illustrated in Fig. 1. This view is taken on line 5—5 of Fig. 1, looking in the direction indicated.

Fig. 6 is a side view of the brush illustrating the hood in opened position to show the precise positioning of the brush therein.

Fig. 7 is a fragmentary side view, partially in section, of the handle end of the brush and illustrates the hood in position for augmenting the handle. This view illustrates a locking notch within the handle member into which a locking latch of the hood is positioned.

Like reference characters refer to like parts throughout the several views.

My new and improved tooth brush is comprised primarily of a tooth brush body 1. The tooth brush body has bristles 2 of any desired construction disposed within a head end 4 of the brush. A handle 3 rearwardly extends from the head 4. A slot 5 extends longitudinally of the center of the handle member for practically its full length. A hood is provided and is comprised of a bottom member 6 and a top member 7. The bottom and top members are hinged together about a pair of journal pins 8 and 9. Lugs 10 and 11 are secured to the inner side of one end of the bottom member 6. These lugs are used for centering the handle when the hood is used at the handle end of the tooth brush. The side walls of the handle engaging end of the bottom member are spaced apart to form a channel way through which the handle of the brush is slidably moveable. A rivet 12 passes through the side walls of the bottom member and also passes through the slot 5. This maintains the bottom member non-detachable relative to the handle member. The rivet 12 has precisely fashioned heads terminating its outer ends. The top member 7 is hinged about the pair of journal pins 8 and 9 and recesses 13 and 14 are disposed in the oppositely disposed inside walls of the free end of the top member 7 of the hood. These recesses are so positioned as to be made to engage the heads 15

and 16 of the rivet 12. The side walls of the free end of the top member are so positioned and spaced apart as to permit a snapping engagement between the recesses and the rivet heads and which is adapted for maintaining the hood in locked condition when closed. The top and bottom members of the hood have a plurality of ventilator holes 17 and 18 within the oppositely disposed walls of the top and bottom members to facilitate the aerating of the brush disposed therein. The lugs 10 and 11 are spaced apart as illustrated at 19 to permit the outer end 20 of the handle of the brush engaging therebetween when the hood assembly is positioned to augment the handle structure of the tooth brush. The positioning of the end 20 of the handle is illustrated within the spaced walls of the lugs in Fig. 4. A locking notch 21 is disposed in the outer surface of the handle member and a locking latch 22 of the top member of the hood is adapted to engage thereinto and to position the hood upon the handle member and to lock the same relative thereto.

The closed device, illustrated in Fig. 1, is made ready for use as a brush by the opening of hood members 6 and 7, about pins 8 and 9, and the freeing of brush head 4 from this closure, as disclosed in Fig. 2; the brush being then moved relative to the hood until rivet 12 has traversed the length of slot 5, when hood member 6 is swung through a position paralleling the brush handle which is then thrust into the recess between lugs 10 and 11 as shown in Fig. 4. The closing of hood member 7, which causes the engagement of locking latch 22 with notch 21, completes the cycle of operation.

A device thus made is adapted for being used as a hood over the tooth brush in which position it is shown in Fig. 1. It is also adapted for augmenting the handle and for being positioned at the free end of the handle as illustrated in Fig. 4 for receiving the free end of the handle to thereby strengthen and reinforce the handle and to enlarge the same to be more firmly grasped by the user.

While the form of mechanism herein shown and described is admirably adapted to fulfill the objects primarily stated, it is to be understood that it is not intended to confine the invention to the embodiment herein shown and described, as it is susceptible of embodiment in various forms, and in various methods, all coming within the scope of the claims which follow.

What I claim is:

1. In a device of the class described, the combination of a tooth brush, the handle of which has an elongated slot running longitudinally of the handle, a hood comprised of top and bottom members hingedly secured together upon their one end by a rivet, a double headed rivet passing through the side walls of one end of one of the hood members and through the slot disposed in the handle of the brush, breather holes disposed through the walls of the top and bottom members of the hood, recesses disposed in the oppositely disposed inner walls of the top hood member, said recesses being adapted for placement and in registry with the heads of the rivet passing through the slot, a locking notch disposed in one of the walls of the tooth brush handle and a locking latch associated with one of the members of the hood and adapted for engagement within the locking notch.

2. In a device of the class described, in combination with a tooth brush, comprised of a hood hinged member adapted for adjustable placement upon the handle of a tooth brush, and adapted for covering the head of a tooth brush and for being moved longitudinally of the handle of the tooth brush and for augmenting the outer end of the tooth brush handle, and for being fixedly positioned thereupon.

3. In a device of the class described, in combination with a tooth brush, the handle of which is slitted longitudinally, a hood comprised of hinged members, said hinged hood having breather holes disposed in the walls thereof and adapted for covering the head of the tooth brush when closed thereover, and for augmenting the handle of the tooth brush when adapted to the free end of the handle of the tooth brush and means adjustably securing the hinged members to the handle.

4. In a device of the class described, in combination with a tooth brush having a slitted handle, comprised of a pair of members hinged together, said hinged members being so shaped as to form a hood for the brushing end of the tooth brush, means for clamping the hinged members together when forming a hood over the brush, and means for clamping the hinged members together and to the free end of the handle of the tooth brush when the hinged members are moved to and adapted to the free end of the tooth brush handle.

5. In a device of the class described, the combination of a tooth brush having an elongated slit disposed longitudinally of the handle end of the tooth brush, hinged members adapted to each other and slidable relative to the slit disposed in the handle, said hinged members adapted for encompassing the brushing end of the tooth brush and for augmenting the free end of the handle when adapted thereto and means for fixedly clamping the hinged members together and to the free end of the handle.

6. In a device of the class described, comprising a brush and a handle therefor, the combination of a hood slidable with respect to the handle and adapted to selectively embrace either said brush or the opposite end of said handle.

7. In a device of the class described, in combination with a handle supported brush comprising brush encompassing handle augmenting members adjustably attachable to the handle of the brushing member.

8. A device of the class described comprising a handle and means slidably mounted with respect to the handle for embracing either end thereof.

9. A device of the class described comprising an elongated handle and means slidably mounted with respect to the handle for embracing either end thereof.

10. A device of the class described comprising a handle and an expansible means slidably mounted with respect to the handle for embracing either end thereof.

WINSTON H. COLE.