

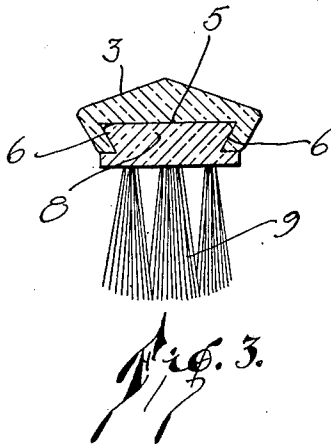
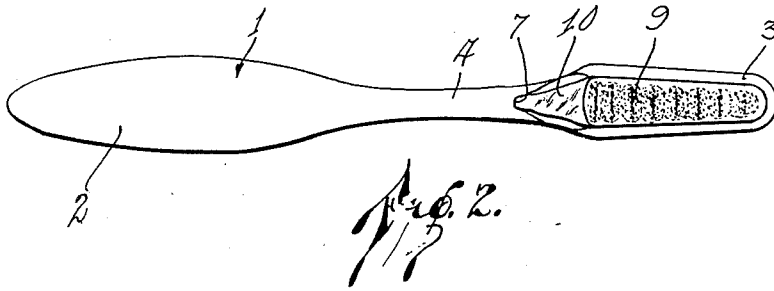
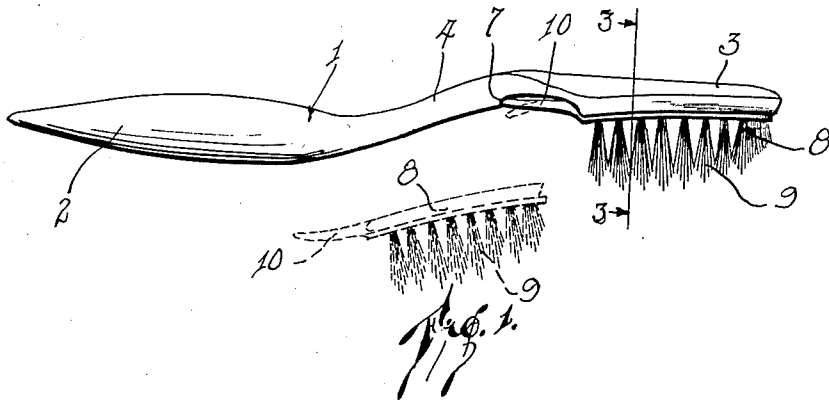
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A. A. HOWARD

TOOTHBRUSH

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INVENTOR
A. A. HOWARD
BY *Munn & Co.*
ATTORNEYS

UNITED STATES PATENT OFFICE.

ANDREW ANTHONY HOWARD, OF CHICAGO, ILLINOIS.

TOOTHBRUSH.

Application filed January 12, 1925. Serial No. 1,986.

To all whom it may concern:

Be it known that I, ANDREW A. HOWARD, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Toothbrushes, of which the following is a full, clear, and exact description.

My invention relates to improvements in tooth brushes, and it consists in the combinations, constructions, and arrangements herein described and claimed.

An object of my invention is to provide a tooth brush of the character described, in which the bristles are mounted upon a member which may be removed at will, for the purpose of replacement or sterilizing, from a permanent handle member.

A further object of my invention is to provide a tooth brush of the character described, in which novel means is employed for holding the bristle bearing member in place upon the handle.

A further object of my invention is to provide a tooth brush of the character described, that is simple, that is durable, and which is thoroughly practical commercially.

Other objects and advantages will appear in the following specification, and the novel features of the invention will be particularly pointed out in the appended claim.

My invention is illustrated in the accompanying drawings forming part of this application, in which

Figure 1 is a side elevation of an embodiment of my invention.

Figure 2 is a plan view of the device shown in Figure 1, and

Figure 3 is a sectional view along the line 3—3 of Figure 1.

In carrying out my invention, I make use of a handle member 1 having a hand grip 2 and a head portion 3. The neck 4 of the handle member is slender and curved somewhat, so as to bring the hand grip 2 in a plane parallel with and at a distance from the plane of the head portion 3.

The head portion 3 is recessed, as shown at 5, the under side thereof, and the side walls 6 of the recess inclined apart from one another in such a manner as to cause the width of the recess to be greater at the innermost end than at the mouth thereof. The head member 3 is therefore, similar as to the recess to one member of a dovetail joint.

The recess 5 extends up into the neck portion 4 of the handle member as shown at 7, thus forming a stop member, the functions of which will be hereinafter explained.

A bristle bearing member 8 fashioned to slide into the recess 5 from that end of the recess adjacent the neck 4, is provided and is constructed of rubber bakelite. Bristles 9 are set in this member and are similar to the ordinary type of bristles employed in tooth brushes.

The bristle bearing member 8 has a cross sectional contour as shown in Figure 3, similar to a dovetail member and therefore is held against unintentional dislodgment from the recess 5 except for longitudinal movement in one direction.

Means for locking the member 8 against longitudinal movement relative to the recess is provided in a thin flexible portion 10 extending rearwardly of the bristle bearing member 8. This portion 10 is adapted to yieldingly lie in engagement with a stop 7, heretofore described.

From the foregoing description of the various parts of the device, the operation thereof may be readily understood. In order to remove the bristle bearing member 8, the person using the device grips the flexible portion 10 and bends that portion away from the neck 4 as shown in dotted lines in Figure 1, which permits the entire member 8 to move longitudinally toward the hand grip 2 of the handle 1 (see dotted lines in Figure 1).

The bristle member 8 may then be sterilized, or if worn out discarded and a new one replaced in the recess 5 of the head portion 3.

The member 8, with its bristles 9, will be held securely against movement in any direction during use of the device, which may be quickly and easily removed as described.

One of the most important advantages of my improved tooth brush construction is that I have provided not only economy in construction, but economy to the user. When the bristles become worn it is only necessary to replace the worn member with a fresh member, which can be provided at cost much less than an entire tooth brush.

I claim:

A tooth brush of the character described comprising a handle member and a head portion, said handle member being formed

with a neck portion intermediate the head and the body of the handle, a replaceable bristle bearing member of resilient material having a rearwardly extending relatively thin flexible portion, said head member having a dovetailed recess therein terminating at its lowermost end in a neck portion, said neck portion beyond the termination of the dovetailed recess being recessed throughout its width providing a shoulder, whereby said bristle bearing member may be projected longitudinally into said dovetailed recess and said flexible longitudinally extending portion may engage with said shoulder to lock said bristle bearing member in said dovetailed recess, and whereby the bristle bearing member may be removed by bending said flexible portion out of engagement with the shoulder.

ANDREW ANTHONY HOWARD.