

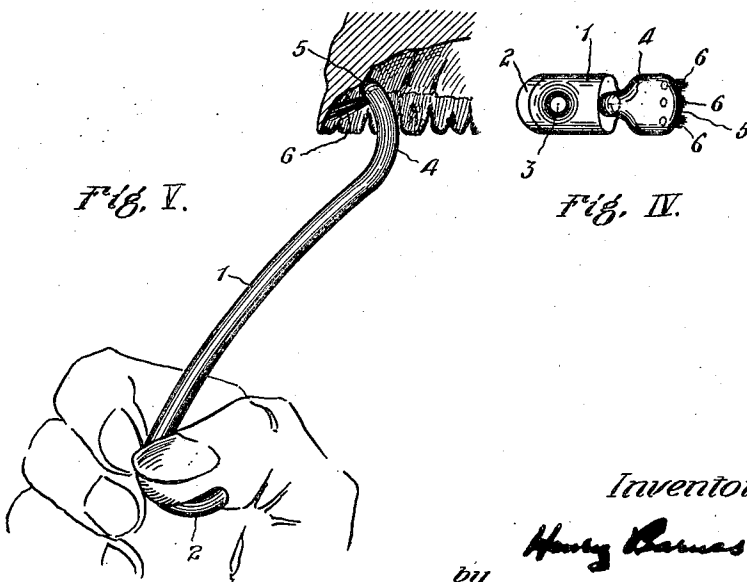
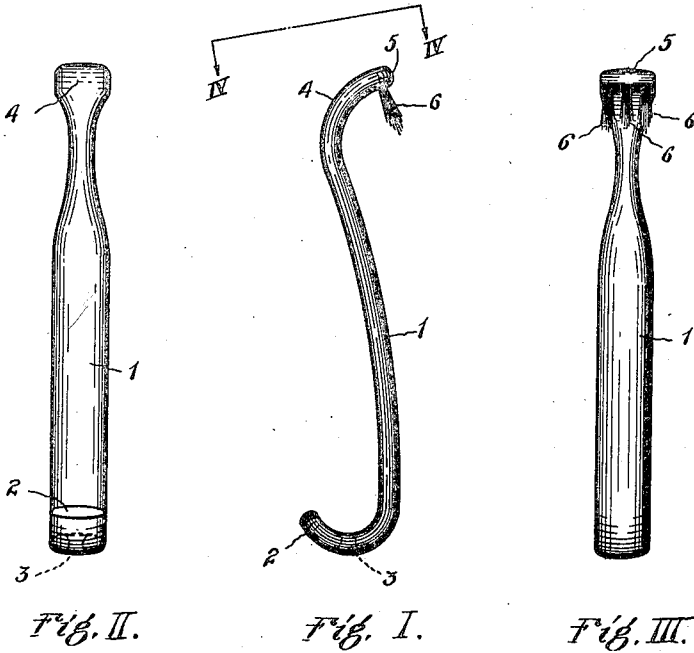
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H. BARNES

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TOOTHBRUSH

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UNITED STATES PATENT OFFICE.

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TOOTHBRUSH.

Application filed May 27, 1918. Serial No. 236,738.

To all whom it may concern:

Be it known that I, HENRY BARNES, a citizen of the United States, residing at No. 600 Schofield Bldg., city of Cleveland, in the
 5 county of Cuyahoga and State of Ohio, have invented a new and useful Improvement in Toothbrushes, of which the following is a specification, the principle of the invention being herein explained and the best mode in
 10 which I have contemplated applying that principle so as to distinguish it from other inventions.

My invention pertains to a tooth brush and more particularly to what I term a lingual
 15 brush because intended to be used against those tooth surfaces which can be reached by the tongue when the teeth are closed.

I have discovered that the bristles should project substantially parallel to the handle
 20 and preferably from a gently curved supporting member as shown.

The bristles are to be laid lengthwise upon the gums over the apical region and drawn over the gums and teeth to the occlusal surfaces. In brushing about the curve of the
 25 typodout arch, the brush itself must be progressively turned in the fingers in conformity to the curves of the arch. The bristles act both as a gum and tooth cleanser and as
 30 a gum massage when a stroke is imparted from the region of the apices or roots of the teeth to the occlusal surfaces or tips of the teeth. During the return stroke, the bristles need not lose contact with the tissues—they
 35 slide back obliquely to the commencing position without any other action than that of a gentle gum massage. The accompanying squeezing action on the gums stimulates circulation thus permitting the healing of the
 40 gums and adjacent tissue by a natural process. This stimulation is without irritation and hastens re-establishment of healthy gum condition which is evidenced by the pale pink tissue and firm construction of the
 45 gums.

Adverting to the drawing:

Figure I is a side elevation of the tooth brush embodying my invention.

Figure II is a back view of the same.

50 Figure III is a front view.

Figure IV is an end view on line IV—IV of Figure I.

Figure V is a view showing how the brush is to be applied to the lingual region of the
 55 mouth.

My brush has a gently curved handle 1

with a curved finger rest extremity 2 provided with a hole 3 by means of which it may be suspended from a small hook when not in use. The other end 4 is inversely
 60 curved, substantially at right angles to the body of the handle, but as is clearly shown in Figure I less sharply so to terminate at a rounded extremity 5. It is this end of the brush which supports the bristles 6. These
 65 latter are so imbedded in the concave side of the end 4 as to project substantially parallel to the general direction of the length of the handle 1. The bristles 6 are moreover preferably located as close to the extremity 5 as
 70 the manner of ordinarily securing them makes feasible. In order to facilitate proper manipulation of the brush I have discovered that the bristle supporting end 4 should extend from the handle at an angle of less
 75 than 90° and preferably at an angle which, if established by a line passing through its extremity 5 and the point of departure of the end 4 from the handle 1, would be substantially 45°. A single cross row of bristle
 80 clusters or tufts has proven entirely satisfactory and the middle cluster is preferably somewhat shorter than the two end clusters as may be clearly seen in Figure III. Together, the tufts of bristles form a body of
 85 bristles having its greatest dimension transverse and substantially equal to the width of the handle. With such an arrangement the lingual surface of each tooth may be separately brushed, the two longer end clusters
 90 being purposed to project through the interstices while the shorter middle cluster spreads over the tooth, during operation by an endwise movement in the direction of the
 95 length of the handle.

I claim:—

A tooth brush comprising a handle having a brush-carrying end extending transversely to the body of the handle, tufts of bristles mounted in said end and projecting therefrom approximately parallel with the body
 10 of the handle and toward the opposite end thereof, said tufts of bristles forming together a body of bristles having its greatest dimension measured in the direction of the
 15 width of the handle and adapted to operate by an endwise movement in the direction of the length of the handle in cleansing the inner or lingual surfaces of the teeth.

Signed by me, this 23rd day of May, 1918.

HENRY BARNES.