

Jan. 21, 1947.

R. W. STAVELY

2,414,775

TOOTHBRUSH

Filed Sept. 6, 1945

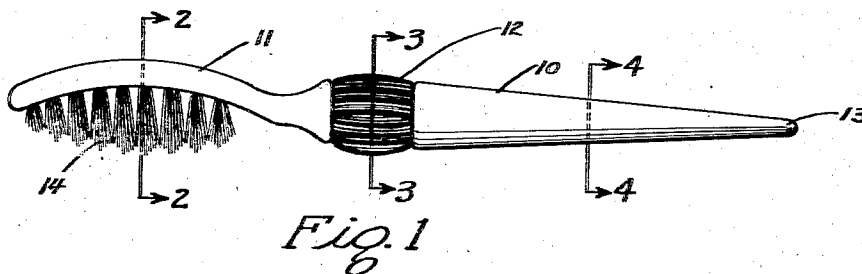


Fig. 2

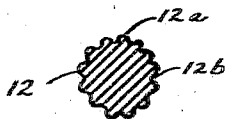


Fig. 3



Fig. 4

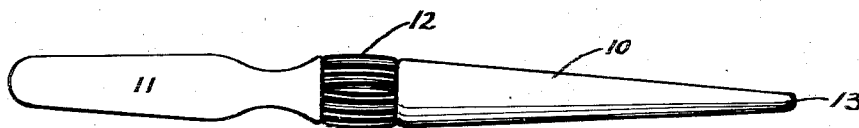


Fig. 5

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2,414,775

TOOTHBRUSH

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Application September 6, 1945, Serial No. 614,673

1 Claim. (Cl. 15-167)

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This invention relates to toothbrushes and has for its general object to provide a brush of this character which is so constructed as to enable the operator to effect a cleansing of the teeth by imparting a rotary movement to the bristle portion of the brush in a particularly efficient manner; also to provide a brush of this type which will enable the foregoing cleansing operation to be accomplished while also enabling the operator to effect a cleansing of the teeth by movements of the bristle portion of the brush transversely of the axes of the latter as well as longitudinally of the axes thereof.

Further and more limited objects and advantages of my invention will be realized by the construction shown in the drawing hereof, wherein Fig. 1 represents a side elevational view of a brush constructed in accordance with my invention; Figs. 2, 3 and 4 are sectional views taken, respectively, on the lines 2-2, 3-3 and 4-4 of Fig. 1 and looking in the directions of the arrows; and Fig. 5 is a rear elevational view of the said brush.

The brush illustrated in the drawing comprises a handle, indicated generally at 10, which has formed therewith the bristle support 11. The handle proper, 10, is comparatively short and is provided adjacent to the bristle support 11 with an outwardly convex frictional gripping portion or surface 12 extending therearound and being coaxial with the axis of the handle, the said surface being shown as formed by means of ribs 12^a with intervening corrugations 12^b.

In practice, the portion of the handle which extends rearwardly, or away from the bristles, is only of sufficient length to enable the end 13 to be pivotally supported against the little finger of the operator while the surface 12 is gripped between his thumb and forefinger. Due to this construction, the brush handle and the bristle carrier and bristles may be conveniently rotated, whereby the bristles 14 may be given an "up-and-down" movement, or movement longitudinally of the axes of the teeth, which movement is highly

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recommended by dentists. Still further, the brush may be operated transversely of the teeth, either while the brush is being given the rotary to-and-fro movements described hereinbefore, or while such movements are suspended.

For the purpose of obtaining a balance of weight about the axis of the brush as a whole, the bristle carrier 11 is given an arcuate form, as shown, while the outer ends of the bristles preferably conform to a curve which is opposed and complementary to the curvature of the inner surface of the bristle carrier and with both curves being preferably symmetrical with respect to the axis and having their ends in substantially the plane of said axis.

Having thus described my invention, what I claim is:

A toothbrush comprising an elongated handle and a bristle-carrier connected thereto and extending outwardly from one end thereof, the bristle-carrier being provided with bristles and having its inner surface concave in the direction of the longitudinal axis of the handle and the outer ends of the bristles conforming to a curve which is convex and which is opposed to and substantially complementary to the curvature of the inner surface of the bristle-carrier and with both curves substantially symmetrical with respect to the axis of the brush handle and having their ends substantially lying in the extended axis of said handle, the handle being provided adjacent to the bristle-carrier with a gripping portion extending therearound, the said gripping portion being generally circular in section and extending symmetrically about the axis of said handle, whereby a substantial balance of weight of the brush as a whole about the axis of said handle may be obtained, and the portion of the handle which extends from the bristle-carrier being of such length as to enable the end of the same to engage and pivot upon a finger of the operator which is remote from the forefinger.

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