H. EPSTEIN & W. CILER.

TOOTH BRUSH.

APPLICATION FILED OCT. 4, 1913.

1,111,144. Patented Sept. 22, 1914.

Fig. 1.

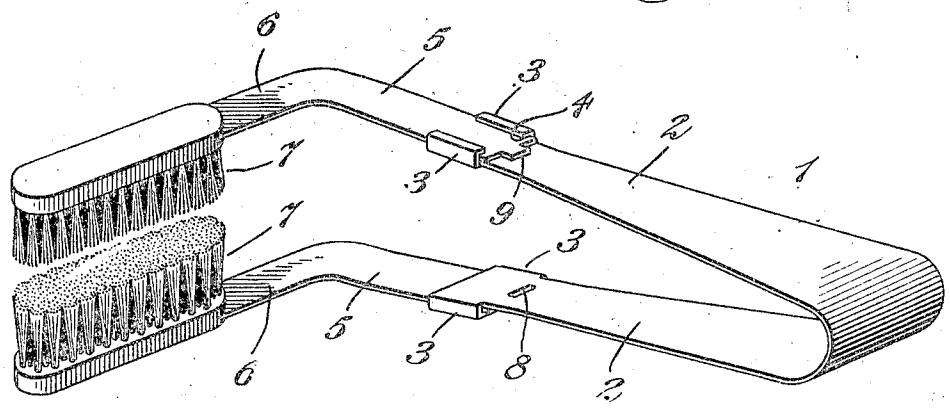


Fig. 2.

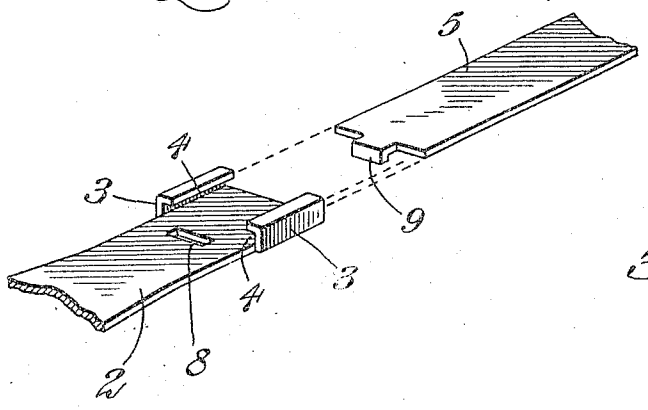
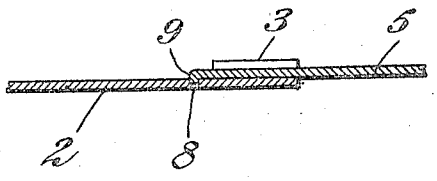


Fig. 3.



WITNESSES

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HARRIS EPSTEIN AND WILLIAM CILER, OF NEW YORK, N. Y.

TOOTH-BRUSH.

1,111,144. Specification of Letters Patent. Patented Sept. 22, 1914.

Application filed October 4, 1913. Serial No. 793,342.

To all whom it may concern:

Be it known that we, HARRIS EPSTEIN and WILLIAM CILER, both citizens of the United States, and residents of the city and State of New York, have invented certain Improvements in Tooth-Brushes, of which the following is a specification.

This invention relates to certain improvements in tooth brushes, and has for its object to provide a device of this general character of a simple and comparatively inexpensive nature, and of a strong and durable construction capable of reliable and effective operation to cleanse both the inner and external surfaces of the teeth simultaneously, and of such structure as to permit of being readily and conveniently adjusted in order to permit of being used to quickly and thoroughly cleanse the teeth.

The invention consists in certain novel features of the construction, and combinations and arrangements of the several parts of the improved tooth brush, whereby certain important advantages are attained, and the device is rendered simpler, cheaper and otherwise better adapted and more convenient for use, all as will be hereinafter fully set forth.

The novel features of the invention will be carefully defined in the claims.

In order that our improvements may be the better understood, we will now proceed to describe the invention with reference to the accompanying drawings, wherein—

Figure 1 is a perspective view illustrating one embodiment of our invention; Fig. 2 is an enlarged fragmentary perspective view illustrating certain features of construction of the detachable connection for the brush members, and Fig. 3 is an enlarged sectional view illustrating certain features of the detachable connection shown in Fig. 2.

As shown in these views, the improved tooth brush has a handle member 1, formed from flattened spring material, such as spring metal, for example, and provided with divergent forks or bifurcations 2, 2, spaced apart from each other, but adapted to be pressed toward each other by pressure of the fingers when the handle member is grasped within the user's hand.

The forks or bifurcations 2, 2, are provided at their free outer ends, with spaced edge flanges 3, 3, which are undercut, as indicated at 4, 4, to receive between them an extension member 5, of which one is provided for each of the forks or bifurcations of the handle member, each such extension member being adapted, when its extremity is in place between said flanges 3, 3, to form an extension or prolongation of the corresponding fork or bifurcation, and having its outer end bent laterally as indicated at 6 in the drawing, and provided with a brush surface of bristles or the like, as shown at 7.

The bends or curvatures of the extension members are similar to each other, and their bristle or brush surfaces 7, 7 are reversely positioned thereon, so that when the parts are assembled, as indicated in Fig. 1 of the drawings, the improved brush may be used very conveniently for cleansing both the inner and external surfaces of the teeth, the bends or curvatures of the extension members permitting the application of the brush surfaces to the teeth at opposite sides of the mouth without interference from contact of the handle member with the teeth.

The detachable connection of the extension members permits them to be readily removed and replaced when worn, and as shown herein, the extension members are of such a length as to permit them to be used separately as ordinary tooth brushes when desired, or upon detachment from the handle member, to be applied thereto in reversely adjusted position, in which case the resilience of the handle member permits its forks to be pressed into contact in such a way that the device presents a brush surface at each of its opposite sides. For retaining the brush members in adjusted position upon the handle member, the arms or bifurcations of the latter are provided with narrow elongated apertures 8, 8, which are engaged by resilient tongues 9, 9 produced upon the extension members.

The improved tooth brush, constructed according to our invention is of an extremely simple and comparatively inexpensive nature, and is particularly well adapted for use by reason of the facility and rapidity with which the teeth may be cleansed by its use, and the readiness with which the brush members may be removed, replaced and adjusted upon the handle member, and it will also be obvious from the above description that the device is susceptible of

considerable modification without material departure from the principles and spirit of the invention.

Having thus described our invention, what we claim and desire to secure by Letters Patent is—

1. A tooth-brush of the type described consisting of a pair of reversely positioned scouring members provided with shanks adapting them for separate use, a handle of resilient material intermediately bent to form a fork or bifurcation with normally divergent prongs compressible toward each other, and detachable connections between said prongs and the shanks of said scouring members permitting the removal or substitution of either member and the use of the other member alone at option, said connections including inwardly turned flanges on opposite edges of said handle prongs, apertures in the prongs located in advance of said flanges, the free ends of said shanks of the scouring members slidably engaging the flanges on the prongs from the outer ends thereof respectively, and laterally projected tongues on said ends of the shanks insertible in said apertures.

2. A tooth-brush of the type described comprising two scouring members capable of use separately and conjointly, said members being provided with shanks intermediately bent edgewise, both in the same direction, and a handle of flexible material doubled upon itself to form a fork or bifurcation having prongs interchangeably engageable with said shanks, whereby the scouring members may be reversely positioned for use either face to face or back to back and may be pressed together or held apart at will.

In witness whereof we have hereunto set our names, in the presence of two subscribing witnesses.

HARRIS EPSTEIN.
WILLIAM CILER.

Witnesses:
J. D. CAPLINGER,
W. C. ABBOTT.