B. H. ROST.

TOOTHBRUSH.

APPLICATION FILED JULY 26, 1920.

1,415,898. Patented May 16, 1922.

Fig. 1.

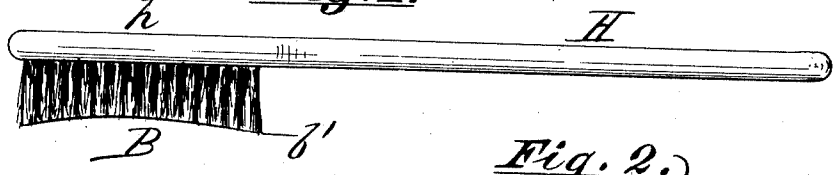


Fig. 2.

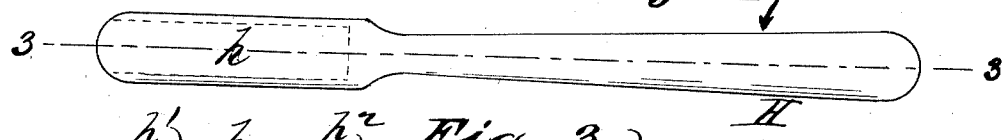


Fig. 3.

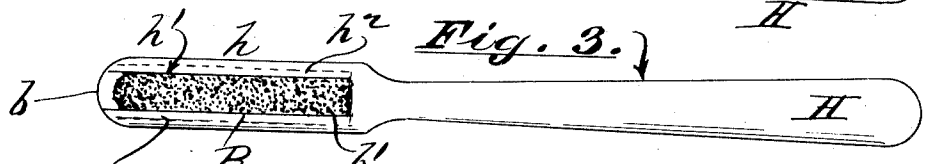


Fig. 4.

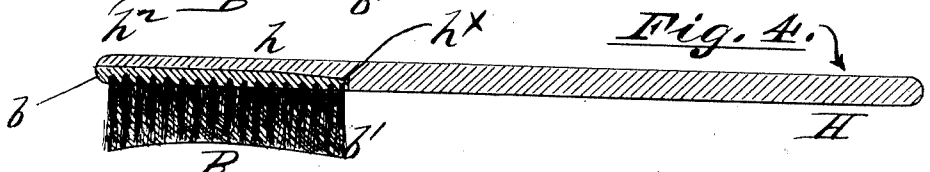


Fig. 5.

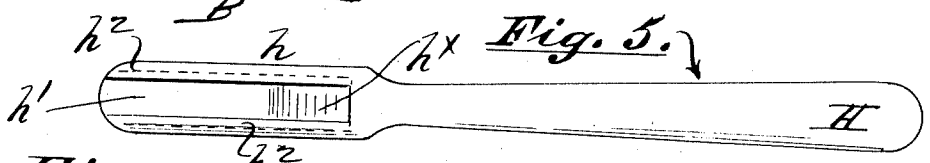


Fig. 8.

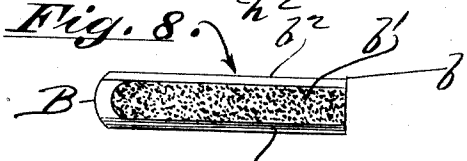


Fig. 6.

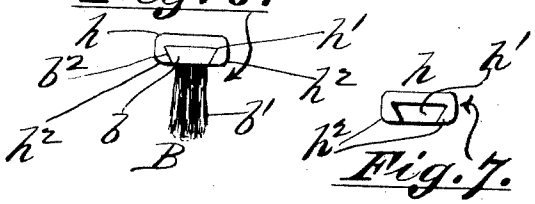


Fig. 7.

Fig. 9.

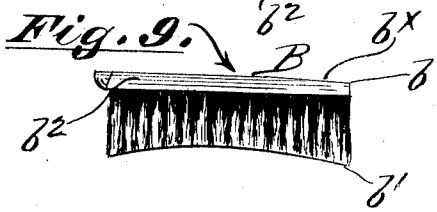


Fig. 11.



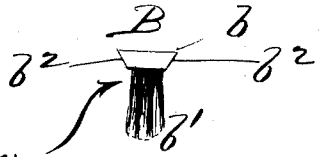


Fig. 10.

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UNITED STATES PATENT OFFICE.

BENJAMIN H. ROST, OF NEW YORK, N. Y.

TOOTHBRUSH.

1,415,898. Specification of Letters Patent. Patented May 16, 1922.

Application filed July 26, 1920. Serial No. 399,143.

To all whom it may concern:

Be it known that I, BENJAMIN H. ROST, a citizen of the United States, and a resident of the borough and county of Bronx, city and State of New York, have invented certain new and useful Improvements in Toothbrushes, of which the following is a specification.

The object of my invention is to promote dental sanitation by means of replacement tooth brushes adapted to be quickly and conveniently secured in position for use in a holder or handle of special construction, and to be as readily removed and discarded after use,—it being a fact recognized and established by dentists and hygienists generally that the ordinary permanent form of tooth brush is detrimental to health and a hindrance to, rather than a promotor of, germicidal conditions, owing to lack of proper sterilization. In other words, the usual tooth brush, owing to its average uncleanliness, becomes a vehicle for the propagation and transmission of germs and bacteria instead of a preventive thereof.

I obviate such harmful conditions and results by the provision of fresh, clean, new, sterile brushes or equivalent contactual means of tooth cleaning, for use upon occasion,—my discardable brush replacements being of simple and inexpensive construction, and adapted to be manufactured and sold independent of, and as supplementary to, the handle or holder in conjunction with which they are to be used.

In accordance with the foregoing synopsis my invention consists in the specific construction, combination and arrangement of parts herein described and claimed,—distinctive features being the formation of a rigid brush holder or handle with a flanged mortise for the reception and support of a replacement brush the back of which is rigid and correspondingly shaped to fit said flanged mortise, and in forming both mortise and brush back with inclined contactual wedge surfaces whereby the brush may be firmly positioned in the handle for use, all as hereinafter fully set forth.

In the accompanying drawings,

Fig. 1, is a side elevation of my improved composite tooth brush, ready for use;

Fig. 2, is a view of the back thereof;

Fig. 3, is a view of the front thereof;

Fig. 4, is a central vertical longitudinal section taken upon plane of line 4—4, Fig. 2;

Fig. 5, is a face view of the brush handle, without a replacement brush;

Fig. 6, is a front end view of the brush handle and brush;

Fig. 7, is a front end view of the handle without a replacement brush;

Fig. 8, is a face view of a replacement brush;

Fig. 9, is a side elevation thereof;

Fig. 10, is an end view of a replacement brush; and

Fig. 11, is a view of the back thereof.

H, represents a handle such as is ordinarily provided for tooth brushes, the main difference being that its forward portion or head h, is recessed to form an elongate mortise h', for the reception of the spine or back b, of a detachable and replaceable brush B,—said back b, having attached thereto bristles b', or equivalent means for cleaning the teeth and gums by contactual engagement therewith. Thus, the construction of the brush section B, may be in accordance with any of the well known methods in vogue in the art of manufacturing tooth brushes, except that my replacement brush B, is formed without a handle. In lieu thereof, the back b, of the brush is formed to fit in the elongate mortise h', of the permanent holder or handle H, as before intimated.

A preferred method of providing for temporary copulation between the replacement brush B, and the handle H, is to form the mortise h', in the latter with inwardly convergent or dove-tail side flanges h^2, h^2, as shown more particularly in Figs. 6 and 7, and to correspondingly bevel the longitudinal edges b^2, b^2, of the brush back b, so that the dovetail back or spine b, of the replacement brush B, thus created will slide and fit snugly within the recess h', of the holder H.

In order to insure a tight fit between the parts, I form the floor of the mortise h', with an inclined surface h^x, rearwardly convergent toward the face side of the handle H, as shown in Fig. 4, and make the rear end of the brush spine or back b, wedge shaped, as shown more particularly in said Fig. 4, and in Fig. 9, of the drawings. Hence, when desired for use, a replacement brush B, may be quickly attached to the handle H, with sufficient firmness and rigid-

ity for all practical purposes as related to oral and dental cleaning, and yet be capable of detachment by hand from the holder H, for discardure after such use.

Many scientific writers have of late warned the laity, and the dental profession, of the danger of germ propagation and disease incidental to the use of the ordinary tooth brush; and my invention is designed to solve the difficulty in a simple and positive manner, obviating the inconvenience and uncertainties of sterilization, (which is seldom efficacious) and hence promoting health and cleanliness in a simple and practical manner.

What I claim as my invention and desire to secure by Letters Patent is,

As an improved article of manufacture, a tooth brush comprising a rigid handle the forward portion of which is formed with an open-end elongate dovetail mortise the rear portion of the floor of which is inclined outward and terminates in an approximately rectangular transverse shoulder, and a removable brush the back of which is of dovetail shape in cross section and the insert end of which is inclined and terminates in a transverse rectangular shoulder for engagement with that at the rear end of said handle mortise, whereby the inward thrust of the brush is limited and prescribed as related to the handle, as and for the purpose set forth.

BENJAMIN H. ROST.

Witnesses:
GEO. WM. MIATT,
DOROTHY MIATT.