

No. 887,181.

PATENTED MAY 12, 1908.

E. D. BARNES.
TOOTH BRUSH.

APPLICATION FILED JULY 22, 1907.

Fig. 1.

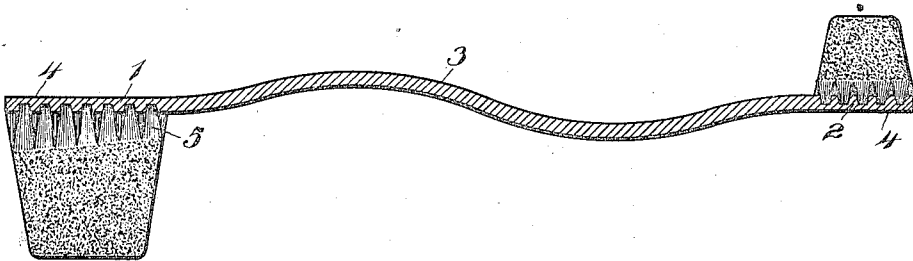


Fig. 2.

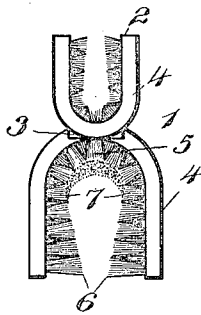


Fig. 3.

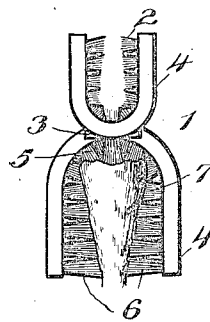
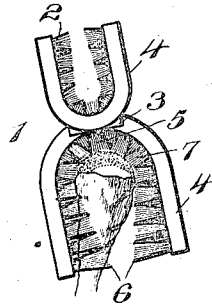


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

ELIAS D. BARNES, OF TARBORO, NORTH CAROLINA.

TOOTH-BRUSH.

No. 887,181.

Specification of Letters Patent.

Patented May 12, 1908.

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To all whom it may concern:

Be it known that I, ELIAS D. BARNES, a citizen of the United States, residing at Tarboro, in the county of Edgecombe and State of North Carolina, have invented certain new and useful Improvements in Tooth-Brushes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to tooth brushes, and has for its object to provide a brush which is particularly designed to be used in the treatment of Riggs disease of the teeth, but which is adapted to be employed as a tooth brush generally.

Riggs disease of the teeth seems to be very prevalent, and being an accumulation of calculus starting on the necks of the teeth is due primarily to a disregard of the teeth and also to the fact that it is difficult to remove the regular deposits of foreign matter on the necks of and between the teeth.

My invention has for its object to provide a brush which not only reaches but hugs the necks of the teeth on both sides thereof in such manner that when a brushing motion is imparted the bristles not only thoroughly cleanse the necks of the teeth but enter between the teeth from both sides in such manner that a thorough and absolute cleansing is effected.

A further object of my invention is to provide a brush which also reaches the buccal surface of the teeth, the palatine surface, the posterior proximo and anterior proximo.

With these objects in view my invention consists in the novel disposition of the bristles on the back of the brush; and my invention also consists in the form of the brush in combination with the specific disposition of the bristles thereon as will be first fully described and afterwards specifically pointed out in the appended claims.

Referring to the accompanying drawing: Figure 1 is a longitudinal sectional view taken through a brush constructed in accordance with my invention. Fig. 2 is an end elevation of the same. Fig. 3 is an end elevation showing position of brush on tooth, and Fig. 4 is a similar view showing position of brush when utilizing same for removing

deposits from between the teeth near the necks thereof.

Like numerals of reference indicate the same parts throughout the several figures in which,—

1 and 2 indicate the brushes, and 3 the handle connecting the same as shown in Fig. 1. The brushes 1 and 2 comprise a substantially U-shaped back 4, the brush 1 being larger than the brush 2 as clearly shown in the drawing; the large brush being of a size sufficient to encompass the posterior teeth while the small brush 2 is of a size sufficient to encompass the upper anterior and also lower anterior teeth.

Referring to Fig. 1 it will be seen that the bristles 5 along the top thereof are larger at the outer end of the brush and greatly diminish in length; while it is seen in Figs. 2, 3 and 4 that the bristles 6 on the lower portion of the brush are longer than the central or intermediate bristles 7. The purpose of this construction is at once apparent when reference is had to Figs. 3 and 4. The neck of the teeth being narrower than the remaining portion thereof the specific arrangement of the bristles as shown and described allows the brush to snugly hug the teeth in such manner that the entire tooth and particularly the neck thereof is engaged and cleansed by the bristles; while the arrangement of the bristles 5 (Fig. 1) allow the longer bristles 6 to enter between the teeth on the upper surface thereof in order to remove any deposits.

As shown in Fig. 4 a tilting motion of the brush causes the longer bristles 6 to enter between the teeth at the necks thereof in order to remove any deposits therefrom which is similar to the action of an ordinary tooth pick. By the construction of this brush it is not only possible to thoroughly cleanse the posterior and anterior teeth on the outer surface thereof but to effectually cleanse the inner surface as well as the portions between the teeth, which portions form receptacles for foreign deposits. It is entirely evident that it requires no longer time to cleanse the teeth with this brush than with an ordinary brush now in common use, while it is possible to completely remove all foreign deposits from all portions of the teeth which is practically impossible with the form of brushes in common use. As before stated, this brush is particularly adapted for use in the prevention and treatment of Riggs disease of the teeth, for the reason that as this disease

starts at the neck of the teeth and is due to the accumulation of calculus occasioned by regular deposits of foreign matter Riggs disease cannot attack the teeth so long as they
5 are kept free from foreign deposits on the necks thereof.

Having thus fully described my invention what I claim as new and desire to secure by Letters Patent of the United States is;—

10 A brush of the character described comprising a substantially U-shaped back of a size sufficient to encompass the teeth, said U-shaped back being provided on the inner

surface thereof with suitable bristles or brush material, the bristles under the upper
15 portion of the back diminishing in length from the outer to the inner edge of the back and the bristles on the lower portions of the back increasing in length toward the lower
20 ends of the back, substantially as described.

In testimony whereof, I affix my signature, in presence of two witnesses.

ELIAS D. BARNES.

Witnesses:

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C. HUGH DUFFY.