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P. LEE

1,746,784

TOOTHBRUSH

Filed March 29, 1929

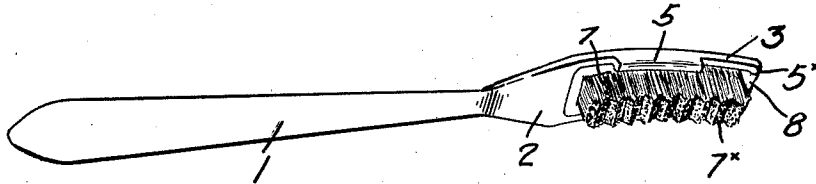


FIG. 1.

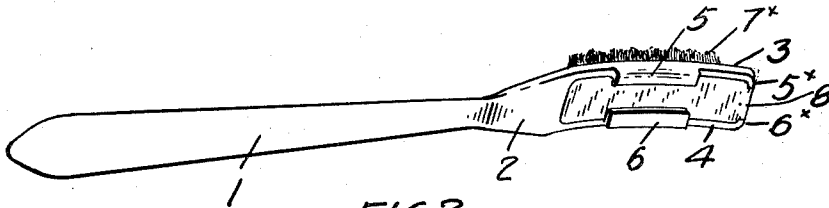


FIG. 2.

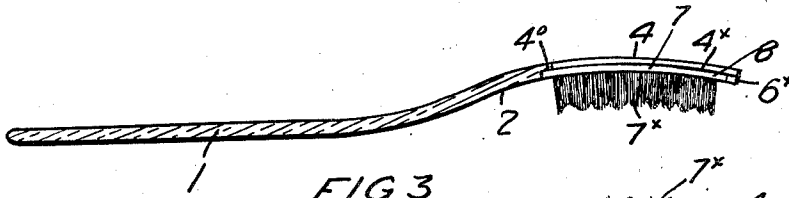


FIG 3

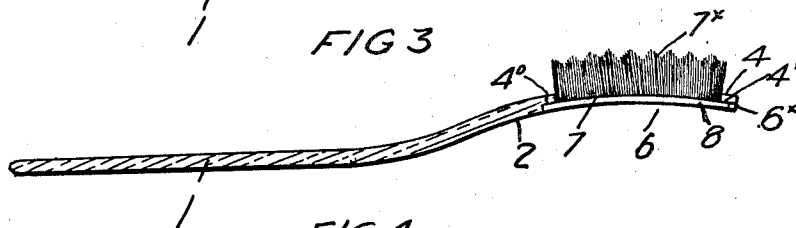


FIG.4.

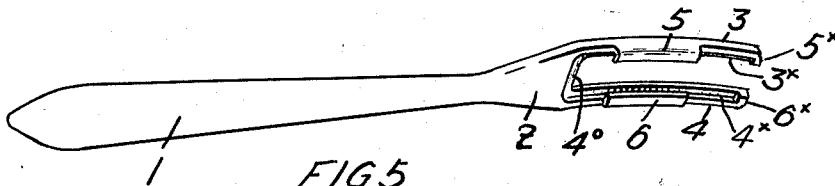


FIG. 5.

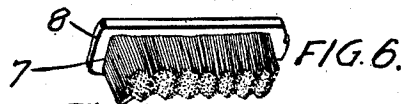


FIG. 6.

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TOOTHBRUSH

Application filed March 29, 1929. Serial No. 351,070.

My invention relates to improvements in tooth brushes, and the object of the invention is to devise a tooth brush provided with a detachable head so that it may be inter-
5 changed or renewed whenever desired, and readily adaptable for cleaning the exterior and interior face of the teeth, and it consists essentially of the arrangement and construction of parts as hereinafter more particular-
10 ly explained.

Fig. 1 is a perspective view of my tooth brush, adapted for cleaning the outer face of the teeth.

Fig. 2 is a similar view to Fig. 1, with the
15 head reversed for cleaning the interior face of the teeth.

Fig. 3 is a longitudinal sectional view through Fig. 1.

Fig. 4 is a longitudinal sectional view
20 through Fig. 2.

Fig. 5 is a perspective detail of the handle of the brush detached from the head.

Fig. 6 is a perspective detail of the head removed from the handle.

25 In the drawing like characters of reference indicate corresponding parts in each figure.

1 indicates the handle of a tooth brush provided with an enlarged end 2, provided with pronged extensions 3 and 4, which are
30 curved so as to form a concave inner face and a convex outer face. The prongs 3 and 4 form an open-ended slot, the opposing sides and inner end of which are recessed as indicated at 3*, 4*, and 4°, forming a receiver for the head of the brush, as will hereinafter ap-
35 pear.

5 and 6 are lips which overhang the side recesses 3* and 4*, intermediate of their length. The outer ends of the recesses 3* and
40 4* are closed by inwardly extending projections 5* and 6*. 7 is a brush head provided with the usual bristles 7*, carried by a resilient backing 8. When inserting the head in the handle of the brush all it is necessary to
45 do is to slip the flexible, resilient backing 8 into the side recesses 3* and 4* of the handle, passing the backing longitudinally thereof beneath the lips 5 and 6 until the end of such backing butts up against the end wall of the
50 recess 4°.

When in this position the opposite end of the backing 8 springs over the projections 5* and 6* so as to drop into the outer ends of the recesses 3* and 4* and thereby temporarily
55 lock the head in position. When the head is inserted as above described and in the manner illustrated in Fig. 1, the outer face of the bristles are slightly concave so that when using the brush the face thereof fits the outer
60 face of the teeth. When it is desired to clean the interior face of the teeth the brush head is removed from the handle and reversed and re-inserted in the position shown in Fig. 2
65 so that the bristles project from the handle in the opposite direction from the convex face of the handle imparting to the outer face of the bristles a convex form which fits the inner face of the teeth when the teeth are
70 being brushed.

By my device also, it will be readily seen
70 that it will be only necessary to provide one handle for several brush heads, so that in a family it will be only necessary to provide one handle and the brush head may be
75 changed for each member of the family. Also when the bristles of the brush head become worn the head may be readily removed and a new head inserted, thus eliminating the expense of buying a new handle
80 when each tooth brush becomes worn out.

Although I have described my device as applied to tooth brushes, it will of course be
85 understood that there are various other types of brushes to which my construction may be applied.

What I claim as my invention is:—

1. A tooth brush comprising a handle member having pronged extensions forming an open-ended slot having the sides and end
90 recessed, a head provided with a back fitting the aforesaid recesses, lips extending from the prongs over the sides of the head, and means for securing the head from longitudinal movement within the recess.

2. A tooth brush comprising a handle
95 member having pronged extensions forming an open-ended slot having the sides and end recessed, a head provided with a back fitting the aforesaid recesses, lips extending from the prongs over the sides of the head, and
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projections formed at the outer end of the prongs and forming closures for the ends of the recesses, and behind which the outer end of the brush head fits.

- 5 3. A tooth brush comprising a handle, prongs extending from one end of the handle, and curved longitudinally to form a concave inner face and a convex outer face, a brush head provided with a flexible resilient back-
10 ing adapted to fit within the slot to conform to the curved shape thereof, and means for retaining the backing within the slot.

- 15 4. A tooth brush comprising a handle, prongs extending from one end of the handle, and curved longitudinally to form a concave inner face and a convex outer face, and having the inner face of the prongs re-
20 cessed, a brush head provided with a flexible backing adapted to fit within the recesses of the prongs, and means for retaining the backing in such recesses.

PING LEE.

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