

May 9, 1933.

C. E. DODSON

1,908,511

TOOTHBRUSH

Filed Dec. 15, 1930

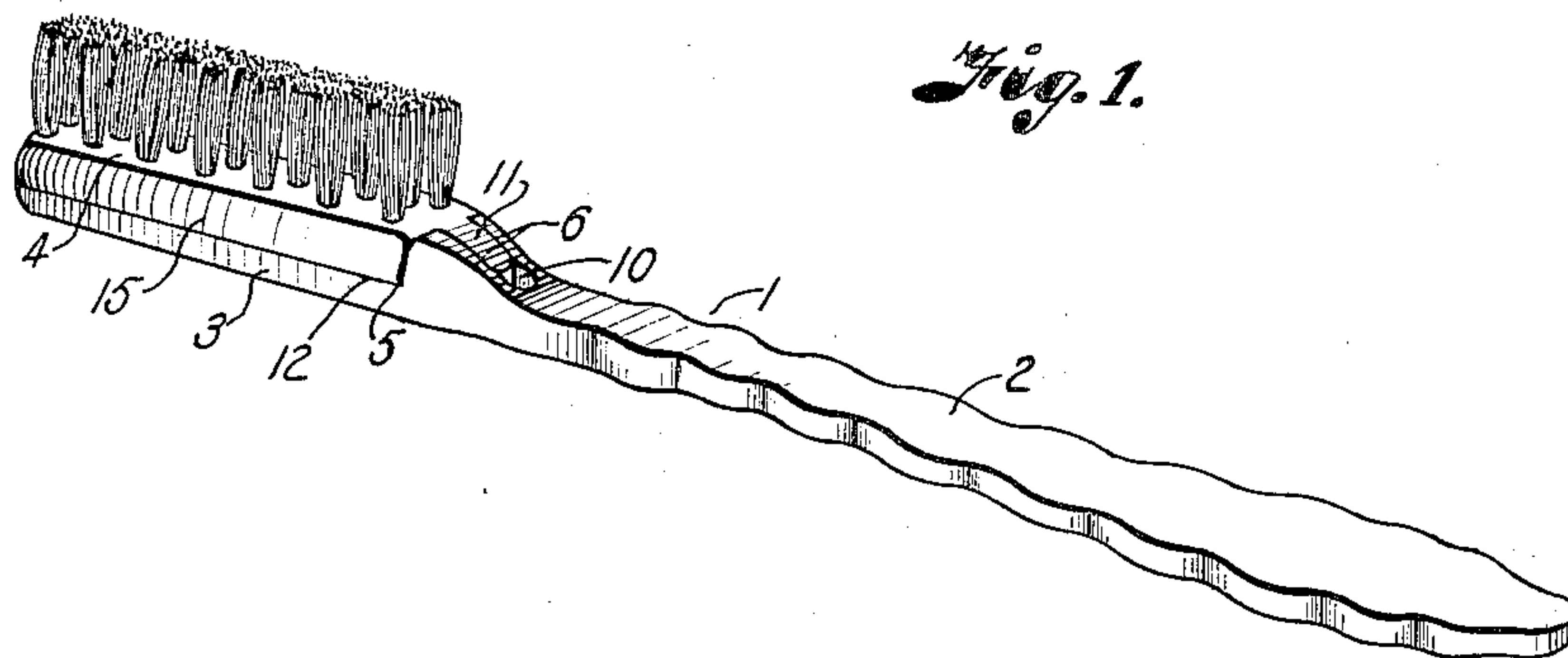


Fig. 1.

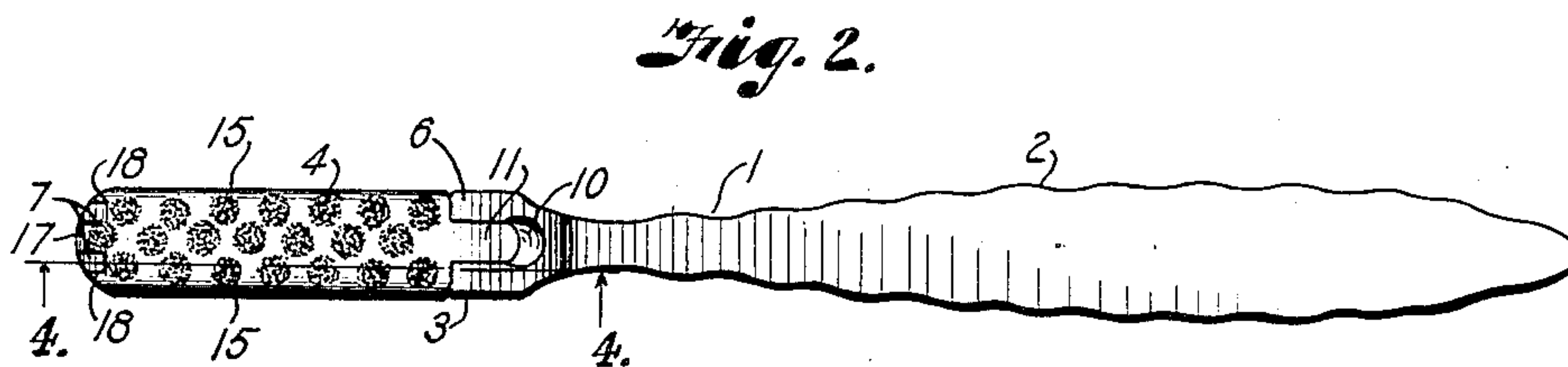


Fig. 2.

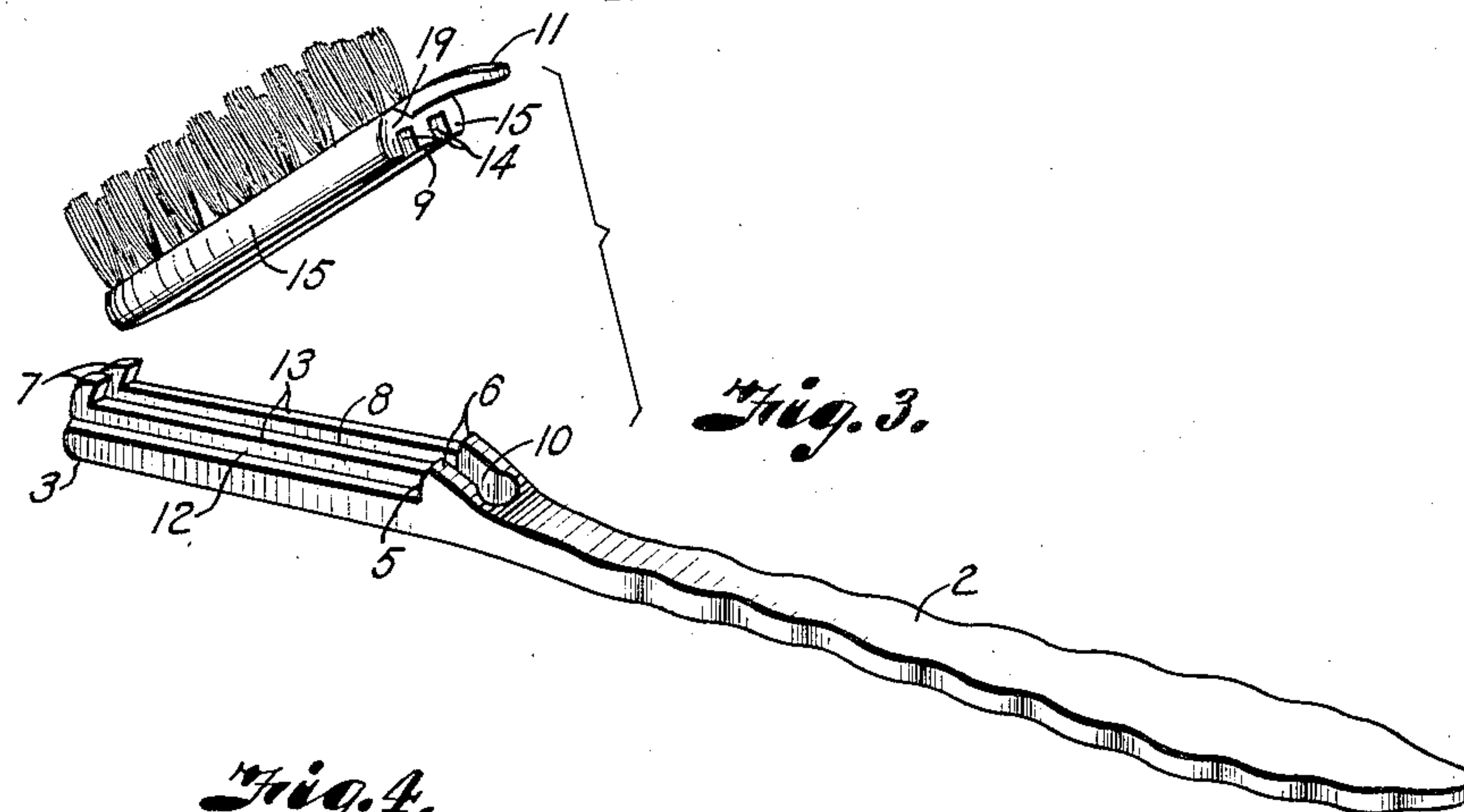


Fig. 3.

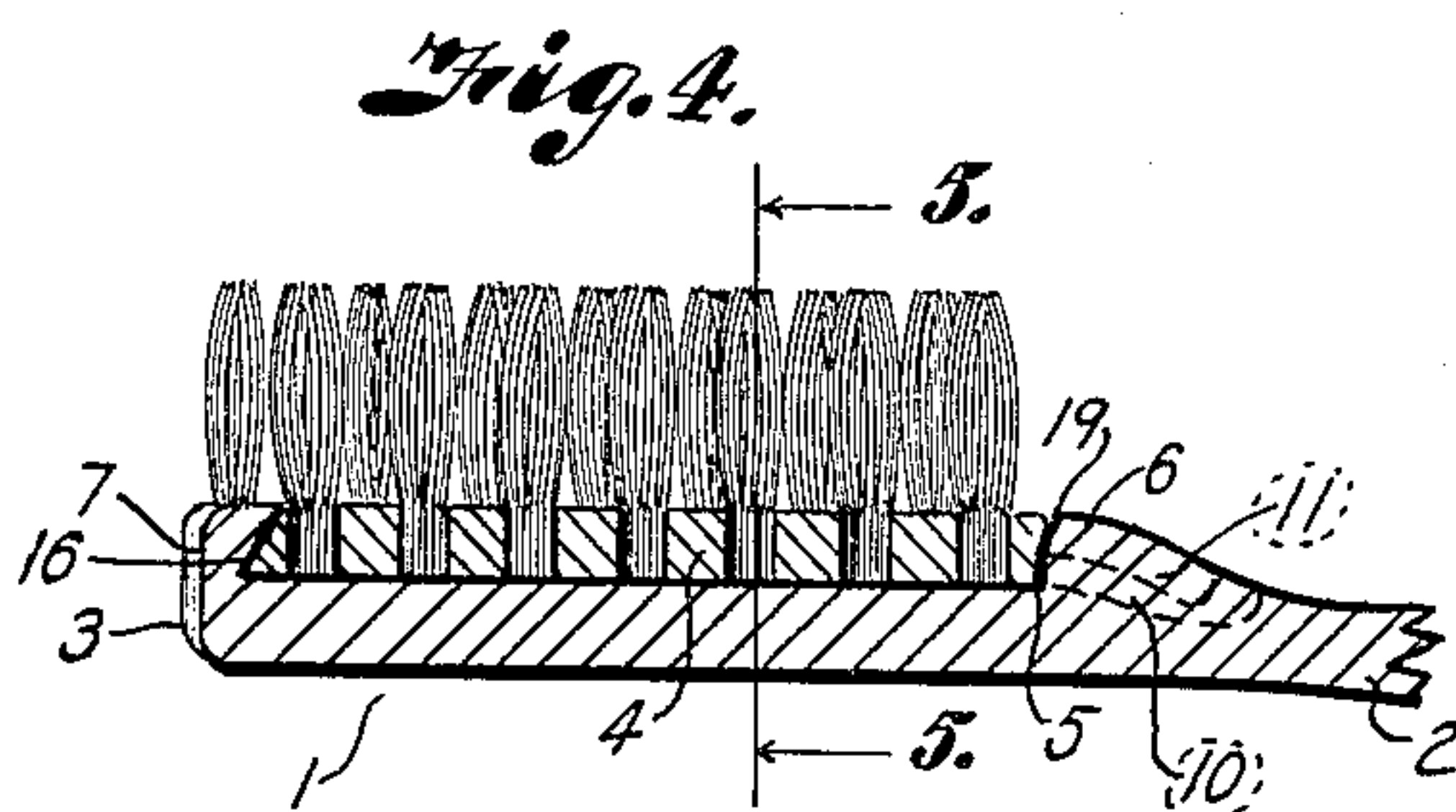


Fig. 4.

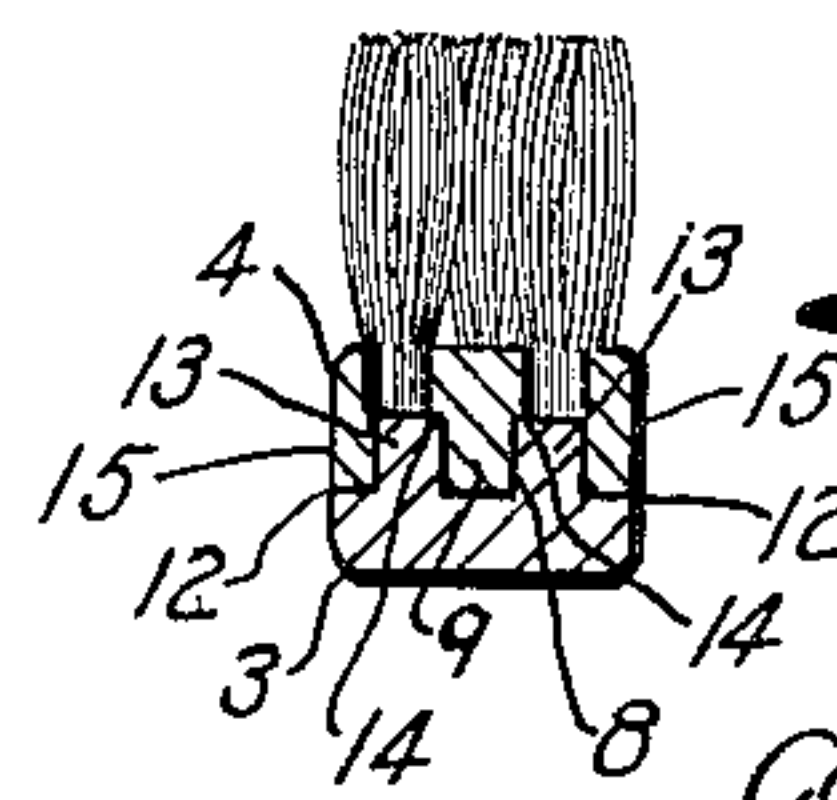


Fig. 5.

INVENTOR.  
Carroll E. Dodson

BY *Wm. C. Brown*  
ATTORNEY.



# UNITED STATES PATENT OFFICE

CARROLL E. DODSON, OF KANSAS CITY, MISSOURI, ASSIGNOR TO LYKO MEDICINE COMPANY, OF KANSAS CITY, MISSOURI, A CORPORATION OF MISSOURI

## TOOTHBRUSH

Application filed December 15, 1930. Serial No. 502,459.

My invention relates to tooth-brushes and more particularly to a brush of that character including a handle having an end portion adapted for carrying a head member; the principal object of the invention being to facilitate replacement of the head member on the handle portion and hold the head member securely to the handle portion when the head member is in place.

In accomplishing these and other objects of the invention, I have provided improved details of structure, the preferred form of which is illustrated in the accompanying drawing, wherein:

Fig. 1 is a perspective view of a toothbrush embodying the features of my invention.

Fig. 2 is a bottom plan view of the brush.

Fig. 3 is a perspective view of the toothbrush showing the head member removed from the handle.

Fig. 4 is a section on the line 4—4, Fig. 2.

Fig. 5 is a section on the line 5—5, Fig. 4.

Referring in detail to the drawing:

1 designates a tooth-brush including a handle member 2 having a head portion 3 and constructed of any suitable material, such as celluloid, amber or like compositions which may be readily cast or machined to the desired form to provide retaining means on the head portion for a removable head member 4.

The head portion 3 of the tooth-brush is preferably formed on one side of the handle by the increased thickness of the material and is recessed from adjacent the ends thereof to form a seat 5 between retainer ears 6 and 7 for receiving and retaining the head member 4 in assembled relation thereon, as hereafter described.

Extending centrally and longitudinally through the head portion below the seat 5 is a groove 8 receiving a longitudinal tongue 9 on the head member 4 for properly aligning the head with the head portion of the handle and having an enlarged portion 10 for receiving a finger 11 projecting from one end of the head, the end of the finger being spaced from the end of the groove when en-

gaged therein to permit lifting of the finger for removing the head from the seat 5.

Formed in the sides of the head portion 3 and extending parallel with the central groove 8 are recesses 12 terminating adjacent the ears 6 and forming rail portions 13 on opposite sides of the groove 8 for engaging slots or channels 14 on opposite sides of the tongue 9 on the head member.

The recesses 12 are adapted for receiving the side flanges 15 of the head member which lie flush with the side edge surfaces of the head, thus forming a smooth continuous surface for the head of the brush when the head member is assembled thereon.

In order that the head member 4 may be retained on the seat 5 when the brush is being used, the ears 7 are undercut slantingly as shown in Fig. 4, and are adapted for engaging the inclined tooth-like edges 16 at the end of the head-member, the edges 16 being set back from the end 17 in slots 18 engageable over the ears 7. The ears 6 at the opposite end of the head member seat 5 are slightly inclined and curved to receive and frictionally engage the tapered end 19 of the head member and thereby retain the head member on the head portion of the handle when the tooth brush is in use.

From the foregoing description it will be apparent that the head member 4 may be fitted with different attrition means such as bristles as shown of different degrees of stiffness and that the head members may be readily interchanged for different treatments or removed for replacement by new head members after the attrition means have become worn. It will also be apparent that the head members 4 may be fitted with pads adapted particularly to treat the gums or the teeth, or both, thereby increasing the usefulness of the tooth-brush handle.

What I claim and desire to secure by Letters Patent is:

1. A tooth-brush including a handle having a longitudinal groove and longitudinally spaced ears on each side of the groove forming retainer means thereon, and a head member having retainer means removably and frictionally engaging the retainer means on



the handle to maintain the head member and handle in assembled condition.

2. A tooth-brush including a handle having retainer means including a longitudinal  
5 groove and longitudinally spaced fixed ears on each side of the groove forming a seat, and a head member engageable with said seat and having retainer means including a tongue  
10 removably and frictionally seated in said groove for latching the head member on said handle.

3. A tooth-brush comprising a handle having an enlarged end portion forming a head and provided with a longitudinal groove  
15 terminating in a socket having an arcuate bottom, tongues on each side of said groove having undercut ears on the ends thereof, portions of said tongues being inset from the side edges of the head to form shoulders, a  
20 head member comprising a base portion having grooves to receive said tongues forming a tongue receivable in the groove of the handle head, flanges on said head member engageable with said shoulders having under-  
25 cut ends engageable with said beveled ears, and a finger projecting from one end of said head member receivable in said socket.

4. In a device of the character described, a handle having a pair of spaced rails on one  
30 of its faces forming a groove, and a head member having a tongue engageable in said groove and flanges spaced from the tongue to engage the outer side faces of said rails for frictionally latching the head member to said  
35 handle.

5. In a device of the character described, a handle having spaced longitudinal rails on one of its faces forming a groove and inset  
40 from the side edges of the handle to form shoulders, and a head member having a tongue engageable in said groove and having flanges engageable with said shoulders to removably latch the head member to said handle.

6. In a device of the character described, a handle having spaced rails on one of its faces forming a longitudinal groove and having  
45 longitudinally spaced ears at opposite ends of the rails, and a head member frictionally engageable between said ears and having a tongue frictionally engageable in said groove.  
50

7. A tooth-brush including a handle having a head portion of increased thickness on  
55 one side of the handle and provided with a longitudinal groove formed in said head portion to locate the bottom of the groove substantially in the plane of said side of the handle, and having a pair of laterally spaced  
60 ears at one end of the head portion and a head member having a tongue engageable in said groove and end edges engageable with said ears, and having a finger projecting from one end of the head member to engage be-  
65 tween said laterally spaced ears.

8. In a tooth-brush, a handle having a head portion, longitudinally spaced fixed ears on the head portion including an under-  
cut ear at one end of the head portion, and a head member having a beveled end to engage  
70 said undercut ear and an opposite end engageable with the opposite one of said ears for latching the head member on the head portion of the handle.

9. In a tooth-brush including a handle hav-  
75 ing a longitudinal groove and a latching socket, a head member having a tongue on one end engageable in said groove and a rigid finger projecting longitudinally from the op-  
80 posite end of said head member and frictionally engageable in said socket for latching the head member to the handle.

In testimony whereof I affix my signature.  
CARROLL E. DODSON.

85

90

95

100

105

110

115

120

125

130