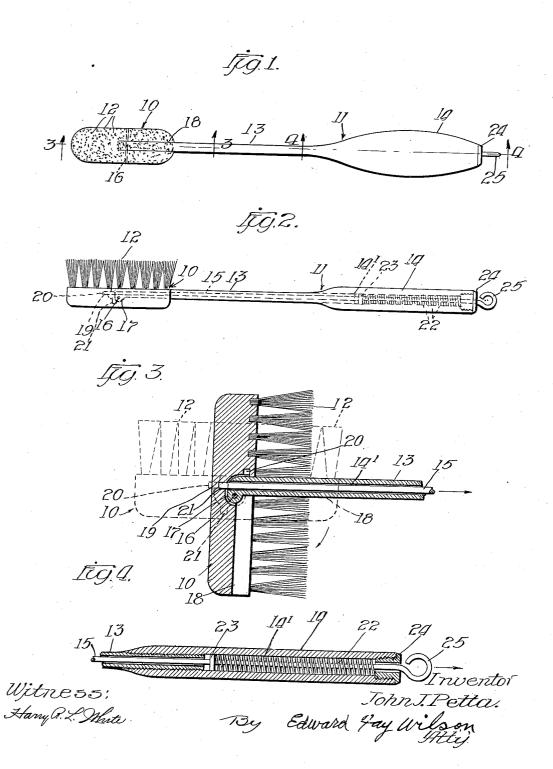
TOOTH BRUSH

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## UNITED STATES PATENT OFFICE

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## TOOTH BRUSH

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3 Claims. (Cl. 15-172)

This invention relates to improvements in tooth brushes and has special reference to a construction which will permit the positioning of the handle of the brush in different relations

5 to the brush proper. The object of the invention is to provide a tooth brush so constructed that the brush can be readily arranged to present the bristles of the brush normally to the interior surfaces of the 10 teeth, that is with the bristles projecting toward the handle, or it can be arranged similarly to the usual form of tooth brush with the bristles projecting out from one side of the handle.

The invention comprises a brush head and a 15 handle, and the two so connected and mutually cooperative that the brush can be readily arranged in a position when the head is in effect an extension of the handle and the bristles project from one side, or the head can be arranged across  $_{
m 20}$  the handle with the bristles projecting toward the handle, and means for latching or locking the two parts in either relative position as desired.

The invention will be more readily understood by reference to the accompanying drawing form-25 ing part of this specification and in which:-

Fig. 1 is a face view of a tooth brush embodying the invention;

Fig. 2, a side view thereof;

Fig. 3, an enlarged sectional view taken on the 30 line 3-3 of Fig. 1; and

Fig. 4 is an enlarged sectional view taken on

the line 4-4 of Fig. 1. As shown in the drawing, my improved tooth brush comprises a head or bristle carrying mem-

35 ber 10 and a handle member 11.

The head 10 is pivotally mounted on one end of the handle member to swing from one relative position as shown in Fig. 1, when the brush simulates an ordinary tooth brush, to a second 40 position, as shown in Fig. 3, when the head 10 is arranged extending across the handle with the bristles 12 projecting toward the handle 11.

The handle is preferably made of a small tube 13, at the end carrying the head 10, and the 45 outer end of the tube 13 is secured in an outer handle part 14 which is shaped approximately like the usual tooth brush handle, that is relatively wide and flat.

The handle part 14 is hollow, that is, it is pro-50 vided with a longitudinal hole 14' in line with the tube 13, and a control rod 15 extends through the handle 11, that is, through the part 14 and the tube 13, and projects from the handle at each end.

The handle ii is pivotally mounted at its inner

end to the head 10 at a point substantially midway between the ends of the head on a pivot pin 16 which extends transversely through the head. The inner end of the tubular part 13 of the handle is enlarged on its side toward the brush head as shown at 17, so that it can be provided with an opening to receive the pivot pin 16 without interfering with the rod 15.

The head 10 is provided with a longitudinal groove 18 extending from one end to the mid- 10 point to receive the tube 13 when the head is arranged extending longitudinally of the handle II.

The inner end 19 of the rod 15 projects from the inner end of the tube 13 past the pivotal point and the head is provided with two holes 20 and 15 21 receiving this projecting end and locking the head in its two positions.

The hole 20 extends in line with the rod 15 when the head extends longitudinally of the handle and the hole 21 extends in line with the 20 rod 15 when the head is swung to its other position, that is to a position at right angles to the handle.

The rod 15 is yieldingly held at the inner limit of its movement in the handle by a spring 22 25 within the hollow handle. The rod is provided with a rigid shoulder 23 against which the inner end of the spring presses and the outer end of the central opening in the handle is closed by a plug 24 against which the outer end of the spring 30 presses.

The outer end of the rod 15 is provided with an enlargement 25 so that it can be grasped and pulled out to free the head 10 from the inner end of the rod and permit the head to be swung 35

from one position to the other.

The construction is very simple, cheap and strong and the head can readily be arranged with the bristles projecting toward the handle for operation upon the inner surfaces of the 40 teeth, especially the front teeth, and can as readily be arranged to project the bristles from one side, like an ordinary tooth brush, and the head is held firmly in both positions.

As many modifications of the invention will 45 readily suggest themselves to one skilled in the art, I do not limit or confine the invention to the specific details of construction except within the scope of the appended claims. 50

I claim:

1. A brush comprising a brush head having bristles projecting from one face thereof, said face being provided with a central groove extending from one end to the center thereof; a handle pivotally mounted at the center of said 55 head to project perpendicularly therefrom or fold into said groove; and means for locking said handle in either of its adjusted positions.

2. A brush comprising a brush head having bristles projecting from one face thereof, said face being provided with a central groove extending from one end to the center thereof; a handle pivotally mounted at the center of said head to project perpendicularly therefrom or fold into

10 said groove; and a spring held locking rod extending through said handle and protruding from the inner end thereof, there being locking

notches in said head to receive the protruding end of said rod to lock said handle in either of its adjusted positions.

3. In a tooth brush, a brush head having bristles projecting from one face thereof, a handle pivotally mounted substantially at the center of said face and movable to project longitudinally of the head or at a right angle to the head from said face and spring pressed releasable means for locking the handle in either of its two positions. 10

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