A. E. FENDRICH.

TOOTHBRUSH.

APPLICATION FILED DEC. 5, 1919.

1,430,967. Patented Oct. 3, 1922.

Fig. 1.

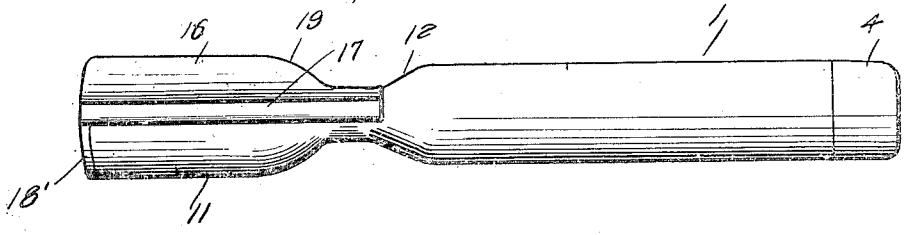


Fig. 2.

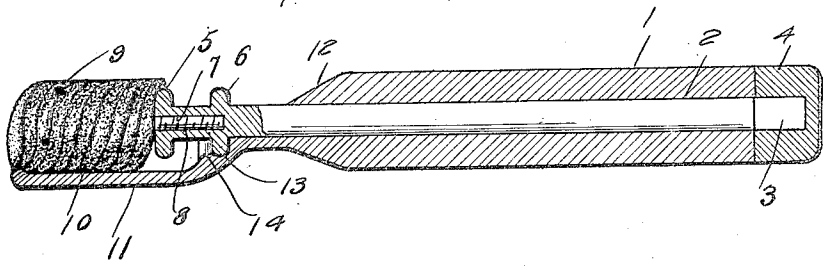


Fig. 3.

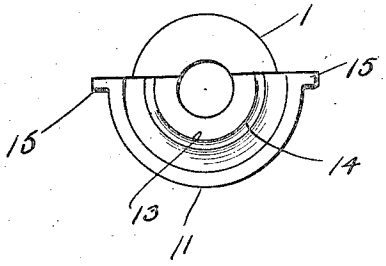
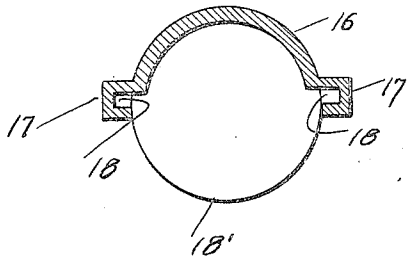


Fig. 4.



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UNITED STATES PATENT OFFICE.

ADAM E. FENDRICH, OF WEEHAWKEN, NEW JERSEY.

TOOTHBRUSH.

Application filed December 5, 1919. Serial No. 342,633.

To all whom it may concern:

Be it known that I, ADAM E. FENDRICH, a citizen of the United States, residing at Weehawken, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Toothbrushes; and I do hereby 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.

This invention relates to new and useful improvements in tooth brushes and more particularly to the rotary type and has for its primary object the provision of a guard that will prevent the lips of a person from being drawn in between the guard and the brush during the operation of the device, thereby obviating any danger of injuring the lips.

Another object of this invention is the provision of means which will permit the removal of the brush from the guard at any time desired.

A further object of this invention is the provision of a tooth brush of the above stated character, which shall be simple, durable and efficient, and which may be manufactured and sold at a comparatively low cost.

With these and other objects in view as will become more apparent as the description proceeds, the invention consists in certain novel features of construction, combination, and arrangement of parts as will be hereinafter more fully described and claimed.

For a complete understanding of my invention, reference is to be had to the following description, and accompanying drawing, in which—

Figure 1 is a side elevation of a tooth brush constructed in accordance with my invention,

Figure 2 is a vertical sectional view of the same with the cover removed,

Figure 3 is an end elevation illustrating the guard with its open end and the guard flanges,

Figure 4 is a detail sectional view of the cover.

Referring in detail to the drawing the numeral 1 indicates a handle of hollow formation to rotatably support an operating rod 2 that extends or projects beyond each end of the handle 1 and has squared faces 3 formed upon one end to receive an actuating member 4 so that on rotating said member the operating shaft 2 will be rotated in the handle 1. The actuating member 4 is detachably secured to the end of the operating rod 2 by frictional contact therewith, whereby said operating rod may be removed from the handle when desired. Relatively spaced annular shoulders 5 and 6 are formed upon the other end of the rod 2 and said end of the rod is provided with a screw threaded socket 7 to receive the screw threaded end of a shank 8 of a brush 9. The shank 8 has secured thereto in spiral formation bristles 10 so as to form a brush of a rotary type.

A semi-circular guard 11 is formed on the end of the handle 1 and partly encloses the brush 9. The end of the handle 1 tapers towards the guard 11 as illustrated at 12 and said guard at its point of formation to the handle is provided with a groove 13 to receive the shoulder 6 to prevent endwise movement of the operating rod in the handle during the use of the device. The groove 13 is provided with a comparatively low wall 14 providing a construction wherein a slight bending or flexing of the end of the operating rod 2 will permit the shoulder 6 to be disengaged from the groove 13 when desiring to remove the operating rod from the handle 1 and after the removal of the operating member 4. The free end of the guard 11 is open to permit the removal of the brush 9 from the operating rod 2 or to permit of the removal of the operating rod 2 from the handle 1. Laterally extending flanges 15 are formed upon the edges of the guard 11 to prevent a person's lips from being drawn in between the guard and the brush during the rotation of the brush.

A cover 16 of substantially semi-circular shape in cross section is provided along its edges with retaining flanges 17 that are of such shape to form grooves 18 that receive the flanges 15 when the cover is slid onto the guard in an endwise direction. One end of the cover carries a circular end wall 18 that is adapted to close the open end of the guard 11 when said cover is applied, thereby completely housing the brush within the guard. The other end of the cover 16 is inclined as illustrated at 19 to conform to the inclined end 12 of the handle 1.

From the foregoing description taken in

connection with the accompanying drawing, it will be noted that when it is desired to use the device for cleaning teeth, the cover 16 is slid endwise from the guard 11 exposing the brush 9 whence the same is placed against the teeth and held in one hand with the handle 1 and with the other hand the operating rod 2 is rotated or oscillated by the actuating or operating member 4. When the device is in use, the lips of the person bear against the guard flanges 15 and prevent them from being drawn in between the guard and the brush.

While I have shown and described the preferred embodiment of my invention, it will be understood that minor changes in construction, combination, and arrangement of parts may be made without departing from the spirit and scope of the invention as claimed.

Having thus described my invention, what I claim is:—

A tooth brush comprising a hollow handle, an operating rod journaled in said handle and extending beyond the end thereof, a brush carried by one end of the rod, a guard carried by the handle to receive a portion of the brush, an annular collar adjacent said end of the rod, said guard having a groove to receive the collar and having one wall of a less height than the other to permit the collar to ride over the same when the rod is manually flexed.

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

ADAM E. FENDRICH.

Witnesses:
LESTER L. DAVIS,
JOHN CALLERY.