

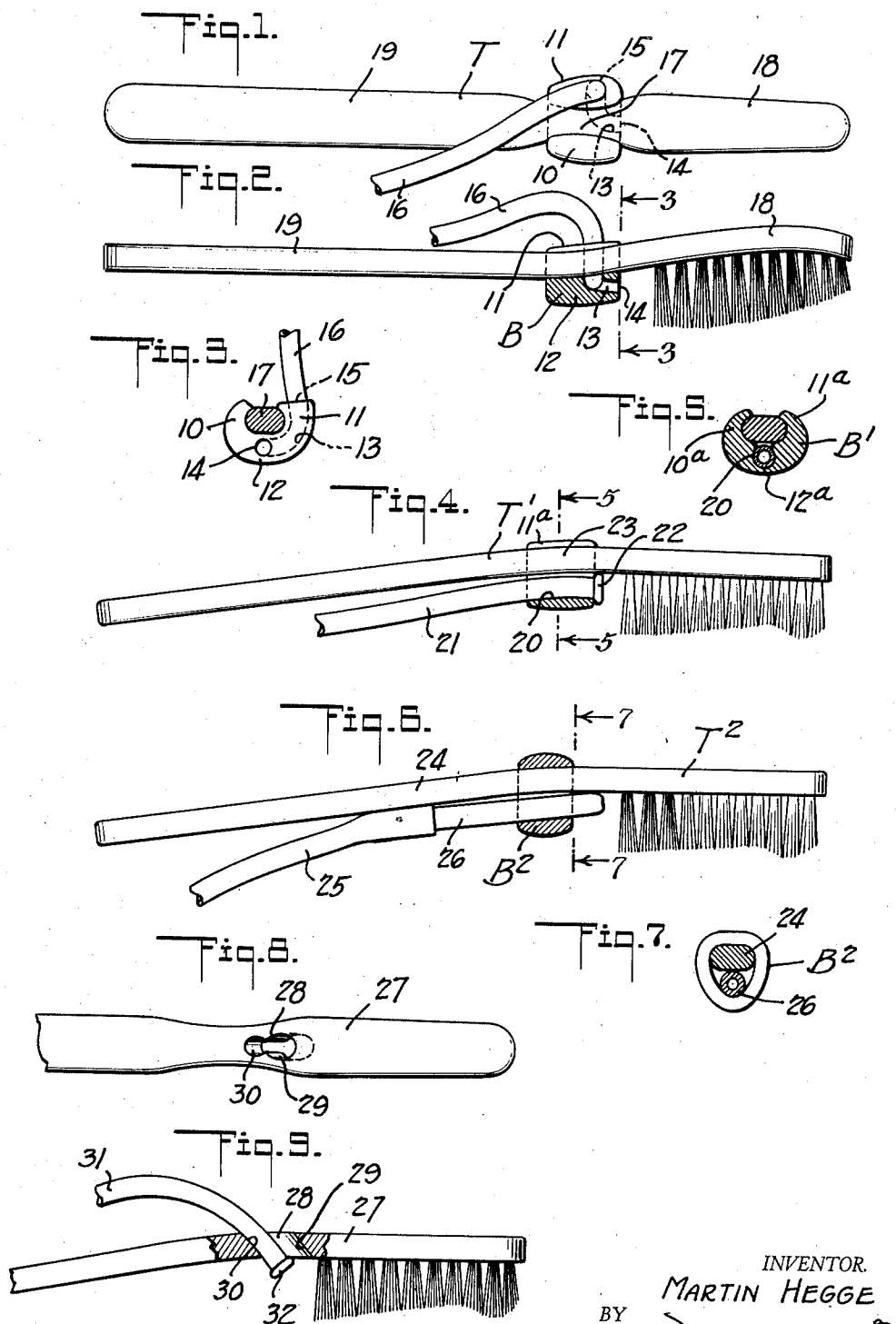
June 6, 1933.

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1,913,079

FOUNTAIN TOOTHBRUSH

Filed Nov. 5, 1931



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FOUNTAIN TOOTHBRUSH

Application filed November 5, 1931. Serial No. 573,251.

This invention relates to and has for a purpose the provision of a tooth brush with which means is associated in a manner to enable a stream of water to be delivered in proximity to the brush bristles while the brush is being manipulated in the mouth, so that any foreign substances on the surfaces of the teeth and gums can be brushed and rinsed therefrom and from the mouth following the operation of brushing the teeth with a suitable cleaning powder or paste, to the end of leaving the mouth clean and sweet.

It is a further purpose of this invention to provide a fountain attachment capable of being applied to and removed from a tooth brush with the utmost ease and dispatch, the attachment when in applied position enabling water from a convenient source of supply such as a faucet, to be delivered to the brush in such proximity to the bristles that as the teeth and gums are being brushed, they will be thoroughly rinsed of any foreign matter thereon.

Four forms of this invention will now be described and the novel features thereof pointed out in claims.

In the accompanying drawing:

Figure 1 is a view showing in plan one form of fountain tooth brush embodying my invention.

Figure 2 is a view in side elevation partly broken away, of the fountain tooth brush shown in Figure 1.

Figure 3 is a transverse sectional view taken on the line 3—3 of Figure 2.

Figure 4 is a view in side elevation partly broken away, of a second form of fountain tooth brush embodying my invention.

Figure 5 is a transverse sectional view taken on the line 5—5 of Figure 4.

Figure 6 is a view in side elevation partly broken away, of a third form of fountain tooth brush embodying my invention.

Figure 7 is a transverse sectional view taken on the line 7—7 of Figure 6.

Figure 8 is a fragmentary plan view of a fourth form of fountain tooth brush embodying my invention; and

Figure 9 is a view in side elevation partly

broken away, of the form of tooth brush shown in Figure 8.

Referring specifically to the drawing, and particularly to Figures 1, 2, and 3, in which similar reference characters designate similar parts in each of the several views, my invention in its present embodiment comprises a body B preferably formed of rubber or other suitable resilient or elastic material. The body is substantially U-shaped in cross section to provide spaced apart resilient portions or jaws 10 and 11, and a connecting portion 12. Through the portions 11 and 12 extends a duct 13 the outlet end 14 of which opens to one end of the body at its connecting portion 12. To the inlet end 15 of the duct 13 is connected one end of a conduit 16 in the form of a length of flexible rubber tubing, the opposite end of which is adapted to be connected to a source of water supply under pressure such as a faucet, for the delivery of water from the faucet to the body and its ejection therefrom in a single stream.

This form of my invention which is in the nature of a fountain attachment for a tooth brush is applied to the latter by spreading the portions 10 and 11 a sufficient amount to permit the insertion of the attenuated portion 17 connecting the bristle carrying head 18 and handle 19 of a tooth brush T. With the attenuated portion 17 received between the portions 10 and 11 of the body B, the portions are released and thereby permitted to co-act in gripping the portion 17 to securely clamp the body to the brush as shown in Figures 1, 2, and 3. With the body thus applied to the brush, the outlet 14 of the duct 13 will be disposed adjacent the heel end of the brush bristles for the delivery of a stream of water in proximity to the bristles, so that as the brush is manipulated in the mouth to brush the teeth following the use of dental paste or powder thereon, the teeth, gums, and the entire interior of the mouth can be thoroughly rinsed of any foreign matter so as to leave the mouth entirely sanitary.

Referring now to Figures 4 and 5, I have herein shown a second form of my invention

also in the nature of a fountain attachment for a conventional tooth brush, which comprises a body B' constructed of elastic rubber, or other suitable resilient material.

5 The body B' is of U-shape in cross section to provide spaced apart resilient portions 10^a and 11^a and a connecting portion 12^a provided with a longitudinal recess 20 opening to the space between the portions 10^a and 11^a, as shown in Figure 5. A conduit 21 in the form of a length of flexible rubber tubing is adapted to be received and clamped in the recess 20 when the body B' is applied to the tooth brush T' as shown in Figures 4 and 10 5, and the outlet end of the tubing is provided with a flange 22 which co-acts with the body to prevent withdrawal of the tubing from the recess. The body is applied to the tooth brush by spreading the portions 10^a and 11^a sufficiently to receive the attenuated portion 23 of the brush, following which the portions 10^a and 11^a are released to cause the portions to co-act in gripping the portion 23 and thus detachably securing the body to the brush with the outlet end of the tubing 21 disposed for the delivery of a stream of water to the bristles of the brush to rinse the mouth in the manner previously described.

30 Referring now to Figures 6 and 7, I have herein shown a third form of my invention also in the nature of a fountain attachment for a conventional tooth brush. This form of my invention comprises a tubular body 35 B² in the form of an annulus of elastic rubber or other suitable resilient material of an internal diameter to freely receive the handle 24 of a tooth brush T². In conjunction with the body B² I provide a conduit in the form of a length of flexible rubber tubing 40 25 having at one end a short section of hard rubber tubing 26.

This form of my invention is applied to the tooth brush T² by first inserting the handle 24 through the opening in the body B², and then inserting the section 26 of the tubing 25 through the opening by expanding or stretching the body, thus causing the body and the tubing to be secured to the brush with the outlet end of the section 26 disposed adjacent the heel end of the brush bristles for the delivery of a stream of water to the bristles when the tubing is connected to a suitable source of water supply.

55 Reference will now be had to Figures 8 and 9 wherein is shown a fourth form of the invention requiring slight modification of a conventional tooth brush which has its bristle carrying head 27 provided adjacent the heel end of the brush bristles with a slot 60 28 extending longitudinally of the head. This slot has relatively enlarged and reduced portions 29 and 30 respectively, the enlarged portion 29 freely receiving one end of a length of flexible tubing 31 pro-

vided on its extremity with a stop flange 32. When the tubing has been inserted through the enlarged portion 29 of the slot, the tubing is shifted rearwardly of the head into the reduced portion 30 of the slot, in which the tubing is snugly received and thus slightly clamped. The stop flange 32 prevents withdrawal of the tubing from the reduced portion of the slot, and it will be noted that the slot extends obliquely through 70 the thickness of the head 27 so as to dispose the outlet end of the tubing 31 at such angle that when the tubing is connected to a suitable source of water supply, water will be delivered in proximity to the bristles for rinsing of the mouth in the manner set forth in connection with the first form of my invention. 75

Although only four forms of fountain tooth brush embodying this invention have been shown and described, it is to be understood that various changes and modifications may be made therein without departing from the spirit of the invention and the spirit and scope of the appended claims. 80 85 90

I claim:

1. A fountain attachment for brushes comprising a U-shaped body of resilient material providing spaced apart resilient portions adapted to be spread to receive and grip the handle of a brush to secure the body to the handle, the body having a duct formed therein and the duct being provided with an inlet and an outlet disposed for the delivery of water in proximity to the brush bristles when the body is applied to the brush, and a conduit connected to the body in communication with the inlet of the duct. 95 100

2. A fountain attachment for brushes comprising a resilient body of U-form in cross section providing spaced apart jaws and a connecting portion co-acting to receive and grip a brush handle to secure the body to the handle, the body having a duct extending through one of its jaws and the connecting portion with the outlet of the duct disposed for the delivery of water in proximity to the brush bristles when the body is applied to the brush, and a flexible tube connected to the body in communication with the inlet of the duct. 105 110 115

3. A brush having a handle projecting from the bristle carrying head thereof and provided with a longitudinally extending slot adjacent the bristles, the slot having relatively enlarged and reduced portions along its length, and a length of flexible tubing insertable through the enlarged portion of the slot for clamping by its reduced portion when the tubing is shifted along the length of the slot into the reduced portion thereof. 120 125

4. A brush having a handle projecting from the bristle carrying head thereof and provided with a longitudinally extending slot adjacent the bristles, the slot having rel- 130

actively enlarged and reduced portions along its length, and a length of flexible tubing insertable through the enlarged portion of the slot for clamping by its reduced portion
5 when the tubing is shifted along the length of the slot into the reduced portion thereof, the tubing having an outwardly projecting flange thereon providing a stop for preventing withdrawal of the tubing from the re-
10 duced portion of the slot.

5. A brush having a handle projecting from the bristle carrying head thereof and provided with a slot adjacent the bristles, and a length of flexible tubing, the slot be-
15 ing of decreasing width longitudinally for the clamping of one end of the tubing against displacement in the smaller end of the slot to secure the tubing to the brush with the outlet of the tubing disposed for
20 the delivery of water in proximity to the brush bristles.

6. A fountain attachment for toothbrushes comprising a substantially U-shaped body of elastic rubber defining a connecting por-
25 tion and a pair of spaced apart portions capable of being spread sufficiently to receive a toothbrush handle and to grip the latter when said pair of portions are released; and a length of flexible tubing, said connecting
30 portion of the body having a recess opening to the space between said pair of portions to receive the tubing when the pair of portions are spread apart, and to grip the tubing when the pair of portions are released and
35 are gripping the toothbrush handle, whereby to secure the body to the handle and the tubing to the body.

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