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E. T. S. CLIFFE

COMBINED TOOTH BRUSH AND PASTE HOLDER

Filed Feb. 21, 1927

Fig. 1

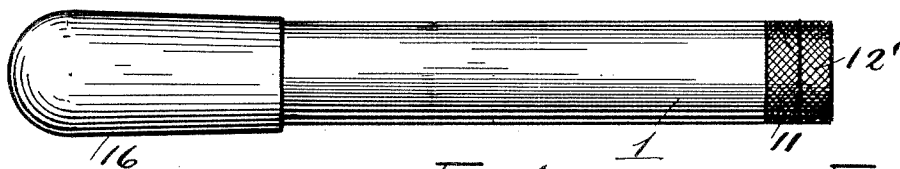


Fig. 4

Fig. 5

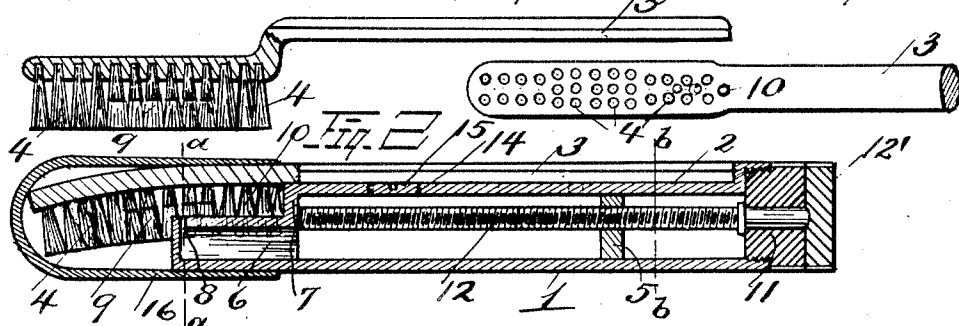


Fig. 6

Fig. 7

Fig. 8

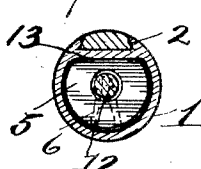
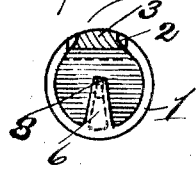
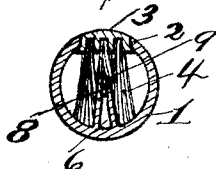
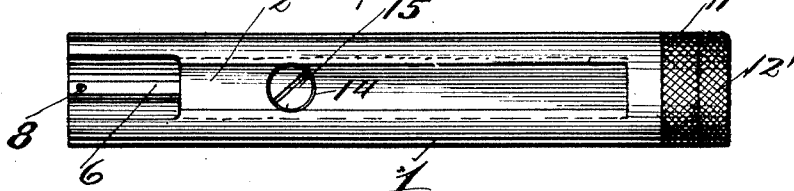


Fig. 9



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COMBINED TOOTHBRUSH AND PASTE HOLDER.

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The objects of the invention are to provide a neat and efficient form of pocket tooth paste and tooth brush holder, thus enabling a traveller to carry on his person his toothbrush and the paste to be used with the same in a suitable container, of such shape that it will not take up any more space in the pocket than an ordinary fountain pen.

To accomplish these objects, the device includes a tubular receptacle for paste provided with an external longitudinal groove or channel in its wall in which the handle of the brush is slidably movable. The invention also includes a blade shaped nozzle for delivering paste to the brush, over which the brush is moved when put in place, and by means of which the rows of bristles are parted to give access for the paste to the interior of the brush.

It includes the employment of a brush having a central recess or pocket for the reception of the paste, and bristles at the heel of the brush arranged to wipe off the paste from the mouth of the outlet in the nozzle so that the parts will always be left clean and sanitary, when the brush is removed.

The invention also includes a closure for one end of the receptacle, a screw threaded rod revolvable in said closure, for operating said plunger, and a blade shaped nozzle projecting underneath the brush at the other end of the receptacle, and provided with an outlet or outlets positioned to discharge the paste into the body of the brush, in such a manner that the brush will receive a sufficient quantity thereof without daubing it upon adjacent parts or fouling the wall of the receptacle. Also a convenient form of cap is provided to enclose the projecting brush end of the tooth brush and the nozzle, so as to produce a neat and serviceable article that can be advantageously carried in the pocket without soiling the clothes.

To accomplish these objects, the invention comprises, the combination and arrangement of parts, and the construction of details, hereinafter described, illustrated in the accompanying drawings and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is an elevation of the device. Figure 2 is a longitudinal section of the device, Figure 3 is a plan of the receptacle with the cap

removed, Figure 4 is a longitudinal section of a modified form of brush, Figure 5 is a plan of the brush showing the preferred form of arrangement of the bristles, Figure 6 is a transverse section of the receptacle on line, *a-a* Figure 2. Figure 7 is an end elevation of the nozzle end of the brush, Figure 8 is a transverse section of the receptacle on line *b-b* Figure 2.

In these views, 1 represents a tubular receptacle having a dovetailed longitudinal groove 2 in its wall, in which the similarly shaped handle 3 of the brush 4 is inserted, leaving the brush overhanging the one end of the receptacle. 5 is a plunger movable longitudinally of the receptacle, and 6 is the nozzle which comprises a hollow blade, extending longitudinally forward from the front wall, 7 of the receptacle and communicating therewith.

This blade is provided with an outlet opening 8 on its inner edge, and is so shaped that when the brush is put in place the blade will part the rows of bristles and will deposit the paste in the interior of the brush in a cleanly manner.

Preferably the middle rows of bristles are cut away at 9 to produce a pocket or recess in which the paste will be deposited and as the brush is withdrawn some of the bristles as at 10 are positioned to wipe off the mouth of the discharge orifice and leave the blade clean for future use, and in condition to be placed in the pocket, so that with a little care the implement will always remain clean and serviceable.

The receptacle is closed at the other end by means of a screw plug 11 and a screw threaded rod 12 is revolvable in the plug 11 and passes through the plunger, and is employed to operate the plunger.

One side of the plunger is flat at 13 and is guided by means of the inner flat side of the wall of the groove in which the handle of the brush is inserted. This wall also serves to prevent the plunger from revolving in the receptacle.

When in use the receptacle is filled with paste in front of the plunger and by revolving the screw threaded rod by means of the knurled end 12' the paste will be forced out of the nozzle onto the brush.

To facilitate filling the receptacle, and to avoid the necessity of removing the plug rod

and plunger every time the receptacle is filled, a lateral opening 14 is made in the side wall of the receptacle through which it can be filled.

5 And this opening is closed by means of the screw threaded plug 15.

This opening and plug are preferably positioned in the bottom wall of the groove in which the handle of the brush is inserted, 10 thus concealing them from view.

The cap 16 covers the brush and nozzle and makes a neat finish for the device.

Having described the invention what I claim as new and desire to secure by Letters 15 Patent is:

1. In a tooth brush and paste holder, the combination with a paste receptacle and a tooth brush detachably mounted thereon, of a blade shaped nozzle adapted to enter be- 20 tween the bristles of said brush and to discharge paste therein when said brush is in place on said receptacle.

2. In a tooth brush and paste holder, the combination with a paste receptacle and a 25 tooth brush detachably mounted thereon, of a nozzle having a part adapted to enter between the bristles of said brush and to discharge paste therein when said brush is in place on said receptacle, said brush being 30 provided with a cavity between said bristles for the reception of paste.

3. In a tooth brush and paste holder, the combination with a paste receptacle and a 35 tooth brush detachably mounted thereon, of a blade shaped nozzle adapted to enter between the bristles of said brush and to discharge paste therein when said brush is in place on said receptacle and means in said 40 receptacle for forcing the paste through said nozzle into said brush.

4. In a combined tooth brush and paste holder in combination, a cylindrical paste re- 45 ceptacle, a blade shaped nozzle therefor projecting longitudinally from one end thereof and provided with a radially outlet opening, one side of said receptacle being provided with holding means for the handle of said 50 brush and for retaining said brush with its bristles end projecting over said nozzle and said nozzle entering between the rows of bristles thereon, and means movable in said 55 receptacle for forcing the paste therein through said nozzle among said bristles.

5. In a combined tooth brush and paste 60 holder, a cylindrical receptacle having a channelled groove upon one longitudinal side thereof for the reception of the handle of said brush, a blade shaped nozzle projecting from one end of said receptacle, over which 65 the bristle end of said brush projects when said brush is in place, said nozzle being shaped to part the rows of bristles in said brush as said brush is put in place said noz- 70 zle being provided with a radially directed

opening adapted to discharge among said 65 bristles, a plunger in said receptacle, a screw threaded rod for operating said plunger, and a closure for the other end of said receptacle in which said rod is revolvable.

6. In a combined tooth brush and paste hold- 70 er, a cylindrical receptacle having a channelled groove upon one longitudinal side thereof, for the reception of the handle of said brush, a blade shaped nozzle projecting from one end 75 of said brush projects when said brush is in place, said nozzle being shaped to part the rows of bristles in said brush as said brush is put in place said nozzle being provided with a radially directed opening adapted to 80 discharge among said bristles, a plunger in said receptacle, a screw threaded rod for operating said plunger, and a closure for the other end of said receptacle in which said rod is revolvable, said receptacle being pro- 85 vided with a lateral opening in its longitudinal side for the admission of paste and a closure for said opening.

7. In a combined tooth brush and paste holder, an elongated receptacle having a 90 channelled groove upon one longitudinal side thereof for the reception of the handle of said brush, a nozzle projecting from one end of the receptacle over which the bristle end 95 of the brush projects when said brush is in place, said brush being provided with a cavity among the bristles for the reception of paste and said nozzle being provided with a radial opening adapted to discharge into said 100 cavity.

8. In a combined tooth brush and paste holder, an elongated receptacle having a 105 channelled groove upon one longitudinal side thereof for the reception of the handle of said brush, a nozzle projecting from one end of the receptacle over which the bristle end 110 of the brush projects when said brush is in place, said brush being provided with a cavity among the bristles for the reception of paste and said nozzle being provided with a radial opening adapted to discharge into said 115 cavity, said brush being provided with bristles at the rear of said cavity positioned to wipe off the mouth of said radial opening when said brush is removed from the chan- 120 nelled groove in said receptacle.

9. In a combined tooth brush and paste holder, an elongated hollow body provided with a brush carrying recess, said receptacle 125 being provided with a discharge passage leading to said brush, when carried in said recess, and means for separating the bristles on said brush when said brush is put in place in said receptacle to permit the passage of paste to the interior of said brush.

In testimony whereof I affix my signature.

ELZA T. S. CLIFFE.