

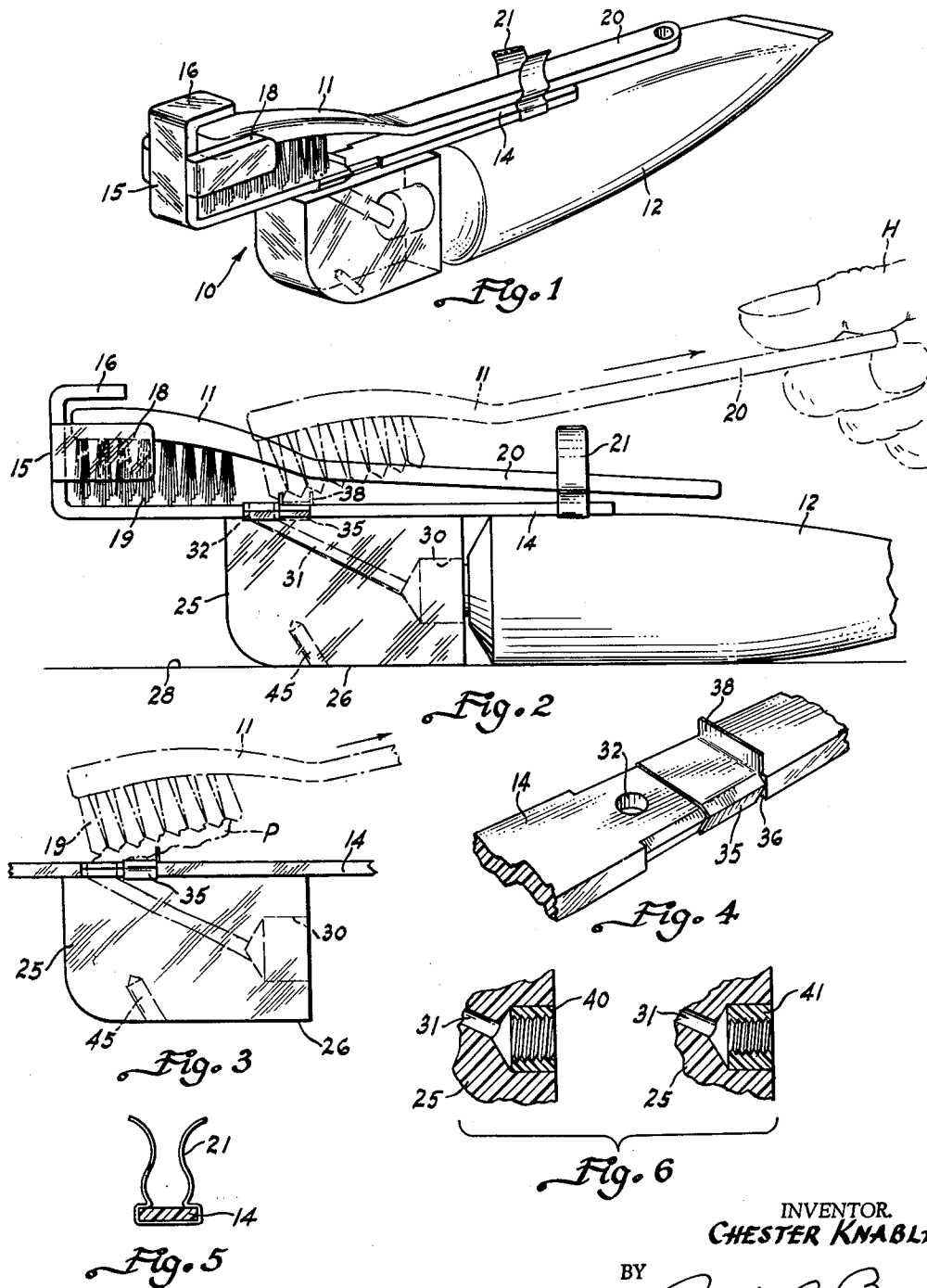
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TOOTHBRUSH HOLDER AND PASTE DISPENSER

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TOOTHBRUSH HOLDER AND PASTE DISPENSER

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This invention relates generally to toothpaste dispensers and more particularly to a combination toothbrush holder and paste dispenser.

Heretofore, manually operable mechanical devices have been provided for holding toothbrushes and for facilitating the dispensing of toothpaste thereto. However, such devices, in general, have been unduly complicated, subject to breakdown, not adapted to various size of brushes and tubes and otherwise of limited utility.

One object of this invention is to provide an improved device for holding a toothpaste tube and for dispensing paste therefrom into a brush supported on the device.

Another object of this invention is to provide an improved toothpaste dispenser having means associated therewith for supporting a toothbrush in proper position to receive dispensed paste when the device is used.

Another object of this invention is to provide a toothbrush holder and paste dispenser device having means thereon for closing a paste outlet to thereby maintain the paste in a sanitary condition and prevent the paste around the outlet from hardening.

Another object of this invention is to provide a toothbrush holder and paste dispenser device of the character described having a movable paste outlet closure member adapted to be operated by manipulation of the toothbrush.

A further object of this invention is to provide a device of the character described which will hold a toothbrush and tube of paste coextensive whereby the device can be conveniently held and manipulated.

A still further object of this invention is to provide a toothbrush holder and paste dispenser which can be manufactured and sold at a low cost.

Other objects of this invention will be apparent hereinafter from the specification and from the recital in the appended claims.

In the drawing:

FIG. 1 is a perspective view of a toothbrush holder and paste dispenser device constructed according to this invention;

FIG. 2 is an enlarged side elevation of the device showing the toothbrush movement from a solid line position to a dotted line position to open the paste outlet closure;

FIG. 3 shows the brush after paste has been dispensed thereon;

FIG. 4 is a perspective view of the paste outlet portion of the device and showing the closure therefor in opened position;

FIG. 5 is a sectional view showing the spring-clip for holding the handle of the toothbrush; and

FIG. 6 is a section through the body of the device showing two of the different size adapters for the device whereby it may be used with various tube sizes.

Referring now to the drawing by numerals of reference, 10 denotes generally a combination device for holding and supporting coextensively a toothbrush 11 and a tube of paste 12. The device comprises an elongated plastic support 14 upturned at one end 15. End 15 is provided with a top tab 16 and side tabs 18 adapted to receive the bristle end 19 of the toothbrush 11 with the bristles facing support 14. The handle end 20 of the toothbrush is yieldably held at the opposite end of support 14 by a spring clip 21. The resiliency

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and configuration of spring clip 21 is such that it is adapted to receive different sizes of brush handles.

Suitably banded to support 14 between the ends thereof and on the side opposite brush 11 is a plastic body 25 having a flat side 26 whereby the device may be placed on a tray or the like 28. Body 25 has a cylindrical bore 30 the axis of which is parallel to the extension of support 14. Communicating with bore 30 is a passage 31 having an outlet 32 which extends through support 14. As shown best in FIGS. 2-4, a closure 35 is provided for outlet 32. Closure 35 is slidably mounted on support 14 for movement between shoulders 36 (FIG. 4) found on the support. Closure 35 has a bent end 38 to facilitate sliding. As shown in FIG. 2, the bristles of the brush may be used to engage the bent end 38 and slide the closure from a closed to an open position. Obviously, closure 35 can be manually operated if desired.

The bore 30 is formed to receive and appropriate adapter, such as adapters 40 and 41 in FIG. 6. The particular adapter used will depend upon the size of the toothpaste tube. Larger size tubes will require adapter 40, while for smaller size tubes adapter 41 will be used. Preferably, the adapters are made of rubber or other resilient material whereby they will fit tightly about the outlet threaded end of the toothpaste tube and conform to variations in tube ends.

When not in use, device 10 is supported horizontally as shown in FIG. 2. It can also be supported vertically, a hole 45 being provided to receive a support pin. To be used, the device 10 is held in one hand and brush 11 is removed using the other hand, denoted H FIG. 2. Using the bristle end 19 of the brush 11 closure 35 is slid to an opened position. Then the tube 12 is squeezed whereby paste is extruded through passage 31 and out of outlet opening 32 in support 14. By passing the brush across the opening as paste is discharged, FIG. 3, paste P will be applied to the brush. After the brush has been used and cleaned, it is returned to the solid line position as shown in FIGS. 1 and 2. As the brush is mounted on support 14 the bristle end 19 can be used to slide closure 35 to a closed position.

The structure described is simple, easily operated, inexpensive to manufacture, and suitable for holding a variety of brush and tube sizes. By keeping the outlet 32 closed when the device is not in use, the paste in passage 31 will not dry out and it will be fresh and clean when the device is next used.

While the device has been described in connection with a particular embodiment thereof, it will be understood that it is capable of further modification, and this application is intended to cover any variations, uses, or adaptations of the invention following, in general, the principles of the invention and including such departures from the present disclosure as come within known or customary practice in the art to which the invention pertains, and as fall within the scope of the invention or the limits of the appended claims.

Having thus described my invention what I claim is:

1. A combination toothbrush holder and toothpaste dispenser device comprising an elongated support having a body portion between the ends thereof and on one side of the support, means on one end of the support and on the side opposite said one side for receiving the bristle end of a toothbrush with the bristles facing the base of said support, means at the opposite end of said support for engaging and releasably holding the handle end of the toothbrush, said body portion of said support having a passage therethrough one end of which opens at a point along said support adjacent said toothbrush bristle end and between such bristle end and said

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handle holding means, means on said body portion communicating with the opposite end of said passage for receiving the threaded end of a toothpaste tube and supporting the tube from the threaded end, means on said support closing said one end of said passage, and means for mounting said closing means for movement to a position opening said passage one end whereupon by squeezing said tube and moving the bristles of the toothbrush across said passage opening, paste may be dispensed into the brush.

2. A combination toothbrush holder and toothpaste dispenser device comprising an elongated support having a body portion between the ends thereof and on one side of the support, means on one end of the support and on the side opposite said one side for receiving the bristle end of a toothbrush with the bristles facing the base of said support, means at the opposite end of said support for engaging and releaseably holding the handle end of the toothbrush, said body portion of said support having a passage therethrough one end of which opens at a point along said support adjacent said toothbrush bristle end and between such bristle end and said handle holding means, means on said body portion communicating with the opposite end of said passage for receiving the threaded end of a toothpaste tube and supporting the tube from the threaded end, said receiving means comprising a cylindrical insert in said body the axis of which is parallel to the elongation of said support whereby the toothpaste tube extends parallel to the support, means on said support closing said one end of said passage, and means for mounting said closing means for restricted movement from a position closing said passage to a position opening the passage one end whereupon by squeezing said tube and simultaneously moving the bristles of the brush across said passage, paste may be dispensed into the brush.

3. A combination toothbrush holder and toothpaste dispenser device comprising an elongated support having a body portion between the ends thereof and on one side of the support, means on one end of the support and on the side opposite said one side for receiving the bristle end of a toothbrush with the bristles facing the base of said support, means at the opposite end of said support for releaseably holding the handle end of the toothbrush, said body portion of said support having a passage therethrough one end of which opens at a point along said support adjacent said toothbrush bristle end and between such bristle end and said handle holding

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means, means on said body portion communicating with the opposite end of said passage for receiving the threaded end of a toothpaste tube and supporting the tube from the threaded end, a closure mounted on said support for relatively free sliding movement from a position closing said passage one end to a position wherein said one end is opened, whereupon by squeezing said tube with said closure in opened position and simultaneously moving the bristles of the toothbrush across said passage opening, paste may be dispensed into the brush, and means on said closure adapted to be engaged by the brush bristles whereby the toothbrush may be used for opening and closing the closure.

4. A combination toothbrush holder and toothpaste dispenser device comprising an elongated support having a body portion between the ends thereof and on one side of the support, means on one end of the opposite side of said support and opened toward the other support end for receiving the bristle end of a toothbrush with the bristles facing the base of the support, means at the opposite end of said support resiliently and releasably holding the handle end of the toothbrush, said body portion of said support having a passage therethrough opening at one end at a point along said support adjacent said toothbrush bristle end and between said bristle end and said handle holding means, a cylindrical resilient insert in said body and communicating with the opposite end of said passage for receiving the threaded end of a toothpaste tube and supporting the tube, said insert having an axis parallel to the elongation of said support whereby the tube will extend alongside the support, a closure mounted on said support for relatively free sliding movement from a position closing said passage opening to a position wherein said opening is opened, whereupon by squeezing said tube with the closure opened and simultaneously moving the bristles of the toothbrush across the opening, paste may be dispensed into the brush, stop means on said support limiting the sliding movement of said closure, and a tab on said closure engageable with the brush bristles whereby the toothbrush may be used for operating the closure.

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