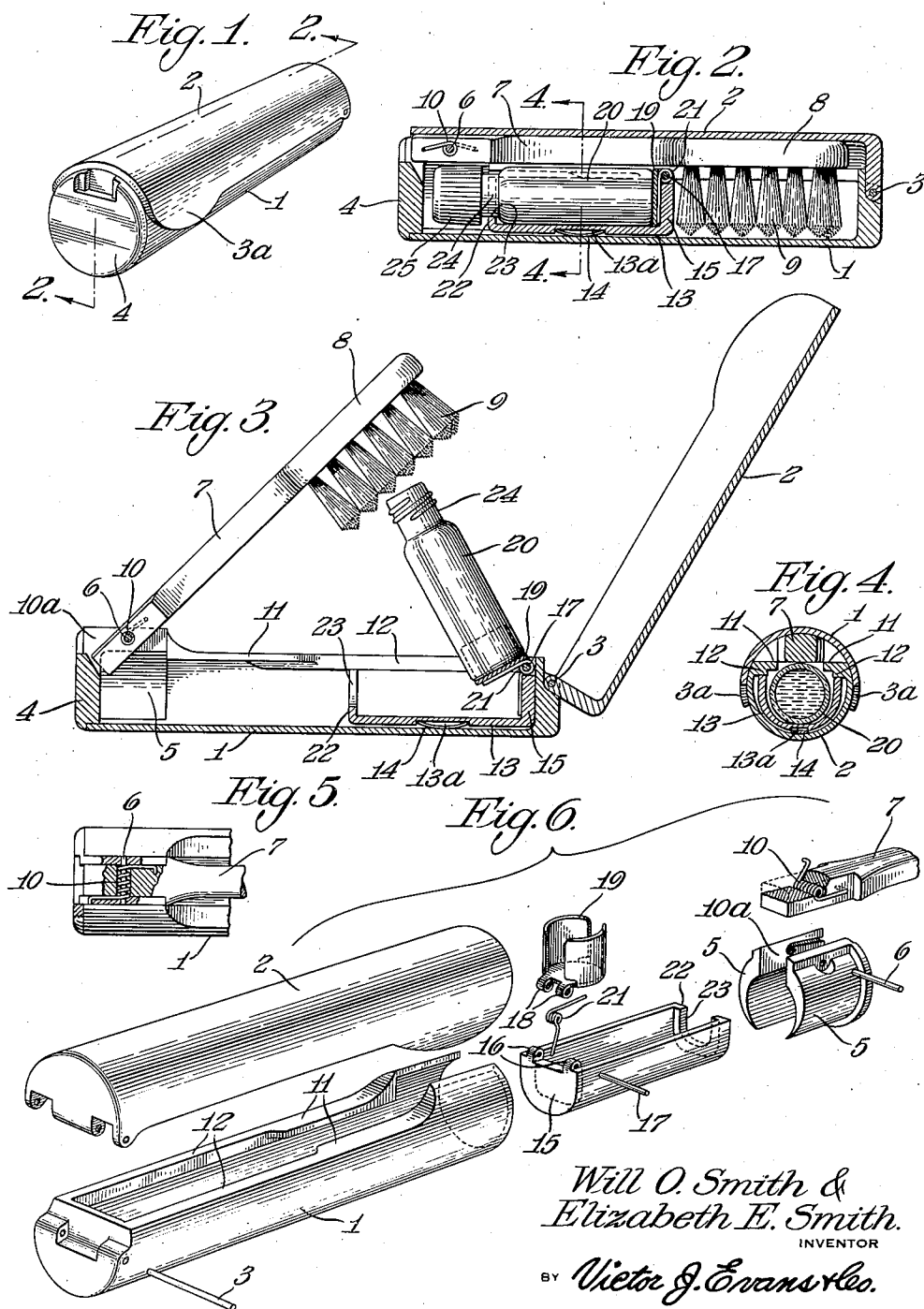


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DENTAL CLEANING COMPACT

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DENTAL CLEANING COMPACT

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2 Claims. (Cl. 132-84)

This invention relates to toothbrushes, and its general object is to provide what may be termed a dental cleaning compact that includes a toothbrush, dentifrice container, and a holder therefor, all connected together in a single unit, the holder and brush being foldably associated in a manner for ready disposal of the brush into and out of use and the holder provides a housing for the brush and for the container, so as to retain the same free from dirt, dust or contamination from other foreign matter, and therefore in a clean and sanitary condition.

A further object is to provide a dentifrice cleaning compact in which the brush thereof is pivotally connected to the holder and is spring pressed to be urged and held in open position for use when released from the holder.

A still further object is to provide a dental toilet article of the character set forth, that can be folded in a very compact form and retained accordingly, so that it can be conveniently carried in the purse or vest pocket of the user.

A further object is to provide a dental cleaning compact that is simple in construction, inexpensive to manufacture, and extremely efficient in operation, use and service.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawing and specifically pointed out in the appended claims.

In describing the invention in detail, reference will be had to the accompanying drawing wherein like characters denote like or corresponding parts throughout the several views, and in which:

Figure 1 is a perspective view of our invention in closed or folded position.

Figure 2 is a sectional view taken on a line 2-2 of Figure 1.

Figure 3 is a longitudinal sectional view, with parts in elevation, and illustrates the brush and dentifrice container in extended positions for applying dentifrice to the bristles of the brush.

Figure 4 is a sectional view taken on a line 4-4 of Figure 2.

Figure 5 is a detail plan view, partly in sections, of one end of the holder with the cover removed and the brush in folded position.

Figure 6 is a disassembled perspective view of our invention.

Referring to the drawing in detail, it will be noted that the holder of our article is shown as being of a tubular formation and is made up of a lower body section 1 and an upper section 2,

both being of substantially semi-circular channel formation and of the same length and with one end of the cover section 2 pivotally connected to the closed end of the body section 1 by means of a pivot pin 3. The opposite end of a cover section 2 is fashioned with depending semi-resilient ears 3a embracing the sides of the body section and which serve as a latching means to maintain the cover section in folded relation with the body section.

The open end of the body section is closed by a circular block 4 formed with a pair of oppositely disposed side sections 5 extending within the front end of the body section and fixed thereto. Pivotaly mounted between the side sections 5, by means of a pin 6, is the rear end of a toothbrush handle 7, the opposite end of which is provided with a head 8 equipped with bristles 9. Sleeved about the pin 6 is a coil spring 10, one end of which is fixed to the brush handle 7 while the opposite end is fixed to one of the side sections 5. The spring 10 functions to urge the brush to extended or open position with respect to the body section. The block 4 is fashioned with a slot 10a disposed between the sections 5 for receiving therethrough the brush when the same is operated to open and closed positions as hereinafter more fully set forth.

The marginal edges of the body section 1 are fashioned with inwardly disposed front and rear flanges 11 and 12 respectively and with the rear flanges spaced a greater distance apart than the front flanges as clearly illustrated in Figure 6 of the drawing. Slidably mounted within the body section is a U-shaped tray 13 having the upper faces of its side walls disposed in engagement with the flanges 12 at all times. The bottom of the tray is provided with a slot 13a in which is contained a spring 14 engaging the bottom of the body section and maintaining said faces of the tray in engagement with the flanges 11. One end of the tray is closed by means of a rear wall 15 fashioned with a pair of ears 16 between which is pivotally mounted, by means of a pin 17, a pair of spaced ears 18 formed on the bottom of a resilient clip member or sleeve 19 receiving therein the lower end of a dentifrice container or bottle 20. Interposed between the ears 18 and arranged about the pin 17 is a coil spring 21. One end of the coil spring 21 engages the clip member while the opposite end engages the rear wall 15 and serves to urge the bottle out of the tray. The opposite end 22 of the tray is formed with a slot 23 through which extends the neck 24 of the bottle, said neck having threaded thereon a closure cap 25, the

latter being disposed between the side sections 5 when the device is in folded or closed position as illustrated in Figure 2.

The bottle is of a lesser diameter than the distance between the flanges 12 and of a greater diameter than the distance between the flanges 11 whereby when the tray is positioned within the front end of the body section, the flanges 11 serve to maintain the bottle within the tray against the tension of the spring 21. It is to be noted that the rear end of the brush handle extends a slight distance beyond the pin 6 and is movable through the slot 10a and the side sections 5 of the block 4.

In use, the parts being in the position illustrated in Figure 2, the cover section 1 is pivoted to open position thereby effecting release of the toothbrush and which is actuated to open position by means of the coil spring 10. As the brush is actuated to open position, the rear end of the handle 7 engages the front end of the cap 25 and moves the tray 13 an appreciable distance toward the rear end of the body section whereupon the operator may have ready access thereto and move said tray into engagement with the rear wall of said body section. As the tray is moved rearwardly, the bottle is released from engagement with the flanges 11 and is pivoted upwardly between the flanges 12 to an inclined position through the medium of the coil spring 21. When the parts are thus positioned, the cap is removed from the bottle and the brush pivoted toward the bottle to effect engagement of the bristles 8 with the mouth of the bottle whereby the dentifrice contained in the bottle, whether it be powder or liquid, may be discharged onto said bristles. After the dentifrice has been applied to said bristles, the cap 25 is secured on the bottle and the cover section operated to closed position and with the brush handle extending through the slot 10a in extended position and the bottle positioned within the tray and held therein by the cover section 2.

When it is desired to operate the parts to closed position, the tray is moved a sufficient distance toward the front of the body section to effect engagement of the bottle with the flanges 11 whereupon the brush is actuated to partly folded position and the tray moved to within the front portion of the body section thus permitting the brush to be folded over the tray and with the bristles disposed within the body section between the rear walls of the tray and said

body section as clearly illustrated in Figure 2, it being understood that the cover section is then operated to closed position as illustrated in Figure 1.

Without further elaboration the foregoing will so fully explain the invention that others may, by applying current knowledge, readily adapt the same for use under various conditions of service. Moreover, it is not indispensable that all the features of the invention be used conjointly since they may be employed advantageously in various combinations and sub-combinations.

It is obvious that the invention is not confined to the herein described use therefor as it may be utilized for any purpose to which it is adaptable. It is therefore to be understood that the invention is not limited to the specific construction as illustrated and described as the same is only illustrative of the principles of operation, which are capable of extended application in various forms, and that the invention comprehends all construction within the scope of the appended claims.

What we claim is:

1. A dental cleaning compact comprising a tubular holder including companion body and cover channel-shaped sections hinged together at one end of said holder for movement of the cover section in association with the body section to provide a housing, a brush pivotally secured to the holder for movement into and out of the same, a tray slidably mounted in said body section, a spring actuated dentifrice container pivotally mounted in said tray, and means carried by said body section and engaging said container when said tray is disposed adjacent the opposite end of said holder for maintaining said container within said tray, said container operable to extended position out of said tray when the latter is disposed adjacent said first mentioned end of said holder whereby to enable the bristles of said brush to engage said container and receive dentifrice therefrom.

2. The structure of claim 1 as set forth and defined therein including, said brush provided with means engaging said container for moving said tray toward said last mentioned end of said holder when said brush is moved out of said holder.

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