Dec. 25, 1945. E. E. SMITH ET AL 2,391,651

DENTAL COMPACT

Original Filed July 21, 1943

Fig. 1.

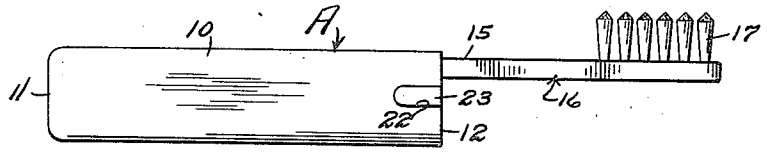


Fig. 2.

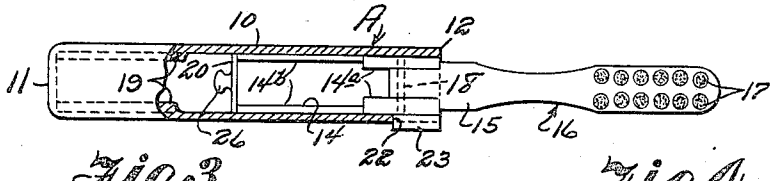


Fig. 3.

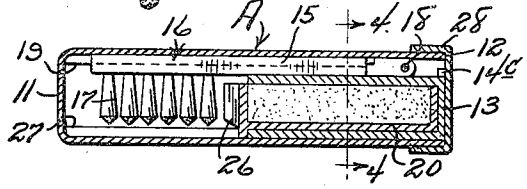


Fig. 4.

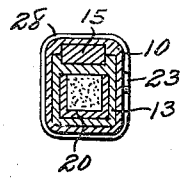


Fig. 5.

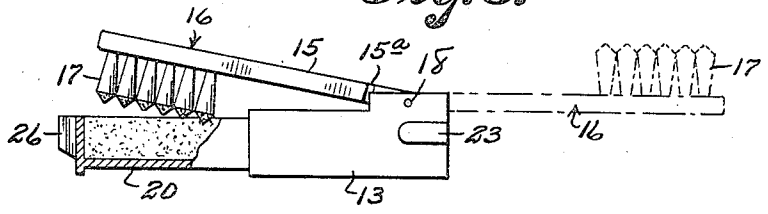


Fig. 6.

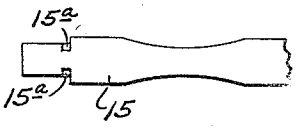
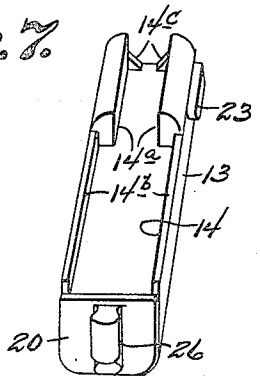


Fig. 7.



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Patented Dec. 25, 1945

2,391,651

UNITED STATES PATENT OFFICE

2,391,651

DENTAL COMPACT

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Original application July 21, 1943, Serial No. 495,654. Divided and this application January 8, 1945, Serial No. 571,798

3 Claims. (Cl. 132—84)

My present invention is a division of my application for patent, Serial No. 495,654, filed July 21, 1943, now Patent No. 2,379,600, dated July 3, 1945, on Dental compact, and in its broad aspect, relates to the unique combination of pivotal support for a pivoted toothbrush to mount the same either in an active or a passive position, and said support being in the form of a hollow block constituting a housing for a drawer-like dentifrice holder which is so formed and positioned that when the toothbrush is in folded or inactive position, the open drawer is beneath and engageable by the bristle head of the brush to supply a powder or other dentifrice to the bristle, and a casing for the brush and block and drawer and serving as a handle and which has means for insuring a closed position of the drawer when the block is in position within the casing, whether the brush be in active or passive position, thereby preventing spilling or loss of dentifrice.

Another object of the invention is the provision of a compact of this character wherein a toothbrush associated therewith and dentifrice material will be confined therein for ready access and will be protected against dirt, dust or contamination from foreign matter when not in use, the toothbrush as well as the dentifrice material being readily accessible for service and without necessitating the separation thereof which might result in the loss of the same and additionally the compact housing constitutes a handle for the toothbrush when in use, as well as a holder for the dentifrice material.

A further object of the invention is the provision of a compact of this character which is simple in construction, thoroughly reliable and effective in operation, and inexpensive to manufacture.

With these and other objects in view, the invention consists in the features of construction, combination and arrangement of parts as will be hereinafter more fully described in detail, illustrated in the accompanying drawing, which discloses the preferred embodiment of the invention and pointed out in the claims hereunto appended.

In the accompanying drawing—

Figure 1 is a side elevation of the compact constructed in accordance with the invention, showing the same arranged for use of the toothbrush, constituting a part thereof.

Figure 2 is a plan view partly in section.

Figure 3 is a longitudinal sectional view with the brush within the shell or casing.

Figure 4 is a sectional view taken on the line 4—4 of Figure 3, looking in the direction of the arrows.

Figure 5 is a view partly in side elevation and partly in vertical section of the brush, drawer and carrying block, the drawer being shown partly withdrawn from the block.

Figure 6 is a plan view of a fragmentary portion of the shank of the brush, and

Figure 7 is a perspective view of the drawer and brush-carrying block.

Similar reference characters indicate corresponding parts throughout the several views in the drawing.

Referring to the drawing in detail, A designates generally the compact. The compact preferably comprises an outer shell or casing 10 permanently closed at the end 11 and open at the opposite end 12 of the same.

The casing 10 receives a block 13, toothbrush 16 and drawer 20. In cross sectional formation, the block 13 conforms to the inner cross sectional formation of the casing 10 and has a snug fit in the forward portion of the casing. The block 13 is provided in its upper side with the groove 14 which extends longitudinally thereof. The flanges formed by grooving the block 13 have relatively thick forward portions 14a and relatively thin rearward portions 14b. The rear end of the shank 15 of the toothbrush 16 is pivoted, as at 18 to and between the flange portions 14a for movement into folded or extended position with relation to the block 13. The brush 16 is provided with the usual bristles 17. The flanged portions 14a are provided at the inner sides and near their forward ends with lugs 14c which are located in notches 15a of the brush shank 15 when the brush is in extended position. The block 13 is provided at its lateral side near its forward end with a lug 23 which has a snug fit in a slot 22 formed in the casing 10.

When in extended position, the brush 16 is arranged for use. It is held in this position against any accidental movement with relation to the casing 10 and block 13 by the ribs 14a, lugs 14c and casing 10. The casing 10 and block 13 are held against any accidental movement one with relation to the other by the lug 23.

The casing 10 is provided with inner longitudinal ribs 19 which extend longitudinally thereof and which contact with the rear ends of the flange portions 14a of the block 13 and with the upper edges of the flange portions 14b of the block, whereby to limit the insertion of the block into the casing and to assist the lug 23 in hold-

ing the block against any accidental movement with relation to the casing. When the brush 16 is in folded position, the shank 15 with the brush is located between the flange portions 14a and 14b and the ribs 19, and the bristles 17 are located rearwardly of the block 13.

The block 13 is hollow, is fully open at its rear end and is fully closed at its front end. The block 13 is adapted to receive the drawer 20 containing the dentifrice. The drawer 20 has a sufficiently snug fit in the block 13 to prevent it from having any lateral movement with relation to the block.

Normally the brush 16 is folded and the drawer 20 is sealed in the block 13 which is confined within the casing 10. The lug 23 protrudes slightly beyond the outer face of the casing 10, so as to enable the removal of the block therefrom to have the brush 16 unfolded or extended for use.

After the unfolding of the brush 16 or the extending thereof on removal of the block 13, the latter is replaced in the casing 10, thus holding the brush fixed in its extended or unfolded position for use.

The drawer 20 is provided at its rear end with a pull 26, and it is held against accidental rearward movement from the block 13 by ribs 27 formed within and extending longitudinally of the casing 10. The ribs 27 are located on the lower side of the casing 10 and contact with the rear end of the drawer 20. As shown, the brush 16 may be supplied with dentifrice after the withdrawal of the block 20 from the casing 10 and before swinging the brush into position for use. The ribs 27 make it impossible for the drawer 25 to occupy a partly opened position when the block 24 is in place in the casing 10. This prevents any waste of the powdered dentifice. The open end of the casing 10 is closed by a cap 28.

It is claimed:

1. A dental compact of the kind described, comprising a casing open at its forward end, a block removably positioned within the open end of the casing, a brush having a shank pivoted to the block for movement into folded or extended position with relation thereto, the block being provided with a passage closed at its front end, a drawer slidably associated with the block, and means in the casing preventing the movement of the drawer to open position when the latter and the block are housed within the casing.

2. The combination in a dental compact, of an elongated casing, a hollow block slidable in the casing, a receptacle for a dentifrice received in the block, said block having parallel, spaced, upstanding edge flanges, a toothbrush having bristles and a shank pivotally mounted in and between the flanges, to be moved to an open position extending out from one end of the block and casing, and to a closed position with the shank lying between the flanges and on top with the bristles overhanging an end of the block and the end of the dentifrice container, and means for preventing displacement of the dentifrice receptacle.

3. The invention as defined in claim 2 wherein said means for preventing displacement of the dentifrice receptacle includes ribs located on the lower floor of the casing and engaging the end of the receptacle.

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