April 18, 1939. B. BERMAN 2,154,486

TOOTH BRUSH PROTECTOR

Filed May 15, 1937

Fig. 1

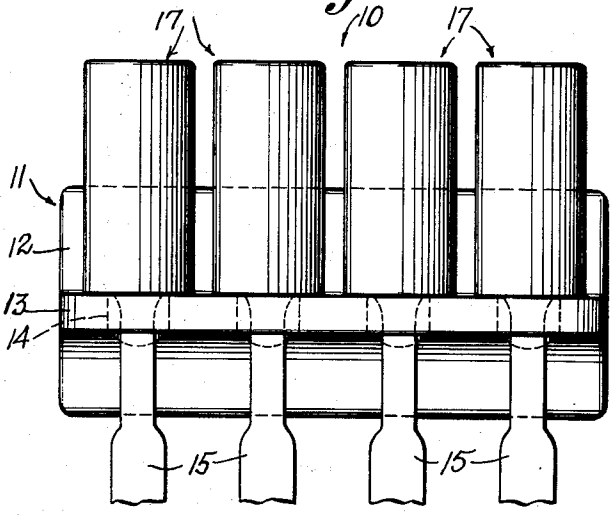


Fig. 4

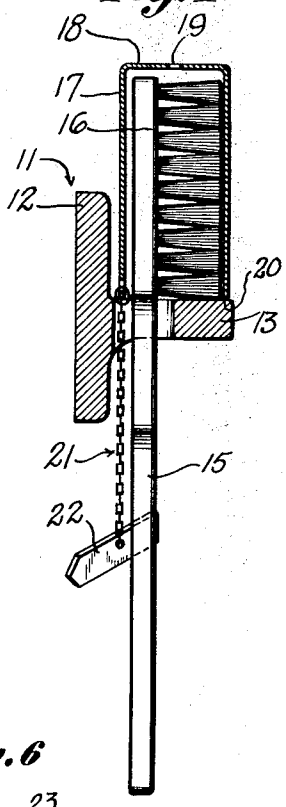


Fig. 2

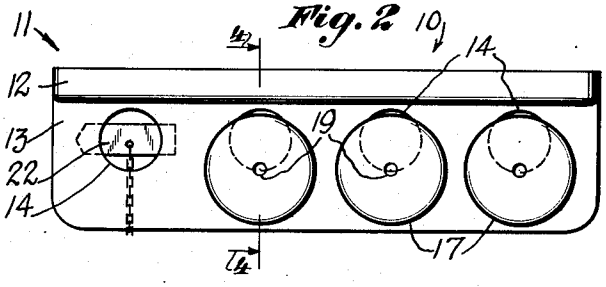


Fig. 6

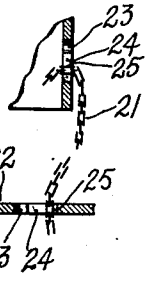


Fig. 7

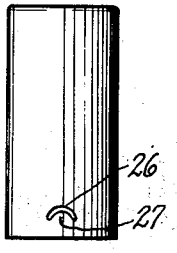


Fig. 3

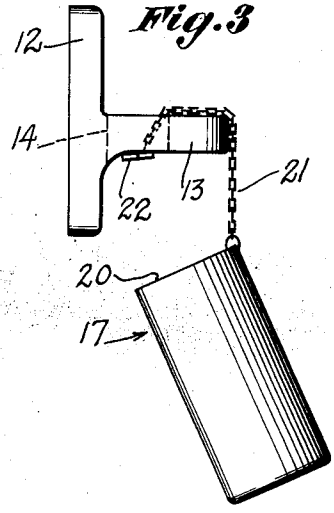


Fig. 5

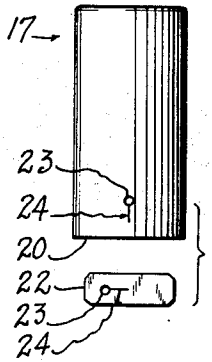
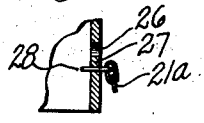


Fig. 8



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UNITED STATES PATENT OFFICE

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TOOTH BRUSH PROTECTOR

Bertha Berman, New York, N. Y.

Application May 15, 1937, Serial No. 142,769

3 Claims. (Cl. 206—15.1)

This invention relates to devices such as tooth brush protectors.

One object of the invention is to provide a device of the character described having improved means comprising caps and elements for mounting the same upon a tooth brush support or bracket, so that the caps may selectively enclose the heads of the tooth brushes in a neat attractive and sanitary manner, with the caps being adapted to be readily removed and retained by the bracket for instant availability.

Another object of the invention is the provision of a device of the nature set forth which consists preferably of Celluloid or like material and includes a chain or like element connected to one or more of the parts of the device for suitably mounting the cap as hereinafter pointed out.

A further object of the invention is to furnish a device of the class alluded to having relatively few and simple parts which can be made and assembled in an inexpensive manner to produce a structure which is unitary, neat, light in weight, compact and readily applicable for its intended uses.

Other objects and advantages of the invention will become apparent as the specification proceeds.

With the aforesaid objects in view, the invention consists in the novel combinations and arrangements of parts hereinafter described in their preferred embodiments, pointed out in the subjoined claims, and illustrated in the annexed drawing, wherein like parts are designated by the same reference characters throughout the several views.

In the drawing:

Figure 1 is a view in front elevation showing a device embodying the invention.

Fig. 2 is a top plan view thereof, but with one of the tooth brush caps in suspended position.

Fig. 3 is a view in side elevation showing a cap in suspended position.

Fig. 4 is a vertical sectional view taken on the line 4—4 of Fig. 2.

Fig. 5 is a view in elevation of the cap and anchor element showing an improved connecting means.

Fig. 6 is a fragmentary enlarged sectional view showing the connecting means assembled.

Fig. 7 is a view in elevation of a modified device embodying the invention.

Fig. 8 is a fragmentary vertical sectional view thereof.

The advantages of the invention as here outlined are best realized when all of its features and instrumentalities are combined in one and the same structure, but, useful devices may be produced embodying less than the whole.

It will be obvious to those skilled in the art to which the invention appertains, that the same may be incorporated in several different constructions. The accompanying drawing, therefore, is submitted merely as showing the preferred exemplification of the invention.

Referring in detail to the drawing, 10 denotes a device embodying the invention. The same may comprise a bracket 11 which may be of a conventional type, having an upright flange 12 adapted to be secured to a wall, and a horizontal flange 13 extending laterally therefrom. The flange 13 may have a series of spaced slots or holes 14 arranged longitudinally thereof and adapted to receive the handles 15 of tooth brushes whose heads 16 rest in upright position upon the supporting flange 13. In this manner a plurality or tooth brushes are supported for convenient selective use.

As thus mounted, the tooth brushes 16 are subject to dust and other unsanitary conditions and detract from the neatness of the bathroom. Frequently the tooth brushes are of different sizes or shapes, and often an accumulation of tooth paste or the like at the bristles mars the appearance of the tooth brushes. Hence it is an object of the invention to provide a device whereby uniformity of appearance or improved sanitation, or both are attained.

Accordingly I provide an enclosure means for the tooth brushes, preferably in the nature of individual enclosures or caps therefor so that any tooth brush can be manipulated as desired without affecting the others. For example, each tooth brush may have a tubular cap 17 adapted to receive the head of the tooth brush and coordinated with the bracket 13 for removable selective mounting for instantly available use with the tooth brush.

Each cap 17 may be of any suitable size or shape and may be made of any sheet material or molded composition, and may be opaque or transparent as desired. For example, Celluloid may be used. Each cap may have a side wall and an end or top wall 18, the latter having a ventilating opening 19, if desired. At its other or lower end, the cap may be open as at 20 to receive the tooth brush head and to rest on the adjacent bracket 13 at the part thereof around an opening 14 through which the brush handle extends.

It will be understood that the different caps

17 may be of different colors or otherwise differentiated so that each user immediately knows his particular tooth brush, if he cannot judge by the exposed handles 15.

When a tooth brush is to be used, its cap 17 is removed. To maintain the cap in position for its selected cooperation with a particular tooth brush or opening 14 therefor, I prefer to provide an anchorage which may comprise a flexible element 21 secured at one end to the cap 17 and at its other end to the bracket 13 at an opening 14 thereof. For instance, the element 21 may be connected to the cap 17 as at an opening in the side wall near the rim of the opening 20. Illustratively, the other end of the element 21 may be connected to an elongated anchor element 22, that consists of stiff material and extends transversely of the flexible element 21, so that it can be longitudinally passed through an opening 14 and normally resists withdrawal therethrough. With the element 21 depending downward through an opening 14, the anchor element 22 is suspended alongside the brush handle 15. When the cap 17 is removed, the flexible element 21 moves upward until the anchor element 22, acting as a stop, engages the lower face of the bracket 13 about an opening 14, permitting the flexible element to be swung laterally with the cap 17 depending thereon as shown in Fig. 3. The flexible element 21 may consist of fine chain, and the stop 22 may consist of the same material as the cap 17.

The parts 17, 21 and 22 constitute a unit that can be applied to any bracket 13 as desired.

While any suitable mode of connection may be practised in securing the chain 21 to the parts 17 and 22, it presents an important problem in this device, when considered from the standpoint of inexpensive quantity production. I prefer to form a small hole 23 in the cap, and a slit 24 extending from said hole toward the opening 20 but terminating in spaced relation thereto. A similar hole and slit may be formed in the stop element 22. Now an end portion of the chain 21 is passed through the hole 23 and the chain is then pulled into the slit 24 at one link 25 so that this link lies flatwise along the slit. Although the link consists of very thin wire, it serves to cause a yielding spread of the slit 24 so that the link is strongly frictionally gripped in the slit. Now the chain is securely held, and cannot be pulled through the slit because the links adjacent to the link 25 form obstructions. Nor will the chain tend to return to the hole 23, especially if the thickness of the sheet material of the cap is almost equal to the length of the link, thus causing gripping of the said adjacent links.

An alternative securement is shown in Figs. 7 and 8 wherein the sheet material may have a slot, preferably an arcuate slot 26 therethrough, forming a tongue 27, and the chain 21*a* having an end ring 28 that can be pushed into the slot so that the tongue 27 springs into the ring. However, the previously described securement is preferable since the need for providing the rings 28 is dispensed with, and the securement is stronger because the rings 28 may accidentally be pulled open.

It will now be perceived that the invention provides a neat, attractive and sanitary adjunct for any bathroom and permits rapid and convenient selective manipulation in connection with the removal and replacement of the tooth brushes, while permitting each person to know at a glance the particular tooth brush that he uses. If all the tooth brushes are exactly alike in appearance, the caps may be used for their differentiation and since each tooth brush will be thus maintained in a particular position, the possibility of confusion between the tooth brushes is further avoided.

I claim:

1. A device including a rack having means for supporting tooth brushes, individual dust caps for the tooth brushes, flexible elements connected to the dust caps and having head portions at the free ends of said flexible elements, and said means having spaced openings of sufficient size to individually receive the handles of the tooth brushes, said flexible elements extending through the self same openings that receive said handles, with the head portions serving to maintain the flexible elements in engagement with the rack.

2. A device including a holding member having means for supporting a tooth brush at the head of the latter, a tooth brush having a head and an elongated handle, a removable dust cap for the tooth brush, a flexible element connected to the dust cap and having a head member at the free end thereof, and said means having an opening of sufficient size for removably receiving said handle, said flexible element permanently extending through the handle receiving opening with the head member serving to prevent removal of the flexible element from said holding member and being otherwise separate thereof.

3. A tooth brush holding device including a rack, dust caps for the tooth brushes, flexible elements individually connected to the dust caps, said flexible elements having head portions at the free ends thereof, said rack having brush head supporting means providing spaced generally circular circumferentially closed holes for freely removably receiving the handles of the tooth brush, said flexible elements extending through said handle receiving holes, said head portions being elongated so that they can be freely inserted through said handle receiving holes but normally retain the flexible elements from removal through said handle receiving holes.

BERTHA BERMAN.