Feb. 18, 1941. W. O. FLEENOR 2,232,171

TOOTHBRUSH HOLDER

Filed March 23, 1939

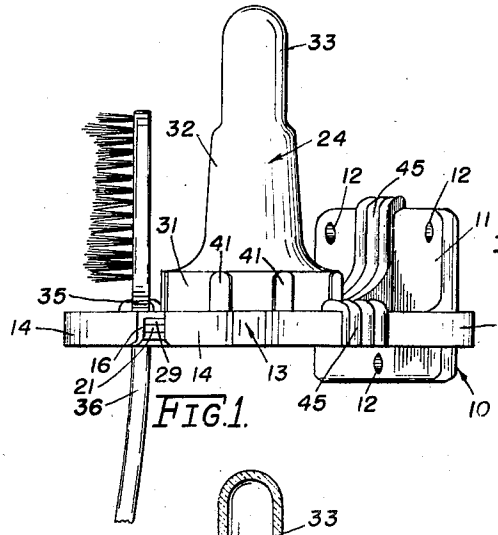


FIG. 1.

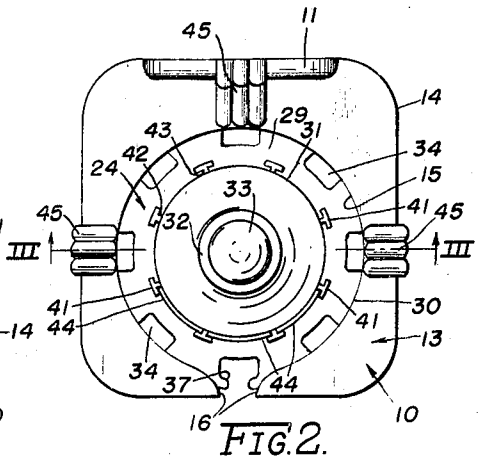


FIG. 2.

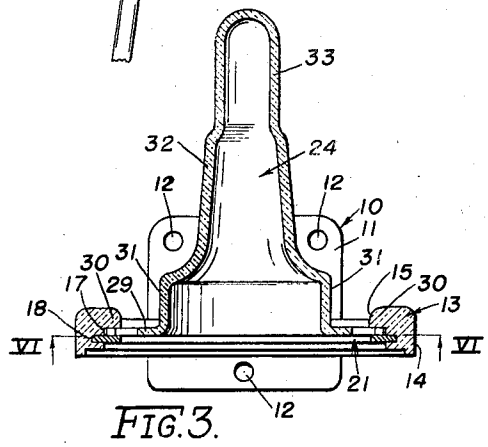


FIG. 3.

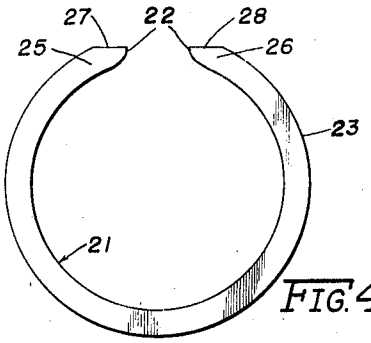


FIG. 4.

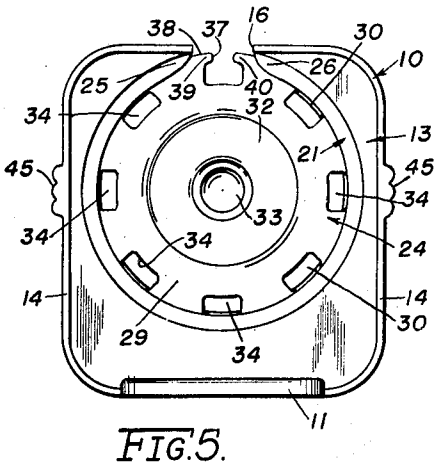


FIG. 5.

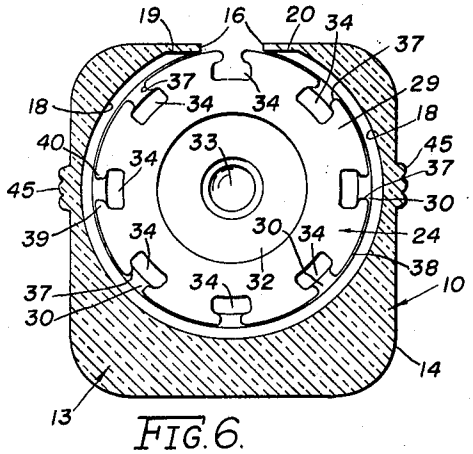


FIG. 6.

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2,232,171

TOOTHBRUSH HOLDER

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Application March 23, 1939, Serial No. 263,586

8 Claims. (Cl. 211—70)

This invention relates to bathroom appliances and more particularly to a multiple toothbrush holder, although certain features thereof may be employed with equal advantage for other purposes.

It contemplates more especially the provision of a simple and inexpensive multiple toothbrush holder that effectively retains the brushes against accidental displacement and renders them individually accessible for instantaneous use.

Many and varied types of toothbrush containers have been designed to meet the known requirements therefor, among which the most widely accepted are individual containers incorporating a hermetic sealing feature for sanitation purposes. However, it has long been known that these individual containers are not entirely satisfactory in that moistened brushes soften and rapidly deteriorate when out of contact with air. Furthermore, these containers are not readily adaptable to convenient and practical daily home use for the reason that they are not readily at hand and cumbersome in use. To overcome these defects, numerous open bracket type toothbrush holders have been devised and placed on the market which do not entirely fulfill the desired functions desirable therein, since they either fail to provide an effective means for retaining the toothbrushes against accidental displacement or do not render the toothbrushes individually and readily accessible for convenient and instantaneous use.

One object of the present invention is to provide a multiple toothbrush holder of simple and improved construction.

Another object is to provide a multiple toothbrush holder presenting a simple and effective retainer for brushes without interfering with the accessibility thereof.

A still further object is to provide a rotatable multiple toothbrush holder which will effectively retain the toothbrushes against accidental displacement and render them individually accessible for instantaneous use.

Still a further object is to provide a multiple toothbrush holder consisting of two relatively movable parts that effectively retain and conveniently releases any selected brush desired for instantaneous use.

Other objects and advantages will appear from the following description of an illustrative embodiment of the present invention.

In the drawing:

Figure 1 is a perspective view of a toothbrush holder embodying features of the present invention.

Figure 2 is a top plan view of the toothbrush holder shown in Figure 1.

Figure 3 is a sectional view taken substantially along line III—III of Figure 2.

Figure 4 is a plan view of the retainer ring shown in its assembled position in Figure 3.

Figure 5 is a bottom plan view of the toothbrush holder shown in Figure 1.

Figure 6 is a sectional view taken substantially along line VI—VI of Figure 3.

The structure selected for illustration comprises a wall mounted stationary member 10 preferably molded or otherwise shaped from a suitable plastic material selected for its adaptability into a finished inexpensive and integral member that is light, durable, and ornamental in color and design. The stationary member 10 consists of a wall mounting plate member 11 provided with a plurality of apertures 12 to receive suitable anchoring fasteners (not shown). The plate member 11 merges with a horizontally disposed bracket member 13, in this instance of substantially square configuration formed with a depending peripheral flange 14.

The bracket member 13 has, in this instance, an enlarged substantially circular opening 15 extending vertically therethrough. The opening 15 is offset forwardly from the wall mounting plate 11 for communication with a restricted slot 16 provided in the forward edge region of the bracket member 13 and its flange 14. The bracket 13 and its flange 14 have inwardly formed and stepped annular grooves 17 and 18 communicating with the opening 15 to constitute a support for the toothbrush holding and retaining instrumentalities to be hereinafter described.

The annular groove 18 has its extreme region proximate to the slot 16 provided with flat portions 19—20 to serve as complements of a resilient retainer ring or disc 21. The resilient retainer disc 21 is radially notched as at 22 to conform with the bracket member notch or slot 16 for registry therewith to present an unobstructed opening for the displacement of toothbrushes as will appear more fully hereinafter. The retainer ring 21 may be molded or otherwise shaped from the same material from which the stationary member 10 is shaped and its exterior peripheral edge assumes a diameter somewhat larger than the annular groove 18 to require its inward springing to a somewhat reduced size for lodgement therein. Consequently, the retainer ring 21 will normally spring outwardly for lodgment in the annular groove 18 to present an inwardly projecting portion that serves as a sup-

port for a rotary member 24 that is journalled in the opening 15 of the bracket member 10.

To preclude rotary displacement of the retainer ring 21, its extreme regions 25 and 26 proximate to the opening 22 therein, have exterior flat edges 17—28 which serve as complements of the correspondingly shaped surfaces 19—20, thereby precluding the axial rotary displacement of the retainer ring 21 and insuring that its radial throat 22 therein will be in registry with the correspondingly sized and shaped throat 16 in the bracket member 10. As shown, the rotary member 24 has a substantially circular base flange 29 which is sized to correspond with the annular groove 17 in the stationary member 13 for rotary displacement therein and support between the retaining ring 21 and the confronting peripheral upper surface 30 of the annular groove 17 when disposed therein.

It will be apparent, therefore, that the circular base flange 29 will rotate relative to the bracket member 13 responsive to imparting a turning movement thereto and its upwardly extending cylindrical base 31. The cylindrical base 31 constitutes, in this instance, an integral part of the circular flange 29 and is pressed or otherwise shaped from plastic material to assume a light, comparatively thin, and tubular shank member 32. The tubular shank member 32, in this instance, is preferably stepped upwardly from the cylindrical base 31 that merges therefrom as a converging intermediate shank terminating in a closed end finger manipulating cylindrical stem 33 that is smaller in diameter than the other portions of the rotary member 24.

The rounded stem 33 is in axial alignment with the circular peripheral flange 29 and its upstanding cylindrical base 31 to provide a light integral rotary member 24 which can be readily manipulated for rotation in either direction in the opening 15 of the bracket member 13 that serves as a support therefor. In order that the rotary member 30 may serve as a support for a plurality of readily accessible toothbrushes, edge communicating notches 34, in this instance eight, are circumferentially spaced on the peripheral flange 29 to present supporting expedients for the neck defining shoulders 35 provided in practically all commercially produced toothbrush handles 36.

To preclude the accidental displacement of the toothbrush handles 36 from the notches 34 in the normal position of support therein, the notches 34 are provided with reduced throat openings 37 that communicate with the exterior edge 38 of the peripheral flange 29, thereby presenting confronting nibs 39—40 in each of the notches 34 to require a 90° turn to be imparted to the toothbrush handle 36 before its removal from the slots 34 can be effected. The notches 34 with their reduced edge openings 37 do not necessarily preclude the accidental displacement of the toothbrush handles 36 therefrom as a positive expedient under all conditions. For that reason, it is desirable to have the peripheral flange 29 with its toothbrush supporting notches 34 confronted by the annular groove edge 17 except for the restricted opening 16 therein. The outline of the annular groove 17 serves as a stop which closes the otherwise accessible toothbrush removing slots 37 through which the toothbrush handles 36 can be displaced edgewise.

Consequently, the rotary member 24 with its radially notched toothbrush holding flange 29 cooperates with the confronting annular groove edge 17 of the stationary supporting bracket 13 to retain the toothbrushes 36 against accidental removal from their supporting means 34 except through the restricted throat 16 provided in the stationary bracket member 13 and its depending flange 14. In order to remove the toothbrushes 36, the notches 34 in the peripheral flange 29 must be aligned for registry with the opening 16 in the bracket member 13 to individually release any selected toothbrush 36.

When not in use, the rotary member 24 with its peripheral flange 29 is displaced in the plate member 13 so that the toothbrush holding notches 34 will be out of alignment and non-registry with the slot 16 therein, thereby precluding the accidental removal or displacement of all the brushes 36 from the member 13. So that all of the brushes 36 confined in the bracket member 13 may be readily identified for individual use, suitable identifying indicia cards are detachably associated with the rotary member 30 to identify each of the brushes 36 supported thereon.

To this end, a plurality of laterally channeled ribs 41 are vertically formed on the cylindrical base portion 31 of the rotary member 24 to assume a position intermediate the toothbrush holder notches 34. The vertically disposed and laterally channeled ribs 41 are molded simultaneously with the formation of the rotary member 24 which is preferably though not essentially molded, pressed or otherwise shaped from plastic material. In consequence thereof, confronting grooves 42 and 43 are presented by the vertically disposed and inwardly channeled ribs 41 to receive substantially rectangular name cards 44 therein.

The name cards 44 may be prepared from glazed paper, Celluloid or other suitable name inscribing material to identify the individual's brush supported in the notches 34 aligned therewith. By so doing, each individual member of the family can readily identify his or her brush 36 so that there is no unintentional exchange in the use thereof for sanitary reasons. It will be apparent that a very inexpensive, effective and highly advantageous brush holder has been provided for precluding the accidental removal and falling off of brushes that constantly occurs with toothbrush holders of known construction.

Should commercial practice so dictate, any suitable form of ornamentation such as circumferentially distributed formations 45 may be formed in conjunction with the plate member 11 and bracket member 13 to improve the appearance thereof and render such an attractive bathroom fixture. It is to be noted that the rotary member 24 with its concentric portions 32—33 extends upwardly beyond the top limit edge 46 of the toothbrushes 36 so that the finger grasp of the top portion 33 will avoid contact with any portion of the toothbrush 36. This insures the sanitary manipulation of the rotary member 24 to bring the proper brush 36 in registry with the bracket member throat 16 without impairment to the sanitation thereof. Consequently, the finger grasping rotary member extremity 33 is free for manipulation without the brushes 36 offering any obstruction thereto.

Various changes may be made in the embodiment of the invention herein specifically described without departing from the invention or sacrificing any of the features thereof, and nothing herein shall be construed as a limitation upon the invention, its concept or structural em-

bodiment as to the whole or any part thereof except as defined in the appended claims.

I claim:

1. In a toothbrush holder, the combination with a stationary bracket member having an enlarged opening therein to define an annular ring, of a revolvable member having its circumference journalled in the opening of said stationary bracket ring member, means for rotatively supporting said revolvable member in said stationary bracket, and a plurality of toothbrush holding means on said revolvable member, there being a notched portion in said stationary bracket ring member to communicate with the enlarged opening therein for removal of toothbrushes therethrough.

2. In a toothbrush holder, the combination with a stationary bracket member having an enlarged opening therein to define an annular ring, of a revolvable member having its circumference journalled in the opening of said stationary member, means for rotatively supporting said revolvable member in said stationary bracket, and a plurality of toothbrush holding notches on said revolvable member confronting said stationary ring member to constitute a stop for said toothbrush holding notches, there being a notched portion in said stationary member to communicate with the enlarged opening therein for the removal of toothbrushes therethrough.

3. In a toothbrush holder, the combination with a stationary bracket member having an enlarged opening therein to define an annular ring, of a revolvable member having its circumference journalled in the opening of said stationary member, there being a plurality of toothbrush holding notches on said revolvable member in communication with the circumference thereof for confronting said stationary ring member to constitute a stop for said toothbrush holding notches, there being a notched portion in said stationary member to communicate with the opening therein for the removal of a single toothbrush therethrough, and means associated with said stationary member for retaining said revolvable member in journalled association therewith.

4. In a toothbrush holder, the combination with a stationary bracket member having an enlarged opening therein, of a revolvable member having its external circumference journalled in the opening of said stationary member, there being a plurality of toothbrush holding apertures in said revolvable member having reduced throats communicating with the external circumference to confront said stationary member whereby said stationary member constitutes a stop for said toothbrush holding apertures, there being a notched portion in said stationary member to communicate with the enlarged opening therein for the removal of toothbrushes therethrough from the apertures, and a removable expansible split ring member complementally associated with said stationary member for retaining said revolvable member in journalled association therein.

5. In a toothbrush holder, the combination with a wall mounting bracket member provided with an annular flange, of a revolvable member having its external circumference journalled in the opening of said wall mounting bracket, means associated with said annular flange to support said revolvable member for rotation therein, there being a plurality of toothbrush holding apertures on said revolvable member, and a manual turning member extending axially from said revolvable member and free from said bracket.

6. In a toothbrush holder, the combination with a stationary member provided with an enlarged opening therein having an annular flange, of a rotary member having an enlarged peripheral external flange which is the complement of said annular flange for journalled support therein, and a plurality of toothbrush holding means on said rotary member confronting said stationary member to constitute a stop for said toothbrush holding means, there being a notched portion in said stationary member to communicate with the opening therein for the removal of toothbrushes therethrough.

7. In a toothbrush holder, the combination with a wall mounting bracket member provided with an enlarged annular flange, of a revolvable member having its greatest external circumference journalled in the opening of said wall mounting bracket member, a plurality of toothbrush holding means on said revolvable member confronting said wall mounting bracket to constitute a stop for said toothbrush holding means, there being a notched portion in said wall mounting bracket to communicate with the opening therein for the removal of toothbrushes therethrough, and means associated with said wall mounting bracket for retaining said revolvable member therein.

8. In a toothbrush holder, the combination with a wall mounting bracket member provided with an opening having an annular flange, of a rotary member having an enlarged peripheral external flange which is the complement of said annular flange for journalled support therein, said peripheral flange having a plurality of outwardly constricted recesses therein to serve as a multiple toothbrush holder with the confronting annular flange periphery constituting the closure surface of said recesses to prevent accidental displacement of tooth brushes therefrom, there being a notched portion in said wall mounting bracket member to communicate with the opening therein for the removal of toothbrushes therethrough, and removable means complementally associated with said wall mounting bracket for retaining said rotary member therein.

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