March 10, 1953 H. H. WARNER ET AL 2,630,912

STERILIZED TOOTHBRUSH CONTAINER

Filed June 30, 1950

Fig. 1

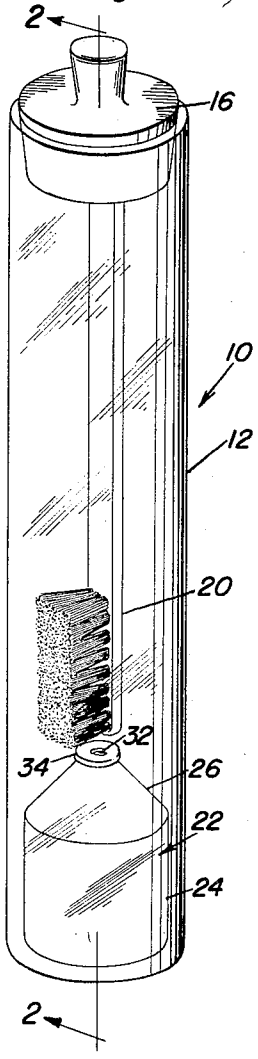


Fig. 2

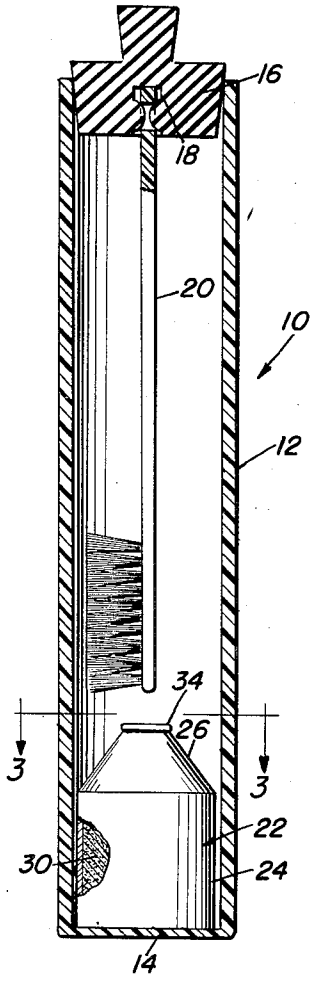


Fig. 3

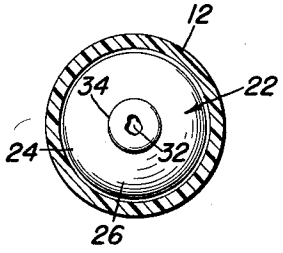


Fig. 4

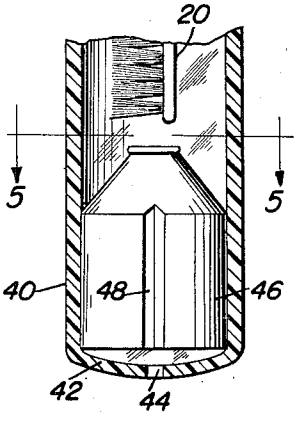
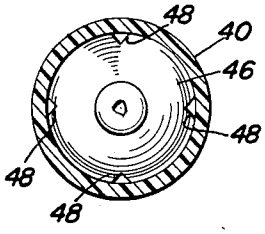


Fig. 5



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STERILIZED TOOTHBRUSH CONTAINER

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1 Claim. (Cl. 206—15.1)

1

This invention relates to new and useful improvements and structural refinements in sterilized tooth brush containers, and the principal object of the invention is to provide a device of the character herein described, wherein the sterilizing agent is properly protected against the effects of moisture from the tooth brush, wherein the tooth brush cannot come in direct contact with the sterilizing agent, and wherein the sterilizing agent may be preserved indefinitely in a special casing, until the use thereof is desired.

Some of the advantages of the invention reside in its simplicity of construction, in its adaptability for use in tooth brush receptacles of different sizes and types, and in its adaptability to economical manufacture.

With the above more important objects and features in view, and such other objects and features as may become apparent as this specification proceeds, the invention consists essentially of the arrangement and construction of parts as illustrated in the accompanying drawings, in which:

Figure 1 is a perspective view of the invention,

Figure 2 is a vertical sectional view, taken substantially in the plane of the line 2—2 in Figure 1,

Figure 3 is a transverse sectional view, taken substantially in the plane of the line 3—3 in Figure 2,

Figure 4 is a fragmentary vertical sectional view, similar to that illustrated in Figure 2, but showing a modified embodiment of the invention, and

Figure 5 is a transverse sectional view, taken substantially in the plane of the line 5—5 in Figure 4.

Like characters of reference are employed to designate like parts in the specification and throughout the several views.

Referring now to the accompanying drawings in detail, more particularly to Figures 1–3 thereof, the invention is embodied in a sterilized tooth brush container which is designated generally by the reference character 10 and includes in its construction a vertically elongated receptacle 12 provided with a flat bottom wall 14 and with a removable resilient cover 16, the latter affording a socket 18 for the reception of an apertured handle of a tooth brush 20, so that the tooth brush may be suspended in the receptacle 12 from the cap 16, as shown.

The essence of novelty of the invention resides in the provision of a sterilizer which is designated generally by the reference character 22 and consists of a substantially cylindrical casing 24 positioned on the bottom wall 14 of the receptacle

2

12 and provided with a frusto-conical upper portion 26.

The casing 24 contains a suitable sterilizing agent 30 which is hermetically sealed in the casing until such time as the sterilizer is to be placed in use, at which time a diffusing orifice 32 may be punctured in the top end of the frusto-conical portion 26 so that the fumes from the sterilizing agent may pass into the receptacle 12 to sterilize the tooth brush 20. If desired, the upper end of the frusto-conical portion 26 of the casing 24 may be provided with an annular member 34, the opening at the center of which defines the region which is to be punctured in forming the orifice 32.

It is to be noted that the lateral wall of the casing 24 is spaced inwardly from the inner surface of the receptacle 12, so that any moisture such as may drop from the tooth brush 20 will gravitate along the outwardly sloping surface of the frusto-conical portion 26 and accumulate in the space between the casing 24 and the receptacle 12. In this connection it is to be noted that the frusto-conical portion 26 affords between itself and the inner surface of the receptacle 12 what may be called an annular trough which may eventually be filled by the accumulated liquid. However, to safeguard any possibility of the accumulated liquid gaining entry into the casing 24 through the orifice 32, the receptacle 12 is preferably formed from transparent material, so that the amount of accumulated moisture in the bottom of the receptacle may be readily observed and the receptacle emptied before the level of such liquid reaches the annulus 34.

Referring now to the modified embodiment of the invention which is illustrated in Figures 4 and 5, the receptacle 40 herein is provided with a bottom wall 42 which has a concave inner surface and is formed at the center thereof with a drain opening or aperture 44.

In this instance the casing 46 of the sterilizer is substantially equal in outside diameter to the inside diameter of the receptacle 40, but it is to be noted that the lateral wall of the casing is provided with a plurality of vertically extending channels or grooves 48 so that moisture dropping from the tooth brush 20 may gravitate through these grooves or channels to the bottom of the receptacle and then drain outwardly therefrom through the opening 44. In this manner emptying of the receptacle is eliminated. In all other respects, the sterilizer in the modified embodiment is substantially the same as the sterilizer 22 already described.

It is believed that the advantages and use of

the invention will be clearly understood from the foregoing disclosure and accordingly, further description thereof at this point is deemed unnecessary.

While in the foregoing there has been shown and described the preferred embodiment of this invention, it is to be understood that minor changes in the details of construction and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as claimed.

Having described the invention, what is claimed as new is:

In combination with a container including a cylindrical lateral wall and a convex bottom wall provided with a central drain aperture, a substantially cylindrical casing positioned in the bottom portion of said container, the outside diameter of said casing corresponding substantially to the inside diameter of the container, and the lateral wall of said casing being provided with a plurality of longitudinally extending grooves affording passages between the portions of the container above and below the casing.

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