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TOILET BOWL DEODORIZER

Filed Feb. 15, 1963

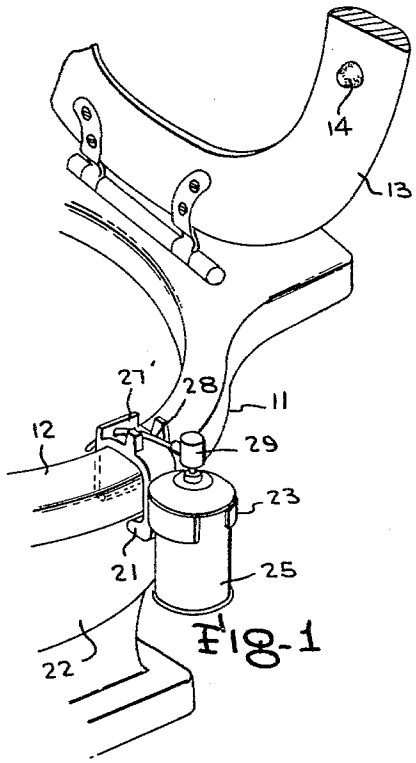


Fig-1

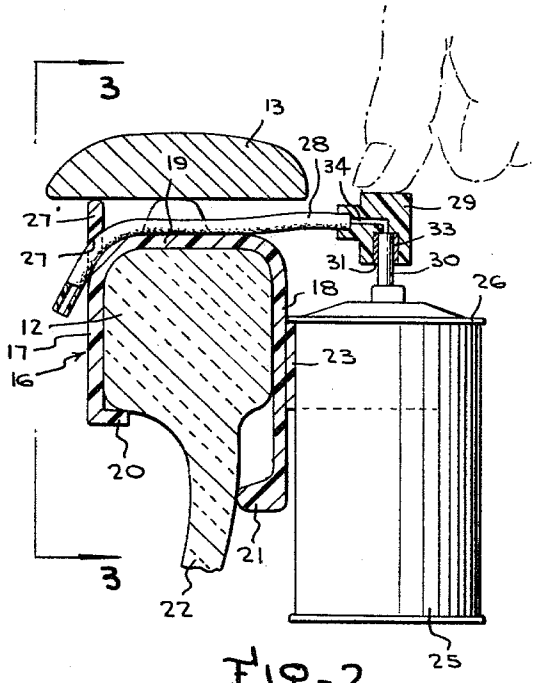


Fig-2

Fig-3

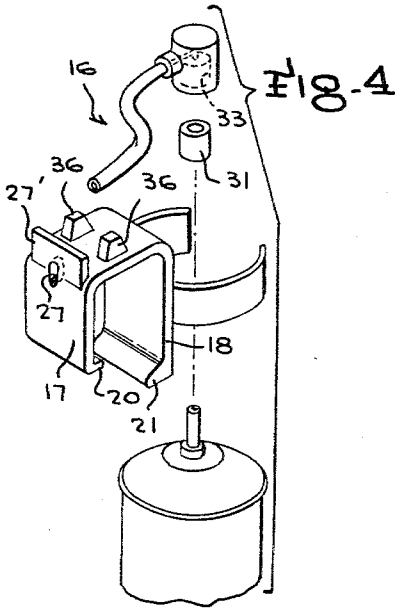
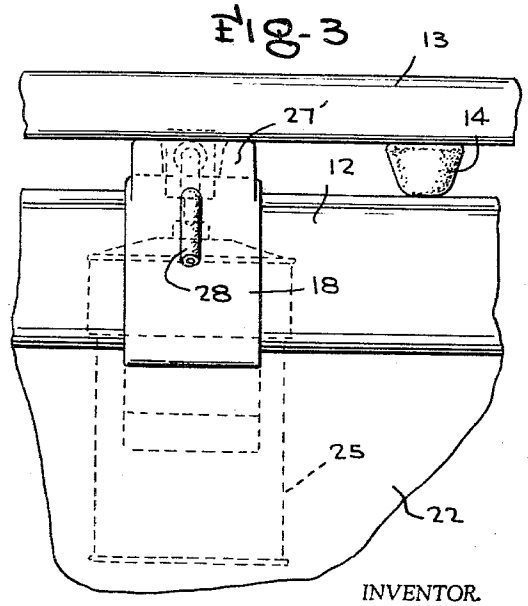


Fig-4



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TOILET BOWL DEODORIZER

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This invention relates to deodorizing devices, and more particularly to an improved supporting and dispensing attachment for an aerosol deodorant container for supporting the container in a position adjacent to a toilet bowl and having means for dispensing deodorant material into the toilet bowl.

A main object of the invention is to provide a novel and improved supporting and dispensing attachment for an aerosol deodorant container, said attachment being easy to mount, being conveniently accessible for operation, and being effective in preventing offensive odors from escaping.

A further object of the invention is to provide an improved device for supporting an aerosol deodorant container on the rim of a toilet bowl, said device having means for conveying deodorant material from the container into the toilet bowl, said means being arranged for easy operation by a person using the toilet bowl, whereby the deodorant material from the container can be sprayed into the toilet bowl, the attachment being simple in construction, being inexpensive to manufacture, and being inconspicuous in appearance.

A still further object of the invention is to provide an improved supporting and dispensing attachment for an aerosol deodorant container, said attachment being easy to mount on the rim of a toilet bowl, being durable in construction, being compact in size, and being reliable in operation.

Further objects and advantages of the invention will become apparent from the following description and claims, and from the accompanying drawings, wherein:

FIGURE 1 is a fragmentary perspective view of a portion of a toilet bowl provided with an improved supporting and dispensing attachment according to the present invention, the attachment being shown mounted on the rim of the toilet bowl and being illustrated as supporting a conventional aerosol deodorant container in position for use.

FIGURE 2 is an enlarged transverse vertical cross sectional fragmentary view taken through the rim of the toilet bowl and through the portion of the attachment of FIGURE 1 engaged on said rim, with the toilet seat associated with the toilet bowl in lowered position.

FIGURE 3 is a fragmentary elevational view taken substantially on the line 3—3 of FIGURE 2.

FIGURE 4 is a fragmentary perspective view showing the elements of an improved supporting and dispensing attachment according to the present invention in separated positions, and illustrating the use of an adapter ring so that the attachment may be used with aerosol containers having relatively small dispensing nozzles.

Referring to the drawings, 11 generally designates a conventional toilet bowl having the usual enlarged top rim 12 and provided with the hinged toilet seat 13. The toilet seat 13 is provided with a plurality of depending rubber bumpers 14 which are engageable with the rim 12 to resiliently support the seat 13 thereon, defining a space between the seat 13 and the top surface of rim 12 when the seat is in its lowered position.

Designated generally at 16 is an improved supporting and dispensing attachment according to the present invention, said attachment comprising a main body of resilient material, such as resilient plastic material, of generally inverted U-shape adapted to clampingly engage on the rim 12 in the manner illustrated in FIGURE 2, said body

having an inner vertical wall 17, an outer vertical wall 18 and a horizontal top wall 19, the walls 17, 18 and 19 being integrally joined and having curved top corners conforming with the similarly curved top corner portions of the cross section of the toilet bowl rim 12. The outer vertical wall 18 is considerably longer than the inner vertical wall 17, as is clearly shown in FIGURE 2, the inner wall 17 being provided with an inturned bottom flange 20 engageable beneath the inside corner of the toilet bowl rim 12 and the outer wall 18 being provided at its bottom edge with an inturned flange 21 substantially engageable against the outside surface of the rim side wall 22.

The main body of the device 16 is of substantial width and is yieldable so that it may be readily engaged on the rim 12 and clampingly engages said rim substantially in the manner illustrated in FIGURE 2.

Secured to the intermediate portion of the outer wall 18 is a generally horizontal C-shaped flexible clamping ring 23, which may be of suitable resilient plastic material, the ring 23 being adapted to receive and supportingly engage a conventional aerosol deodorant container 25 in the manner illustrated in FIGURES 1 and 2, namely, with the clamping ring 23 engaged around the body of the container and being supportingly engaged beneath the outwardly projecting top flange or bead 26 of the container. The clamping ring 23 is of substantial width so that it is effective to support the container 25 in a vertical position substantially parallel to and adjacent the side wall 22 of the toilet bowl, as illustrated.

The inner wall 17 is formed with an upstanding vertical flange 27' rising above the top wall 19, as illustrated in FIGURE 2, said flange being formed with a downwardly and inwardly inclined aperture 27. Designated at 28 is a flexible conduit which overlies and rests on the top wall 19 and extends through the aperture 27, being thus held so that its end portion is directed downwardly and inwardly. The outer end of the flexible conduit 28 is connected to a head member 29 of molded plastic material, or the like, said head member 29 being engageable over the upstanding discharge nozzle 30 of an aerosol container 25 supported in the clamping ring 23 in the manner illustrated in FIGURE 2. Thus, if the nozzle 30 is relatively small in diameter, a filler ring 31 may be employed between the nozzle and the inside bore of the nozzle-receiving cavity 33 of head 29. Head 29 is formed with a passage 34 which connects the cavity to the flexible conduit 28.

Top wall 19 is formed integrally with a pair of spaced upstanding lugs 36, 36, said lugs being located adjacent the respective side marginal portions of the top wall, as shown in FIGURE 4. The lugs 36, 36 receive the flexible conduit 28 therebetween and are engageable with the bottom surface of the toilet seat 13 to prevent the toilet seat from engaging the flexible conduit 28, the lugs 36 being substantially of the same vertical height as the bumper members 14 on the toilet seat. Thus, the lugs 36 protect the conduit 28 in the event that the bumpers 14 become deformed or disintegrated. The flange 27' rises substantially to the same height as the lugs 36, 36, so that it likewise acts to prevent the toilet seat 13 from descending so as to engage conduit 28.

To dispense deodorant material from the container 25, it is merely necessary to press downwardly on the head 29, which transmits downward force to the nozzle 30. In the conventional deodorant container 25, when nozzle 30 is depressed downwardly, the deodorant material is released and escapes through said nozzle. Thus, when downward pressure is exerted on the head 29, the deodorant material passes through the nozzle 30, through passage 34, and through conduit 28 into the toilet bowl being di-

rected downwardly and inwardly because of the configuration of the inner end portion of nozzle **19**, which is produced by the downward and inward inclination of the aperture **27**. Thus, the device may be operated by a person using the toilet and serves to prevent offensive odors from escaping therefrom during such use.

As will be readily apparent, the attachment is easily mounted on the rim of a toilet bowl, and can be mounted on either side thereof, namely, either on the right side or on the left side. The aerosol container **25** may be easily engaged in the clamping ring **23**. The head **29** may be engaged on the nozzle **30** of the aerosol container either before or after the aerosol container is engaged in the clamping ring **23**. The end of the flexible conduit **22** may be engaged through the inclined aperture **27** so that the inner end of the conduit is directed downwardly and inwardly, as illustrated in FIGURE 2, with the main portion of the conduit resting on the top wall **19** between the lugs **36, 36**.

The inwardly extending flange **21** is engageable against the outside surface of the toilet bowl side wall **22** to prevent the device from tilting from the position thereof illustrated in FIGURE 2, when the head **29** is pressed downwardly to release the deodorant material.

While a specific embodiment of an improved supporting and dispensing attachment for an aerosol deodorant container has been disclosed in the foregoing description, it will be understood that various modifications within the spirit of the invention may occur to those skilled in the art. Therefore, it is intended that no limitations be placed on the invention except as defined by the scope of the appended claims.

What is claimed is:

1. A supporting and dispensing attachment for an aerosol deodorant container comprising a main body of resilient plastic material of generally inverted U-shape adapted to clampingly engage over and depend adjacent opposite sides of the rim of a toilet bowl, said body having an inner vertical wall, an outer vertical wall, and a horizontal top wall, clamping means on said outer wall adapted to supportingly engage an aerosol deodorant container and support said container in a vertical upright position closely adjacent the outer wall, an upstanding flange on said body above said inner vertical wall and rising above said top wall, said flange having an aperture, and a flexible conduit extending through said aperture and being held thereby in a downwardly and inwardly inclined position, said conduit having an outer head communicating therewith and shaped to fit sealingly on the top end of the dispensing nozzle of an aerosol deodorant container.

2. A supporting and dispensing attachment for an aerosol deodorant container comprising a main body of resilient plastic material of generally inverted U-shape adapted to clampingly engage over and depend adjacent opposite sides of the rim of a toilet bowl, said body having an inner vertical wall, an outer vertical wall, and a horizontal top wall, an upstanding flange on said body above said inner vertical wall and rising above said top wall, said flange having an aperture, means to clampingly secure an aerosol container to the outer vertical wall, a flexible conduit extending through said aperture and being held thereby in a downwardly and inwardly inclined position, said conduit having an outer head communicating with

the conduit and shaped to fit sealingly on the top end of the dispensing nozzle of an aerosol deodorant container, and a pair of upstanding spaced toilet seat-supporting projections on said top wall located adjacent opposite side margins thereof and receiving said flexible conduit therebetween.

3. A supporting and dispensing attachment for an aerosol deodorant container comprising a main body of resilient plastic material of generally inverted U-shape adapted to clampingly engage over and depend adjacent opposite sides of the rim of a toilet bowl, said body having an inner vertical wall, an outer vertical wall, and a horizontal top wall, a generally C-shaped flexible clamping member secured on said outer wall adapted to engage supportingly around an aerosol deodorant container and to support said container in a vertical upright position closely adjacent the outer wall, an upstanding flange on said body above said inner vertical wall and rising above said top wall, said flange having a downwardly and laterally inclined aperture, a flexible conduit extending through said aperture and being held thereby in a downwardly and inwardly inclined position, said conduit having an outer head communicating with the conduit and shaped to fit sealingly on the top end of the dispensing nozzle of an aerosol deodorant container, and a pair of upstanding spaced toilet seat-supporting projections on said top wall located adjacent opposite side margins thereof and receiving said flexible conduit therebetween.

4. A supporting and dispensing attachment for an aerosol deodorant container comprising a main body of resilient plastic material of generally inverted U-shape adapted to clampingly engage over and depend adjacent opposite sides of the rim of a toilet bowl, said body having an inner vertical wall, an outer vertical wall, and a horizontal top wall, a generally C-shaped flexible clamping member secured on said outer wall adapted to engage supportingly around an aerosol deodorant container and to support said container in a vertical upright position closely adjacent the outer wall, said outer wall being substantially longer than said inner wall, respective inwardly directed projections on the lower edges of said inner and outer walls adapted to abut a toilet bowl on opposite sides of its rim, an upstanding flange on said body above said inner vertical wall and rising above said top wall, said flange having a downwardly and laterally inclined aperture, a flexible conduit extending through said aperture and being held thereby in a downwardly and inwardly inclined position, said conduit having an outer head communicating with the conduit and shaped to fit sealingly on the top end of the dispensing nozzle of an aerosol deodorant container, and a pair of upstanding spaced toilet seat-supporting projections on said top wall located adjacent opposite side margins thereof and receiving said flexible conduit therebetween.

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