May 25, 1971 R. P. LEITER ET AL 3,579,663

TOILET SEAT COVER

Filed Nov. 18, 1968

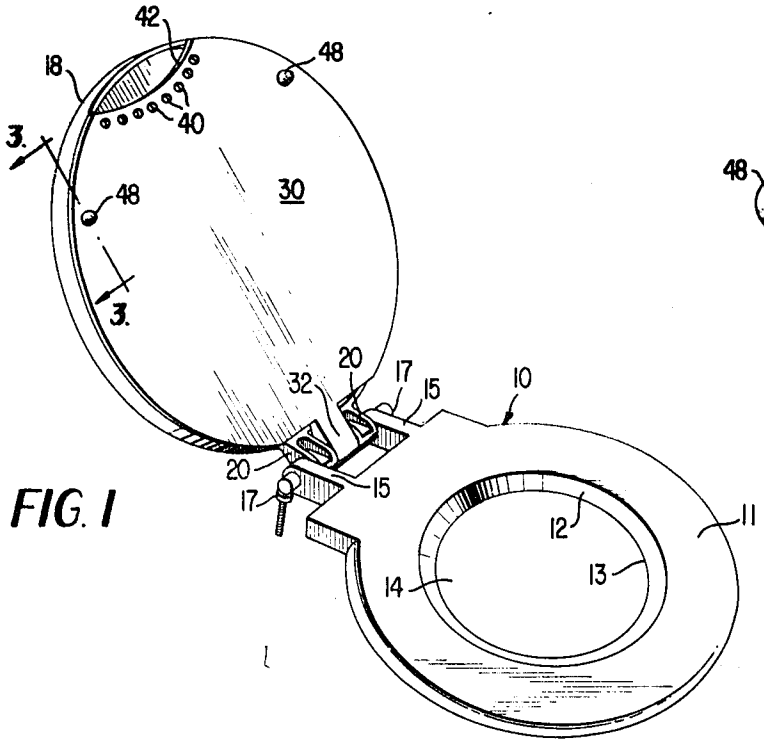


FIG. 1

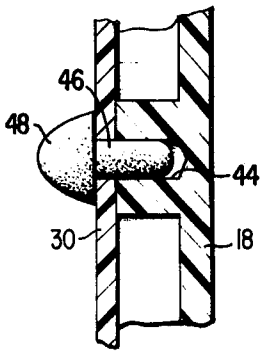


FIG. 3

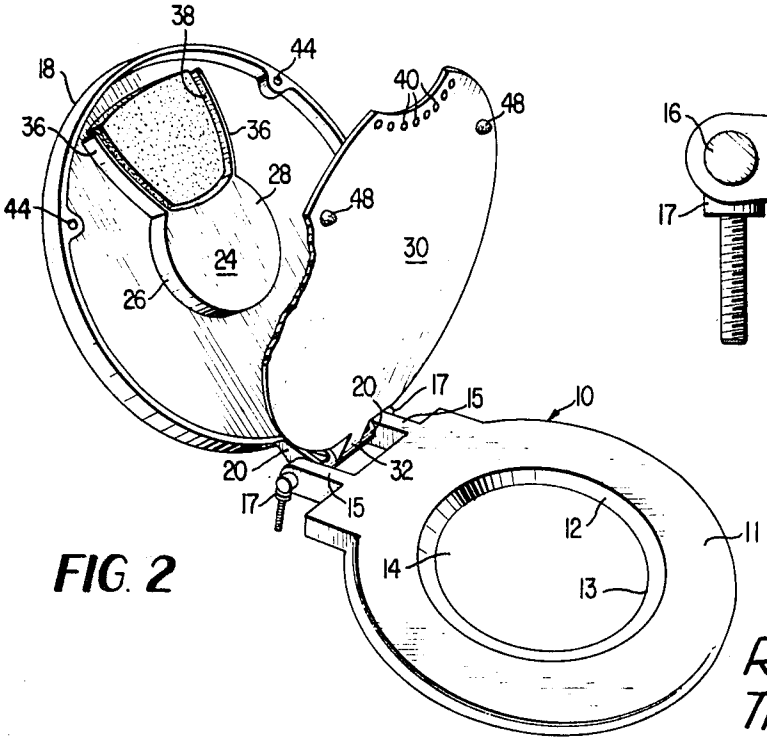


FIG. 2

FIG. 4

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TOILET SEAT COVER

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Continuation-in-part of application Ser. No. 755,137, Aug. 26, 1968. This application Nov. 18, 1968, Ser. No. 776,318

Int. Cl. E03d 9/00

U.S. Cl. 4—230 8 Claims

ABSTRACT OF THE DISCLOSURE

A toilet seat assembly having a cover pivotally secured to the seat member wherein there is provided a flat foraminous bottom member which has a common pivot with the cover, and cooperating members on the cover and flat bottom such that they may be snapped together or pulled apart. A central island having a pair of diverging walls extending therefrom is located on the inside face of the cover to define an open area for receiving deodorant material which is held in place by the flat bottom member when interlocked with the cover.

CROSS-REFERENCE TO RELATED APPLICATION

This application is a continuation-in-part of application Ser. No. 755,137, filed Aug. 26, 1968, for "Toilet Seat Assembly," by the same inventors.

BACKGROUND OF THE INVENTION

This invention relates generally to toilet seats and more particularly to a toilet seat cover assembly which provides for disinfecting and deodorizing the assembly.

In the past, deodorizing and disinfecting of toilets and toilet seat assemblies has been accomplished by either providing a device separate from the toilet seat assembly or by providing a deodorant housing which has generally proven to be difficult to install and refill, unattractive, cumbersome, relatively expensive, and not completely effective.

SUMMARY OF THE INVENTION

Accordingly, an object of the present invention is to provide a new and improved toilet seat cover assembly which is inexpensive to manufacture, easy to install and fill, attractive in appearance, durable in structure, and efficient in operation.

Another object of this invention is to provide a new and improved cover assembly which can effectively deodorize and disinfect without detracting from the overall appearance of the assembly.

A further object of the instant invention is to provide a cover assembly for a toilet seat which efficiently disinfects or deodorizes the seat in a continuous manner.

Briefly, in accordance with one embodiment of this invention, the foregoing and other objects are attained by providing a cover assembly having a cover plate with a generally planar inner surface and an integrally formed downwardly extending edge about a major portion of the periphery thereof, projections integral with and extending from the inner surface of the cover plate for providing side walls of a chamber, a generally planar foraminous member conforming in shape to the cover plate and having a peripheral extent generally coinciding with the downwardly extending edge for enclosing the chamber and providing a generally planar surface for the cover assembly, and releasable interlocking members for securing the foraminous member in engagement with the side walls for retaining vapor releasing material within the chamber.

Many other advantages and objects of the present invention will become readily apparent as the following detailed description of the invention unfolds when taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a perspective view of a toilet seat assembly constructed in accordance with the present invention, the deodorant chamber being closed;

FIG. 2 is a perspective view similar to FIG. 1 and showing the deodorant chamber in the open position;

FIG. 3 is a vertical sectional view, taken along the line 3—3 of FIG. 1, on an enlarged scale, of the securing device, utilized for retaining the deodorant chamber in the closed position as shown in FIG. 1; and

FIG. 4 is an enlarged vertical sectional view of a detail of the assembly shown in FIGS. 1 and 2, with parts broken away.

DESCRIPTION OF THE ILLUSTRATIVE EMBODIMENT

Referring now to the drawings wherein like reference characters designate identical or corresponding parts throughout the several figures and more particularly to FIG. 1, whereon numeral **10** denotes the seat of the toilet assembly being conventional in construction and preferably formed from plastic by injection molding. The toilet seat **10** includes an upper annular surface **11** and an inwardly and downwardly inclined inner surface **12**, integrally joined together, wherein the inner periphery **13** of the surface is oval or elliptical to define a central opening **14** therein. At the rear of the outer edge, seat **10** is bifurcated to provide a pair of spaced, parallel rearwardly extending arms **15** which pivotally receive and journal a transverse shaft or rod **16**, seen in FIG. 4. As is conventional, a pair of opposed brackets **17**, seen in FIGS. 1, 2 and 4, support the rod **16** in a transverse or horizontal position, the brackets **17** being secured on the top of a conventional commode so as to provide support and permit the pivoting of the toilet seat assembly thereabout.

The cover **18**, pivotally connected to the seat **10**, has a pair of rearwardly extending arms **20** which are journalled on rod **16** and pivotally received between the arms **15**.

As best seen in FIG. 1, the cover **18** includes a relatively flat wide annular outer plate, the central portion of which is integrally connected to a downwardly projecting oval shaped cup, denoted generally by numeral **24**. The cup **24** has a continuous wall **26** perpendicular to the plate, the upper edge portion of cup **24** being integrally connected to the inner surface of the flat upper plate. The wall **26** depends from the plate and is integrally joined along its lower edge by a bottom plate **28**.

A flat chamber enclosing member **30** is illustrated as having a central rearwardly extending arm **32** pivotally journalled on rod **16** between the arms or legs **20**. The flat plate **30** has a configuration substantially the same as cover **18** so as to engage the rim or edge of cover **18** when in the closed position shown in FIG. 1. Extending forwardly of cup **24** are a pair of diverging projections **36** integrally formed on the plate and having a depth substantially equal to the depth of the rim to define the side walls of a chamber **38** for housing a vapor releasing chemical block of deodorant or disinfectant. When in the closed position, as shown in FIG. 1, the plate **30** encloses chamber **38** to retain the deodorant or disinfectant therein. The plate **30** is rendered foraminous by virtue of a plurality of apertures **40** on the forward edge thereof such that the vapor released from chamber **38** may permeate the toilet and toilet seat through the apertures **40**. A hand hole **42** is provided on the forward portion of plate **30** to enable the plate **30** to be readily opened and closed.