May 30, 1944. J. N. PAGE 2,349,985

RECEPTACLE CLOSURE

Filed March 2, 1942

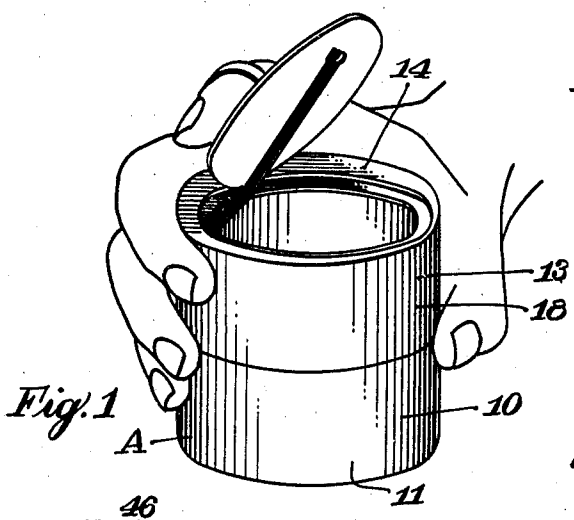


Fig. 1

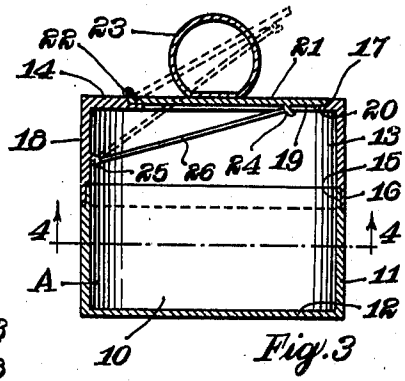


Fig. 3

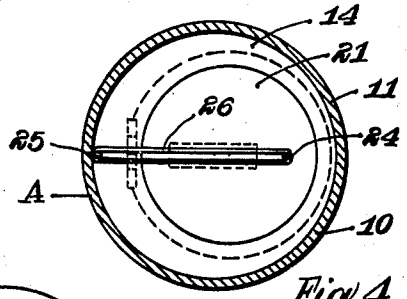


Fig. 4

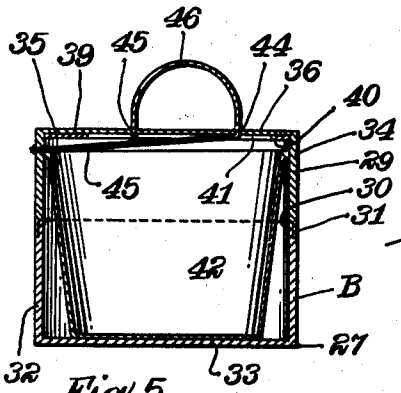


Fig. 5

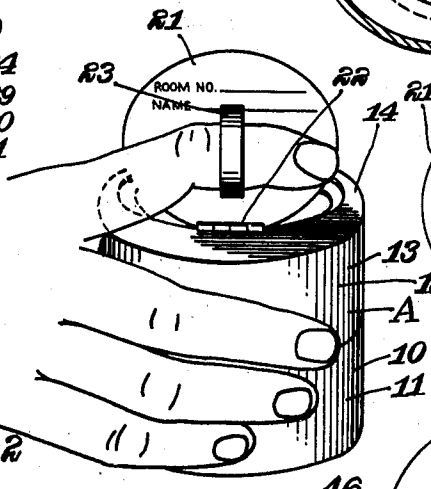


Fig. 2

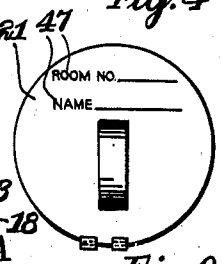


Fig. 9

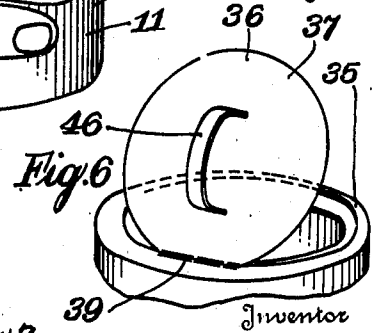


Fig. 6

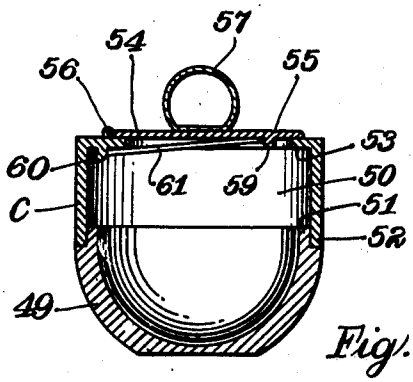


Fig. 8

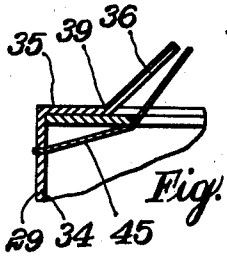


Fig. 7

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UNITED STATES PATENT OFFICE

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RECEPTACLE CLOSURE

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Application March 2, 1942, Serial No. 432,937

3 Claims. (Cl. 220—30)

My invention relates to an improvement in receptacle closure wherein it is desired to provide an extremely simple and effective closure for small containers and the like.

In tuberculosis sanitariums, and the like, small receptacles are extremely desirable for use as cuspidors. It is extremely desirable that these be used by individual patients and that they be individually marked, so that the necessary tests and examinations may be made. These receptacles must be extremely simple to operate and low in cost, and are preferably water tight so that no liquid may be spilled therefrom, even when they are tipped over or dropped.

It is the object of the present invention to provide a receptacle which may be used with a minimum of effort and which will provide an effective seal to prevent the escape of moisture. My receptacle may be operated with very little effort, and with a natural movement which will not inconvenience a patient.

The receptacle is preferably of such a size that it may be easily held during use.

A feature of the present invention lies in the provision of a simple closure which is actuated by means of a resilient element, such as a rubber band, or the like. This band is stretched as the closure is opened, and when the pressure is released, the band will draw the closure into sealed position.

A feature of the present invention lies in the provision of a body portion in two sections which may be disassembled when desired for examination and for cleaning purposes. When assembled, however, the container is liquid tight and moisture will not leak therefrom, even when the container is tilted.

A feature of the present invention lies in the provision of a body structure suitable for accommodation of a removable or replaceable inner lining. With this construction, the inner lining, which by itself forms an inner open-topped receptacle, may be removed and discarded at intervals.

A feature of the present invention lies in the formation of the container body, which is so arranged, that it may be constructed of plastic, metal, paper, or other suitable material. When so constructed the container is suitable for various uses, and may be designed as an individual ash tray or for other various purposes.

An additional feature of the present invention comprises the use of a surface of the container as a marking surface for indicating the name and room number of a patient when the receptacle is used for this purpose. This will provide a clear record of the name of the patient using each individual receptacle.

These and other objects and novel features of my invention will be more clearly and more fully set forth in the following specification and claims.

In the drawing forming a part of my specification:

Figure 1 is a perspective view of my receptacle in readiness for use.

Figure 2 is a rear perspective view of the receptacle in partially opened position.

Figure 3 is a vertical cross-sectional view through the receptacle, showing in full lines the closure in closed position and showing in dotted outline the partially open position of the closure.

Figure 4 is a transverse section through the container, the position of the section being indicated by the line 4—4 of Figure 3.

Figure 5 is a vertical section through a modified form of container.

Figure 6 is a perspective view of the container illustrated in Figure 5, showing this container in partially open position.

Figure 7 is a sectional view through a portion of the closure in partially open position.

Figure 8 is a sectional view through another modified form of container.

Figure 9 is a top plan view of the closure showing the surface thereupon which may be marked to indicate ownership.

The container A, illustrated in Figures 1, 2, and 3 of the drawing comprises a cylindrical lower section 10, including a hollow cylindrical shell 11 forming the side wall of the section and a bottom 12 closing the lower end of this shell. The upper portion 13 of the receptacle A includes a cylindrical shell 18 of substantially the same diameter as the shell 11 and includes a top plate 14 closing the top of the shell. As best illustrated in Figure 3 of the drawing, the shell 11 includes a flange of relatively smaller diameter, indicated by the numeral 15, projecting upwardly therefrom into overlapping relation with a flange 16 on the upper shell 13. The flanges 15 and 16 frictionally engage to hold the container assembled, or these flanges may be threaded to engage more firmly, if it is so desired.

The top 14 is provided with a recess 17 extending partially through the same and a concentric recess 19 of smaller diameter extends the remaining distance through the top 14. This

provides a circular flange or shoulder 20, which acts to support the closure 21.

The closure 21 is connected by the hinge to the top 14. This closure 21 is of a shape to fit in the recess 17 and to rest upon the shoulder 20. The closure 21 fits tightly against the shoulder 20 so as to seal the closure with respect to the top 14. A ring or loop 23, adhered or otherwise affixed to the upper surface of the closure 21, forms a convenient means of opening the closure. The loop 23 is of sufficient size to permit a finger to be inserted thereinto for opening the closure 21.

A hook 24 is provided on the lower surface of the closure 21, and a hook 25 is provided on the inner surface of the shell 13 on the side of the closure hingedly connected to the top 14. A rubber band 26 is mounted between the hooks 24 and 25 to draw the closure 21 into closed position. The hooks 24 and 25 are so located that the band 26 is stretched as the closure is opened. As a result, the band will draw the closure into sealed relation with the top 14 when manually released.

In Figure 5 of the drawing, I disclose a somewhat similar construction which is useful for a great number of purposes. The receptacle B includes a lower portion 27 and an upper portion 29, which are provided with frictionally engaging friction flanges 30 and 31. The lower section 27 comprises a cylindrical shell 32, being closed at the lower end by the bottom 33. The upper section 29 includes a cylindrical shell 34 which is closed at its upper extremity by a top 35. The top 35 is provided with a closure 36, which is preferably formed by cutting the top along the arcuated line 37, as illustrated in Figure 6 of the drawing, but leaving a short uncut portion 39 which may be scored along a straight line to act as a hinge. A second closure disc 40 underlies the top 35 and is provided with an opening 41 therethrough, which is in registry with the closure 36, but is of smaller diameter. As a result, the edges of the disc 40, bordering the opening 41, act to support the closure 36.

A removable and replaceable cup 42 is provided within the container B to support the contents of the container. This cup 42 may be removed and disposed of from time to time, as it is desired. The cup 42 fits closely adjacent the inner walls of the receptacle to seal thereagainst. A resilient means, such as a flat rubber band 43, may be secured to the side of the shell 29 adjacent the hinge 39, and may extend through a slot 44 in the closure 36, and may be secured to the closure at 45 to provide an externally projecting loop 46. This loop may be used as a handle to open the closure 36 and a finger may extend through this loop to open the closure.

In Figure 9 of the drawing, I disclose the closure 21 having marked upon its surface indicia, such as 47 which states "Name" and "Room number," or other suitable indicia markings. The surface of the closure 21, following the indicia 47 may be roughened sufficiently to permit the name and room number to be marked thereupon, if the container is to be formed of plastic, or such a construction is unnecessary if the receptacle is formed of paper or similar material. The individual containers may thus be properly identified.

In Figure 8 of the drawing, I disclose a modified form of receptacle construction, indicated in general by the letter C. The receptacle C comprises a concave bottom section 49 and a substantially cylindrical upper portion 50. A cylindrical flange 51 on the bottom portion 49 fits in sealing relation with the cylindrical shell 52 from the side walls of the upper section. A top 53 is provided on the upper section 50 and an opening 54 is provided in this top 53. A closure plate 55 is hinged at 56 to the top 53 and acts to normally close the opening 54.

A ring or loop 57 is provided on the upper surface of the closure 55 for operating this closure. The ring 57 is of sufficient size to permit insertion of a finger therein for use in opening the closure. A hook 59 projects downwardly from the undersurface of the closure and a similar hook 60 is provided on the undersurface of the top 53 adjacent the hinge 56. A rubber binder 61 connects the hooks 59 and 61 and draws the closure 55 normally against the top 53.

The receptacle C is particularly designed for use as an ash tray, or similar article, and is so shaped that the ashes will be easily cleaned therefrom. As the closure 55 fits tightly against the top 53, a burning object, such as a cigarette or the like, will not remain ignited for any considerable period of time, due to the lack of oxygen within the receptacle after the burning has continued for a short period of time.

In accordance with the patent statutes, I have described the principles of construction and operation of my receptacle, and while I have endeavored to set forth the best embodiments thereof, I desire to have it understood that obvious changes may be made within the scope of the following claims, without departing from the spirit of my invention.

I claim:

1. A container comprising a body, a top on said body having an opening therethrough, a closure for said opening, a hinge connecting said closure to said body, and a resilient band secured to said container wall, extending through said closure, forming a free open loop above said closure adapted to receive a finger, and being terminally connected to said closure, said band extending substantially beneath said hinge.

2. A container comprising a body, a top on said body having an opening therethrough, a closure for said opening, a hinge connecting said closure to said body, a resilient band secured to said container wall, said band extending through said closure and forming a free open loop above said closure adapted to receive a finger, said band extending substantially beneath said hinge.

3. A container comprising a body, a top on said body having an opening therethrough, a closure for said opening, a hinge connecting said closure to said body, and a resilient band secured to said container wall, said band extending through said closure and extending freely above said closure to form a handle for opening said closure, said band extending substantially beneath said hinge.

JOHN N. PAGE.