May 30, 1944. A. L. FELDMAN 2,349,856

MOISTURE ABSORBING DEVICE

Filed June 16, 1942

Fig. 1.

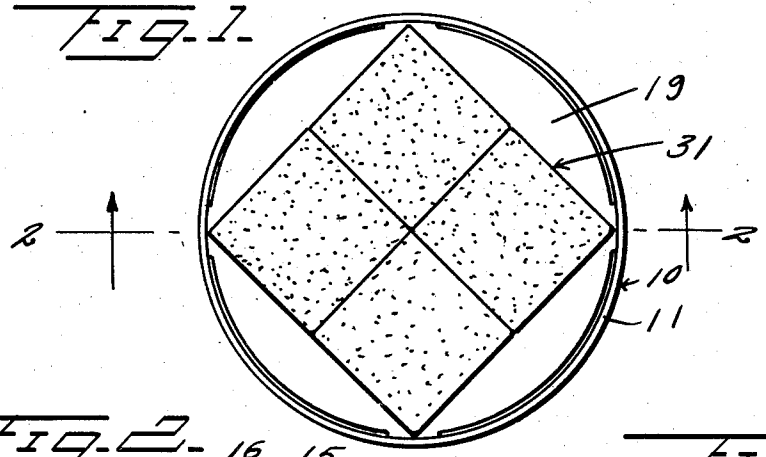


Fig. 2.

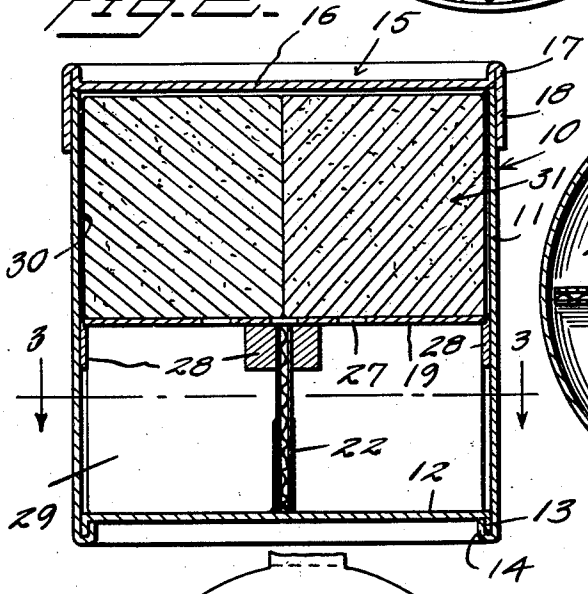


Fig. 3.

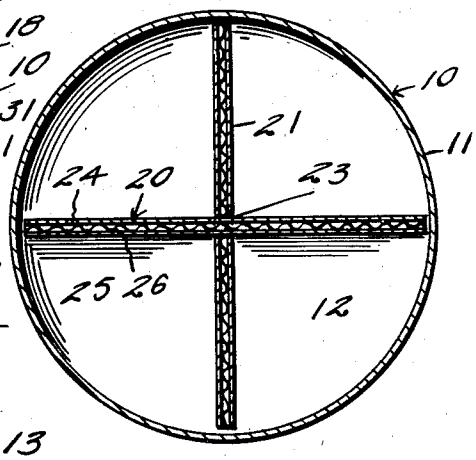
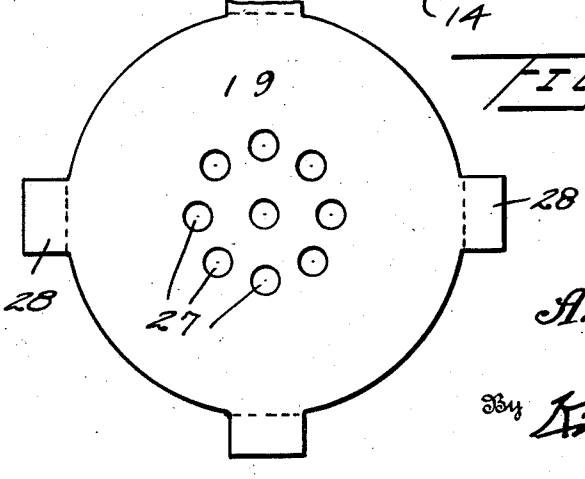


Fig. 4.



Inventor

A. L. Feldman

By Kimmel & Crowell

Attorneys

Patented May 30, 1944 2,349,856

UNITED STATES PATENT OFFICE

2,349,856

MOISTURE-ABSORBING DEVICE

Abrom L. Feldman, Atlanta, Ga.

Application June 16, 1942, Serial No. 447,284

2 Claims. (Cl. 229—15)

This invention relates to a moisture absorbing means and a receptacle therefor.

An object of this invention is to provide a moisture absorbing compound for removing moisture from closets, containers, or the like, so as to prevent accumulation of mildew, to eliminate mold and to eliminate unpleasant odors.

A further object of this invention is to provide an improved combined package and receptacle in which the solidified compound is adapted to be positioned, the receptacle being of a disposable waterproof construction and including a removable closure for exposing the compound to the atmosphere.

A further object of this invention is to provide an improved combined package and receptacle which may be formed out of waterproof cardboard or the like and which is provided with an inner bottom with a support for the latter, thereby dividing the interior of the receptacle into an upper chamber in which the solid compound is positioned, and a lower liquid receiving chamber.

With the foregoing objects and others which may hereinafter appear, the invention consists of the novel construction, combination and arrangement of parts as will be more specifically referred to and illustrated in the accompanying drawing, wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications may be resorted to which fall within the scope of the invention as claimed.

In the drawing:

Figure 1 is a detail top plan of a moisture absorbing device constructed according to an embodiment of this invention showing the device with the cover or closure removed,

Figure 2 is a sectional view taken on the line 2—2 of Figure 1, with the cover in position,

Figure 3 is a sectional view taken on the line 3—3 of Figure 2, and

Figure 4 is a top plan partly broken away of the inner perforate bottom.

Referring to the drawing, the numeral 10 designates generally a receptacle which is adapted to be constructed out of cardboard or other fibrous material and which is coated or impregnated with waterproof material. The receptacle 10 includes a cylindrical side wall 11 and a bottom wall 12 which is formed at the outer marginal edge thereof with a depending cylindrical flange 13. The lower end of the side wall 11 is reverted or crimped as at 14 so as to tightly hold and seal the bottom 12 in the lower end of the side wall 11.

A closure 15 is adapted to removably engage the upper open end of the receptacle 10 and includes a disc-shaped body 16 which is formed with a reverted marginal edge portion 17. The reverted edge portion 17 forms a rib extended outwardly from the outer side of the body 16 and a cylindrical flange 18 is formed integral with the rib or reverted portion 17 and is adapted to tightly and removably engage about the outer surface of the body 11.

An inner disc-shaped bottom 19 is disposed within the cylindrical side wall 11 in upwardly spaced relation to the lower bottom 12. The inner bottom 19 is supported in upwardly spaced relation with respect to the lower bottom 12 by means of a pair of right angularly related partitions or supporting members 20 and 21. The supporting member 20 is formed centrally of the length thereof with a downwardly opening slot 22 and in like manner the wall or supporting member 21 is formed centrally of the length thereof with an upwardly opening slot 23. In this manner the two inner walls or supporting members 20 and 21 may be interlocked with each other so that the upper and lower edges thereof will be coplanar.

Each supporting member or partition includes a pair of sheet-like walls or plates 24 and 25 which are disposed in spaced apart relation and have secured therebetween a corrugated sheet 26. The corrugated sheet 26 provides reinforcing for the two outer walls or sheet members 24 and 25 so that the two partitions 20 and 21 will be strengthened and may readily stand on edge to support the weight which is placed on the inner bottom member 19.

The inner bottom 19 is provided with a plurality of circumferentially spaced apart openings 27 and the outer edge of the inner bottom 19 has formed integral therewith a plurality of circumferentially spaced apart depending flaps or fingers 28. The flaps or fingers 28 are adapted to be interposed between the outer vertical edges of the partitions 20 and 21 so as to tightly hold the partitions 20 and 21 against rotary movement in the side wall 11 and the frictional engagement of the flaps or fingers 28 also provide a holding means for holding the inner bottom 19 in position on the upper edges of the partitions 20 and 21. The inner bottom 19 divides the interior of the receptacle 10 into a lower liquid receiving chamber 29 and an upper chamber 30. A moisture absorbing element 31 is adapted to be disposed in the upper chamber 30 and rests on the upper side of the inner bottom 19.

This moisture absorbing element 31 is con-

structed in the form of a plurality of cakes of calcium chloride which have impregnated therein at the time of the formation of the solid body a perfume or odorizing element so that the odorizing element will be normally inert but will be rendered active when moisture is absorbed by the hygroscopic element 31.

In the use of the moisture absorbing device, the package which is formed by the receptacle 10 and the solid calcium chloride or moisture absorbing element 31 is normally sold with the closure 15 on the upper end of the receptacle 10. As long as the closure 15 is in position no moisture will collect on the calcium chloride or element 31 and no odor will be given off by this element. Where it is desired to remove moisture from the atmosphere in a closed chamber, such as a closet or the like, the receptacle 10 is placed in the closet or closed chamber and the cover or closure 15 removed. This will expose the calcium chloride to the atmosphere and the moisture in the atmosphere will collect on the body or cake 31.

As the moisture is collected on the calcium chloride the inert odorizing element will be rendered active so that such odorizing element will permeate the closet or chamber and if desired the odorizing element may be in the form of an insect repellent odor.

By constructing the package out of waterproof cardboard or the like, the receptacle may be thrown away or disposed of after the cake 31 has been dissipated.

What I claim is:

1. A receptacle comprising a cylindrical body, a lower bottom in said body, a pair of right angularly disposed inner walls resting at their lower edges on said bottom wall, an inner perforate bottom resting on the upper edges of said inner walls, said inner bottom dividing the interior into a lower chamber and an upper chamber, downturned fingers integral with said inner bottom and interposed between the outer ends of said inner walls and the inner side of said body for holding said inner walls against movement, and a closure encompassing the upper end of said body.

2. A receptacle comprising a cylindrical body, a lower bottom in said body, a pair of upright right angularly disposed inner walls resting on said bottom wall, each inner wall comprising a rectangular member formed with an elongated medial slot extending inwardly from one horizontal edge thereof, each member including a pair of spaced apart relatively rigid sheets and a corrugated member disposed between said sheets, the slots in said rectangular members being oppositely disposed whereby said members may interlock with each other, an inner perforate bottom resting on the upper edges of said inner walls, said inner bottom dividing the interior into a lower chamber and an upper chamber, downturned fingers integral with said inner bottom and interposed between the outer ends of said inner walls and the inner side of said body for holding said inner walls against movement, and a closure encompassing the upper end of said body.

ABROM L. FELDMAN.