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W. V. LUNDQUIST  
COMBINED RETAINING WEIGHT AND DEODORIZER  
FOR GARBAGE CAN COVERS  
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3,102,661

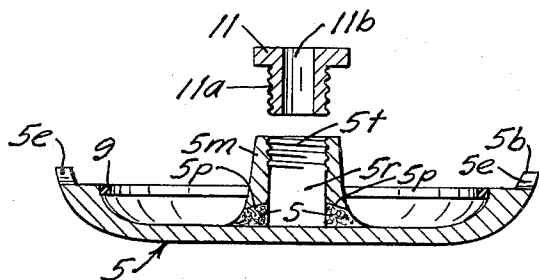
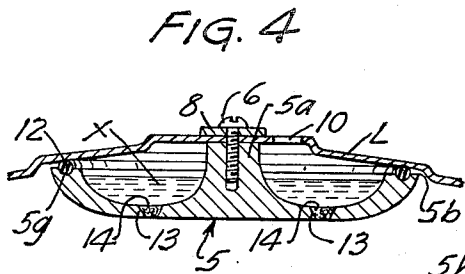
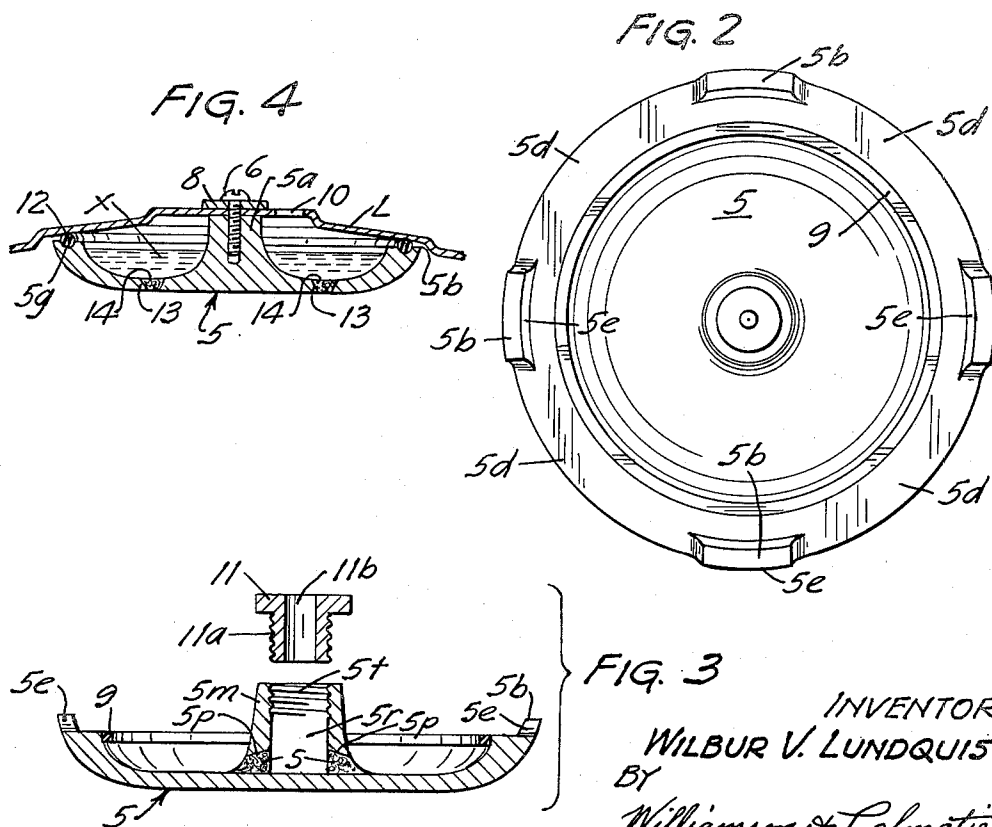
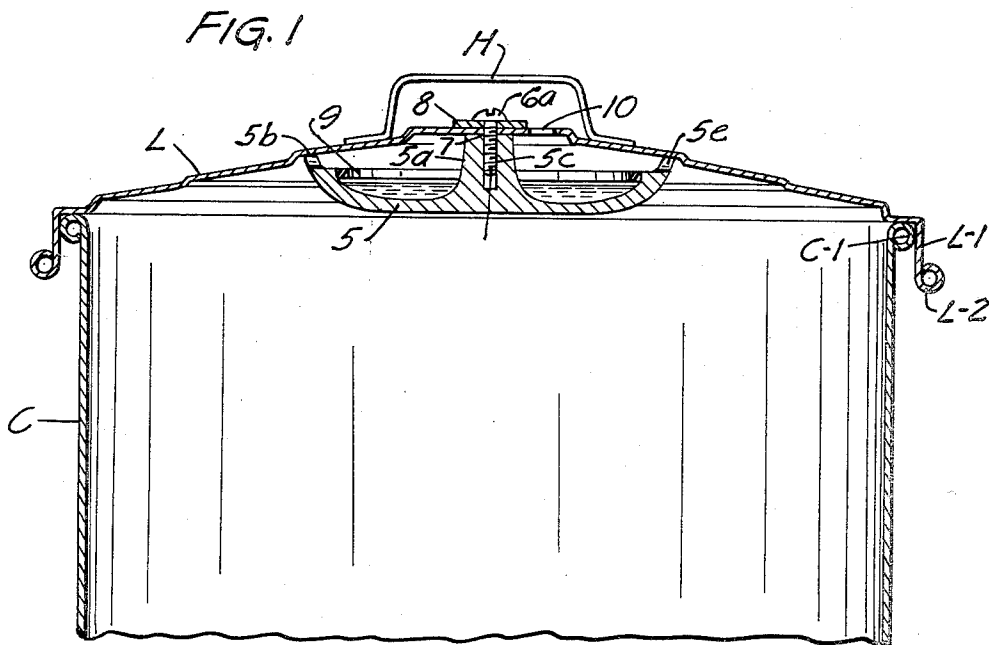


FIG. 3

INVENTOR  
WILBUR V. LUNDQUIST  
BY  
Williamson & Palmatier  
ATTORNEYS

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**COMBINED RETAINING WEIGHT AND DEODORIZER FOR GARBAGE CAN COVERS**  
 Wilbur V. Lundquist, 2209 W. 91½ St.,  
 Minneapolis 31, Minn.  
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 1 Claim. (Cl. 220-87)

This invention relates to garbage cans and other containers having readily removable lids or covers, and has particular application to a device which will both prevent displacement or removal of the cover from the container by winds, animal displacements or other causes and which will also supply to the top of the garbage can or container beneath the cover, a supply of a chemical adapted to deodorize and/or disinfect the upper contents of the can.

At the present time most garbage cans and other containers holding rubbish or waste material are provided with lids or covers which very loosely fit the upper edges of the container proper, telescoping in shallow relation therewith. Such lids too frequently are displaced by high winds or by dogs or other animals, domestic and wild, lifting upon one edge of the cover to tilt and displace the same. Garbage cans and the like, particularly when substantially full of waste material and garbage, produce unpleasant odors and contamination in the areas wherein they are supported.

It is an object of my invention to provide a combined retaining weight and deodorizer integrally formed in preferably a unitary device or element which will be effective to prevent displacement of the cover by wind and manipulation by domestic and/or wild animals and which will also act as a deodorizer or disinfectant or both for the upper stratum of the contents of the garbage can and particularly the air space just below the cover.

More specifically it is an object to provide a combined retaining weight and deodorizer holder and distributor for garbage can covers and the like which may be very readily and inexpensively applied to conventional garbage can covers and analogous container lids and which preferably is secured to and supported from the centermost portion of the garbage can cover through retaining means preferably of a clamping nature, having an element projecting through the can cover and threaded into a retaining socket of the weight device; and having also in combination with the can cover, a passage for replenishing and supplying a liquid or granular deodorizing chemical through the dished portion of the weight member for dissemination and/or distribution to the contents of the can just below the cover.

A further and more specific object is the provision of a simple, comparatively inexpensive combination device of the class described wherein the weight member and retainer for deodorizer will not interfere with the loading or dumping of the garbage can and wherein the device may be readily attached by unskilled users without special tools.

These and other objects and advantages of my invention will more fully appear from the following description made in connection with the accompanying drawings, wherein like reference characters refer to the same or similar parts throughout the several views in which:

FIG. 1 is a vertical section taken through the upper portion of a conventional garbage can having the usual cover superimposed thereon and with an embodiment of my combined retaining weight and deodorizer applied to the cover in operative position;

FIG. 2 is a top plan view of the combined retaining weight and deodorizer detached (and on a larger scale);

FIG. 3 is a vertical section taken through an alternative form of my invention; and

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FIG. 4 is a similar vertical section of a second alternative form of the invention, wherein a positive seal is made throughout the upper peripheral edge of the weight member and the bottom side of the central cover portion.

Referring now to the form of the invention shown in FIGS. 1 and 2, the upper portion of a garbage can C is shown in diametrical, vertical section, having telescopically applied thereto in the usual manner, a garbage can cover or lid L, having the usual depending flange L-1 terminating in a beaded edge L-2. The flange L-1, at its angularly bent portion is superimposed about the upper peripheral edge of can C which usually terminates in a reinforcing bead C-1.

The lid or cover L, in conventional garbage cans very loosely fits the upper open end of the can so that it may be readily superimposed thereon and will not stick or cause difficulty in fitting, through bulges or encrustment at the upper end of the can. Consequently, in conventional garbage cans and other analogous containers the covers or lids L are easily displaced and removed through high winds and also, by manipulative effort of domestic animals such as dogs and often, in rural areas, by wild animals, such as skunks, raccoons, bear and the like.

The form of my invention shown in FIGS. 1 and 2 comprises a relatively heavy, integral retaining weight and deodorizer indicated as an entirety by the number 5 of circular and general dished shape, having as shown a central upstanding boss 5a which terminates at its upper end in a plane slightly above the peripheral upper edge 5b of the dished body 5. The boss 5a is axially tapped from the upper end thereof to provide a threaded socket 5c for reception of a clamping screw 6 which in attachment, passes through an aperture 7 formed centrally in the top of the can cover or lid L. A reinforcing plate or washer 8 is interposed between the head 6a of the screw and the central portion of the lid L bearing in substantial area, against the sheet metal of the central portion of the lid.

The upper peripheral edge 5b of the dished, circular weight and deodorizer member is provided with elongated, shallow recessed portions 5d extending between the upstanding peripheral lid-engaging portions 5e to form venting apertures for permitting volatile fumes from the deodorant or disinfectant to be transmitted to the underside of the general area of the lid L. The edges 5b are formed to abut and seat against the appropriate portions of the underside of the can cover to substantially seal and seat thereagainst, further reinforcing the lid when the member 5 is clamped and secured in the position shown in FIG. 1.

I prefer to employ, in the structure of FIGS. 1 and 2, a ring or collar 9 which may be constructed of plastic, rubber or metal and which is secured by cement or other means to the upper portion of the dish proper, forming an overhanging ledge to prevent spilling of liquid contents of the dish portion when the lid L is taken off from the garbage can to load material into the can or to dump the can. The aperture 7 and the screw 6 are preferably applied to the garbage can cover or lid in a position below the conventional handle H of the lid.

A filling and replenishing passage 10 is formed in the central portion of the lid L, as shown to one side or just below the handle H, through which liquid or granular chemical material either in liquid or solid form, may be introduced and will drop into the annular dish container formed by the body member 5.

The weighted member 5 may vary in accordance of course with the general dimensions of the can, from say 2½ pounds to 8 pounds.

From the foregoing description in connection with the accompanying drawings, it will be seen that I have provided a readily attachable, rather inexpensive combined

retaining weight and deodorizer for the covers or lids of garbage cans and like containers. The structure enables the lid to be retained against displacement through the usual objectionable sources now prevalent. My structure offers no impediments to the charging or discharging of the garbage can and enables the odor which usually is present in garbage cans, to be minimized by application and distribution of fumes most advantageously in the dome portion of the can cover or lid L.

In FIG. 3, an alternative embodiment of the invention is shown wherein the body identified as an entirety by the numeral 5 is provided with an enlarged boss member 5m which also acts as a small reservoir or container 5r to hold liquid deodorant or antiseptic. The interior of the large boss 5m is threaded at 5t to receive the externally threaded, tubular collar 11a of the clamping nut 11, having an axial charging passage 11b formed therethrough. The body member or dished weight 5 is secured to the under central portion of the can cover L in the manner previously described with reference to the form of FIGS. 1 and 2, and the peripheral upper edge 5a of the body member 5, are related with the upper end of the boss 5m to abut and be disposed in reinforcing relation against the under-side of the lid L when the device is clamped in attached position.

In this last mentioned form, the lower portions of the enlarged boss 5m are provided with outwardly tapered liquid-discharge passages 5p, three or four in number, in which small sponge elements S are inserted to permit gradual dripping and communication of the deodorizer liquid or antiseptic, through said passages and into the dished portion or the body member 5.

In FIG. 4 another alternative form of the invention is provided which has high efficiency to prevent spilling of liquid deodorizer material within the dished weight when the cover is removed and tilted. In this form the body member 5 is provided with a boss 5a similar to the first form described, interconnected and supported from the central portion of the can cover or lid L by a screw 6 and the screw reinforced by a washer or plate 8.

The peripheral edge 5b of this last mentioned form is of uniform height and is provided with a concentric annular groove 5g in which is seated and secured as by cement, an enlarged O-ring 12 which in operative positioning of the body 5 forms a tight seal against the under-side of a circular zone of the lid L. A filling and replenishing passage 10 is provided in the cover similar to the passage shown in the form first described.

The liquid deodorizer or antiseptic X is disposed within the dished annular portion of the body 5 and is dripped or dispensed through a number of downwardly tapered

passages 13 from circumferentially spaced points on the underside of the body 5. These passages may have restricted orifices or may be enlarged to receive sponge elements 14, inserted therein.

From the foregoing description it will be seen that I have provided several simple, highly efficient and inexpensive embodiments of my combined retaining weight and deodorizer for garbage can covers and the like. The overall structure has the dual functions of supplying a sufficiently heavy weight and centering device to prevent the cover from being displaced by the usual causes and also to suffice as a retainer and distributor for deodorizing and disinfecting chemicals.

It will of course be understood that various changes may be made in the form, details, arrangement and proportions of the various parts without departing from the scope of my invention.

What is claimed is:

In combination with a garbage can cover having a down-turned peripheral flange for telescopically surrounding the upper end of a garbage container, a symmetrical heavy weight member having a peripheral area substantially smaller than that of the cover and constructed of heavy, metallic material having a thickness substantially in excess to that of the cover,

and provided with a heavy central upstanding solid boss and a peripheral upstanding flange having a thickened upper end portion,

means engageable with the upper end of said boss and extending through the central portion of said cover for securing said weight member substantially centrally below said cover,

said weight member having a dished interior constituting a reservoir for a chemical such as a deodorizer or disinfectant,

and a passage extending through said cover and communicating with the dished interior of said weight member for supplying a chemical deodorant thereto.

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