Feb. 3, 1942. M. GLOWKA 2,271,918

SANITARY SILENT GARBAGE CAN

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Fig. 1

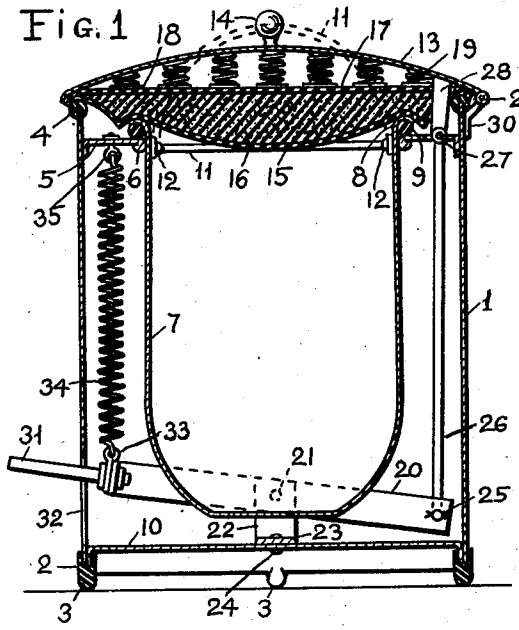
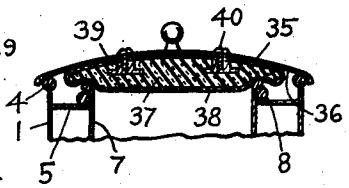


Fig. 4



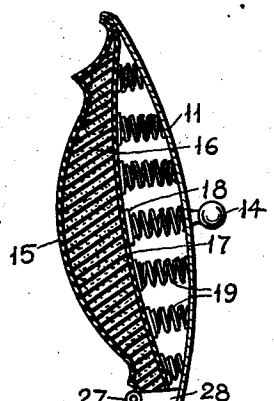


Fig. 3

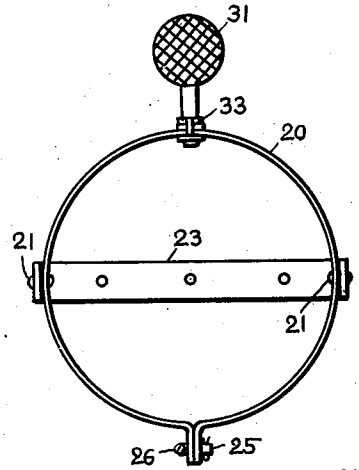
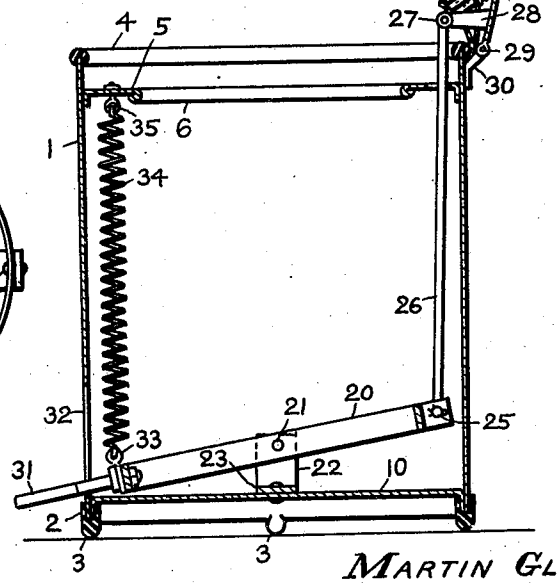


Fig. 2



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SANITARY SILENT GARBAGE CAN

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2 Claims. (Cl. 220—9)

My invention relates to sanitary garbage cans and has particular reference to garbage cans of a silent or noiseless type.

My invention has for its object to provide a can having an inner container of a sanitary type with a rounded bottom portion so that it can be easily cleaned and sterilized inside and which is supported in an outer container having a cover or lid, tightly and hermetically closing both containers.

Another object of my invention is to provide a pedal-operated mechanism for opening or raising the cover, the pedal being connected with a lever at the bottom of the can, the lever being so arranged that a relatively small movement of the pedal will fully open the cover so as to permit withdrawal of the inner container. I also provide a spring for automatically closing the cover when the pedal is released and for keeping the containers tightly closed.

Another object of my invention is to provide an elastic or resilient padding of a spongy material, preferably sponge rubber, under the cover, the spongy material being held by an elastic or pliable diaphragm preferably moulded to fit the edges of both containers. I also provide means to yieldably and resiliently press the pad against the edges of the containers when the cover is closed, and for this purpose I employ a plurality of springs interposed between the under side of the cover and the pad. With this arrangement it is possible to obtain air air-tight, hermetic sealing for both containers.

My invention is more fully described in the accompanying specification and drawing in which—

Fig. 1 is a sectional elevational view of my sanitary can with the cover in the closing position.

Fig. 2 is a similar view of the can with the cover in the opened position and with the inner container removed.

Fig. 3 is a plan view of the lever with the pedal, showing also the supporting bracket.

Fig. 4 is a fractional view of a modified cover.

My sanitary can consists of an outer container 1 open at the top and provided with an annular rubber base 2 preferably moulded on the bottom flange of the container and provided with rubber legs 3. The upper edge of the container is provided with a round bead 4 preferably made of rubber and moulded or cemented to the edge. An annular flange 5 is attached to the inner wall of the container substantially below the rim or bead 4 and has an inner rounded or beaded edge 6. An inner container 7 is loosely fitted into the opening in the annular flange and has a rounded or beaded edge 8 supporting a rubber ring 9 which rests on the flange 5 supporting the inner container with its bottom raised above the bottom plate 10 of the outer container. This arrangement provides for a noiseless operation when the inner container is placed in the outer container. The inner container is used for collecting garbage, and its bottom portion has a rounded shape as shown in order to avoid any inner corners and to facilitate its cleaning and sterilizing. It has a handle 11 in the form of a semicircular bar pivoted by its ends at 12 to the inner wall of the container. The radius of the handle is somewhat smaller than the radius of the container so that the handle can be turned to the side as shown in Fig. 1 when the container is closed by the cover 13. The handle can be raised when the cover is removed into the position shown in dotted lines in Fig. 1.

The cover or lid 13 has a handle 14 and is provided with a yieldable resilient padding for simultaneously closing both containers. The padding comprises a diaphragm 15, preferably made of rubber, rubberized cloth or similar elastic or pliable material and is attached at the periphery to the periphery of the cover 13. The under side of the diaphragm may be moulded or formed to fit the round bead 4 and the round edge 8 of the containers as shown in Fig. 1. A pad 16, preferably of sponge rubber or similar elastic spongy material, is placed on top of the diaphragm 15 and may be cemented thereto. A second diaphragm 17 is placed on top of the pad 16 and is also held at the periphery of the cover 13. The second diaphragm may be also made of rubber or rubberized cloth or similar material and is provided with projections or pads 18 supporting a number of springs 19 which urge the diaphragm and the spongy pad outward as shown in Fig. 2. The elastic diaphragms with the pad 16 between them tightly fit the edges of the containers when the cover is closed thereby hermetically sealing both containers. The cover is operated by a mechanism comprising a ring-shaped lever 20 at the bottom of the can loosely encircling the inner container and pivotally supported at diametrically opposite points 21 in brackets 22 which may be made as a single piece with a cross bar 23 attached to the bottom plate 10 as by rivets 24. It may be also, of course, welded or soldered. The ring lever 20 is pivotally connected at 25 to one end of a rod 26 whose other end is pivoted at 27 to

a lug 28 extending from the cover 13 near its hinge 29 which supports the cover on a bracket 30 attached to the container 1.

At a point opposite the pivot 25 and midway between the pivots 21, a pedal 31 is attached to the ring lever extending to the outide through a vertical slot 32 in the wall of the outer container. A hook 33 is fastened to the pedal and engages a coil spring 34 whose other end is attached to a hook or eye 35 depending from the flange 5. The spring tends to raise the pedal thereby bringing the rod 26 down and pressing the cover 13 with its padded diaphragm against the edges of both containers. The lug 28 is so positioned that the cover is fully opened as shown in Fig. 2 when the pedal is depressed, permitting withdrawal of the inner container from the annular flange 5. The handle 11 is turned upward into the position indicated in dotted lines in Fig. 1 for the withdrawal of the inner container, and is placed sidewise, as shown in Fig. 1, when the inner container is placed into the outer container.

Due to the particular construction of the cover 13, it is not only hermetically tight when closed but is also noiseless and even with a strong spring 34 snap back softly without any objectionable noise.

A modified cover is shown in Fig. 4. The cover 3 has a lining 36 of rubber or similar material attached to its under surface. A pad 37 is placed under the cover and is preferably made of sponge rubber enclosed in an envelope 38 of rubber, or rubberized fabric or similar material. Elongated nuts are moulded or inserted into the pad, being retained by enlarged heads 39. Screws 40, passing through corresponding holes in the cover, are threaded into the nuts and hold the pad fast against the cover. The pad may be also cemented in its place or attached by screws threaded into nuts fastened to the under side of the cover.

A retrieving spring (not shown) of an ordinary construction may be provided for the handle 11, in order to bring it down into an inoperative position, shown in full lines in Fig. 1.

My garbage can has an important advantage of being noiseless in all its operation and is sanitary because the inner container can be easily cleaned and sterilized and both containers are hermetically sealed when the cover is held in its closing position.

It is understood that my garbage can may be further modified without departing from the spirit of my invention as set forth in the appended claims.

I claim as my invention:

1. A garbage can comprising a cylindrical outer container, an inner container removably supported in the outer container, a cover hingedly supported at the edge of the outer container, a pad of a resilient spongy material under the cover having an annular groove for the edge of the inner container, a yieldable diaphragm extending under the pad and conforming to its shape, a flexible diaphragm covering the upper side of the pad, means to support the pad on the under side of the cover at the periphery thereof, and a plurality of individually acting springs supported between the upper diaphragm and the cover for pressing the pad against the edges of the inner container.

2. A garbage can comprising a cylindrical outer container, an inner container removably supported in the outer container, a cover hingedly supported at the edge of the outer container, a pad of a resilient spongy material under the cover having an annular groove for the edge of the inner container, a yieldable diaphragm extending under the pad and conforming to its shape, a flexible diaphragm covering the upper side of the pad, means to support the pad on the under side of the cover at the periphery thereof, and resilient means between the upper diaphragm and the cover for pressing the pad against the edges of the inner container.

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