

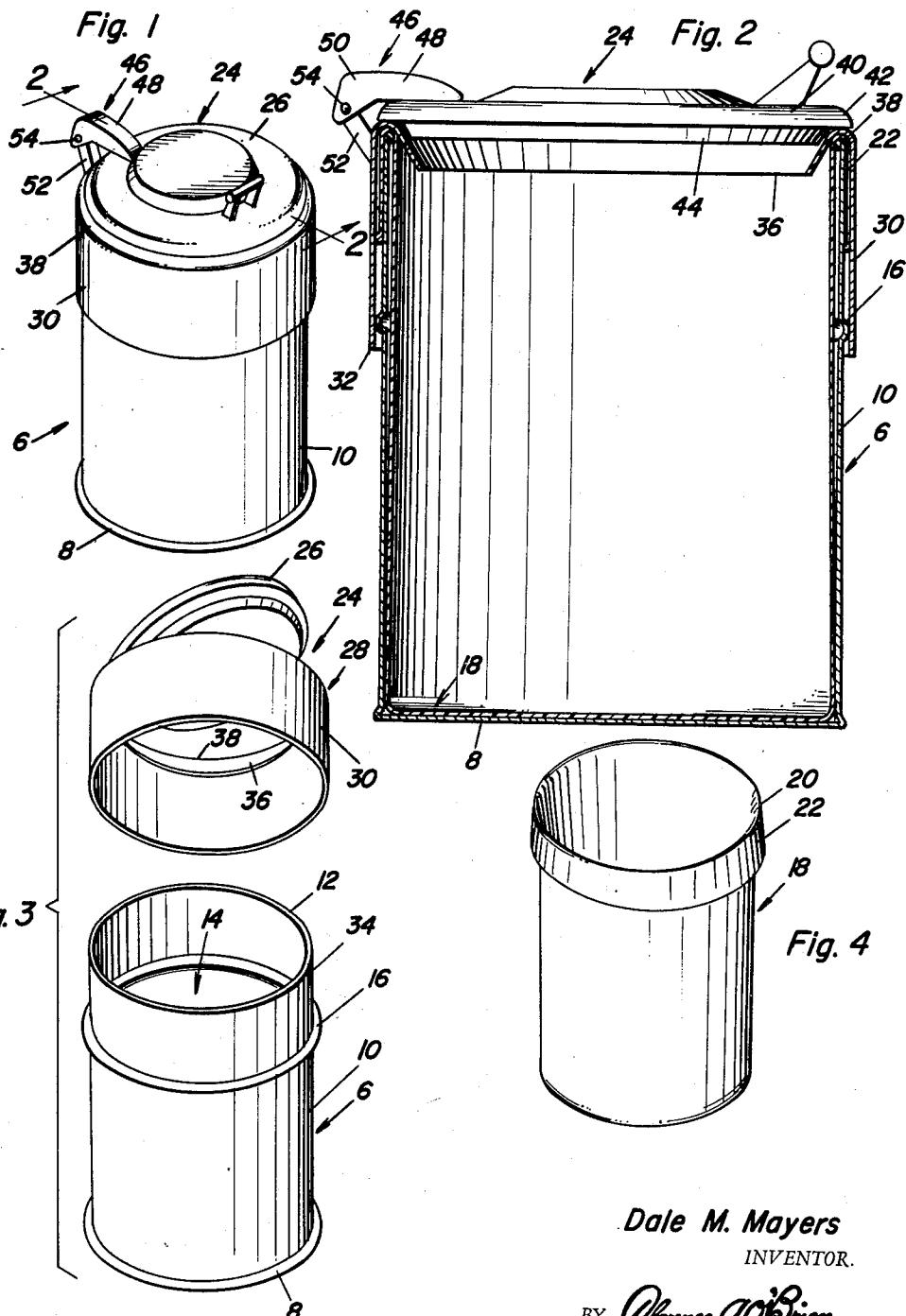
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DISPOSABLE GARBAGE BAG AND CONTAINER

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**DISPOSABLE GARBAGE BAG AND CONTAINER**  
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This invention relates to an improved waste material and garbage accumulating, packaging and handling device characterized, generally speaking, by an open top can or pail, a throwaway pail lining bag, and novel cover means.

Persons conversant with the instant category of inventions are aware that it is common practice for one to insert an economical plastic, paper or an equivalent bag in the receptacle portion of refuse, waste and garbage cans and pails in a manner to line and preserve the pail, to collect the garbage in the bag, form it into a package and dispose of it in one manner or another. Not only this, a number of patents have been granted wherein special adaptations and constructions have been devised. For example a patent to Thoren 2,384,709 has to do with a waste receptacle construction broadly analogous to the instant invention in that an insertable and removable flanged collar provides bag retaining means acts as a funnel and spreads the mouth of the bag as shown. Secondly but perhaps more significant is the waste pail lining of Martin 2,318,952 having an exterior collar-like rim, interior funnel and lid or cover seated on the connecting web between the funnel and skirt portions.

An object of the present invention is to structurally, functionally and in other ways improve on the above-identified and other prior art pail constructions. To the ends desired, improved cover means is utilized. In carrying out this aspect of the instant concept the cover means is unique in that the lid or cover is permanently joined to a novel collar through the medium of a hinge means on the cover and collar, respectively.

Further, the herein improved collar or adapter is novel in that it features a deep skirt or rim the lower edge portion of which is opposed to and cooperates with piloting and spacing means, for example a simple annular outstanding bead embodied in the upper part of the wall of the pail. With this arrangement the rim or skirt of the collar is spaced from the exterior surface of the wall, may be guidingly slipped on and off with ease and without binding and does not displace the down-folded lip of the disposable or throwaway bag when the latter is loaded and ready to remove.

Then, too, the collar features a simple truncated conical depending flange functioning as a practical loading funnel for the bag. In fact, this flange is integrally joined to the upper edge of the depending skirt portion of the collar by way of an arched or bent web which in conjunction with the skirt portion and funneling-flange defines a channel suspending the cover means and serving as a hold-down for the fold of the bag over and upon which the web conformingly fits.

Reverting to the cover means, the lid is provided with a suitable handle diametrically opposite the hinge and the hinge is such in construction that it too may be used as a handle to facilitate handling the cover means; that is, with this novel association and cooperation of parts the cover means, as a unit, can be slid on and off without difficulty.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accom-

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panying drawing forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 is a view in perspective of the improved disposable garbage bag and container combination;

FIGURE 2 is a view with parts in elevation on the vertical section line 2—2 of FIGURE 1;

FIGURE 3 is an exploded perspective view of the pail or container and cover with the cover removed and the disposable waste accumulating bag emitted; and

FIGURE 4 is a view in perspective of the bag by itself.

With reference in particular to FIGURE 3 the numeral 6 designates the aforementioned pail, container, or can. This pail is of suitable material, metal or plastic material and is generally cylindrical in cross-section.

15 The bottom wall is denoted at 8 and the upstanding cylindrical vertical wall at 10 and the upper edge at 12. The receptacle portion or receiver space is denoted at 14 and it will be noticed that below the level of the upper edge of the wall is provided with spacing and guide means. More specifically this "means" comprises an endless annular outstanding bead 16. In practice the throwaway or disposable plastic or equivalent bag 18 is inserted in the receptacle portion whereby it becomes a liner and also is readied to collect and accumulate the waste material, garbage or other refuse to be bagged and ultimately and suitably disposed of. The bag is of a size and shape to fit into the receptacle portion and is sufficiently such in depth or length that the mouth portion may be folded over the edge 12. The folded portion is denoted at 20 and the depending skirt-like lip at 22. When the bag is in position as shown in FIGURE 2 the lower edge of the lip terminates in a plane spaced above the plane of the spacing bead 16. The readily applicable and removable cover means is denoted as a unit by the numeral 24. Here again this means is constructed of suitable sheet material and is made up of two simple component parts; namely a cover or lid 26 and an attaching and retaining adapter or collar 28. The adapter comprises an annular rim 30 which functions as a depending skirt portion in the manner illustrated in detail in FIGURE 2. The cross-section or depth of the rim or skirt portion is such that the lower edge portion 32 depends below but positively contacts or rests against the crest of the bead 16. It follows that a suitable space exists between the surface 34 and the interior surface of the skirt portion. It is in this space that the lip 22 is accommodately confined and held. The upper part of the adapter or collar is formed with an integral depending truncated conical flange 36. The flange is relatively short but inclines into the receptacle part of the bag and consequently constitutes a practical funnel which assists in loading the bag when the lid is in an open position.

40 The upper end of the flange is joined with the upper edge portion of the skirt of the collar by way of a transversely curved bend or bent portion 38. This bent portion in conjunction with the skirt portion and funneling flange defines a channel which conformingly resides upon the fold 20 of the bag. The weight of the cover means as a unit and this conformable feature provide the desired hold-down and bag retaining result. The lid or cover is

45 of suitable material and is circular and is denoted generally by the numeral 40 and the outer marginal edge portion 42 rests directly on the bent portion or web 38. The cover is of suitable shape but preferably has a depending tapering or generally conical embossment 44 which telescopes into the funnel as illustrated in FIGURE 2. It is significant to note that the lid is permanently connected with the adapter 28. More specifically the connecting means comprises a hinge 46 of the form illustrated in FIGURES 1 and 2. One member or part 48 of the hinge has an end portion superimposed on and joined with the marginal portion of the lid and the

outer end portion 50 projects radially and overhangs the exterior surface of the collar 30. The skirt portion of the collar is provided with an oblique angled upstanding part 52 which constitutes the other hinge member and in practice this may telescope into the channel-shaped member 48 where it is hinged or pivotally mounted as at 54. At a diametrically opposite point the lid is provided with a suitable handle. Thus the handle and hinge means 46 may be, if necessary, conjointly used in fitting the cover means over the bag-lined pail aided, of course, by the guiding and piloting action of the spacing and guiding bead 16.

It will be evident that with the plastic or equivalent collecting bag 18 in position in the manner shown in FIGURE 2 by opening the lid the funnel 36 comes into play to assist in filling and packing the bag. This flange in conjunction with the web and channel also facilitates holding the bag securely in place.

It may be added that the invention does not require specially designed bags or inserts. As a matter of fact suitable plastic bags which achieve the end result herein desired are on the open market.

Although the invention is relatively small and is intended for use on a kitchen counter adjacent one's sink it will be obvious that it is not to be regarded as limited to this specific purpose.

It is believed that a careful consideration of the specification in conjunction with the drawing will enable the reader to obtain a clear and comprehensive understanding of the construction, combination and association of component parts and the attending features and advantages. Likewise the mode of use is believed to be self-evident. Therefore a more lengthy description is believed to be unnecessary.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. For use in the kitchen or elsewhere, a waste and garbage collecting and packaging device comprising, in combination, a pail embodying a receptacle portion open at its upper end, an upper portion of the wall of said pail having an endless outstanding collar guiding and spacing bead, said bead being located in a plane at a prescribed distance below the upper edge of the pail, a throwaway bag for accumulating, wrapping and disposing of waste and garbage which is placed therein, said bag being of a depth greater than the depth of the pail and fitting into the receptacle portion of the pail, said bag having a normally open mouth portion at its top and the lip portion of the mouth portion being folded over the upper edge of the open upper end of the pail and being then directed downwardly and encircling an exterior portion of the pail readily applicable and removable adapter means comprising a skirt portion exteriorly encircling and directly contacting said bead and spaced outwardly from that portion of said wall above the plane of said bead, said skirt portion having an upper edge portion with a turned in depending conical flange telescoping into the mouth of said receiver and constituting a bag loading funnel, said flange having its upper end joined to the upper edge of the skirt portion by way of a curved endless annular web, said web functioning to support the adapter means, an upper end of the aforementioned bag being folded over the upper edge of the wall of the receptacle portion of the pail and having an outwardly disposed depending lip portion interposed between the wall of the pail and inner periphery of said skirt portion and being clamped in place by the aforementioned web, a lid spanning the aforementioned funnel and upper end portions of the bag and pail and having an

underneath marginal portion resting atop said web, and means hingedly connecting said lid to a cooperating peripheral surface of said skirt portion.

2. A waste and garbage accumulating, packaging and disposal device primarily intended and adapted for use on a counter top in one's kitchen comprising an open top portable garbage pail having a bottom wall and a complementary upstanding body wall defining a receptacle, a throwaway-type bag located in the receptacle and lining the interior surfaces of the walls thereof, said bag being of a depth greater than the depth of the receptacle portion of said pail and having an open upper end constituting a surplus portion, the latter portion projecting through and beyond the open upper end of the pail and being folded over the upper end of said pail and then directed downwardly to provide a lip portion, and said lip portion encircling and covering the encircled surfaces of the exterior of said upper end, a readily applicable and removable cover unit comprising an adapter, and embodying a collar including an outwardly disposed relatively deep depending skirt portion encircling and spaced from the upper portion of the wall of the pail and enclosing but spaced outwardly from the lip portion of said bag, said adapter also embodying a turned in depending truncated conical flange telescoping into the mouth portion of the bag and providing a bag-loading funnel, the upper portions of said flange and skirt portion, respectively, being connected by an intervening curved web defining a channel, said web engaging over the fold of the bag existing between the lip portion and receptacle lining portion, the upper portion of the wall of said pail having outstanding guiding and spacing means interposed between the skirt portion and exterior surface of the wall of the pail and having physical contact with the interior surface of said skirt portion, the bottom edge of said skirt portion depending to a position below the position of said guiding and spacing means, a lid spanning the aforementioned bag-loading funnel and mouth of the bag and having an outer marginal portion resting atop the web portion, and hinge means embodying one hinge member joined to a marginal portion of the lid and hingedly connected to a complementary member, the latter member being integrally joined with an exterior peripheral surface of the aforementioned skirt portion.

3. Cover means for ready application to and removal from the cylindrical body of a garbage pail wherein the upper end of said body portion is open to permit insertion and removal of a garbage packaging and pail lining bag, and said upper portion being provided at a predetermined level below the top of said pail with an outstanding spacing bead comprising: adapter means embodying a relatively short truncated conical flange of endless construction and constituting a bag loading funnel, an annular skirt portion depending below said flange and being adapted to encircle the upper portion of said pail, the lower free edge portion of an interior surface of said skirt portion being adapted to surround and contact said bead, and a web connecting upper end portions of the truncated flange and skirt portions respectively and defining a single unit, cover means embodying a lid having its marginal edge portion resting atop said web and having a centralized depending embossment telescoping into the upper cooperating portion of the funnel, a hinge member attached to and radiating from an exterior peripheral surface of said skirt portion and located adjacent the upper edge of said skirt portion, a second hinge member having an inner end integral with a marginal portion of the lid and means hingedly joining adjacent cooperating ends of the hinge members together in hinging relationship.

4. For use in the kitchen or elsewhere in one's home, a waste and garbage collecting device comprising, in combination, a rigid portable open top pail, a throwaway garbage collecting and packaging bag removably fitted in and temporarily lining the walls of said pail, said bag being of a depth greater than the depth of the pail and having an open foldable mouth portion projecting through and be-

yond the open upper end of said pail with the free upper edge of the mouth portion folded over the upper end of said pail, and defining a depending lip portion exteriorly encircling the upper end portion of said pail, a readily applicable and removable cover unit for the open top portion of said pail comprising a lid and an adapter collar for said lid, said adapter collar embodying a depending annular skirt portion encompassing and spaced radially from the exterior upper portion of the body of said pail and also from the aforementioned depending lip portion of said bag, spacing and guiding means embodied in the upper portion of said pail and interposed in an existing space between said skirt portion and exterior upper portions of said pail, said spacing and guide means comprising an outstanding endless bead disposed in a plane below the lower terminal edge of the lip portion of said bag, and the lower edge of said skirt portion projecting to a plane slightly below the plane of said bead, and hinge means permanently connecting the lid and skirt portion of the

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adapter collar together, said hinge means embodying a first hinge member joined to the top of the lid adjacent a peripheral portion of the lid and projecting outwardly and overhanging said skirt portion, and a second hinge member fixed to an outer peripheral surface of said skirt portion in line with and pivotally connected to said first-named hinge member, said hinge members being thus accessibly exposed so that they may be conveniently caught hold of in a manner to handle the cover means when bodily applying or removing the same.

## References Cited in the file of this patent

## UNITED STATES PATENTS

1,401,090	Levy	-----	Dec. 20, 1921
1,643,407	Florance	-----	Sept. 27, 1927
2,442,377	Regele	-----	June 1, 1948
2,757,859	Holland	-----	Aug. 7, 1956
2,916,183	Ariens	-----	Dec. 8, 1959
3,082,901	Nakagawa	-----	Mar. 26, 1963