ABSTRACT

A trash receptacle constructed of a storage can or and an integral storage liner cartridge which is temporarily attached to the bottom of the receptacle for the quick and easy replacement of specific sized liners within the can.
TRASH CAN WITH CARTRIDGE LINER DISPENSER

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] N/A

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

[0002] Not applicable

REFERENCE TO SEQUENCE LISTING

[0003] Not applicable

FIELD OF THE INVENTION

[0004] The present invention relates to a waste or trash container having an integrated, removable and replaceable disposal liner storage cartridge and compartment integral therewith.

BACKGROUND OF THE INVENTION

[0005] In the common work place or residence replacing disposal liners in a trash can has long been a problem. The disposal liners are often stored in a box or roll away from the trash can area making it inconvenient for the replacement of such. Accordingly, it is practical to have the capability of storing an integral, plurality of trash liners within the trash can providing convenient access thereto.

[0006] Various trash can assemblies having liner dispensers exist in the prior art. For example, U.S. Pat. No. 5,628,424 issued to Gola relates to a trash receptacle having a bottom panel that forms a liner storage receptacle there below. The bottom panel has an opening for accessing liners stored in the liner storage receptacle. The top edge of the can has an upwardly facing lip with a lid hingedly attached thereto which may be sealed about the top of the can to secure a trash liner. This design does not allow enough support to keep the weight of the trash from crushing the liner storage area. Furthermore, this design does not allow for an integrated storage cartridge containing liners of a particular size associated with the can.

[0007] U.S. Pat. No. 5,503,292 issued to Cucchiaro relates to a system for automatically lining a trash can comprising a trash receptacle having a floor portion with a slot formed therein. A liner holder may be removably coupled with the floor portion of the receptacle and has a rotatable spindle therein for receiving a roll of liners. This design requires too much room as a roll of liners is simply to cumbersome. Furthermore, this design does not allow for an integrated storage cartridge containing liners of a particular size associated with the can.

[0008] U.S. Pat. No. 5,458,259 issued to Falk relates to a trash can with a liner dispenser including an upwardly open base having a horizontal cross sectional shape adapted to receive a trash receptacle. A hinge connects the base to the trash receptacle along a horizontal pivot axis extending along one side of the base. This design is too elaborate in design and expensive to manufacture as the bottom panel hinge and storage area are all connected to the trash receptacle. Furthermore, this design does not allow for an integrated storage cartridge containing liners of a particular size associated with the can.

U.S. Pat. No. 5,405,041 issued to Van Brakle relates to a self dispensing trash liner pail including a receptacle having a bottom wall and a plurality of upstanding side walls. A dispenser having a top slot therethrough is securable to the bottom wall of the receptacle. This design does not allow enough room to dispense trashliners from a roll. Furthermore, this design does not allow for an integrated storage cartridge containing liners of a particular size associated with the can.

[0010] U.S. Pat. No. 6,105,859 relates to a trash can having an integral liner storage compartment and liner counting means includes a trash can having a liner storage receptacle at its bottom end. Again, this device does not compensate for the amount of weight a filled trash liner may have, crushing or damaging the stored liners below. Furthermore, this design does not allow for an integrated storage cartridge containing liners of a particular size associated with the can.

SUMMARY OF THE INVENTION

[0011] The present invention relates to a waste (plastic, metal, etc.) can with an integrated design for removable/replacement cartridge type storage and supply of plastic can liners. The cans and cartridges will vary in size as appropriate. A major portion of the design is to have a cartridge of replacement liners friction fit into a designed slot in the bottom of the raised floor of the waste can and become part of the can floor’s self.

[0012] The friction fit holds the cartridge in place as the replacement liners are being distributed thru a slotted opening in the top of the cartridge one by one as they are used. To achieve this the 2 inside raised edges of the slot in the can floor are to be slightly convex so as to cause the sides of the cartridge to fit tightly as the new cartridge is pressed down into the slot of the can floor. The top of the cartridge container is to be doubled in thickness or as necessary to support mild pressure as waste is being filled into can. This allows maintaining the integrity of the can as well as the secure storage and distribution of replacement liners one at a time as needed. Waste cans, storage of liners and distribution of liners in one integrated—functional design.

[0013] The present invention relates to a trash can having a trash liner storage compartment with an integrated trash liner cartridge containing trash can liners associated in size to the can. The device comprises a trash can having a horizontal bottom end, four side walls vertically depending therefrom and an open top in communication with an interior trash receptacle. A horizontal partition is received within the trash receptacle and is spaced a predetermined distance from the bottom wall, the area between which forms a compartment for storing a trash liner cartridge specifically associated with that size can. The storage compartment is divided into three compartments. The two outwardly departments are structural in design to support the weight of the trash, keeping the liner cartridge from being damaged or crushed. The partition has a slit through which a liner may be delivered from the liner storage compartment to the trash receptacle.
There has thus been outlined, rather broadly, the more important features of the invention in order that the detailed description thereof that follows may be better understood, and in order that the present contribution to the art may be better appreciated. There are additional features of the invention that will be described hereinafter and which will form the subject matter of the claims appended hereto.

In this respect, before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and to the arrangements of the components set forth in the following description or illustrated in the drawings. The invention is capable of other embodiments and of being practiced and carried out in various ways. Also, it is to be understood that the phraseology and terminology employed herein are for the purpose of description and should not be regarded as limiting.

As such, those skilled in the art will appreciate that the conception, upon which this disclosure is based, may readily be utilized as a basis for the designing of other structures, methods and systems for carrying out the several purposes of the present invention. It is important, therefore, that the claims be regarded as including such equivalent constructions insofar as they do not depart from the spirit and scope of the present invention.

Further, the purpose of the foregoing abstract is to enable the U.S. Patent and Trademark Office and the public generally, and especially the scientists, engineers and practitioners in the art who are not familiar with patent or legal terms or phraseology, to determine quickly from a cursory inspection the nature and essence of the technical disclosure of the application. The abstract is neither intended to define the invention of the application, which is measured by the claims, nor is it intended to be limiting as to the scope of the invention in any way.

It is therefore an object of the present invention to provide a trash can with associated cartridge liner dispenser which has many of the advantages of the devices mentioned heretofore and many novel features that result in a trash can with cartridge liner dispenser which is not anticipated, rendered obvious, suggested, or even implied by any of the prior art tool guides, either alone or in any combination thereof.

It is another object of the present invention to provide a trash can with cartridge liner dispenser which can be easily and efficiently manufactured and marketed.

It is a further object of the present invention to provide a trash can with cartridge liner dispenser which is of a durable and reliable construction.

An even further object of the present invention is to provide a trash can with cartridge liner dispenser which is susceptible of a low cost of manufacture with regard to both materials and labor, and which accordingly is then susceptible of low prices of sale to the consuming public, thereby making such trash can with cartridge liner dispenser economically available to the buying public.

An even further object of the present invention is to provide a trash can with cartridge liner dispenser which is specifically constructed to fit as an integral part of the trash. The liner cartridge will contain liners of a specific size to fit a specific can. For example; cartridge A liners will only fit into the bottom of trash can style A and cartridge B liners will only fit in the bottom of trash can style B.

Still yet another object of the present invention is to provide a trash can with cartridge liner dispenser which provides in the apparatus and methods of the prior art some of the advantages thereof, while simultaneously overcoming some of the disadvantages normally associated therewith.

And finally, another object of the present invention is to provide a trash can with cartridge liner dispenser whose owner can order exact size replacement liners by referencing the trash can identifier for the proper liner cartridge.

These together with other objects of the invention, along with the various features of novelty which characterize the invention, are pointed out with particularity in the claims annexed to and forming a part of this disclosure. For a better understanding of the invention, its operating advantages and the specific objects attained by its uses, reference should be had to the accompanying drawings and descriptive matter in which there are illustrated preferred embodiments of the invention.

**BRIEF DESCRIPTION OF THE DRAWINGS**

*FIG. 1* is a perspective view of the trash can with cartridge liner dispenser opening of the present invention.

*FIG. 2* is a top view of the trash can with cartridge liner dispenser of the present invention shown in position within receptacle.

*FIG. 3* is a top perspective view of the trash can with cartridge liner dispenser assembly in place within the trash receptacle.

*FIG. 4* is a perspective cross section view of the trash can with cartridge liner dispenser assembly left side.

*FIG. 5* is a perspective right side view of the trash can with cartridge liner dispenser assembly right side.

What is claimed as being new and desired to be protected is as follows:

1. A trash can having an integral trash liner replacement cartridge means comprising:

   a hollow trash can having an exterior surface, an interior surface, a bottom end and an open top end in communication with an interior trash receptacle;

   a trash liner cartridge compartment within said trash receptacle and in communication therewith for receiving a specific size liner cartridge containing a plurality of trash liners;

   means for automatically identifying the replacement liner cartridge by the can style therefrom.

2. A trash can with cartridge liner dispenser according to claim 1 wherein the device is constructed of two separate yet integral parts, one being the can and one being the liner cartridge.
3. A trash can with cartridge liner dispenser according to claim 1 wherein the liners of within the cartridge are distributed into the can through friction gates in the bottom of the can.

4. A trash can with cartridge liner dispenser according to claim 1 wherein the device will not accept existing trash liner rolls or liner cartridges.

5. A trash can with cartridge liner dispenser according to claim 1 wherein the device has an easily removable and replaceable liner cartridge.

6. A trash can with cartridge liner dispenser according to claim 1 wherein the cartridge becomes a strategic part of the floor of the can to support the bottom of the bottom of the liner being filled.

7. A trash can with cartridge liner dispenser according to claim 1 wherein the cartridge protects the unused liners from contamination if a rupture occurs in the liner in use.

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