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3,718,253

BAG PACKAGE AND METHOD

Filed Jan. 8, 1971

2 Sheets-Sheet 1

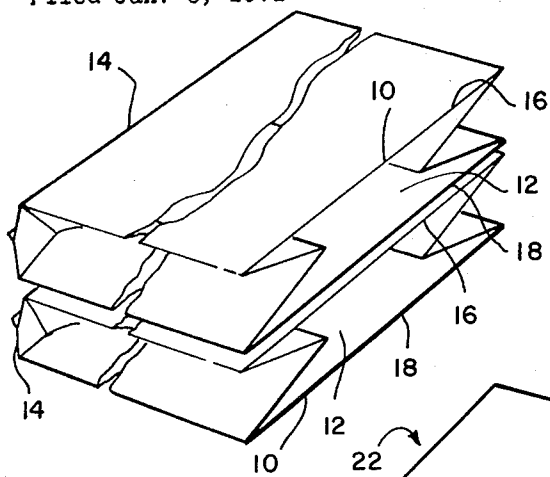


FIG. 1.

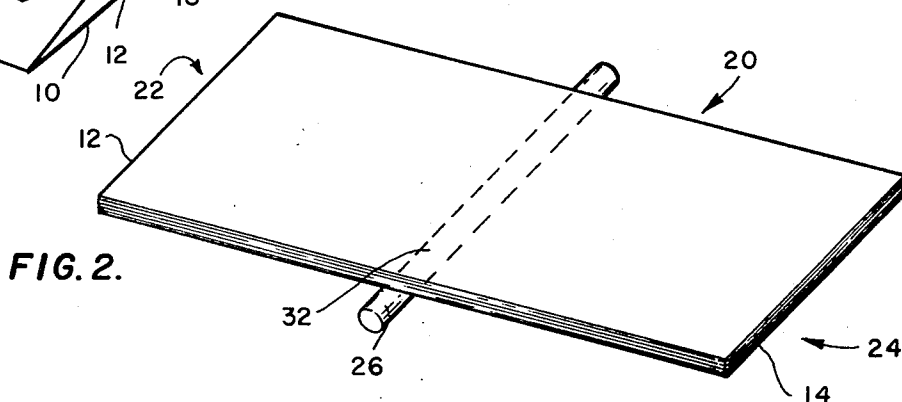


FIG. 2.

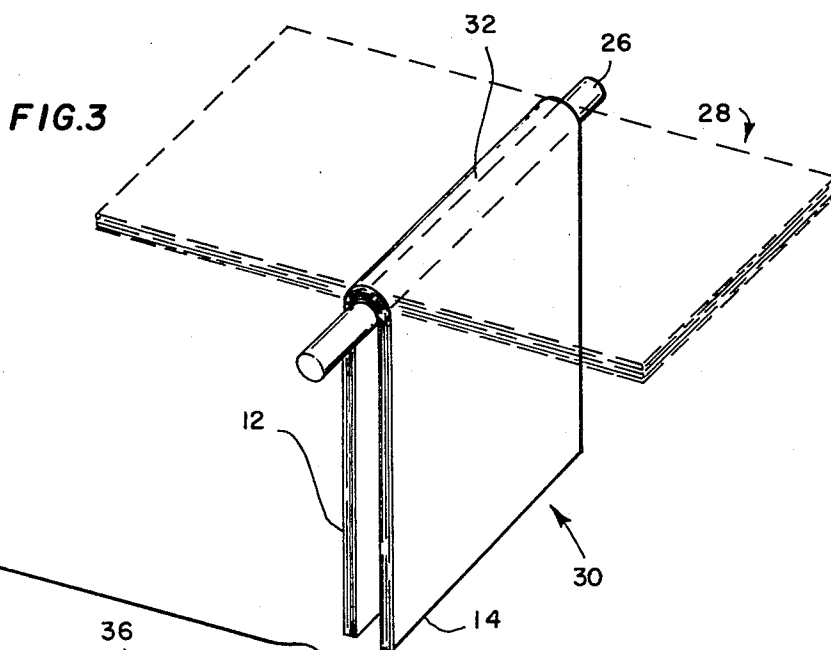


FIG. 3

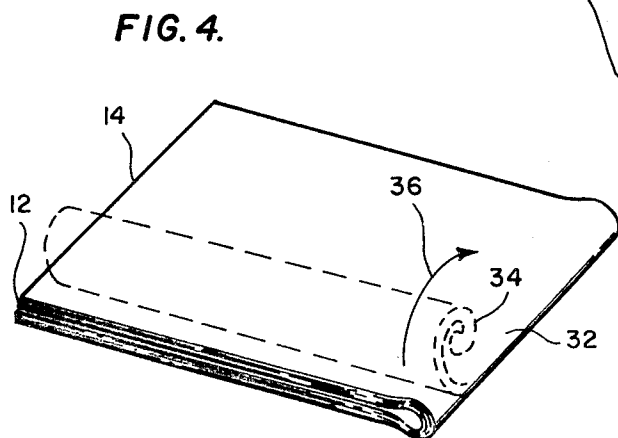


FIG. 4.

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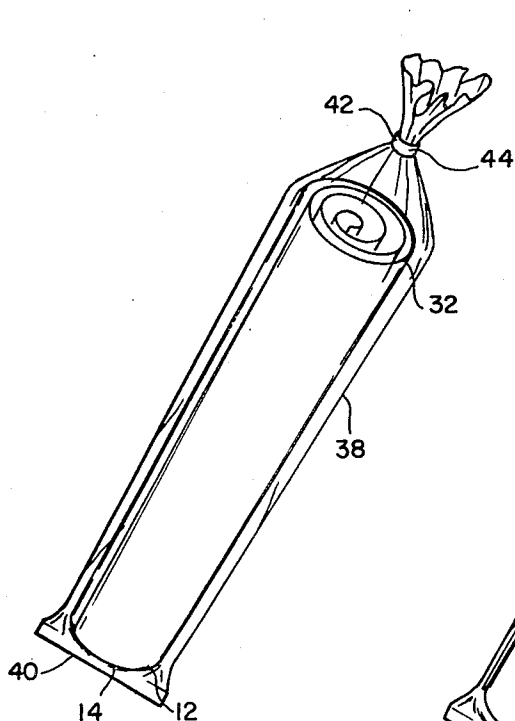


FIG. 5.

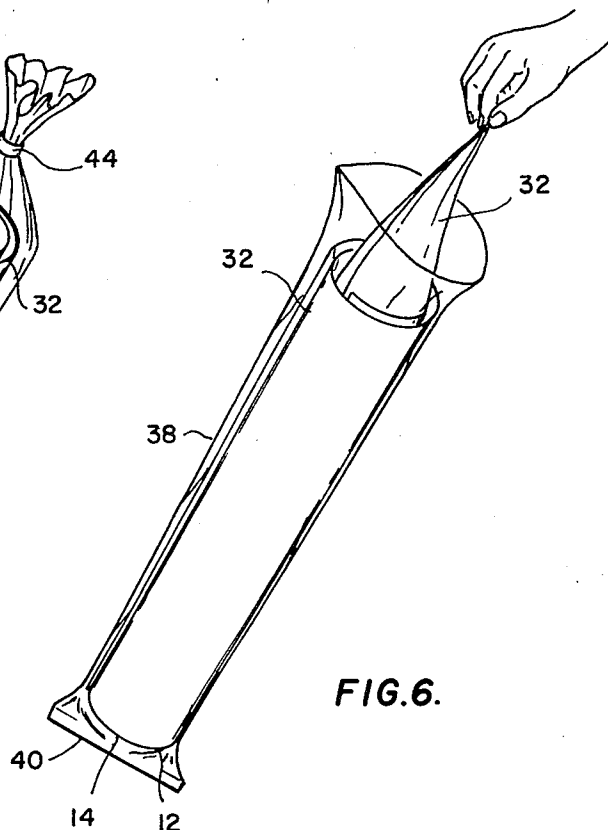


FIG. 6.

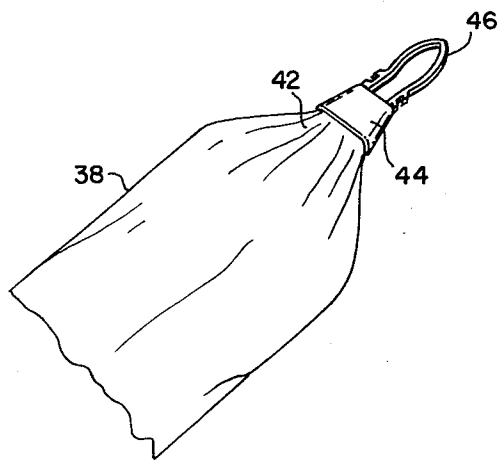


FIG. 7.

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BAG PACKAGE AND METHOD

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7 Claims

ABSTRACT OF THE DISCLOSURE

A bag package and method for packaging plastic bags wherein a plurality of generally tubular bags are disposed in a flat side-to-side stack and the plurality of bags is then folded intermediate the ends of the bags; then the folded stack is rolled into a spiral shaped roll with the folded portions of the bags disposed in spiral form at one end of the roll; then the roll is placed in a container which loosely holds the roll with the said folded portions communicating with an open end of said container, whereby one bag at a time may be dispensed from the container by slidably pulling the folded area of one of said bags from the spiral shaped stack of bags in the container.

Plastic bags, such as thin polyethylene bags, have been used for a great variety of purposes including the containment of trash, garbage and other waste material. Additionally, such bags have been used for the purpose of storing various articles to protect them from the elements.

Such plastic bags have become widely used, and particularly in homes, for the purpose of temporarily storing waste material so that it may be placed along the street for collection by garbage and trash collection agencies.

Many of these bags are quite large, approximately 2½ feet in width and 3 feet in length. Such large bags are generally contained in stacks or may be disposed in rolled form in an elongated tubular section with perforations between the ends of the bags so they may be rolled from the roll and torn loose from each other one by one. Due to the large size of these trash collection bags, rolls are quite bulky and large and require a substantially large fixture for holding them for convenient dispensation. Roll holders may be connected to the wall of a kitchen or any room as desired so that these rolls of large bags may be properly held for convenient dispensation. Rolls and packages of bags are delivered by some trash collection agencies in various municipalities, and these rolls or packages of bags are generally thrown onto the front yard of a residence or the like and are initially packaged in some container.

The rolls of bags must be removed from the container in order to put them on a holder or to dispense the bags therefrom.

Other ways of packaging bags also dictate that a person must remove the bags from the delivery container or bag before these refuse or waste containing bags may be utilized. Additionally, the folded bags or rolled bags must be provided with special means for handling them, otherwise they are very difficult to dispense from a package of bags and difficult to store in a limited amount of space.

In accordance with the present invention, a spiral shaped roll of plastic bags are disposed in an elongated container which is preferably made of tubular polyethylene plastic and whereby a roll of bags in accordance with the present invention may be delivered in said container and whereby the bags may be used or dispensed from the container without removing the roll of bags therefrom.

The invention comprises a package of bags wherein bags are disposed in flat side-to-side relationship with each other such that a large plurality of bags may be so disposed and these bags in plurality are folded at intermediate portions and rolled into a spiral roll such that the inter-

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mediate portions are disposed in spiral form at an open end of the delivery container in which the spiral roll of bags is loosely held, whereby bags may be dispensed from the container one at a time by simply pulling on the exposed spiral shaped folded portion of the outermost bag in the package.

The present invention comprises a package of bags from which bags may readily be dispensed at the open end of the delivery container in which the bags are loosely held, whereby expensive holding devices are not required for dispensation of plastic bags from the package of the invention.

The invention comprises a novel method of packaging plastic bags so that they are neatly disposed in a container and wherein an elongated spiral shaped roll of bags is so formed that the bags in their delivery container may be disposed on a shelf with the open end of the container directed such that bags may be dispensed from the package in a very convenient manner and from a very compact storage area without special holding fixtures or without removing the package of bags from its delivery container.

The package of plastic bags, according to the present invention, may be very conveniently carried in vehicles such as automobiles, house trailers and other vehicles for use in the outdoors to protect the environment and for preventing damage to the natural ecology.

The package of bags, according to the present invention, may include any plurality, as for example several dozen bags, all disposed in a very convenient elongated spiral shaped roll and loosely held in the delivery container which may be a very tough polyethylene bag adapted for all weather resistance so that packages of the bags may be delivered outdoors in any weather and such that the throwing of packages of the bags, according to the present invention, will permit the package to land in the front yard of a dwelling, for example, without damage to the package of plastic bags to be used for collecting trash or for other uses as desired.

Accordingly, it is an object of the invention to provide a very novel package of plastic bags and method of packaging the same.

Another object of the invention is to provide a novel spiral shaped elongated stack of layered collapsed plastic bags which may be conveniently carried or stored in homes, trailers, vehicles, or other places for quick and ready dispensation of plastic bags for containing refuse or for other desired purposes.

Another object of the invention is to provide a novel package of a plurality of plastic bags which may be used directly from the container in which the bags are delivered, whereby the package of bags in accordance with the present invention does not require expensive holders or dispensers.

A further object of the invention is to provide a novel method and package which will promote the use of plastic bags for a great variety of purposes and particularly for trash and waste disposal whereby the natural ecology and sanitary conditions of various areas may be preserved.

Other objects and advantages of the invention may be apparent from the following specifications, appended claims and accompanying drawings.

FIG. 1 of the drawings is a perspective view of two conventional polyethylene plastic bags shown partly open and in generally superimposed relationship to each other to illustrate the class of bags which may be packaged in accordance with the present invention;

FIG. 2 discloses a substantial plurality of such bags as shown in FIG. 1, all in flat layered condition relative to each other and in side-to-side relationship with each other, said bags being disposed over a folding device located generally at intermediate portions of the bags;

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FIG. 3 is a perspective view of the plurality of layered bags folded at their intermediate portions;

FIG. 4 is a perspective view of the stack of layered bags in folded condition after being removed from the folding device shown in FIG. 3 of the drawings, and FIG. 4 illustrates by broken lines the method step of rolling the folded bags whereby their folded portions are disposed at one end of a spiral shaped roll;

FIG. 5 is a perspective view of a spiral shaped roll of plastic bags in accordance with the present invention, and showing the roll disposed in a delivery container;

FIG. 6 is a perspective view of one of the plastic bags of the package being removed from the delivery container of the invention; and

FIG. 7 is a fragmentary perspective view of the outside of the container of the invention, showing a throwing handle in connection therewith.

As shown in FIG. 1 of the drawings, a plurality of plastic bags 10 are provided with open ends 12 and closed ends 14 and these bags are provided with opposite sides 16 and 18, and it will be seen that these bags are adapted to be collapsed such that the side 18 of one bag is adjacent to and contiguous with the side 16 of another one of said bags.

A substantial plurality of such bags may be disposed in a position such as shown in FIG. 1, as for example several dozen of these bags may be so disposed and collapsed flat against each other to form a flat stack of bags indicated generally at 20 in FIG. 2 of the drawings. Thus several dozen of these bags may be disposed in a flat stack with the flat sides of the bags in contiguous relationship with each other and the open ends 12 may be disposed at 22 as shown in FIG. 2 of the drawings, while the closed ends 14 may be disposed at 24. The flat stack of bags 20 may be placed over a folding rod 26 as shown in FIG. 2 of the drawings, and folded from a broken line position 28 to a folded solid line position 30, the broken line position corresponding to the position shown in FIG. 2 of the drawings, and thus intermediate portions 32 of the bags may be disposed over the folding device 26 and then these intermediate portions 32 may be folded as shown in FIG. 3 of the drawings to the folded position 30. The folded stack of bags may then be removed from the folding device 20 and disposed in a position as shown in FIG. 4 of the drawings. In the position as shown in FIG. 4 of the drawings, the opposite ends 12 and 14 are adjacent to each other and the intermediate portions 32 are opposite to said ends 12 and 14. The stack of folded bags is then rolled into a spiral shaped roll as indicated by broken lines 34 and by an arrow 36 in FIG. 4 of the drawings. The longitudinal axis of the spiral shaped roll extends from the folded portions 32 to the ends 12 and 14 of the bags, as shown in FIG. 4 of the drawings, such that the folded portions 32 are disposed at one end of the spiral shaped roll as shown in FIG. 5 of the drawings. This spiral shaped roll, as shown in FIG. 5 of the drawings, is loosely held in a tubular bag or container 38. This container 38 may be made of flexible material such as polyethylene or may be made of a semi-rigid material, as desired.

The container 38 is provided with an enclosed end 40 adjacent to which the opposite ends 12 and 14 of the folded stack of bags are disposed and the folded portions 32 of the stack of bags are disposed near an openable end 42 of the container 38 and the openable end 42 is provided with a suitable enclosure device 44 which may be a conventional tape enclosure, or may be a throwing handle as will be hereinafter described in connection with FIG. 7 of the drawings.

When the package of plastic bags, as shown in FIG. 5, is delivered in the container 38 the spiral shaped roll of plastic bags is loosely contained therein so that each individual bag may be progressively removed from the spiral shaped roll one at a time, as shown in FIG. 6 of the drawings, by simply grasping and slidably removing the middle portion of the outermost bag in the spiral

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shaped roll, this being done as illustrated in FIG. 6 of the drawings.

As shown in FIG. 7, a conventional throwing handle is attached to the openable end 42. This throwing handle is designated 44 and may be similar to the throwing handle manufactured by John L. Rie, Inc., Yonkers, N.Y. This throwing handle may be grasped by persons who are delivering packages or containers filled with bags in accordance with the present invention, so that such containers may be thrown into the yard of persons who may use these bags for the disposal of garbage and trash.

The throwing handle 44 is provided with a loop 46 which is convenient for use in swinging the package of bags from a delivery vehicle onto the yard of a residence or the like, and such delivery may be made in a manner similar to that of delivering newspapers.

The polyethylene container 38 is very tough and will avoid scuffing or damage to the package of plastic bags disposed therein, and the container 38 when the enclosure 44 is released therefrom may be opened and the bags may be left directly in the container 38 as shown in FIG. 6, for dispensation of bags one at a time therefrom.

The elongated spiral shaped roll of bags in the container 38 is very convenient to store on a shelf or in very limited areas such as in vehicles or house trailers, or other places, and due to the fact that a holder is not required and a certain disposition of the package is not needed for convenient dispensation, the use of these bags will be readily and easily promoted due to such convenience, and therefore the protection of natural ecology and sanitation may readily be promoted by use of the packages of bags in accordance with the present invention.

It will be understood that the usual polyethylene bag is quite slippery and therefore these bags will slide very readily from the stack by pulling on the folded portions, and due to the fact that the spiral shaped roll of bags is quite loose, the folded portions 32 are readily and easily grasped and each bag may be dispensed one at a time until the last bag is removed from the container 38.

The container 38 may also include a plurality of tie closures corresponding to the number of bags in the package or in the container 38, these tie closures being conventional type tie closures similar to those conventionally used on bread wrappers or other packages. These closures are generally made of a piece of wire laminated between two strips of paper, and may be wound around the open ends of the plastic bags after they have been removed from the container 38 for retaining trash or garbage therein. The tie closure, after being wound around the open end of such bags, may be twisted or otherwise locked to provide a very secure and tight enclosure of trash or refuse being disposed of.

I claim:

1. A package of collapsed plastic bags comprising a plurality of generally tubular bags having opposite ends and opposite sides, one of said ends of each bag being open and the other end thereof being closed, said bags being disposed in layered relation to each other whereby one side of each bag is contiguous with an adjacent side of another one of said bags; all of said bags having intermediate portions folded together at a location intermediate said opposite ends and all of said bags and said intermediate portions being disposed in a spiral shaped in cross section roll having opposite ends, said folded intermediate portions being in a spiral disposition at one of said roll both ends of each bag being at an opposite end of said roll from said folded intermediate portions.

2. The invention as defined in claim 1 wherein a container is disposed in surrounding relationship with said roll and said spiral shaped in cross section roll is loosely disposed in said container.

3. The invention as defined in claim 2 wherein said container is provided with a normally closed end and an openable end; and means for releasably holding said openable end closed.

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4. The invention as defined in claim 2 wherein said intermediate portions of said bags are disposed near said openable end of said container and in communication therewith.

5. A method for packaging a plurality of plastic bags comprising the placement of a plurality of collapsed bags in flat layered side-to-side contiguous relation to each other; then folding said plurality of bags at intermediate portions thereof; then rolling said bags into a spiral shaped roll with said intermediate portions at one end of said roll; then placing said roll in an elongated container having an openable end and disposing said roll in said container with one end of said roll directed toward the openable end of said container.

6. The invention as defined in claim 5 wherein said openable end of said container is then closed.

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7. The invention as defined in claim 6 wherein a throwing handle is then attached to said enclosed openable end of said container.

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U.S. Cl. X.R.