United States Patent [19]

Aboud

[11] **3,927,786**

[45] **Dec. 23, 1975**

[54] **CONTAINERS FOR WASTE FOR USE WITH TRASH BAGS**

[76] Inventor: **Fred George Aboud,** 3812 Taylorsville Road, Louisville, Ky. 40220

[22] Filed: **July 11, 1973**

[21] Appl. No.: **379,544**

[52] **U.S. Cl.** ..... **220/4 R;** 220/63 R; 220/1 T

[51] **Int. Cl.**[2] **B65D 7/00**

[58] **Field of Search** ..... 220/63, 66, 1 T, 4 R, 4 A, 220/5 R

[56] **References Cited**

UNITED STATES PATENTS

3,115,986 12/1963 Groff ..... 220/63 R

3,688,942 9/1972 Mitchell et al. ..... 220/60 R

Primary Examiner—William I. Price
Assistant Examiner—Steven M. Pollard
Attorney, Agent, or Firm—William R. Price

[57] **ABSTRACT**

A waste container, consisting of detachably connected open ended container, attached to a tub, makes removal of heavy trash bags, (full of waste from can) unnecessary. This is accomplished with a Container for Trash Bags, consisting of an open ended container, detachably connected to a tub, which may be detached from said tub and lifted up and away from a full bag of waste.

2 Claims, 6 Drawing Figures

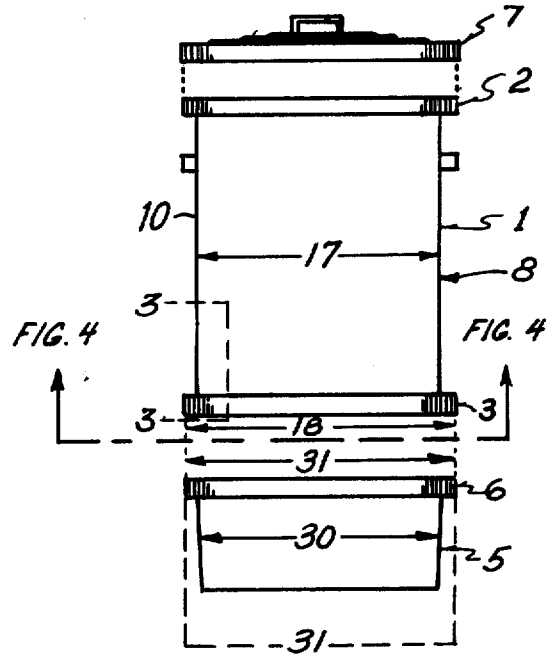


FIGURE 1

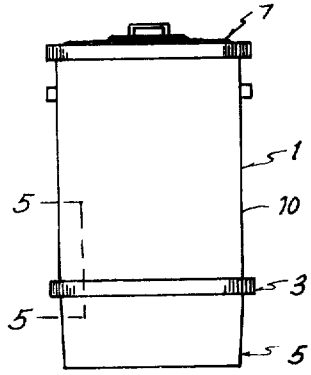


FIGURE 2

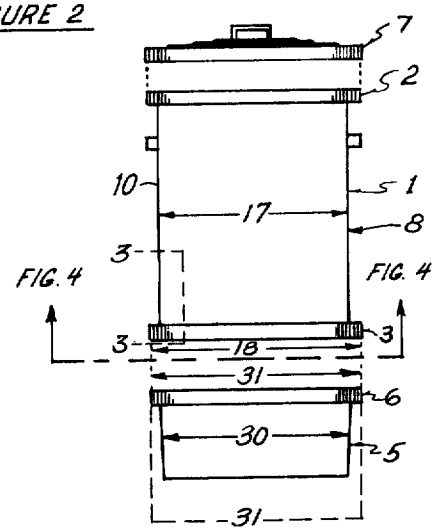


FIGURE 3

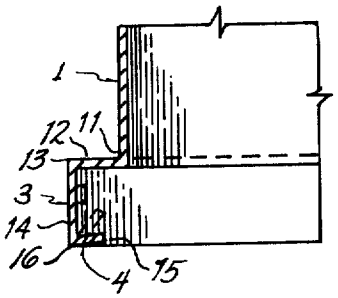


FIGURE 4

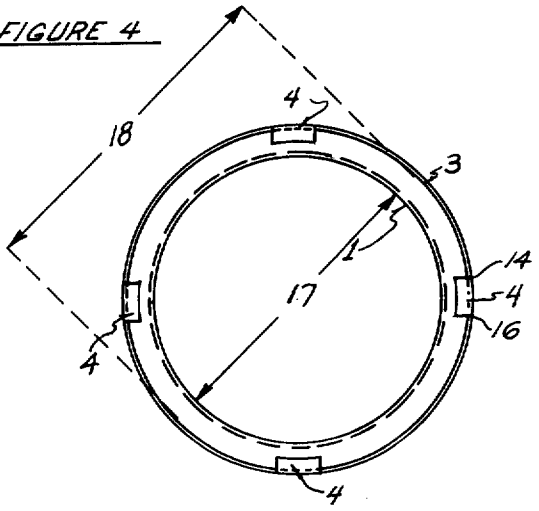


FIGURE 5

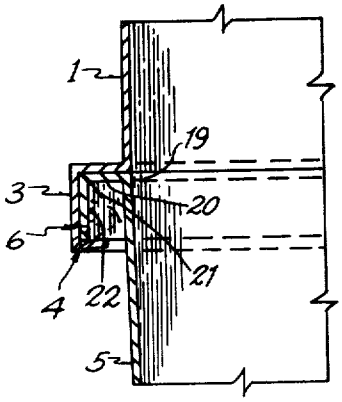
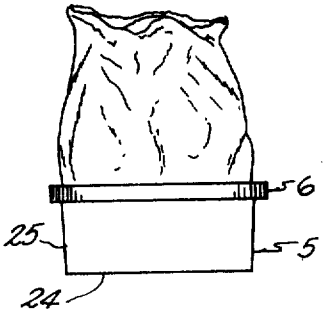


FIGURE 6



CONTAINERS FOR WASTE FOR USE WITH TRASH BAGS

FIELD OF THE INVENTION

This invention relates to a new and novel container for use with trash bags.

One object of the invention is to make it easy to separate a trash bag which contains heavy waste, from a container.

Another object is to receive more use from light weight trash bags by filling them to a greater extent than can be done with containers now in use.

BACKGROUND OF THE INVENTION

Within recent years, the use of vinyl plastic trash liners or bags has superceded the householders use of left-over paper bags as garbage receptacles. An advantage of the plastic trashliners is the fact that they are sufficiently large to line a conventional 20 gallon trash can. When these are filled, the light-weight plastic liner can be removed from the relatively heavy can and taken directly to the garbage collection area. A problem develops with heavily loaded replaceable liners in attempting to remove same from the trash can without breaking the liner. This is accentuated if the liner or replaceable bag contains a sharp or pointed object which can pierce the bag while removal is attempted.

SUMMARY OF THE INVENTION

According to this invention, a two-piece container for trashbags is provided which includes an upper vertical supporting member for the liner and a lower receiving and supporting tub for receiving and supporting the loaded trash bag. The upper member comprising an open-ended tubular portion and an engagement rim containing flexible and inwardly projecting tab members for engagement with a complementary lower engagement rim of the tub. Thus, the upper portion may be detachably connected and disconnected from the tub for filling of the replaceable liner or removal of the upper portion up and away from the loaded liner in the receiving tub. The receiving tub has an upstanding annular wall of sufficient height to independently support the loaded liner. Further, the relatively light-weight tub and loaded liner can be carried to the collection area utilized the lower engagement rim as a hand grip.

BRIEF DESCRIPTION OF THE DRAWINGS

This invention is fully disclosed by way of example in the following description and in the accompanying drawing in which

FIG. 1 is a side view of the Container for Trash Bags

FIG. 2 is a an exploded view of the container, with container seperated from tub

FIG. 3 is a side section of rim taken on lines 3—3 of FIG. 2 of container showing fastener

FIG. 4 is a plan view of the upper supporting member viewed from the bottom.

FIG. 5 is a section showing the upper rim fastener secured to the complementary rim of the tub

FIG. 6 shows upper support member removed, leaving tub with waste in bag.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The Container for Trash Bags comprises of a certical support member 8 comprising tubular portion 10 open at both ends, preferably cylindrical (same diameter, bottom and top) or with top opening smaller than bottom opening, and a tub 5 and a lid 7. It is best made of plastic because of resilient qualities since shape of various elements must be maintained when joined together.

The upper rim 3 of the vertical support member 8 and the lower rim 6 of the tub 5 are made to fit snugly, the inside of rim 3 of the container 1 fitting over the outside of rim 6 of tub 5.

The upper rim 3 consists of a radially extending flange 12 connected to the open-ended tubular portion 10 by means of inner bight portion 11. An outer bight portion 13 connects the radially extending flange 12 to the upper portion of upper depending skirt 14. At the bottom of the upper depending skirt 14 are a series of equally spaced fasteners 4 consisting of inwardly projecting tabs 15 connected by means of a flexible bight portion 16 to the lower portion of the upper depending skirt 14. The diameter 17 of the tubular portion 10, is less than the diameter 18 of the top engaging rim 3, as viewed from the interior surface of the depending skirt 14.

As is shown in FIGS. 5 and 6, the tub member 5 consists of a bottom 24 and an upwardly extending annular wall 25 of sufficient height to independently support the loaded trash liner. At the top of the annualar upstanding wall 25 is the lower engagement rim 6 which has a radially entending flange 20 connected to the annualy wall 25 by means of inner bight portion 19. An outer bight portion, 21 connects the outer circumference of the radially extending flange 20 to the depending skirt 22 which is fabricated preferably of flexible plastic material so that the free end of said skirt will flex inwardly and outwardly. As is shown in FIG. 2, the interior diameter 30 of the tub 5 is less than the diameter of the lower rim 6 taken from the outer surface, of depending skirt 22. The relationship of the diameter 31 of the lower engagement rim 6 and the diameter 18 of the upper engagement rim 3 is such that the upper engagement rim 3 will slide snugly over the exterior surface of the lower depending skirt 22 for a snug fit. This is best shown in FIG. 5. Now, as the flexible fasteners 4 consisting of the inwardly projecting tabs 15 slide over the depending skirt 22, the tabs 15 are flexed upwardly while the lower depending skirt 22 is flexed inwardly so as to allow the fasteners to slide over the depending skirt 22 of the lower engagement rim 6. Thus, when the two skirts 14 and 22 are in essentially a snug engagement, the inwardly projecting tab 15 will snap downwardly and medially to engage the lower surface of the depending skirt 22 as is shown clearly in FIG. 5. This thus allows the upper and lower portions of the trash container to be detachably connected so that the container 1 can be moved from place to place either with a loaded bag or in empty condition.

In FIG. 4, the fastener 4, of which there are four, spaced ninety degrees apart and extending inwardwardly from the bottom of depending skirt 14 of rim 3, will detachably secure container 1 to tub 5 when downward pressure is exerted on upper support member 8. The upper vertical support member of container 1 may be seperated from tub 5 by simply pulling downwardly two adjacent tabs 15 of fasteners 4 and then lifting

upper vertical support member **8** of container I from tub **5.** The Container for Trash Bags is used with plastic liners by inserting opened bag in container I that is attached to tub **5,** and draping top of trash bag or liner over top rim **2** of container **1.** The container is also suitable for use with the new type paper liners. One simply inserts opened bag in assembled container. The Container for Trash Bags is made primarily for large amounts of waste. A trash bag in a conventional container that is heavy with waste is quite difficult to remove from can, due not only to downward pressure but also outward pressure of waste and resulting friction when trying to lift bag from can. The usual results are torn bags where grasped by hands in lifting. One must use a heavy duty bag (resulting in increased cost) or not fully utilize bag by not filling to greatest extent, if a light weight bag is used.

The Container for Trash Bags makes lifting up and out of can unneccessary, since one simply undrapes top of bag from rim **2,** releases tabs **15** of fasteners **4** and then raises container I, leaving trash bag in tub, FIG. **6.**

The Container with larger bottom opening than top opening will slip very easily from a full bag of waste (as will cylindrical version), if container opening at top were larger than bottom opening and bag fully loaded, one would have to force bag through bottom.

If for some reason waste material includes liquid, or material creates condensation, the tub will contain such liquid. If the assembled Container is full of waste and must be moved, the fasteners will secure container to tub, thus permitting such movement or the lower rim **6** of tub **5** will serve as a hand grip for tub **5.**

The Container for Trash Bags permits one to fill bag with trash to fullest extent, and permits one to use a lighter weight bag, with resulting savings in cost. It makes unneccessary, lifting of waste bag up and out of can.

I claim:

1. For use with replaceable trash bags, a trash container conprising:

A. an upper, vertical support member comprising:
   1. an open-ended tubular portion, and
   2. an upper open-end peripheral engagement rim at the bottom of said tubular portion, said upper engagement rim being of enlarged diameter relative to the diameter of said tubular portion and comprising
      a. a radially extending flange
      b. a flexible inner bight portion contiguous with said radially extending flange and the bottom of said tubular portion,
      c. an upper depending annular skirt,
      d. an outer bight portion continguous with the outer circumference of said flange and the upper edge of said skirt, and

      e. equidistantly spaced engagement fasteners at the bottom of said depending annular skirt, which comprises,
         1. a tab, and
         2. a flexible bight portion contiguous with the bottom of said annular depending skirt and the outer edge of said tab and serving as a flexible hinge for said tab,
         3. said tab projecting inwardly and in its natural unflexed position being generally aligned parallel with said radially extending flange and
         4. said tab in its fully flexed position, being aligned generally parallel with said upper depending annular skirt;

B. a lower receiving and supporting tub which comprises:
   1. a bottom,
   2. an upwardly extending annular wall for supporting a loaded bag, and
   3. a lower open-ended peripheral engagement rim at the top of said wall, said lower engagement rim being of enlarged diameter relative to the diameter of said tub, and said lower engagement time comprising:
      a. a radially extending flange,
      b. an inner bight portion contiguous with the top of said annular wall and the inner circumference of said flange,
      c. a lower depending skirt in spaced relation to said wall,
      d. an exterior bight portion at the outer portion of said flange and contiguous with the upper portion of said lower depending skirt,
      e. the outer diameter of said lower depending skirt of said tub being less than the interior diameter of said upper depending skirt of said upper member to allow for snug fit between said upper and lower skirts,
      f. the lower depending skirt being inwardly flexible in response to the downward pressure of said upper engagement rim to allow for the upward and outward flexure of said inwardly projecting tabs of said upwardly depending skirt;
      g. the tabs of said equidistantly spaced engagement fasteners snapping downwardly and inwardly to detachably engage the bottom of the lower depending skirt upon lateral flexure of said skirt and thereby holding the upper vertical supporting member in detachable engagement with said lower receiving tub.

2. A trash container as defined in claim **1,** in which the openended tubular portion of said upper vertical support member is smaller in diameter at the top end than at the bottom end.

* * * * *