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Brescia

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[54] **RECEPTACLE TOP ADAPTOR CONSTRUCTION**

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[52] **U.S. Cl.** ..... **220/55 K,** 220/24 GC, 220/60 R, 292/19, 292/DIG. 38

[51] **Int. Cl.**..... **A47j 36/10,** B65d 43/10, E05c 7/00

[58] **Field of Search**..... 220/60 R, 59, 55 Y, 1 T, 220/55 K, 55 BD, 24.6 C; 24/73 P, 73 PF; 292/19, DIG. 38, 256.6, 256.63

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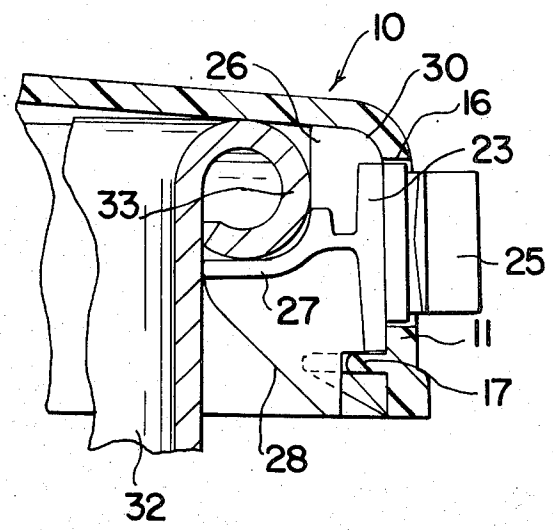
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Assistant Examiner—Allan N. Shoap
Attorney, Agent, or Firm—Hamilton, Renner and Kenner

[57] **ABSTRACT**

A waste receptable top preferably having a self-closing door and a rim flange for normally telescopically fitting over a mating receptacle body, said flange adapted to receive snap-on clips for fitting onto the rim of an open-top standard steel drum to mount the top thereon.

2 Claims, 9 Drawing Figures



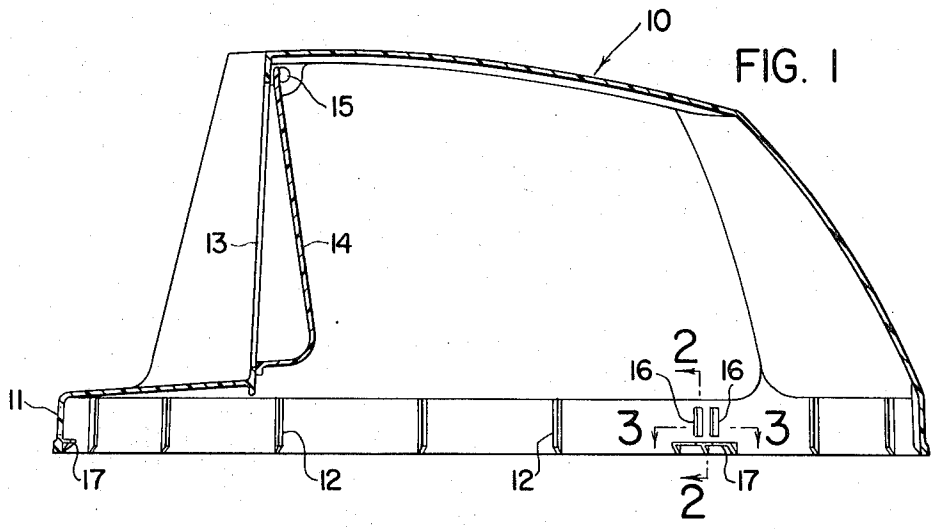


FIG. 1

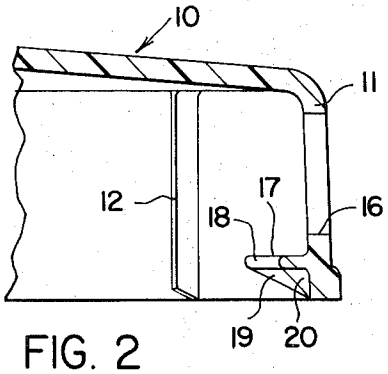


FIG. 2

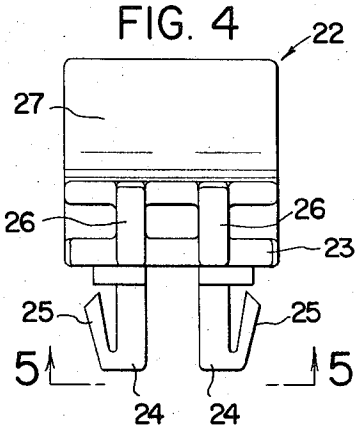


FIG. 4

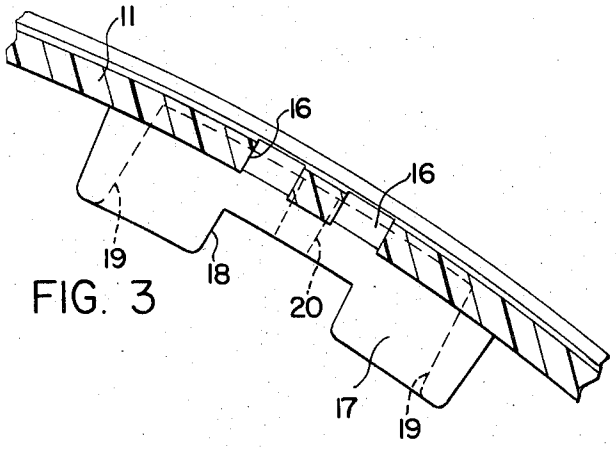


FIG. 3

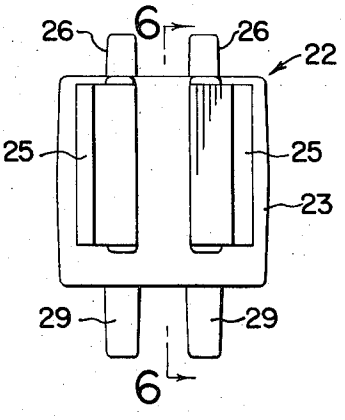


FIG. 5

FIG. 6

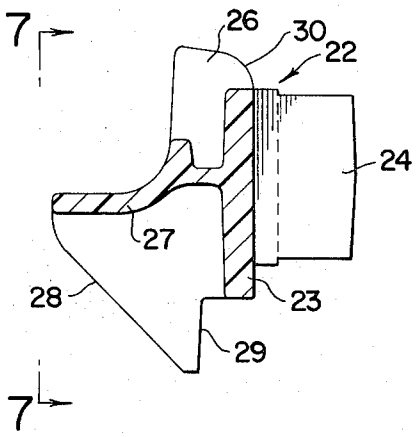


FIG. 7

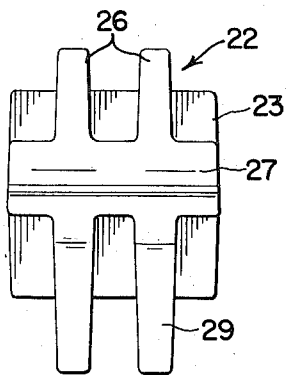


FIG. 8

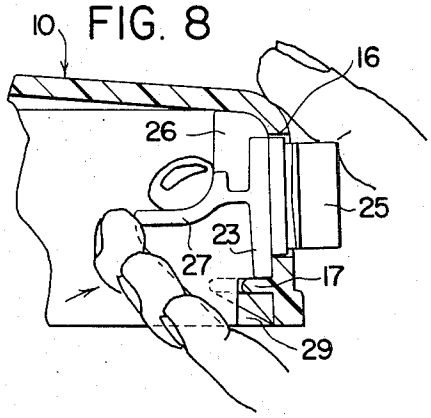
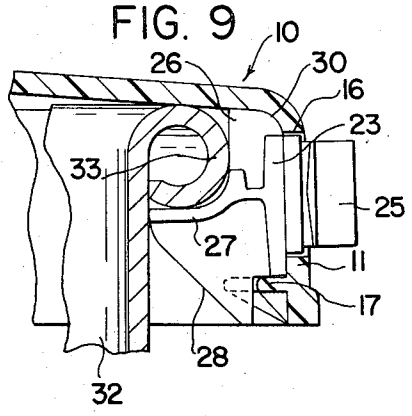


FIG. 9



RECEPTACLE TOP ADAPTOR CONSTRUCTION

BACKGROUND OF THE INVENTION

Large molded plastic waste receptacles are provided with plastic covers having rim flanges for telescoping tightly over the open top of the receptacle. Such receptacles are used primarily for industrial and commercial purposes, and the covers preferably have self-closing doors for admitting waste material. However, it frequently happens that the user may wish to use standard size steel drums instead of the molded plastic receptacles for reasons of greater durability or economy or convenience. In such cases, the original drum top is not suitable as a removable top through which waste material is dropped into the drum.

SUMMARY OF THE INVENTION

It is an object of the present invention to provide a waste receptacle top adaptor construction in which the top may be used with a mating receptacle or may be selectively used to fit the open end of a standard steel drum.

Another object is to provide a molded top construction which is easily converted for use as a top for a standard steel drum.

A further object is to provide a novel snap-on clip construction which is easily attached to the rim flange of the molded top at spaced locations, and which snaps over and engages under the rim bead of a standard steel drum when the top is forced thereover to lock the top thereon.

A still further object is to provide a novel clip construction which is adapted to be used with a variety of top constructions to convert the top for use as a cover for a standard steel drum.

These and other objects are accomplished by the improvements comprising the present invention, a preferred embodiment of which is shown by way of example in the accompanying drawings and described in detail in the following specification. Various modifications and changes in details of construction are comprehended within the scope of the appended claims.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a vertical sectional view of a preferred embodiment of a waste receptacle dome top having a rim flange adapted selectively to fit a molded receptacle top or the end of a standard steel drum.

FIG. 2 is an enlarged fragmentary sectional view on line 2—2 of FIG. 1.

FIG. 3 is an enlarged fragmentary sectional view on line 3—3 of FIG. 1.

FIG. 4 is an enlarged top plan view of one of the novel snap-on clips.

FIG. 5 is a front elevation thereof.

FIG. 6 is a vertical sectional view on line 6—6 of FIG. 5.

FIG. 7 is a rear elevation thereof on line 7—7 of FIG. 6.

FIG. 8 is a fragmentary sectional view similar to FIG. 2, showing how one of the clips fits into the rim flange of the top.

FIG. 9 is a similar view showing how the clip fits onto the rim bead of a standard steel drum when the rim flange of the top is pressed thereon.

DESCRIPTION OF A PREFERRED EMBODIMENT

While the improved top adaptor construction is shown herein as applied to one form of molded dome top with a hinged door of the gravity closing type, it is to be understood that the invention is adapted for use with other receptacle tops having a circular rim flange for telescopically fitting over a mating receptacle body.

The molded dome top shown generally at **10** has a cylindrical rim flange **11** adapted for telescopically fitting over the upper open end of a molded receptacle body in a usual manner. The rim flange has a certain amount of resiliency allowing it to resiliently engage the upper end of the receptacle body to make a tight fit. Interior reinforcing ribs **12** may be formed at intervals around the rim flange for engaging the upper end of the receptacle body. The molded dome top may be molded integrally with the rim flange **11** and be provided at one side with a door opening **13** which is normally closed by an inner door **14** hinged at **15** and adapted to close by gravity. The molded top and door are preferably made of suitable plastic material.

At intervals, preferably of 120°, the rim flange **11** is provided with pairs of vertical slots **16** and immediately below each pair of slots is an inwardly extending horizontal supporting flange **17** having a medial notch **18** therein. Tapered reinforcing ribs **19** are provided under the ends of the flange **17** and a medial supporting rib **20** under the medial portion of the flange adjacent the notch.

One of the novel clips is shown generally at **22** in FIGS. **4 – 7,** and is preferably molded of suitable semi-rigid plastic material having some resiliency and comprises a central vertical rectangular plate **23** from which two vertical legs **24** extend laterally forward in one direction and have wings **25** extending reversely from their outer ends. Two vertical legs **26** extend laterally rearward from plate **23** in the opposite direction from legs **24.** The rear edges of the upper portions of legs **26** merge into the upper edge of a curved saddle flange **27** and below the flange **27** the rear edges of the lower portions of legs **26** have inclined cam edges **28** extending forwardly downward from the rearward edge of the saddle flange **27** to points below the bottom edge of plate **23.** The lower inner portions of legs **26** have notches **29** extending rearwardly from the bottom edge of plate **23.**

Each pair of slots **16** in rim flange **11** is adapted to receive the legs **24** of a clip and when pressed into the slots from the inside of the flange, as indicated in FIG. **8,** the wings **25** will fold to allow insertion and then snap out over the outer side edges of the slots and lock the legs in the slots. In this position the curved upper edges **30** of legs **26** fit into the curved bend at the upper edge of flange **11** and the notched part of flange **17** fits into the notches **29** of the legs **26** under the bottom edge of plate **23** to support the clip from below.

When the top **10** is thus fitted with three of the clips **22** it may be applied to the upper open end of a standard steel drum **32** by pressing the rim flange downwardly over the rim bead **33** of the drum **32** so that the cam edges **28** of the clips slide over the bead and bend the rim flange **11** of the top radially outward. After the saddle flange **27** passes below the bead it will snap under the bend to the position shown in FIG. **9** and lock

the top in place. The top can be removed by pulling radially outward at one of the clips to spring the saddle flange upwardly over the bead.

The capacities of the receptacle body for which the top is designed and the standard steel drum on which the top is adapted to fit may not be the same, as long as the diameter of the rim flange is such that when the novel clips are snapped therein the top will fit the bead of a standard size steel drum.

It will be apparent that a simple and easily workable receptacle top adaptor construction is provided whereby the top is quickly converted from a top for a molded waste receptacle to a top functioning in the same manner for a standard size steel drum without the use of any tools and without changing the basic construction of the top.

I claim:

1. In combination, a receptacle cover having a rim flange normally adapted to fit telescopically over the open end of a mating receptacle, said flange having apertures at peripheral intervals, a plurality of adaptor clips having projections to snap fit into said apertures, said rim flange having clip supporting flanges adjacent said apertures, said clips having cam elements for for snapping over and engaging under the rim bead of a standard steel drum when the cover is pressed thereon, and said clip supporting flanges extending inwardly below said apertures and under said clips.

2. In combination, a receptacle cover as described in claim **1**, in which the clip projections have retainer wings for locking said projections in said apertures.

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