

[54] **WASTE RECEPTACLE HAVING LINER BAG HOLDERS**

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[58] Field of Search 220/1 T, 63 R, DIG. 25, 220/17, 85 R, 65; 248/95, 99-101

[56] **References Cited**

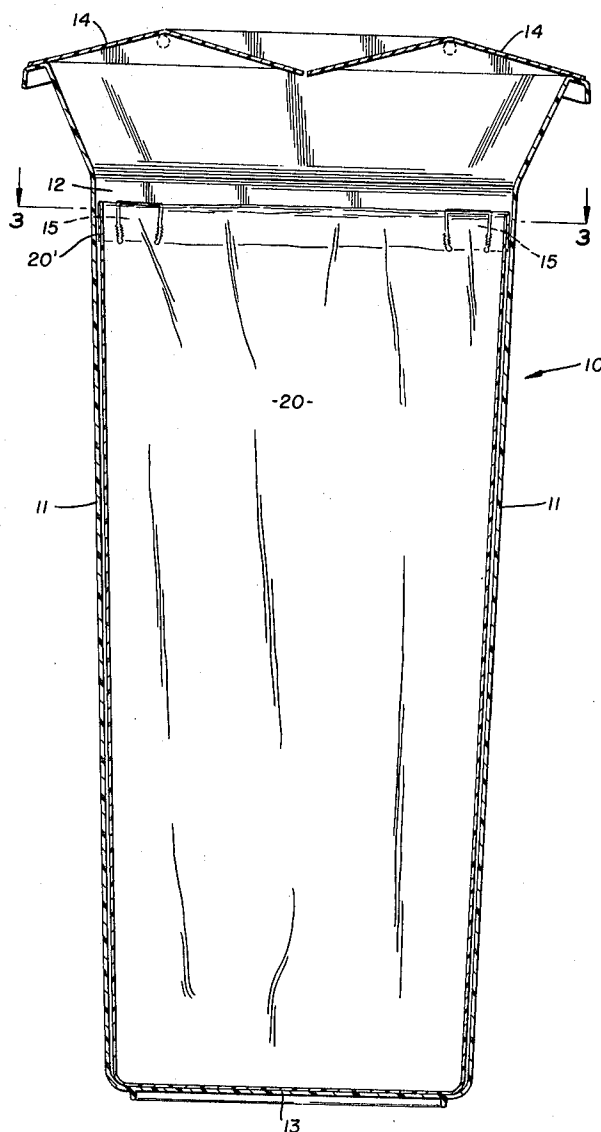
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[57] **ABSTRACT**

A molded waste receptacle having integral resilient tabs formed in its side walls and adapted to be sprung inwardly by pressing on their exterior surfaces for engaging under and pinching the periphery of a liner bag between the tabs and the adjacent receptacle wall.

2 Claims, 7 Drawing Figures



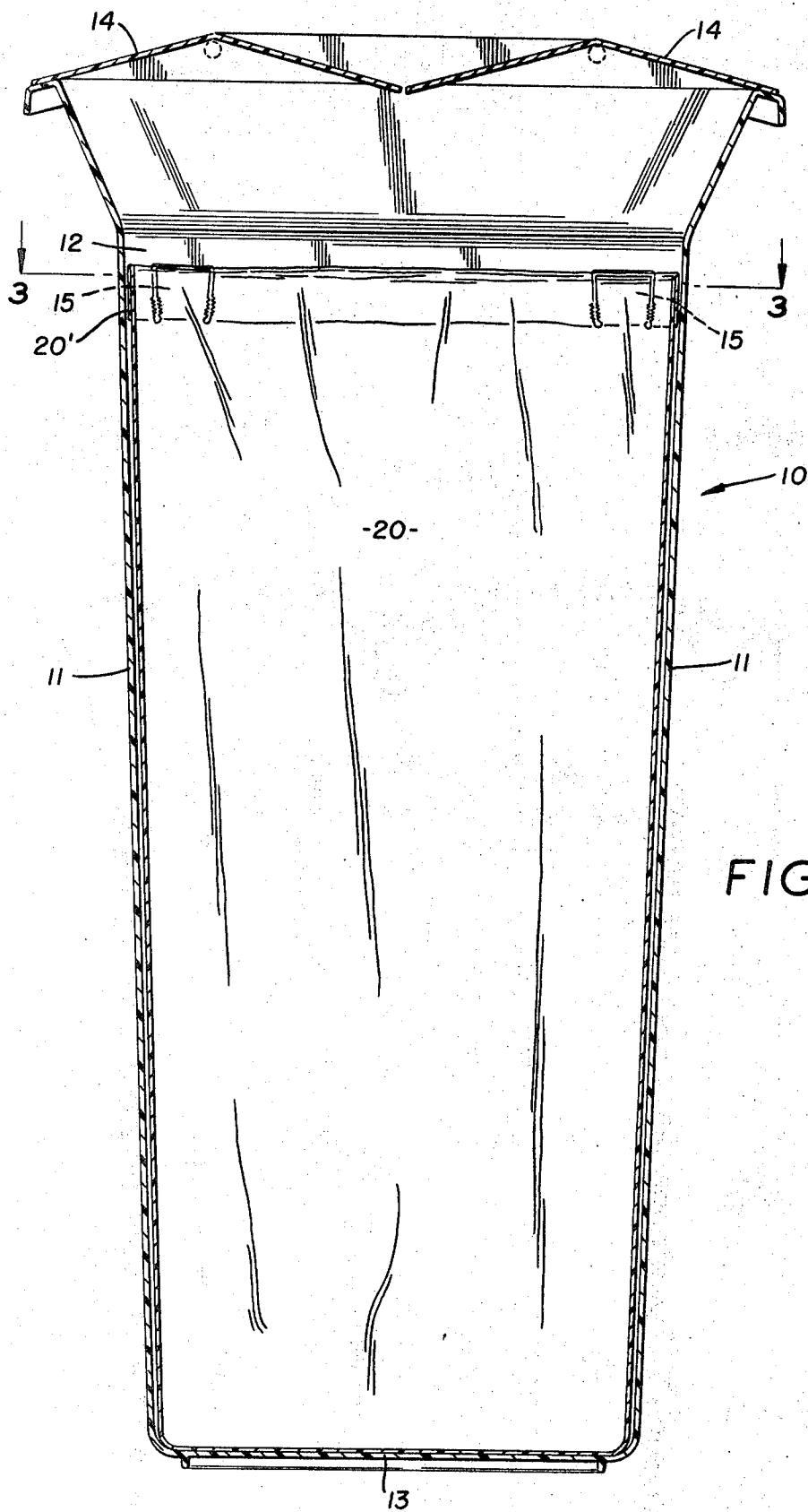


FIG. 2

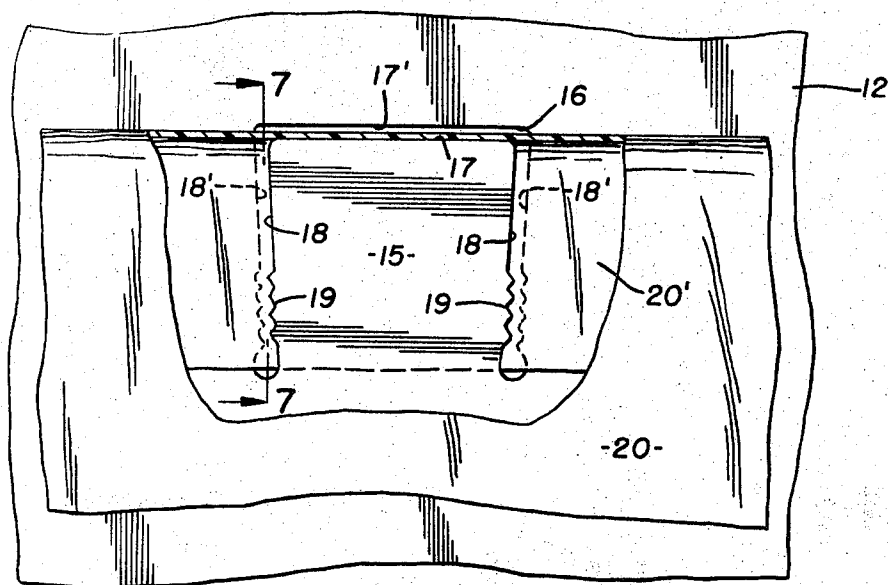


FIG. 4

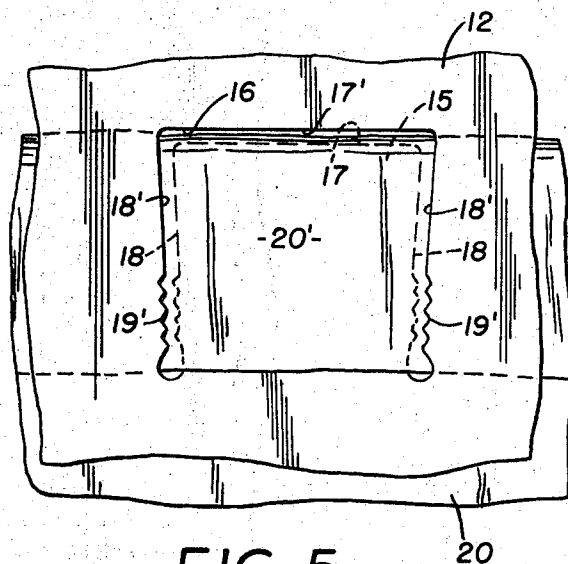


FIG. 5

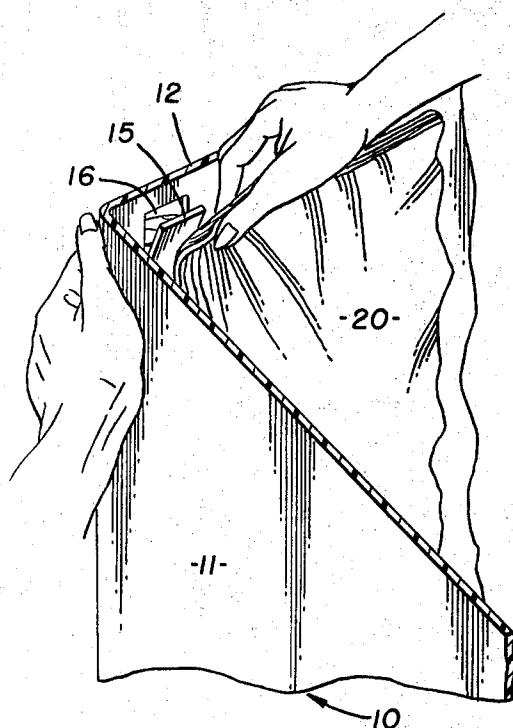


FIG. 6

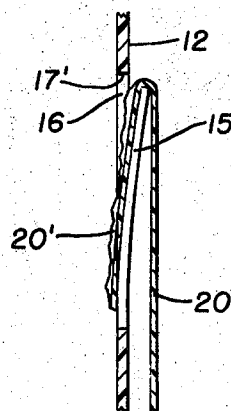


FIG. 7

WASTE RECEPTACLE HAVING LINER BAG HOLDERS

BACKGROUND OF THE INVENTION

Modern methods of handling waste materials frequently involve the use of liner bags in the waste receptacles so that when full the liner bags can be removed and disposed of and replaced with new bags, thereby maintaining the waste receptacles clean and avoiding the necessity of handling loose and exposed waste materials.

Plastic film liner bags are readily available in a variety of sizes but it is difficult to hold the film liner bag in open position within the receptacle, particularly when the receptacle is made of smooth plastic material, as the film liner bags slide easily over the smooth surfaces of the receptacle. Attempts have been made to make the bags long enough to fold down around the upper rim of the receptacle, but these require extra film material and the part folded over is unsightly.

It has also been proposed to provide a resilient ring fitting inside of the top rim of the receptacle over which the film bag is folded inside of the receptacle, but this involves the expense of a separate part which is apt to be lost or misplaced.

SUMMARY OF THE INVENTION

It is an object of the present invention to provide a waste receptacle having novel and improved integral means for holding a liner bag in open position therein.

Another object is to provide a waste receptacle having improved integral means for quickly and easily gripping the marginal edge portion of a liner bag in open position within the upper portion of the receptacle.

A further object is to provide a waste receptacle having improved integral means for tightly gripping the marginal edge portion of a plastic film liner bag in open position within the receptacle.

A still further object is to provide a waste receptacle having improved resilient liner bag holding means which are easily manipulated by unskilled persons selectively to grip and detach the marginal edge portion of a liner bag in open position within the receptacle.

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

DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a waste receptacle having the novel liner bag holding means.

FIG. 2 is a vertical section on line 2—2 of FIG. 1, showing a liner bag in open position therein.

FIG. 3 is a plan sectional view on line 3—3 of FIG. 2.

FIG. 4 is an enlarged partial interior elevation, partly broken away, showing the marginal portion of the liner bag held by the improved holding means.

FIG. 5 is an enlarged partial exterior elevation of the parts shown in FIG. 4.

FIG. 6 is a partial perspective view, partly in section, showing the manner of applying the improved holding means to the marginal edge portion of a liner bag.

FIG. 7 is a sectional view on line 7—7 of FIG. 4.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The receptacle shown generally at 10 in FIGS. 1—3 is rectangular in shape and has four walls, two side walls 11 and two end walls 12, and a bottom 13. However, it will be understood that the invention is applicable to receptacles of various shapes, including round or rounded shapes. The receptacle 10 has an outwardly flared top portion on which a pair of tiltable lids 14 are mounted in a usual manner for swinging downwardly when an object is dropped thereon, but the invention is applicable to receptacles having a variety of tops or covers or to an open top receptacle.

Preferably, the receptacle body is molded of a suitable plastic material, such as low density polyethylene, so that the walls 11 and 12 have a substantial amount of resiliency. The lids 14 are preferably of harder, more rigid plastic material, such as high density polyethylene or polystyrene.

As indicated in the drawings, four opposed tabs 15 are formed in the upper rim portion formed by the receptacle walls. As shown, these tabs 15 are formed adjacent to the corners, two in each end wall 12. However, the tabs could be formed in the side walls 11, and in the case of a circular wall the tabs would be formed opposing each other at spaced-apart locations.

As best shown in FIGS. 4—6, the tabs 15 are preferably substantially rectangular in shape and are integrally joined to the walls 12 along the bottom of the rectangle. The tabs may be formed by inverted U-shaped slots 16 in the wall, thereby spacing the top edge 17 and side edges 18 of the tabs from the adjacent edges of the wall 17' and 18' of the wall. The tabs 15, being formed from the walls 12, normally lie in the planes of the walls.

Preferably, the lower portions of the side edges 18 of the tabs 15 and the adjacent wall edges 18' are serrated as shown at 19 and 19', respectively, for a purpose to be described.

A plastic film liner bag indicated at 20 inserted into the receptacle is held in open position therein by passing the upper marginal portion of the liner behind the tabs in the manner shown in FIGS. 4—7. As shown in FIG. 6, the operator presses a tab at one corner inwardly of the wall 12 with one hand and folds the marginal portion 20' of the liner over and behind the tab with the other hand. When the pressure on the tab is released, the resiliency of the tab along its bottom portion causes it to spring back toward its normal position in the plane of the wall, thus pinching the marginal portion of the film liner and gripping it between the side edges 18 and 18' of the slots.

The serrated edge portions 19 and 19' enhance the gripping action and insure positive holding to overcome any tendency of the film to slip due to its thinness. Obviously, the liner bag 20 can be quickly removed by pressing inwardly on the tabs and lifting the marginal portion of the bag upwardly over the tabs.

The improved waste receptacle having the novel integral tabs provides an inexpensive means to quickly and easily apply and detachably hold a liner bag in open position within the receptacle by an unskilled person, without requiring any separate parts. The liner bag is

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securely gripped regardless of its thinness and smoothness, and substantially all of the bag is out of sight from the exterior of the receptacle except for the small portions passing behind the tabs.

I claim:

1. A waste receptacle having at least one wall forming an upper rim portion, opposed resilient tabs formed in said upper rim portion and having their lower portions joined to said wall, side edge portions of the tabs and the adjacent wall being serrated, said tabs normally

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substantially in the plane of said wall, and bendable inwardly thereof to allow insertion behind them of a marginal portion of a liner bag in open position within said receptacle, whereby said tabs when released will pinch said liner bag marginal portion against adjacent edges of said wall.

2. A waste receptacle as in claim 1, in which the receptacle is of molded plastic material and the tabs are integral therewith.

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