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(54) **AUXILIARY SUPPORT AND TRASH BAG BIN FOR TRASH RECEPTACLE**

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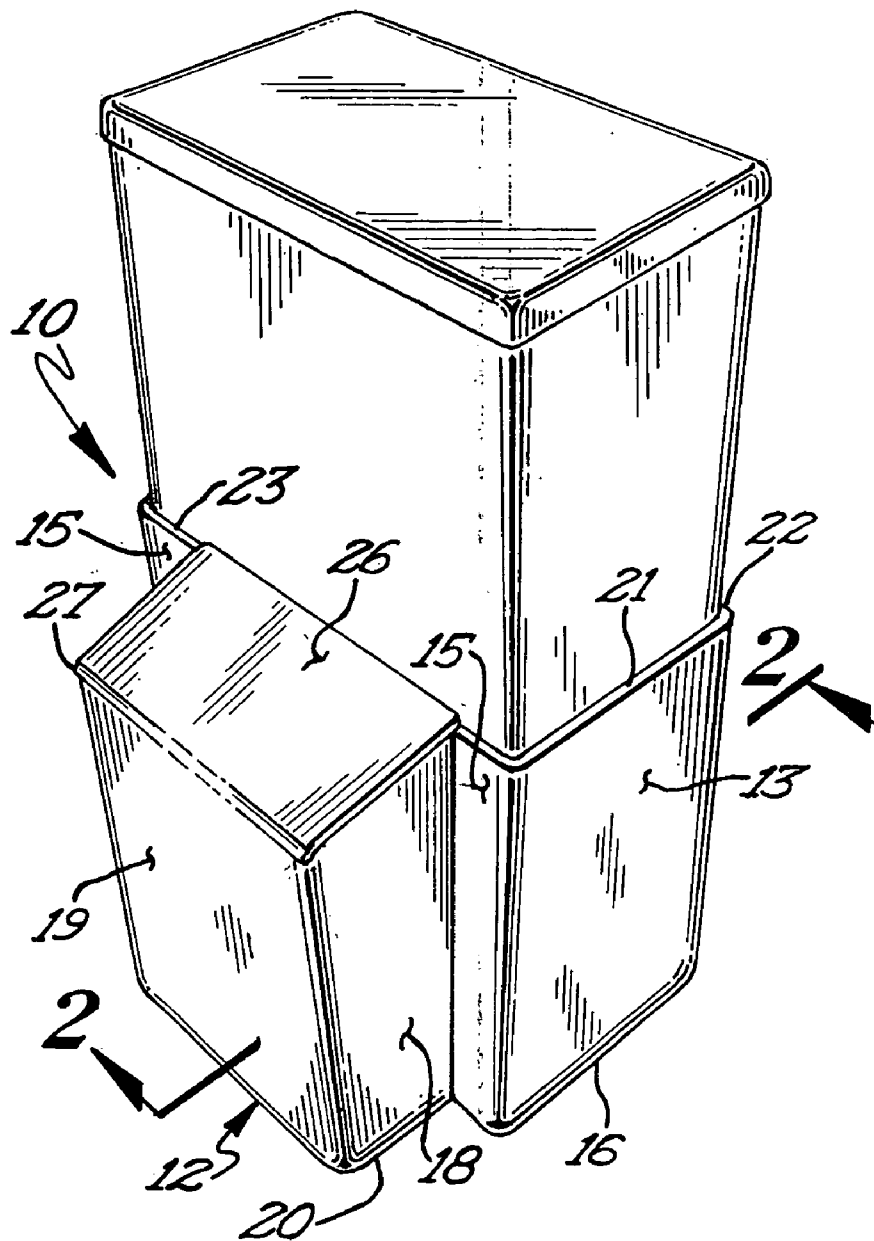
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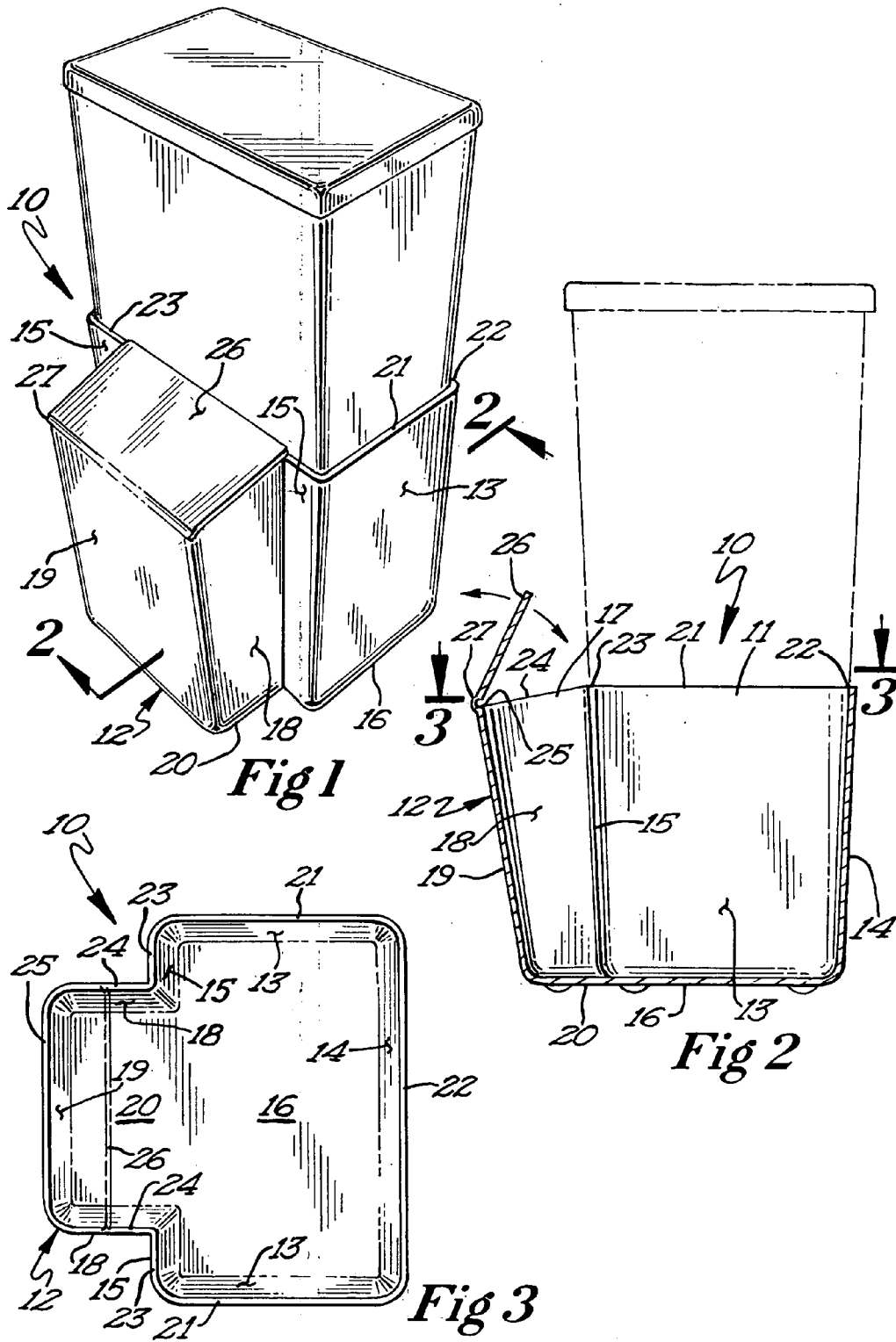
(57) **ABSTRACT**

A unitary support and trash bag bin device for use with conventional trash receptacle includes an open top support member for receiving the lower end portion of a trash receptacle therein. A trash bag bin is integral with the support member and projects forwardly therefrom. The bin is sized and dimensioned to contain a supply of trash bags which are used to line a trash receptacle.

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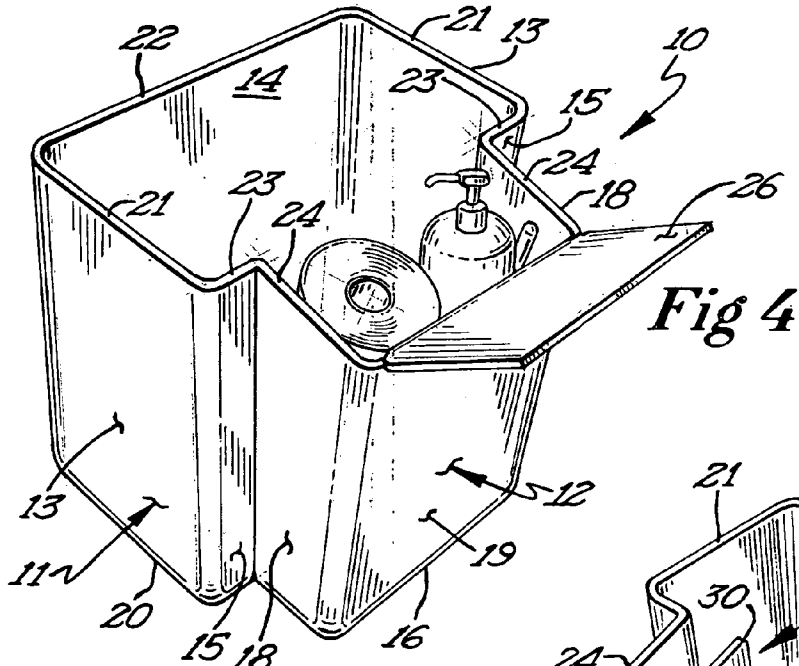


Fig 4

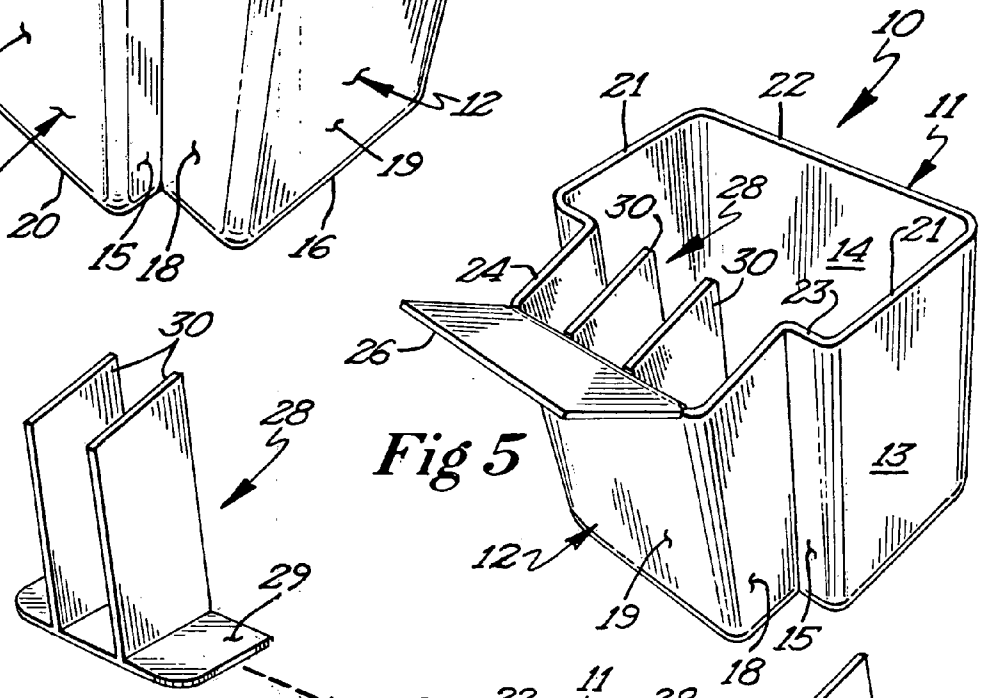


Fig 5

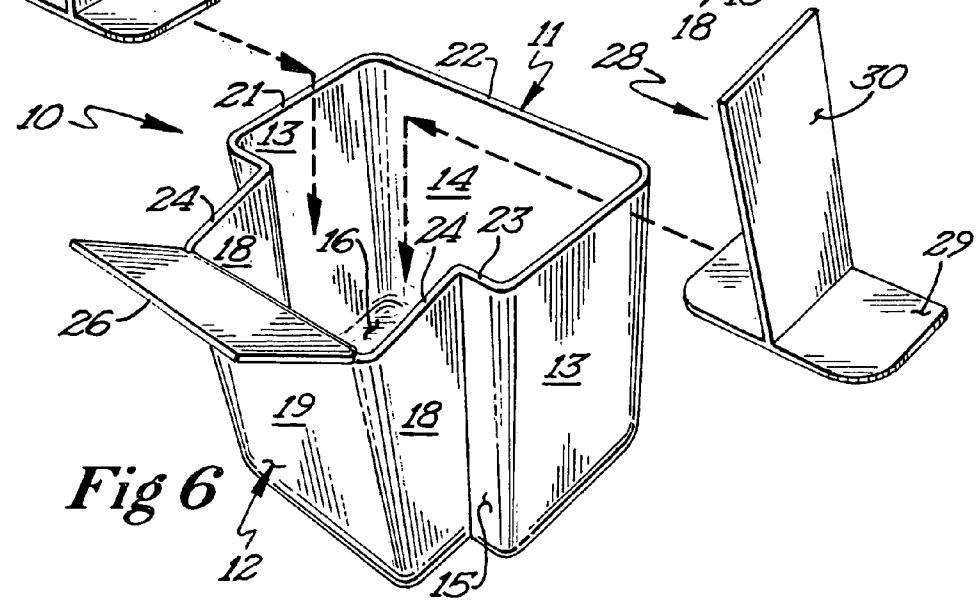


Fig 6

AUXILIARY SUPPORT AND TRASH BAG BIN FOR TRASH RECEPTACLE

FIELD OF THE INVENTION

[0001] This invention relates to a support and trash bag bin device for use with a conventional trash receptacle.

BACKGROUND OF THE INVENTION

[0002] In my earlier U.S. Pat. No. 7,036,675, I provided a conventional trash receptacle with a smaller bin for containing trash bags. Typically, household trash receptacles are provided with trash bag liners for facilitating the removal of the contents of the receptacle. In my U.S. Pat. No. 7,036,675, a conventional trash receptacle was modified to provide the container for the trash bags.

[0003] The present invention obviates the need for such modification of a conventional trash receptacle. The instant device is designed for supporting a conventional trash receptacle while providing a trash bag bin for containing trash bags.

SUMMARY OF THE INVENTION

[0004] It is an object of this invention to provide a novel support device for use with conventional household trash receptacles which provides trash bag bins for such receptacles.

[0005] Specifically, it is an object of this invention to provide an auxiliary support and bin device, of essentially unitary construction, for accommodating a conventional trash receptacle.

[0006] The support and bin device is preferably a one-piece molded structure in which the support is shaped and configured to receive the lower portion of a conventional trash receptacle therein. The receptacle cooperates with the bin to form a container for the trash bags to enable a user to have a supply of trash bag liners readily available for use. Removable dividers for the trash bin are provided to allow the bin to be compartmentalized.

BRIEF DESCRIPTION OF THE FIGURES OF THE DRAWINGS

[0007] FIG. 1 is a perspective view of the auxiliary support and bin device illustrated in cooperating relation with a conventional trash receptacle;

[0008] FIG. 2 is a cross-sectional view of the auxiliary support and bin device taken along line 2-2 of FIG. 1 and looking in the direction of the arrows with a conventional trash receptacle shown in phantom line configuration;

[0009] FIG. 3 is a top plan view of the auxiliary support and bin device;

[0010] FIG. 4 is a perspective view of the auxiliary support and bin device illustrating a roll of trash bags and a spray bottle in the bin;

[0011] FIG. 5 is a perspective view of the auxiliary support and bin device illustrating the bin with removable dividers; and

[0012] FIG. 6 is a partially exploded perspective view of the auxiliary support device illustrating a single and double divider for optional use in the bin.

DESCRIPTION OF THE PREFERRED EMBODIMENT

[0013] Referring now to the drawings and more particularly to FIG. 1, it will be seen that the novel support and trash bag bin device 10 is illustrated in cooperating relation with a conventional open top household trash receptacle 31. The trash receptacle 31 is a conventional commercially available receptacle and includes opposed side walls 32, a front wall 33 and a rear wall 34.

[0014] The opposed side walls 32, front wall 33 and rear wall 34 converge slightly downwardly to a bottom wall 35. The upper edge of the receptacle 31 has a conventional rolled flange 36 characteristic of commercial receptacles 31.

[0015] The support and trash bag bin device includes an open top support member 11 and a trash bag bin 12. The support and bin device is of molded one piece construction from a suitable rigid plastic material. The support member 11 includes opposed side walls 13, a rear wall 14 and a front wall 15 which converge slightly downwardly to a flat bottom wall 16.

[0016] The convergent angle of the vertical walls of the support member 11 correspond to convergent angle of the walls of the trash receptacle 31 thereby enabling the trash receptacle to be snugly positioned within the support member 11. The front wall 15 of the support member 11 has a generally rectangular shaped opening 17 therein. The bin 12 projects forwardly from the periphery of the opening 17 and is positioned inwardly of the side walls 13.

[0017] The bin 12 has opposed side walls 18, a front wall 19 and a bottom wall 20. It will be noted that the bottom wall 20 is coplanar and continuous with the bottom wall 16 of the support member. It will also be noted that while the front wall 19 converges downwardly and inwardly, the side walls 18 are disposed in substantially parallel relation to each other. The bin 12 is provided with a lid 26 having a molded in hinge 27. Although a hinged lid is preferred, the lid may be omitted.

[0018] It will be noted that the upper edges 21 of the side walls 13, the upper edge 22 of the rear wall 14 and the upper edge 23 of the front wall of the support member are disposed in a single plane disposed substantially parallel with the bottom wall 16. However, the upper edges 24 of the side walls 18 of the bin 12 are declined downwardly and forwardly to the upper edge of the front wall 19.

[0019] Referring now to FIG. 4, it will be seen that the bin defines a single compartment for accommodating a roll of bags B and a spray bottle S. However, a divider or dividers may be provided for compartmentalizing the interior of the bin 12. Referring now to FIG. 6, it will be seen that a flat horizontal support element 29 is provided and shaped to fit snugly into the bin upon the bottom wall 20. A vertical substantially flat divider element 30 is secured to the horizontal element 29 and projects upwardly therefrom. The divider 30 is centrally located with respect to the horizontal element 29 and has a vertical dimension corresponding generally to the vertical dimension of the vertical side walls 15 of the bin 12.

[0020] FIG. 6 also shows a two divider arrangement including a flat horizontal element 29 having a pair of substantially identical dividers secured thereto and project-

ing upwardly therefrom. The dividers 30 are spaced apart a distance corresponding to the spacing from a side edge of the horizontal element 29 to the adjacent divider 30. When this divider structure is positioned within the bin 12, the interior of the bin is divided into three equal compartments as shown in FIG. 5. The upper edges of the divider or dividers may be disposed in plane parallel to the bottom wall 20 and the divider edge(s) may be positioned slightly below the upper edges of the side walls 18 of the bin. Alternatively the upper edge(s) of the divider may be inclined and coextensive with the inclined upper edges of the side walls 18.

[0021] Use of the dividers is optional, but use of the divider or dividers does effectively compartmentalize the interior of the bin. It will be noted that the bin 12 does not have a rear wall. However, when a conventional trash receptacle is placed into the support member, the front wall 33 of the trash receptacle defines the rear wall of the bin.

[0022] A user will remove a bag from the bin and line the interior of the trash receptacle 31 with a bag. The upper edge portions of the bag will be folded over the flange 36 of the receptacle. When bag liner is full, the user may remove the filled bag and replace it with another bag conveniently located within the bin.

[0023] A user need not remove the receptacle from the support member even though this may be accomplished easily. The support and trash bag bin devices may be stacked since the units readily nest within each other.

[0024] From the foregoing description, it will be seen that I have provided a novel support and trash bag device which cooperates with conventional trash receptacles for providing trash bag liners for the receptacles.

What is claimed is:

1. An auxiliary support and trash bag bin device for use with a conventional open top trash receptacle, the trash receptacle having opposed side walls and opposed front and rear walls converging slightly downwardly and being integral with a flat, planar bottom wall,
the auxiliary support and trash bag bin device including an open top support member having opposed side walls and opposed front and rear walls converging slightly downwardly to a flat bottom wall, the convergent angle of the walls of the support member corresponding to the convergent angle of the walls of the trash receptacle to enable the trash receptacle to be snugly positioned within the support member,

an open top bag bin integral with the front wall of the support member including opposed side walls and a front wall integral with a flat bottom wall, the width dimension of the bin being less than the width dimension of the support member, said bin having an open rear portion extending between the side walls and bottom wall of the bin, the front wall of the trash receptacle defining the rear wall of the bin when the trash receptacle is positioned within the support member, the bag bin being sized and dimensioned for containing trash bags therein for use in lining the interior of the trash receptacle.

2. The device as defined in claim 1 wherein said trash bag bin is provided with a lid having a molded in hinge integral with the front wall of the bin.

3. The device as defined in claim 1 wherein said support member and trash bag bin device is of unitary molded construction formed of a plastic material.

4. The device as defined in claim 1 wherein the flat bottom wall of the support member is coplanar and continuous with the flat bottom wall of the bin.

5. The device as defined in claim 1 wherein the upper edges of the walls of the support member are disposed in a plane substantially parallel to the bottom wall of the support member, the upper edges of the walls of the bin being disposed in plane angularly disposed with respect to the bottom wall of the bin.

6. The device as defined in claim 1 and removable divider mean positioned within the bin and dividing the interior of the bin into equal sized vertical compartments.

7. The device as defined in claim 6 wherein the divider means include a flat horizontal element positioned upon the bottom wall of the bin, and a vertical, planar divider element integral with the horizontal element and projecting upwardly therefrom.

8. The device as defined in claim 7 wherein the horizontal element corresponds in size and dimensions to the bottom wall of the bin to snugly fit within the bin.

9. The device as defined in claim 6 wherein the divider means includes a horizontal element positioned upon the bottom wall of the bin, a pair of laterally spaced apart vertical, planar divider elements integral with the horizontal element and projecting upwardly therefrom to divide the interior of the bin into three equal sized compartments.

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