United States Patent

[11] 3,612,343

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[73] Assignee **Plastic Specialties, Inc.**
Glen Ellyn, Ill.

[54] **SUPPORT FOR FLOWER BASKET**
7 Claims, 13 Drawing Figs.

[52] U.S. Cl. ..... **220/69,** 220/94 R
[51] **Int. Cl.** **B65d 7/42**
[50] **Field of Search** 220/69, 18; 47/34, 39; 248/131, 349

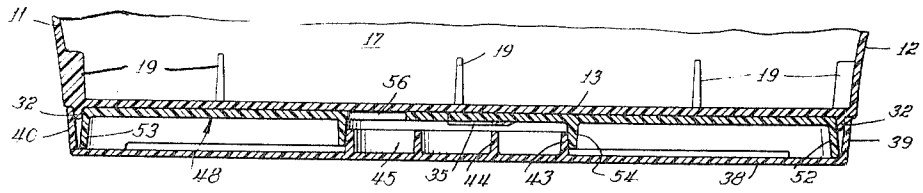
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Attorney—Darbo, Robertson & Vandenburgh

ABSTRACT: A molded plastic container is relatively long between two ends and relatively narrow between two sides. Secured to the bottom of the container is a downwardly extending molded plastic base of substantially the same configuration as the container. The base defines a cavity between the bottom plate of the base and the bottom of the container. Within this cavity is a supplemental support pivotally connected to the base by interfitting annular bosses. The supplemental support is rotatable between a position at which it is entirely within the cavity and a position at right angles thereto at which the supplemental support extends outwardly beyond the sides of the container. Cams on the bottom of the container force the supplemental support downwardly as it is rotated into the latter position. A molded plastic handle extends upwardly in a loop above the container. The plastic handle has downwardly extending prongs which are received in openings in the container and engage the container.



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SHEET 1 OF 3

Fig. 1

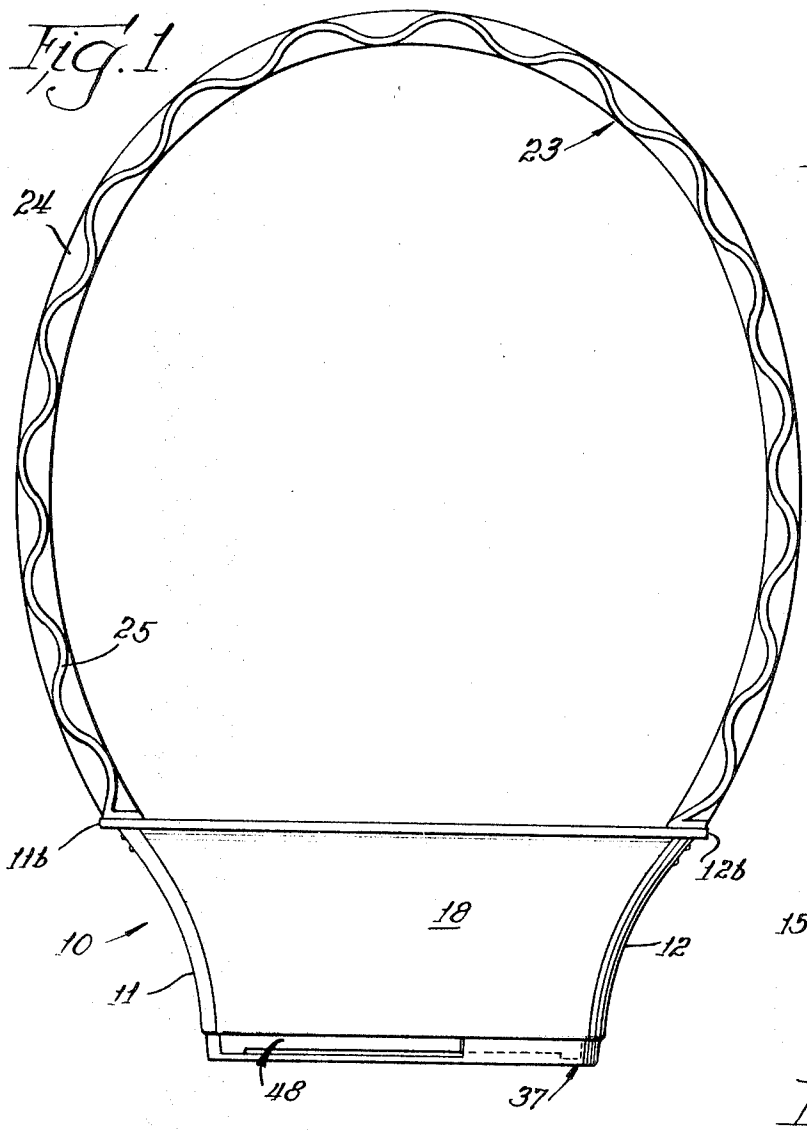


Fig. 3

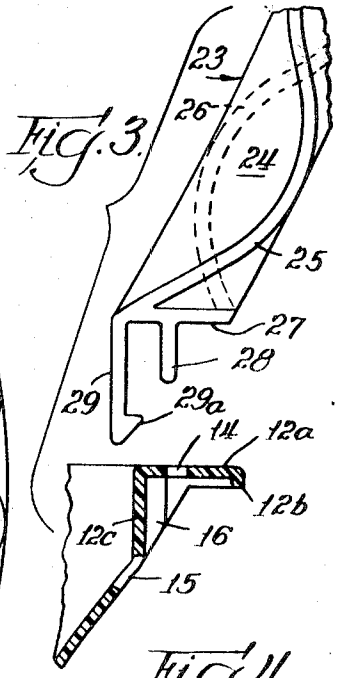


Fig. 4

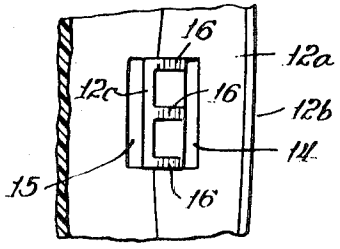


Fig. 2

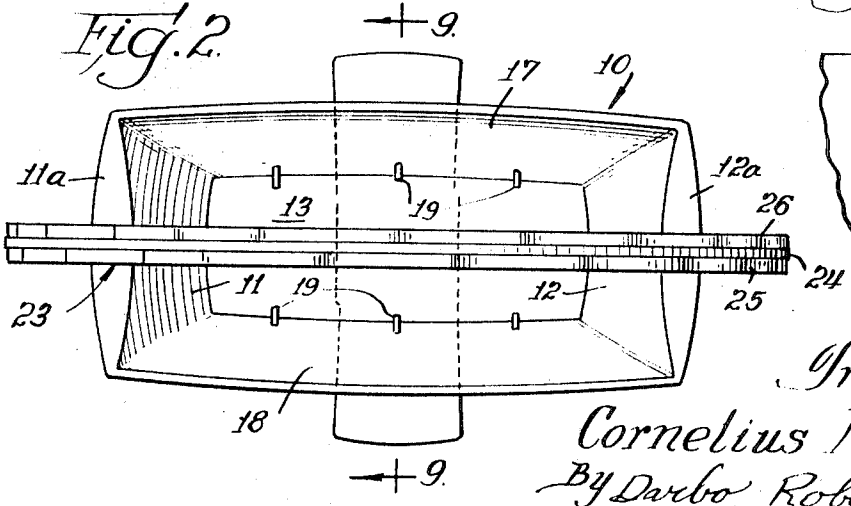
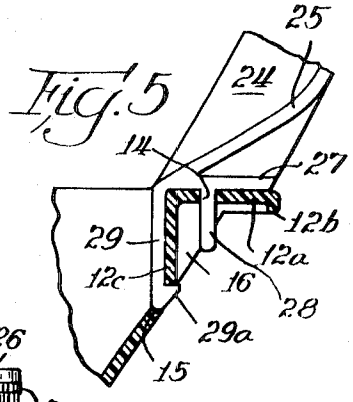


Fig. 5



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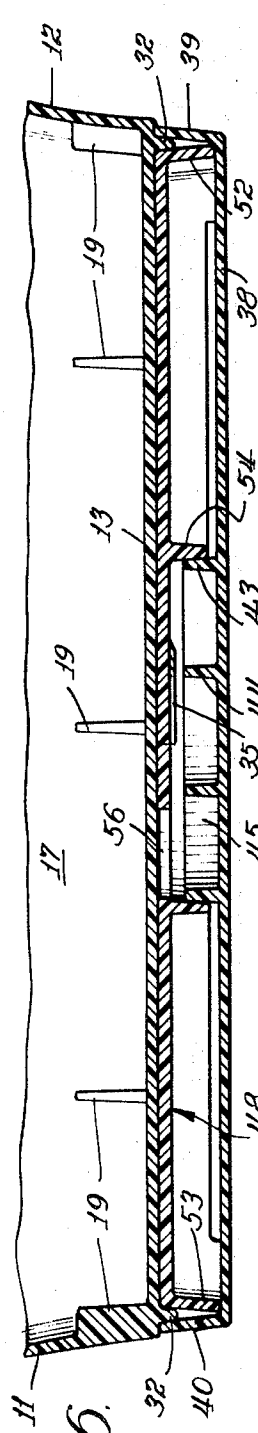


Fig. 6.

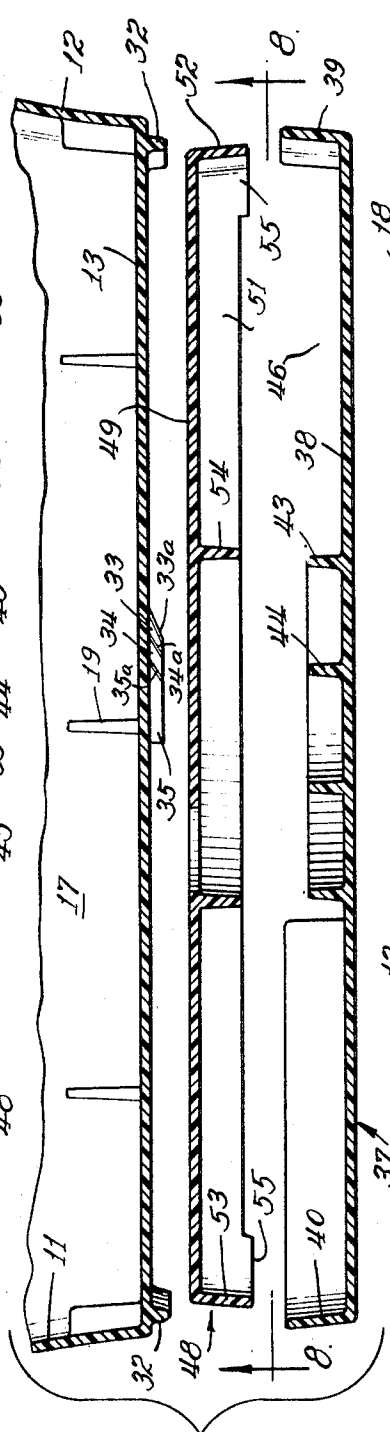


Fig. 7.

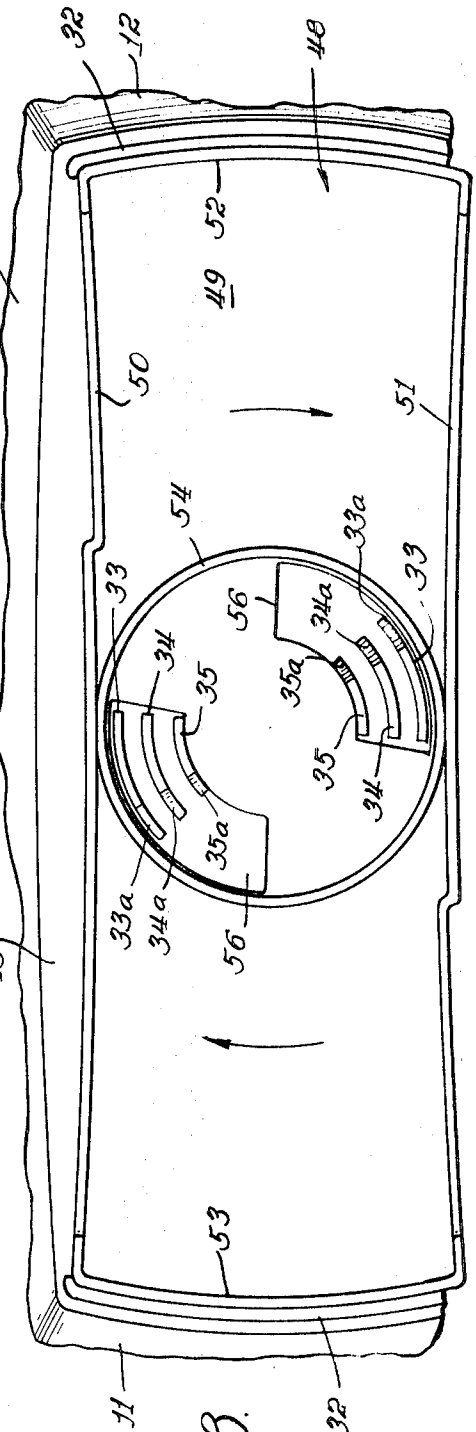


Fig. 8.

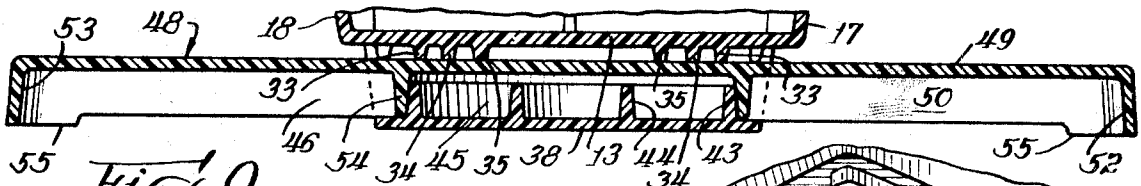


Fig. 9.

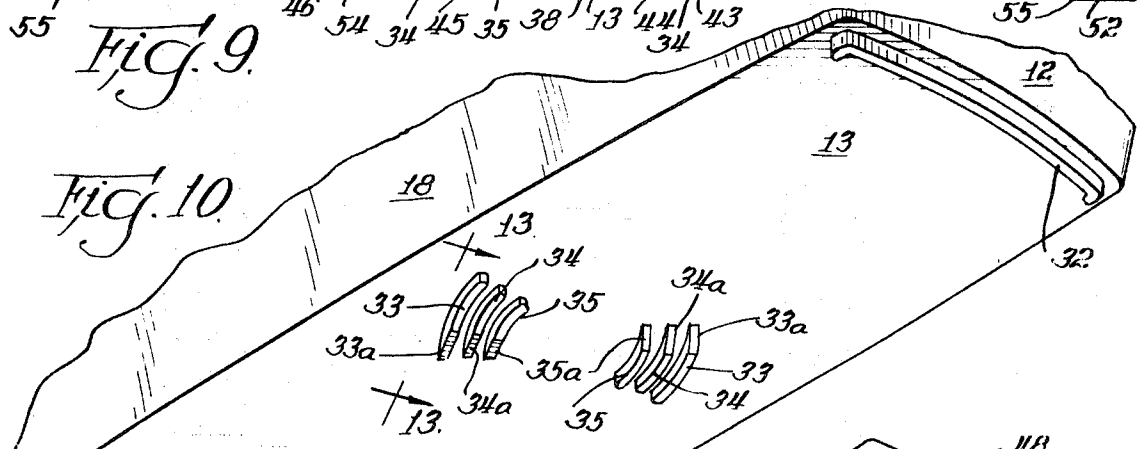


Fig. 10.

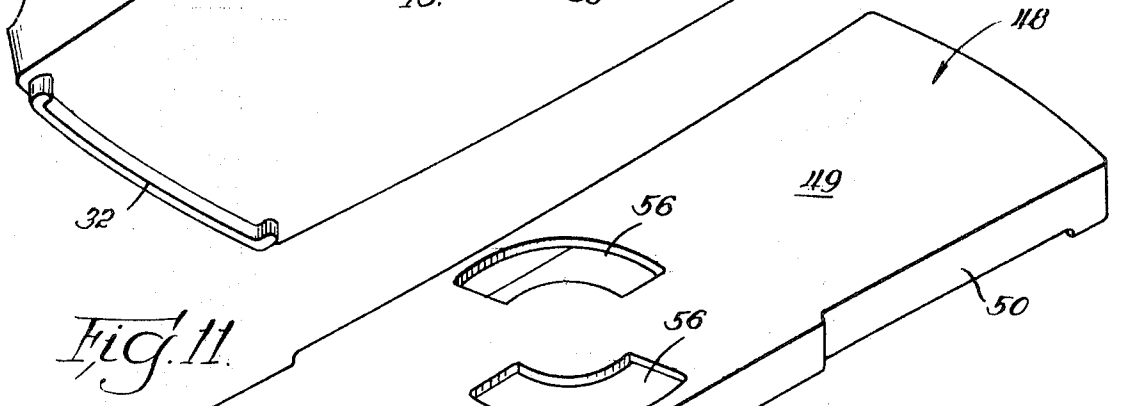


Fig. 11.

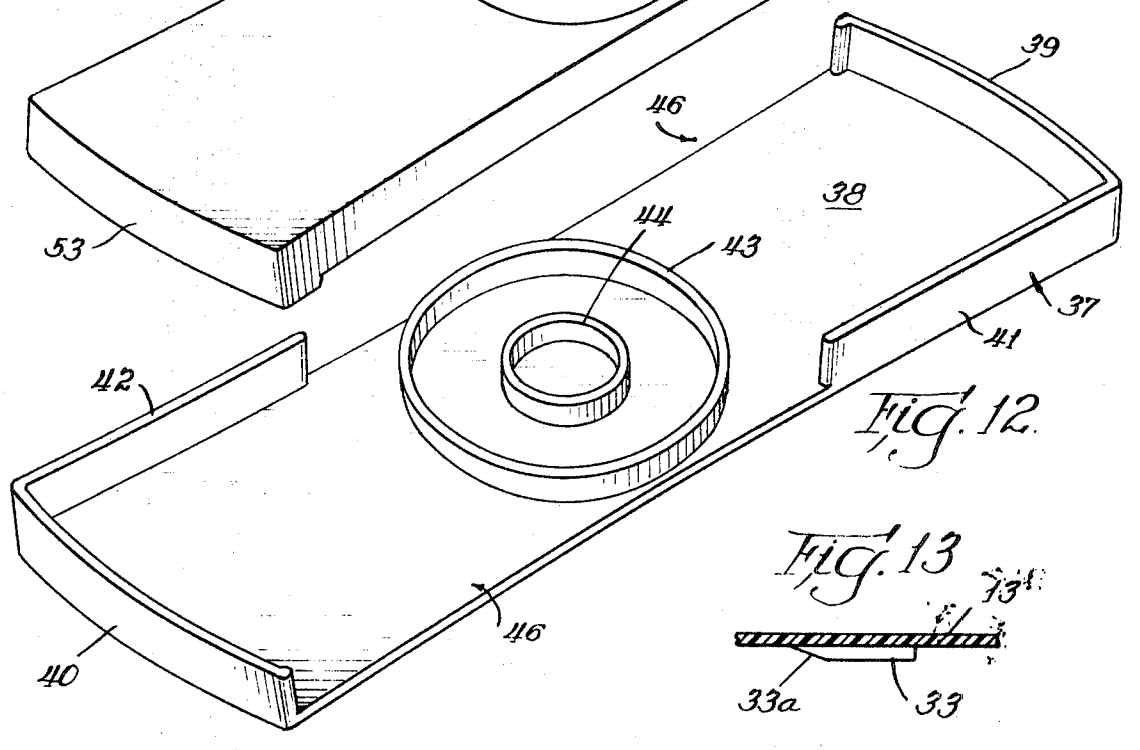


Fig. 12.

Fig. 13.

SUPPORT FOR FLOWER BASKET

SUMMARY OF THE INVENTION

The present invention relates to an attractive flower basket readily assembled from molded plastic parts and which has a rotatable supplemental support in the base which can be moved from a concealed position to a transverse position at which it stabilizes the flower basket.

DESCRIPTION OF THE DRAWINGS

FIG. 1 is a side elevation of an embodiment of the invention;

FIG. 2 is a plan view;

FIG. 3 is an enlarged fragmentary view of an end of the handle and the portion of the container with which it engages;

FIG. 4 is an enlarged bottom view of the portion of the container with which the handle engages;

FIG. 5 is an enlarged assembled view of the end of the handle connected to the container;

FIG. 6 is an enlarged sectional view of the lower portion of the container as seen in a plane intersecting the ends of the container;

FIG. 7 is an exploded view corresponding to FIG. 6;

FIG. 8 is a bottom view as seen at line 8—8 of FIG. 7;

FIG. 9 is an enlarged sectional view of the lower portion of the container as seen at line 9—9 of FIG. 2;

FIG. 10 is a perspective view looking at the bottom of the container with the base and supplemental support removed;

FIG. 11 is an enlarged perspective view of the supplemental support looking downwardly toward the top thereof;

FIG. 12 is an enlarged perspective view looking at the inside of the base; and

FIG. 13 is a fragmentary view of the bottom of the container and cams as seen at line 13—13 of FIG. 10.

DESCRIPTION OF SPECIFIC EMBODIMENT

The following disclosure is offered for public dissemination in return for the grant of a patent. Although it is detailed to ensure adequacy and aid understanding, this is not intended to prejudice that purpose of a patent which is to cover each new inventive concept therein no matter how others may later disguise it by variations in form or additions or further improvements. The claims at the end hereof are intended as the chief aid toward this purpose, as it is these that meet the requirement of pointing out the parts, improvements, or combinations in which the inventive concepts are found.

A container, generally 10, has two ends 11 and 12 and a bottom 13. At the top of the ends are relatively horizontal flanges 11*a* and 12*a* which terminate in downwardly extending lips 11*b* and 12*b*. At each of the ends are two downwardly extending slots 14 and 15. Three vertical ribs 16 reinforce wall portion 12*c* between the slots. A corresponding configuration, not illustrated, is present at end 11 of the container. Between the two ends 11 and 12 are sides 17 and 18. A plurality of projections 19 are present just above the intersection of the sides with the bottom 13. In addition to providing some reinforcement, these projections serve to prevent the containers from jamming together when they are stacked for shipment.

A handle, generally 23, extends between ends 11 and 12 in a generally oval configuration. The handle comprises a flat band 24 lying in a plane and sinuous strips 25 and 26 integral with opposite sides of the band. As best seen in FIG. 3, the strips 25 and 26 are approximately 180° out of phase with respect to each other so far as their curvilinear configuration is concerned. At each end of the handle is a soleplate 27 which abuts, in face to face contact, with flanges 11*a* and 12*a* at the respective ends of the container. Extending downwardly from soleplate 27 are prongs 28 and 29. Prong 28 is dimensioned to enter opening 14 and prong 29 is dimensioned to enter opening 15. Prong 29 has a hook 29*a* at the distal end thereof which, as best seen in FIG. 5, engages about the bottom edge of portion 12*c* of the end of the container to lock the handle in place.

Extending downwardly from the bottom 13 of the container are end flanges 32 and two sets of three cams each, 33, 34 and 35. The cams each have tapered end faces 33*a*, 34*a* and 35*a*. As best seen in FIG. 8, the cams are aligned as arcs of circles.

A base, generally 37, has as integral parts, a bottom 38, two ends 39 and 40, two partial sides 41 and 42, and two upstanding annular bosses 43 and 44. As best seen in FIG. 6, ends 39 and 40 fit snugly about flanges 32 of the container and are secured thereto as by means of an adhesive. When so connected together, a cavity 45 is defined between bottom plate 13 of the container and bottom plate 38 of the base.

Within cavity 45 is a supplemental support member, generally 48. Support member 48 comprises, as integral parts, a top plate 49, downwardly extending sides 50 and 51, ends 52 and 53, and a downwardly extending annular boss 54. Ends 52 and 53 extend downwardly somewhat farther than do sides 50 and 51 with the distal portions lying in a common plane to form feet 55. The annular boss 54 fits about annular boss 43 of base 37 so as to form a pivotal mounting for the supplemental support 48 on the base 37, as best seen in FIGS. 6 and 9. Top plate 49 has arcuate slots 56 therethrough. Slots 56 are positioned to receive cams 33–35 when the support member 48 is fully within cavity 45. In this position the supplemental support is fully concealed, for all practical purposes, as best seen in FIG. 1.

For many uses, particularly when the basket is fully loaded with flowers or the like, transverse stability is required due to the relatively narrow dimension of the basket between sides 17 and 18. When this is required, the supplemental support 48 is rotated with respect to the remainder of the structure so that the ends of the supplemental support move out through openings 46 defined between partial sides 41 and 42 and ends 40 and 39 respectively. As this rotation occurs, the cams 33–35 move out of openings 56 in plate 49 and onto the upper surface of the plate. These cams force the supplemental support member 48 downwardly so that when this member has reached the transverse position illustrated in FIGS. 2 and 9, the bottom of feet 55 lie in the same plane as that defined by the underside of baseplate 38. Thus the supplemental support member supplies the required added transverse stability to the flower basket.

Each of the components, container 10, handle 23, base 37 and supplemental support member 48 are formed as an integral unit of plastic. This is done, for example, by the injection molding of each of these components separately. Any suitable plastic may be employed, as for example high-impact polystyrene. While the components may be shipped as individual units to the ultimate consumer, the preferred practice will be to assemble the supplemental support member 48 and base 37 to the container 10 before shipment. The portions thus assembled can be stacked together for convenient shipment. Without the handles being affixed thereto, a relatively compact shipping package is obtained. When the units are received by the ultimate user, or the store in which they are to be sold, it is relatively simple for the handles to be affixed to the containers. A person need only slip the prongs 28 and 29 into their respective openings at each end of the container sufficiently far so that hook 29*a* engages the end wall 12*c* of the container. The particular configuration of the handle, comprising band 24 and its alternately positioned strips 25 and 26, provide an attractive appearance as well as giving good rigidity to the overall handle.

I claim:

1. In a container having a bottom which is substantially longer in the direction between two ends of the container than it is in the other direction between the two sides of the container, the improvement comprising:

first means attached to said container and having ends adjacent the ends of the container, said ends of said first means extending downwardly from said bottom and terminating in a common plane, said first means defining a cavity between said ends;

a supplemental support member having ends and pivotally mounted at the bottom of said container and movable between a first position at which it is within said cavity with the ends of the support member adjacent the ends of said first means and a second position at which the ends of the support member extend outwardly beyond the sides of the container, said support member having downwardly extending feet at the ends thereof; and

cam means between said bottom and said support member for forcing said support member downwardly when said support member is moved to said second position to an extent such that the bottom of said feet are in said common plane and permitting said feet to retract above said common plane when said support member is in said first position.

2. In a container as set forth in claim 1, wherein said first means has a bottom plate in said plane and ends and partial sides extending upwardly from said plate to said bottom.

3. In a container as set forth in claim 2, wherein said support member has a top plate and sides and ends extending downwardly from said top plate.

4. In a container as set forth in claim 3, wherein said top plate has two opposed arcuate slots therethrough, said cam means including a pair of opposed arcuate cams extending downwardly from said bottom, said cams and slots being positioned so that the cams extend through said slots when said member is in the first position and said cams bear against said top plate when said member is in the second position.

5. In a container as set forth in claim 4, wherein

said first means is an integral molded plastic part and at the center thereof includes an annular upstanding boss;

said support member is an integral molded plastic part and at the center thereof includes an annular downwardly extending boss which is concentric with and interfits with said upstanding boss to provide the pivotal mounting for said support member; and

said bottom and said cams are an integral molded plastic part and includes downwardly extending flanges at the ends of the bottom which interfit with the ends of the first means.

6. In a container as set forth in claim 1, wherein said support member has a top plate with two opposed arcuate slots therethrough, said cam means including a pair of opposed arcuate cams extending downwardly from said bottom, said cams and slots being positioned so that the cams extend through said slots when said member is in the first position and said cams bear against said top plate when said member is in the second position.

7. In a container as set forth in claim 6, wherein

said first means is an integral molded plastic part and at the center thereof includes an annular upstanding boss;

said support member is an integral molded plastic part and at the center thereof includes an annular downwardly extending boss which is concentric with and interfits with said upstanding boss to provide the pivotal mounting for said support member; and

said bottom and said cams are an integral molded plastic part and include downwardly extending flanges at the ends of the bottom which interfit with the ends of the first means.