Oct. 4, 1966 R. M. ROSSER 3,276,733

GARBAGE CAN RACK

Filed Aug. 4, 1965

Fig. 1

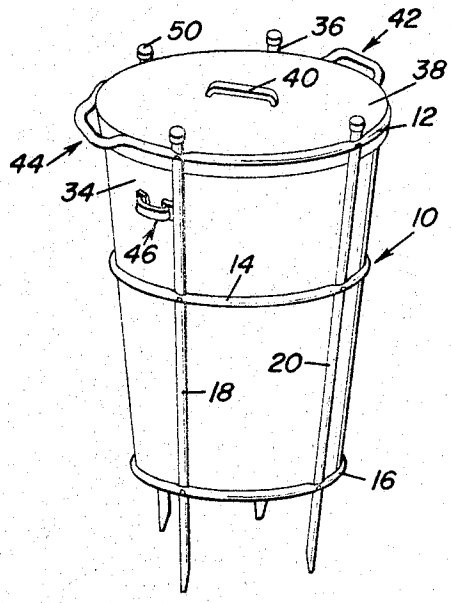


Fig. 2

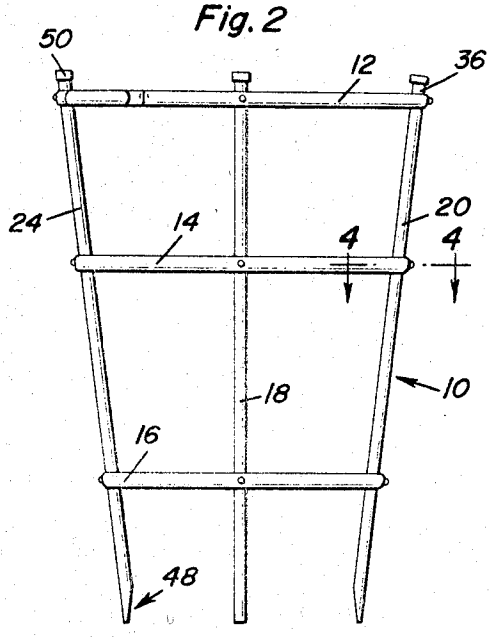


Fig. 3

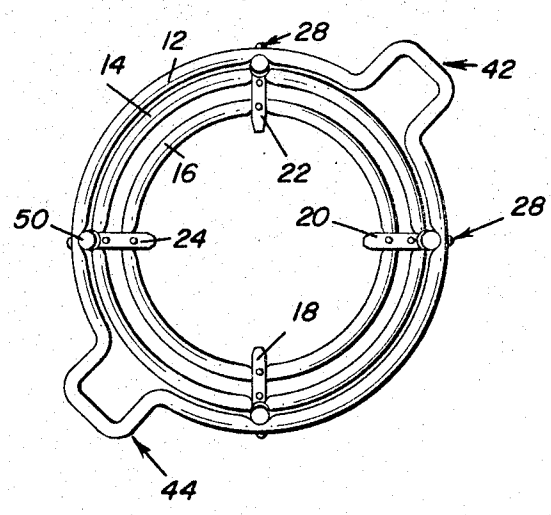
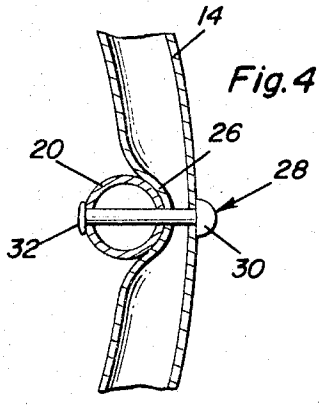


Fig. 4



Rufus M. Rosser
INVENTOR.

BY Lawrence O'Brien and Harvey B. Jacobson
Attorneys

United States Patent Office

3,276,733

Patented Oct. 4, 1966

3,276,733

GARBAGE CAN RACK

Rufus M. Rosser, 218 11th Ave., Atmore, Ala.

Filed Aug. 4, 1965, Ser. No. 477,159

3 Claims. (Cl. 248—146)

This invention relates generally to container supports and more specifically to a rack for supporting garbage cans in upright position.

Various supports for containers such as garbage cans or the like have been devised and made available for use. However, these prior devices have proved to be generally unsatisfactory in that they do not provide means for retaining the cans in the support nor do they prevent the top from being either accidentally or purposely knocked off the can while it is in the support.

Accordingly, it is an object of the present invention to provide a supporting rack for trash cans, garbage cans or the like in which the cans may be maintained in upright position and secured in place and which minimizes the likelihood and the danger of the can top being knocked off.

It is another object of the instant invention to provide a container support which holds the container secured in upright position and which is in turn fastened to the ground.

It is a still further object of the present invention to provide a container support which is light of weight, sturdy of construction and economical to manufacture.

It is another object of the present invention to provide a container support having novel container locking means therein for releasably locking the container in the support.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 is a perspective view of the support comprising the present invention with a container such as a garbage can in place therein;

FIGURE 2 is an elevational view of the container support comprising the present invention;

FIGURE 3 is a top plan view of the container support; and

FIGURE 4 is an enlarged horizontal sectional view taken substantially on the plane of the line 4—4 of FIGURE 2.

Referring now and more specifically to the drawings and particularly to FIGURE 1, reference numeral **10** designates the container support of the present invention. The container support **10** comprises a plurality of ring members, including the top ring **12**, intermediate ring **14** and bottom ring **16**. These rings are generally circular and preferably manufactured of aluminum pipe or any other lightweight yet substantially sturdy material.

As illustrated in FIGURES 1 and 3, the three rings **12, 14** and **16** are maintained in generally concentric relationship each to the other by the legs **18, 20, 22** and **24**, which legs are connected to the rings at generally equally spaced points about the periphery thereof. These legs are also preferably constructed of aluminum pipe material or the like in order to make the container support lightweight in construction, yet rigid and durable.

The rings **12, 14** and **16** each have depressed portions **26** in the inner walls thereof at equally spaced intervals thereabout to receive the coacting legs **18, 20, 22** and **24**. Thus, by viewing FIGURE 4 it may be seen that the depressed portions **26** conformingly correspond to the outer cylindrical configuration of the legs thereby providing a

tight recessed fit for the legs against the rings. The legs are fastened to the rings by aluminum rivets **28**, which rivets extend through the rings at each depressed portion **26** and through the legs in order to securely fasten the legs to the rings. The rivets **28** include outer rounded heads **30** and inner flattened heads **32** for retaining the legs against the rings. The rounded heads **30** provide a smooth surface and thereby prevent the possibility of injury due to scraping against the protruding rivets. The heads **32** are flattened to limit the protrusion thereof toward the inside of the support, and provide a flat, smooth contact surface for the garbage can or container when it is placed in the support.

The rings **12, 14** and **16** are of decreasing diameter, the bottom ring **16** being the smallest in diameter. Thus, it is apparent that the container support **10** is substantially in the configuration of an inverted truncated cone with the smaller diameter ring at the bottom. This configuration is especially adapted to receive a garbage can such as garbage can **34** which is tapered downwardly from a larger diameter top portion to a smaller diameter bottom portion. Thus, by viewing FIGURE 1 it may be appreciated that the garbage can **34**, when placed in a container support **10**, slides downwardly through and into the support until it reaches a point where the diameter of the can is equal to the diameter of the support, at which point further movement of the can downwardly in the support will be stopped. The flattened head portions **32** of rivets **28** provide a contact surface for the can in its at rest position in the support.

The support **10** is further designed so that a can **34**, when in its lowermost or supported position in the support, will have its top positioned somewhat below the upper portions **36** of the legs. Referring again to FIGURE 1, it will be seen that the can **34** has a removable top **38** including a handle portion **40**. The legs **18, 20, 22** and **24** of the container support **10** each has the aforementioned projecting portion **36** extending above the top ring **12** a limited distance, and hence when the can is in place in the support the top **38** may be removed only by lifting it vertically off the can **34** by the handle **40**. It is therefore apparent that the top **38** may not be accidentally knocked off of the can **34** when it is in position in the container support. However, insofar as the legs of the support are divergent upwardly, there is adequate room for the top **38** to be lifted upwardly off of the can.

Referring now to FIGURES 1 and 3, it may be seen that the top ring **12** embodies substantially U-shaped outwardly projecting integral portions or ears **42** and **44**. These ear portions are formed in diametrically opposed portions of the top ring **12**, so as to aptly accommodate the opposed side handles **46** of the can **34**. Thus, it will be appreciated that the can **34** may be positioned telescopingly in the container support **10** only when handles **46** are aligned with ears **42** and **44** inasumch as the diameter of the top ring **12** is otherwise too small to allow the handles **46** to bypass the ring. After the can **34** is moved downwardly into the container support **10**, with handles **46** passing through the projecting ears, the can **34** may be rotated in the support until the handles **46** engage the legs adjacent the ears. At this time, the can is firmly lodged in the container support and cannot be moved upwardly out of the support unless the can is rotated back so that handles **46** are in alignment with the ears **42** and **44**. That is to say, once the can is positioned in the support and properly rotated therein, the can cannot be lifted straight out of the support but must be first rotated back to its original freely insertable position.

It will be further seen that the legs **18, 20, 22** and **24**

include lower end portions **48** formed either by cutting off the legs at a substantial angle or by flattening the ends. These pointed end portions **48** allow the container support **10** to be driven downwardly into the ground until the bottom ring **16** rests against the ground. This will allow the container support **10** to be anchored in the ground, and the garbage can **34** when placed in the container support to rest substantially against the ground thereby obviating the possibility of animals pushing it upwardly out of the support. Of course, it is also possible to design the container support so that the rings **12, 14** and **16** are of such diameter that the can **34** is merely positioned therein and resting on the ground rather than being supported by the legs of the support as mentioned above. As will be apparent, a major feature of this invention is that the garbage can **34** when wholly positioned within the encompassing confines of support **10** and has its top substantially coplanar with the top ring **12**, thereby eliminating the possibility of the can top **38** being knocked off the can, and therefore it is immaterial whether the can rests on the ground or is supported by the legs. However, if it is contemplated that relatively heavy material will be contained within the can **34**, it may be more practical from a standpoint of wear and tear on the support **10** for the can to rest on the ground rather than lodge itself within the support.

In order to seal the top of the legs, and in order to provide protection from the rough sharp edges of the leg tops, caps **50** of plastic or other durable semi-rigid material are provided suitably fitted over the tops of the legs. These caps **50** are preferably of such internal diameter that they may be tightly seated and secured on the legs.

The foregoing is considered is illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A container support for a lidded garbage can or the like having laterally projecting handles comprising an openwork frame structure characterized by a plurality of generally circular rings, said rings being horizontally disposed and vertically spaced, decreasing in diameter from the top ring to the bottom ring, and having a common vertical axis, a plurality of substantially vertical legs disposed within said rings, each of said legs being fastened to the inner peripheral surfaces of each of said rings, said legs including downwardly convergent longitudinal inner surfaces providing can contacting and supporting surfaces for a readily insertable and removable garbage can, a pair of diametrically opposed outwardly projecting ear means embodied in the uppermost one of said rings defining a pair of inwardly opening recesses therein spaced between adjacent pairs of said legs, said recesses being adapted to comprise the only portion of said uppermost ring providing sufficient clearance for the laterally projecting handles of the can which is to be positioned in said frame structure, whereby a can positioned in said support with its handles disposed below said uppermost ring and rotated sufficiently will be effectively held against displacement from said support.

2. In combination, an enclosing, supporting and stay-put rack comprising: a horizontal bottom ring of a predetermined inside and outside diameter, a complemental vertically spaced top ring in a plane horizontally above said bottom ring and in alignment therewith and of a diameter greater than the diameter of said bottom ring, and a third intermediate as well as a companion ring located between said top and bottom rings and spaced therefrom and of a prescribed inside and outside diameter proportional and relative to said top and bottom rings, all of said rings having correspondingly constructed interior peripheral surfaces, each peripheral surface provided with circumferentially spaced indentations providing leg accommodating seats, a plurality of equidistant circumferentially spaced vertical legs, said legs being situated within the inner peripheral confines of the respective rings and the outer surface portions of said legs being nested in their respectively cooperating seats and being removably bolted in place in said seats, the cross-section of said legs being such that the inner half-portions of the respective legs project radially inwardly of the adjacent encompassing peripheral surfaces of the respective rings, whereby to provide circumferentially spaced support surfaces for abutting exterior faces of the body of said garbage can, said upper ring being provided at diametrically opposite sides with a pair of outstanding substantially U-shaped bends which serve not only as handgrips but also as clearance and bypassing ears for handles such as are commonly provided on diametrically opposite sides of a garbage can.

3. The structure defined in claim **2** and, in combination, a garbage can of an overall depth and height approximately the same as the depth and height of said rack, said garbage can having a body portion fitted telescopingly into the rack and having portions thereof residing in contact with the supporting surfaces of said legs, said garbage can being provided at its top with an attachable and detachable lid having a handle, said lid being substantially coplanar with the upper surface portion of said upper ring, upper end portions of said legs projecting slightly above the level of the top of said lid, the upper diametrically opposite side portions of the body of said can being provided with handgrips, and said handgrips being adapted to pass freely through the clearance spaces provided by said ears, said handgrips being purposely disaligned with the ears to guard against unauthorized displacement of said can.

References Cited by the Examiner

UNITED STATES PATENTS

1,162,574	11/1915	Craig	248—153
1,326,086	12/1919	Ormandy	248—311
1,382,115	6/1921	Ohme	248—149
1,794,076	2/1931	Jablons	248—176
2,260,570	10/1941	John	248—147
2,501,895	3/1950	Gayle	248—146
2,673,053	3/1954	Kilian	248—153
2,717,706	9/1955	Yow et al.	214—383
2,952,306	9/1960	Adler	248—188.91 X
3,103,742	9/1963	Cruson	29—482

CLAUDE A. LE ROY, *Primary Examiner.*

CHANCELLOR E. HARRIS, *Examiner.*