Sept. 8, 1970 J. B. HERDY 3,527,356

GARBAGE CAN RACK

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Fig. 1

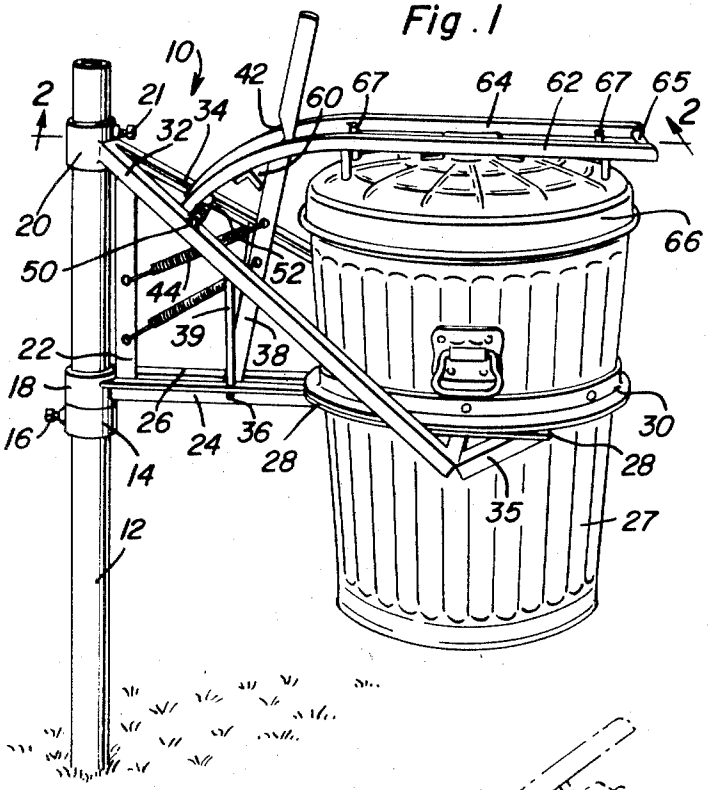


Fig. 3

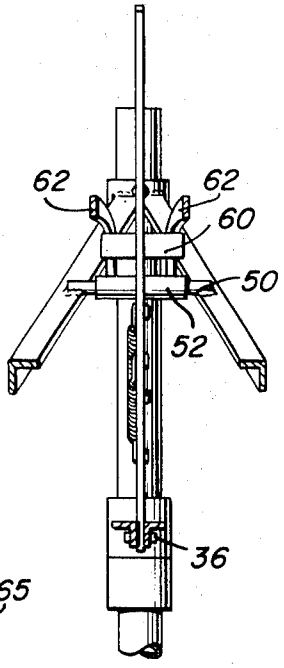
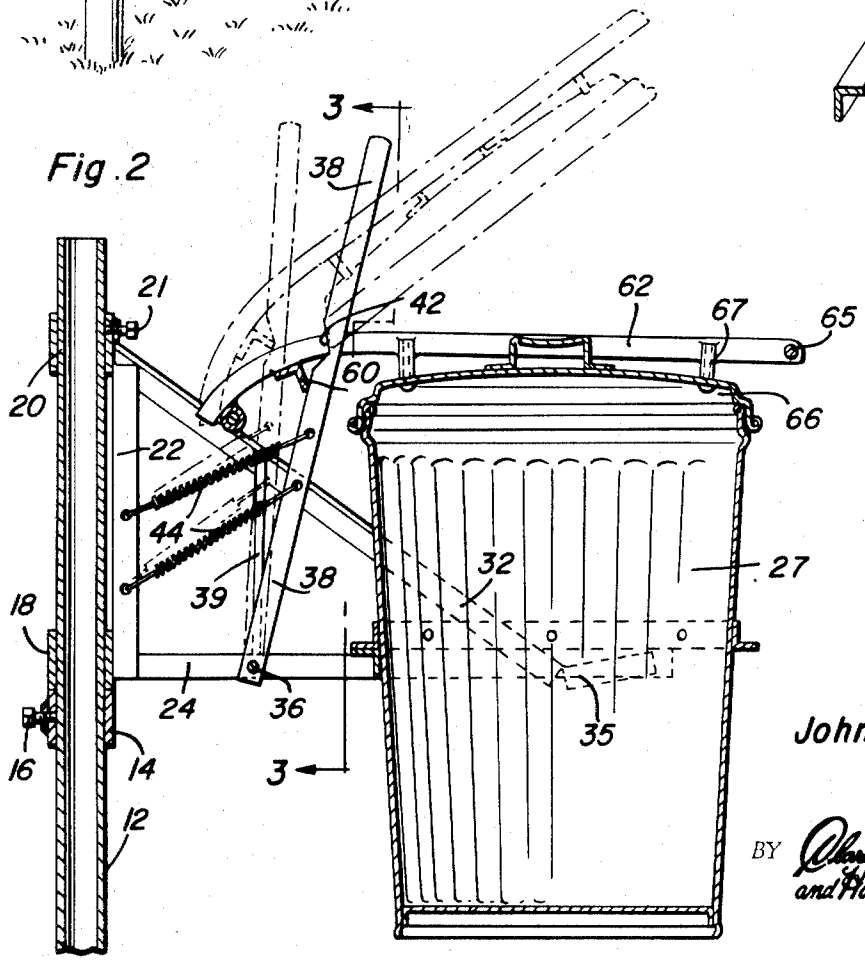


Fig. 2



John B. Herdy

INVENTOR.

BY Clarence A. O'Brien and Harvey B. Jacobson

Attorneys

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Fig. 4

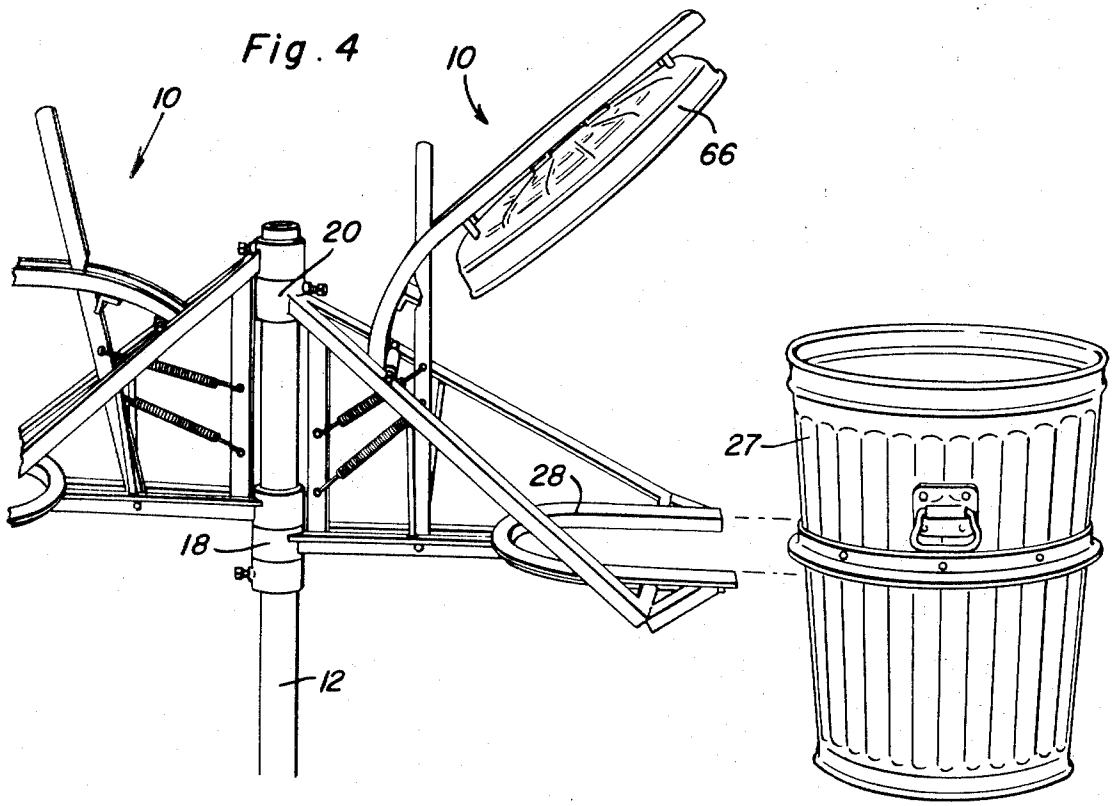


Fig. 5

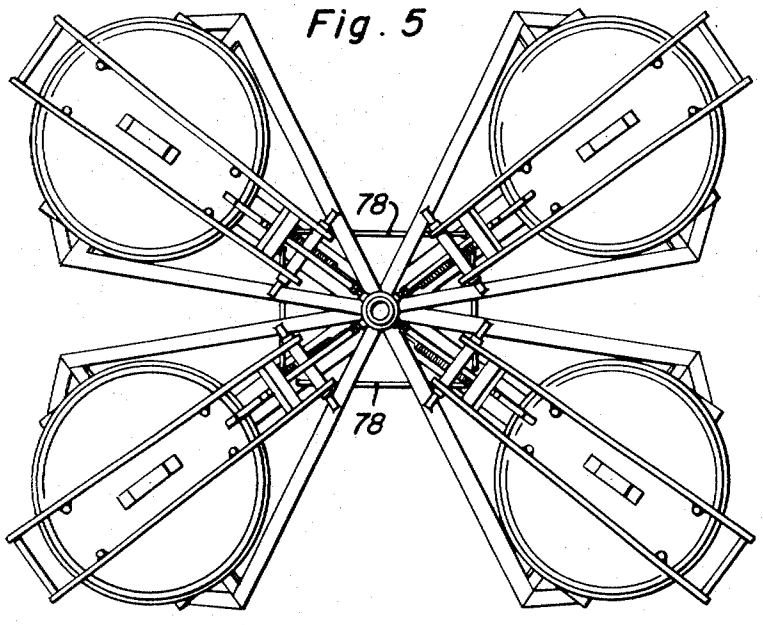
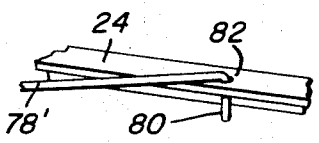


Fig. 6



John B. Herdy

INVENTOR

BY Lawrence O'Brien and Harvey B. Jacobson Attorneys

United States Patent Office

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GARBAGE CAN RACK

John B. Herdy, 5323 McCullough,
San Antonio, Tex. 78212

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Int. Cl. A47g 29/00
U.S. Cl. 211—82 7 Claims

ABSTRACT OF THE DISCLOSURE

An anchor post mounts a refuse container rack. Actuator rods having a container cover mounted thereto are pivotally connected to the rack and are upwardly displaceable in response to a lifting force. The actuator rods include a latch member which is adapted to engage a keeper when the actuator rods are displaced to a predetermined vertical position. Thus, refuse may be deposited in a rack supported container without the necessity of holding a lid or cover. A gentle downward force on the actuator rods causes the lip to return to a container covering position.

This invention relates to an improvement of the structure set forth in U.S. Pat. 2,546,449, issued Mar. 27, 1951, to John B. Herdy.

This invention relates to a refuse receptacle holder or rack.

The aforementioned patent discloses a garbage can rack structure which supports a garbage can in a vertically upright position. Pivotable actuator rods having a can cover mounted thereto is normally positioned to seal the can. Upon upward displacement of the actuator rods, the can becomes uncovered to receive refuse therein. In order to retain the upwardly displaced cover at a fixed distance from the top of the can, latch means are provided. Although the patented invention works satisfactorily, a new design has been conceived and reduced to practice and offers superior long wear and trouble-free operation due to latch means which exhibit a minimum of frictional contact between latching members. The present invention includes cooperating structure for permitting upwards of four racks to be rotatably mounted upon one anchor post in fixed angular spaced relationship.

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:

FIG. 1 is a perspective view illustrating a refuse container mounted on a rack.

FIG. 2 is a vertical cross-sectional view taken along a plane passing through section line 2—2 of FIG. 1.

FIG. 3 is an irregular sectional view taken along a plane passing through section line 3—3 of FIG. 2.

FIG. 4 is a perspective view illustrating the displacement of a container from its respective rack.

FIG. 5 is a top plan view of a multiple rack installation.

FIG. 6 is a partial perspective view illustrating the connection of a tie bar to a rack frame.

Referring specifically to the drawings, and more particularly to FIG. 1, reference numeral **10** generally denotes a refuse container rack and an associated container supported thereon. A vertical anchoring post **12**, adapted to be fixed permanently is provided and forms anchorage for the rack structure. A slidably adjustable collar **14** is received on the post and is secured in a preselected vertical position by suitable locking means such as a setscrew **16**. A pair of ring bearings or collars **18** and **20**

are rotatably secured on the post **12** and are fixed in vertically aligned spaced relation by a link or arm member **22** secured at either end thereof by suitable means such as welding, brazing or the like. A pair of horizontally disposed and outwardly extending arms or links **24** and **26** are secured at one end thereof to the bearing **18**. A U-shaped angle iron or bracket **28** is connected along the bight portion thereof to the outward ends of arms **24** and **26**. The U-shaped bracket permits encircling engagement of a refuse can **27**. An annular angle iron **30** is suitably attached around the periphery of the container **27** at a position along the height of the container which allows container retention above ground. When the container is placed in the rack, the undersurface of annular angle iron **30** contacts the upper surface of the U-shaped bracket **28**. It is noted that the links **24** and **26** connected with U-shaped bracket **28** form a pair of bifurcated arms for encircling the refuse container. For purposes of convenience, the above mentioned members shall be referred to as bifucated arms.

A pair of links **32** and **34** whose opposite ends are rigidly fixed to the bifurcated arms by some suitable metal connecting means such as welding or the like, are secured to the upper ring bearing or collar **20**, and the upper end of rod **22**. A pivot pin **36** is received within horizontally aligned apertures formed in links **24** and **26**. An elongated rod-like member **38** is pivotably connected at a lower end thereof to pin **36**. The rod-like member extends upwardly and includes a V-shaped notch **42** formed inwardly from an edge confronting post **12**. The notch is formed intermediate the length of the member and serves as a latch keeper as explained hereinafter.

For additional rigidification, a pair of vertically disposed links **39** are connected between laterally associated links **32** and **24**, respectively, as well as **34** and **26**, respectively.

A pair of substantially parallel spaced coil springs **44** are disposed between arm member **22** and latch keeper rod member **38**. These springs serve to bias the latch keeper member **38** toward the anchor post **12** to effect bearing relation with a latch member to be discussed hereinafter.

A stub shaft or pivot pin **50** is connected at the outward ends thereof to the links **32** and **34**, by means of welding or the like. A bearing **52** is journaled on the pivot pin and is limited in axial travel by the inwardly confronting edges of links **32** and **34**. Bearing **52** mounts actuator rods **62** and **64** at the inward ends thereof which extend outwardly in normally parallel spaced relation with the bifurcated arms. It will be noted that the actuator rods **62** and **64** diverge outwardly from their common connection point, the rods including an inward end portion of arcuate contour for strengthening the actuator rod structure. An angle iron section **60** is connected at the outward ends thereof between the curved protions of actuator rods **62** and **64** and functions as a latch member. When the refuse container **27** is normally positioned on the rack, latch member **60** is disposed in downward spaced relation to notch **42**, the latter being in latch keeper member **38**. In this position, the latch keeper member is maintained in a position inclined toward the refuse container. The outward ends of the actuator rods include a handle **65** connected therebetween. Permanently fixed to the bottom edge of the actuator rods, by means of spacers **67**, is a refuse container cover **66**.

In operation of the device, handle **65** is lifted upwardly thereby causing the pivotal rotation of actuator rods **62** and **64**. This motion in turn causes camming action by latch member **60** against latch keeper rod member **38** until the former engages the V-shaped notch **42** whence the actuator rods are disposed in an upwardly inclined position as shown in FIG. 2. It is noted that in this position, the

latch keeper member **38** assumes a nearly vertical position as illustrated in phantom. With the actuator rods in an in an inclined position, the attached container cover **66** is displaced from the top of container **27** so that refuse may easily be deposited in the container. Further, in this position, the refuse container may be easily removed from the rack as shown in FIG. 4.

FIG. 4 illustrates the mounting of a second rack **10'** upon post **12**. In fact, should such be desired, up to four racks may be mounted on post **12** as shown in FIG. 5. The racks are mounted upon the post by alternately inserting the lower collars **18** of the respective racks, then alternately inserting the upper collars **20** of the respective racks. In order to retain the racks shown in FIG. 5 in equally spaced relation from each other, a square tie bar **78** is connected between the racks. This square tie bar is constructed from four tie rod sections **78'** shown in FIG. 6. Each end of the tie rod includes a right angle offset portion **80** which is adapted for insertion in an aperture **82** formed in a link member **24**. It is noted that the oppositely disposed offset portion is similarly inserted in an aperture formed in a link member **26** of an adjacent rack structure.

The foregoing is considered as 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 rack for supporting a refuse container having an annular collar therearound, said rack comprising vertical anchor means, a pair of bifurcated support means mounted to said anchor means and extending outwardly therefrom for engaging the container collar and to supoprt the container in a vertical position, a pair of bracing arms mounted at one end thereof to said collar and extending outwardly therefrom for securement at the opposite ends thereof to respective ones of said bifurcated support means, a pair of actuator rods having a refuse container cover attached thereto, pivot means connecting said actuator arms to said bracing arms, a latch fixedly mounted between said actuator arms, a latch keeper having a latch retaining notch along an intermediate length thereof, pivot means connecting said latch keeper at one end thereof to said bifurcated arms, spring means connected to said latch keeper for biasing said keeper in engaging relation with said latch upon upward rotation of said actuator rods whereby the container cover may be lifted and latched in a predetermined position.

2. The structure set forth in claim **1** wherein said bifurcated support means and said bracing arms are secured together and are pivotally mounted to said anchor means.

3. The structure set forth in claim **2** wherein said bifurcated support means include a generally U-shaped angle iron member for encircling said container, and further wherein each said bracing arm includes an outward

end portion extending laterally inwardly to cause contact between the undersurface of said U-shaped member and the end of said bracing arms.

4. The apparatus set forth in claim **3** wherein said collar includes an annular angle iron, said collar maintained in contacting overlying relation with said U-shaped member.

5. A multiple rack assembly for supporting a plurality of refuse containers, each said container having an annular collar therearound, said rack comprising vertical anchor means, a plurality of container supporting racks, each said rack including a pair of bifurcated support means mounted to said anchor means and extending outwardly therefrom for engaging the container collar for supporting the container in a vertical position, a pair of bracing arms mounted at one end thereof to said collar and extending outwardly therefrom for securement at the opposite ends thereof to respective ones of said bifurcated supoprt means, a pair of actuator rods having a refuse container cover attached thereto, pivot means connecting said actuator arms to said bracing arms, a latch fixedly mounted between said actuator arms, a latch keeper having a latch retaining notch along an intermediate length thereof, pivot means connecting said latch keeper at one end thereof to said bifurcated arms, spring means connected to said latch keeper for biasing said keeper in engaging relation with said latch upon upward rotation of said actuator rods whereby the container cover may be lifted and latched in a predetermined position.

6. The assembly set forth in claim **5** together with tie bar means connected between adjacent arms of adjacent bifurcated support means to retain said support means in fixed spaced relation.

7. A rack for carrying a container, the rack comprising a vertical support member, a horizontal support member extending outwardly from the vertical member for engaging the container, an inclined brace member connecting the outward end of the horizontal member to the vertical member, an arm pivotally mounted to the inclined member for attaching a lid for the container, a lever pivotally connected to the horizontal member, and detent means connected between the arm and the lever for latching the arm and the lever whereby the container lid is maintained in a temporary elevated position clear of the container when a user displaces the arm upwardly, the lid closing the container when downward displacement of the arm is executed and thereby disengaging the detent means.

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JAMES A. LEPPINK, Primary Examiner

U.S. Cl. X.R.

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