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COLLAPSIBLE RACK FOR REFUSE CONTAINERS

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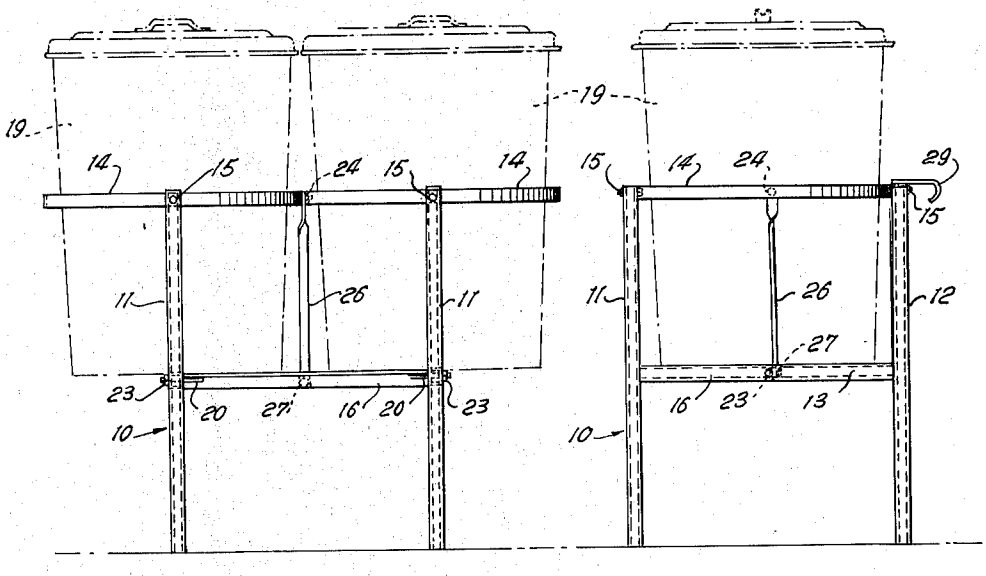


Fig. 1

Fig. 2

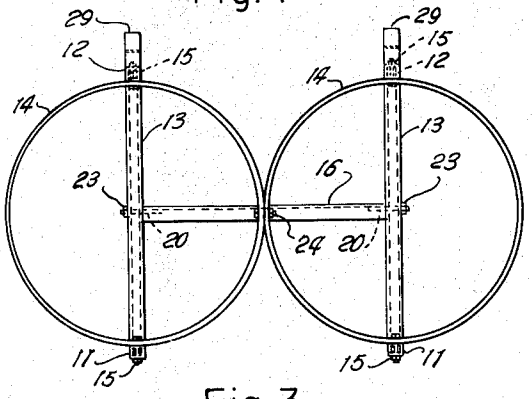


Fig. 3

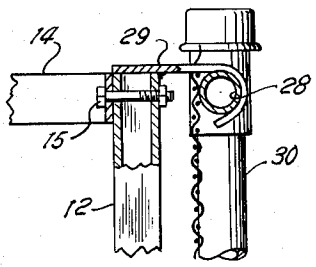


Fig. 4

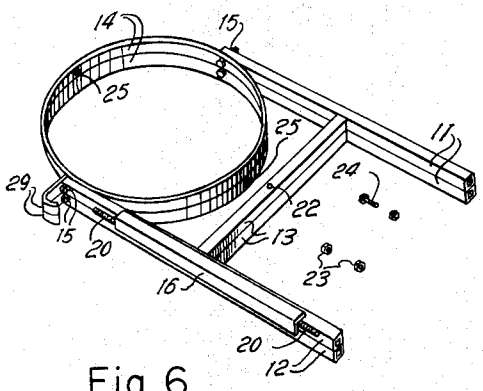


Fig. 6

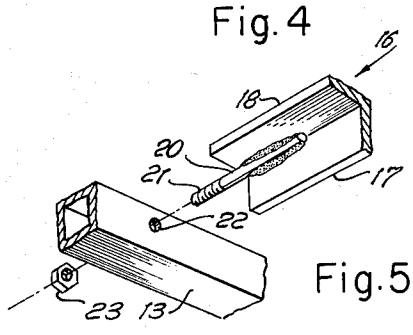


Fig. 5

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COLLAPSIBLE RACK FOR REFUSE CONTAINERS

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This invention relates to supporting and retaining racks for refuse containers, and it has particular reference to an improved rack for garbage and trash cans primarily for domestic or household use.

The common practice of locating refuse cans on the ground or pavements adjacent to the premises, without some means of confinement to a specific location, and without the provision of some device for supporting the containers above and out of contact with the ground, is undesirable, primarily because the containers are more easily upset by roving animals, strong winds, and other factors, by which the contents can be scattered to cause unnecessary cleanup problems as well as damage to the containers themselves. It is also desirable to support the containers well above the ground to protect the bottoms against deterioration through sweating and the accompanying electrolytic processes which attack and destroy the metal.

A prime object of the invention is that of providing a simple and economical support by which such disposal containers can be retained in a confined area in ready access to the refuse collector, as well as the user, and whereby the containers can be safely out of reach of small animals, and rigidly restrained against being overturned and tossed about by the wind.

A further object of the invention resides in the provision of a container support which is light in construction and designed in a manner enabling the device to be compactly packaged for initial delivery, and while possessing substantial rigidity, is capable of easy assembly by the purchaser, having few parts requiring the use of the simplest of household tools.

Broadly, the invention contemplates the provision of a rack for refuse containers which may be formed of relatively inexpensive materials and made collapsible for compact storage and transportation, and which, if desired, may be supported on a fence well above the ground.

While the foregoing objects are paramount, other and lesser objects will become apparent as the description proceeds, when considered in connection with the appended drawings wherein:

FIGURE 1 is a front elevational view of a refuse container support embodying the invention, showing a pair of containers therein in broken lines.

FIGURE 2 is an end elevational view of the embodiment of the invention showing a container, in broken lines, supported thereon.

FIGURE 3 is a plan view of the invention.

FIGURE 4 is a fragmentary elevational view, partially in section, of the frame structure and one of the supporting hooks attached to a fence.

FIGURE 5 is a fragmentary perspective exploded view of parts of the frame, and showing the manner of assembly, and

FIGURE 6 is a perspective illustration of the invention collapsed in a compact assembly for packaging and transportation.

The invention, in its preferred form, comprises a pair of primary frame members, generally designated by the numeral **10**, which are H-shaped and are formed of square tubing, having a pair of parallel suporting members **11** and **12** rigidly connected by a cross-member **13** intermediate their ends, as best shown in FIGURES 2 and 6. A hoop or band **14** of strap metal is secured between the upper ends of the members **11** and **12** by

bolts **15** arranged through apertures in diametrically opposed sides of the bands **14**.

When the invention is assembled, as shown in FIGURES 1, 2 and 3, the frame members **10** are arranged vertically and connected by an angle bar **16** so that one of its flanges **17** extends downwardly while the opposing flange **18** provides a seating surface, with the cross-members **13**, for the containers **19**, as indicated in FIGURES 1 and 2, the containers **19** being shown in broken lines. As illustrated in FIGURE 5 the angular member **16** has a rod **20** welded thereto at each end and projecting therefrom and threaded at **21** to extend through apertures **22** in each of the cross-members **13** and receive nuts **23**, in the manner shown in FIGURES 1 and 3. The rods **20** lie in the angular trough defined by the flanges **17** and **18** of the members **16**.

In the assembled position, shown in FIGURES 1, 2 and 3, the bands **14** are aligned horizontally and joined at their adjacent sides by a bolt **24** arranged through apertures **25** therein. If desirable a vertical brace **26** may be provided between the bands **14**, the bolt **24** extending through its upper end, as shown in FIGURES 1 and 2, while its lowermost end is attached by a bolt **27** to the angular cross-bar **16**. The brace **26**, however, may be optional.

For supporting the invention on the top rail **28** of a fence, or other structure, a hook **29** is welded to the upper end of each of the members **12** of the frame elements **10** and applied in the manner shown in FIGURE 4. A typical fence post **30** is shown to which the rail **28** is attached.

As depicted in FIGURE 6, the invention can be partially disassembled, as by detaching the angular cross-member **16** from the members **13**, rotating the bands **14** on the bolts **15** to axial alignment, and arranging the H-shaped frame members **10** in adjacent relationship. The angular bar **16** can be arranged alongside of the frame members **10**, and attached thereto by wire, or other device, and the complete structure can be enclosed within a relatively thin carton for easy storage and transportation. The device may be readily and rapidly erected with a minimum of effort.

The invention may be modified with certain limitations, by persons skilled in the art, without departing from the spirit and intent thereof or the scope of the appended claims.

What is claimed is:

1. In a collapsible rack for confining and supporting a plurality of garbage cans above the ground, the combination of a rigid frame structure consisting substantially in its entirely of a pair of circular bands, each adapted to encircle a garbage can, normally lying in a common horizontal plane and having means rigidly and removably connecting them at their adjacent edges, a pair of end frames, each consisting of a pair of normally vertically disposed elongated supporting members and a normally horizontally extending transverse member, whereby said supporting members are rigidly connected intermediate their ends in predetermined spaced apart relation to each other, the two supporting members comprising each of the end frames overlying a peripheral edge portion of one of the circular bands, on diametrically opposite sides thereof, and having means whereby they are pivotally and removably connected thereto at their upper ends, and a normally horizontally disposed member extending longitudinally between said transverse members and having means whereby it is rigidly and removably connected at its ends to said transverse members intermediate their ends.

2. The structure of claim **1**, said transverse members, with said longitudinally extending member, each providing

a bottom support for a garbage can, and said circular bands being movable pivotally relative to their respective supporting members whereby they may be rotated 90 degrees from a first position, in which they are arranged perpendicular to the supporting members, to a second position in which they are aligned longitudinally therewith for compactness in packaging the rack in its disassembled condition in which said longitudinally extending member is disconnected from said transverse members.

3. The structure of claim 1, said supporting members having a height corresponding substantially to the height of the top rail of a metal fence, and two of said supporting members having hook members rigidly connected to their upper ends for engagement over the top rail of an adjacent fence to thereby prevent displacement of the rack.

4. The structure of claim 1, and a normally vertically extending member having means rigidly and removably connecting it at its ends to the longitudinally extending member intermediate its ends and to the adjacent edges of the circular bands whereby the structure of the rack is substantially reinforced.

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