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GARBAGE CAN HOLDER

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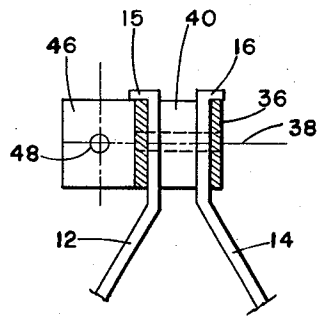

FIG. 2

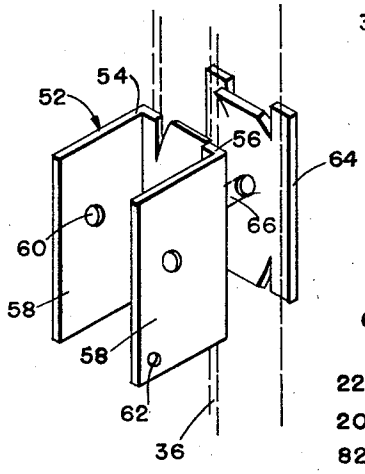

FIG. 3

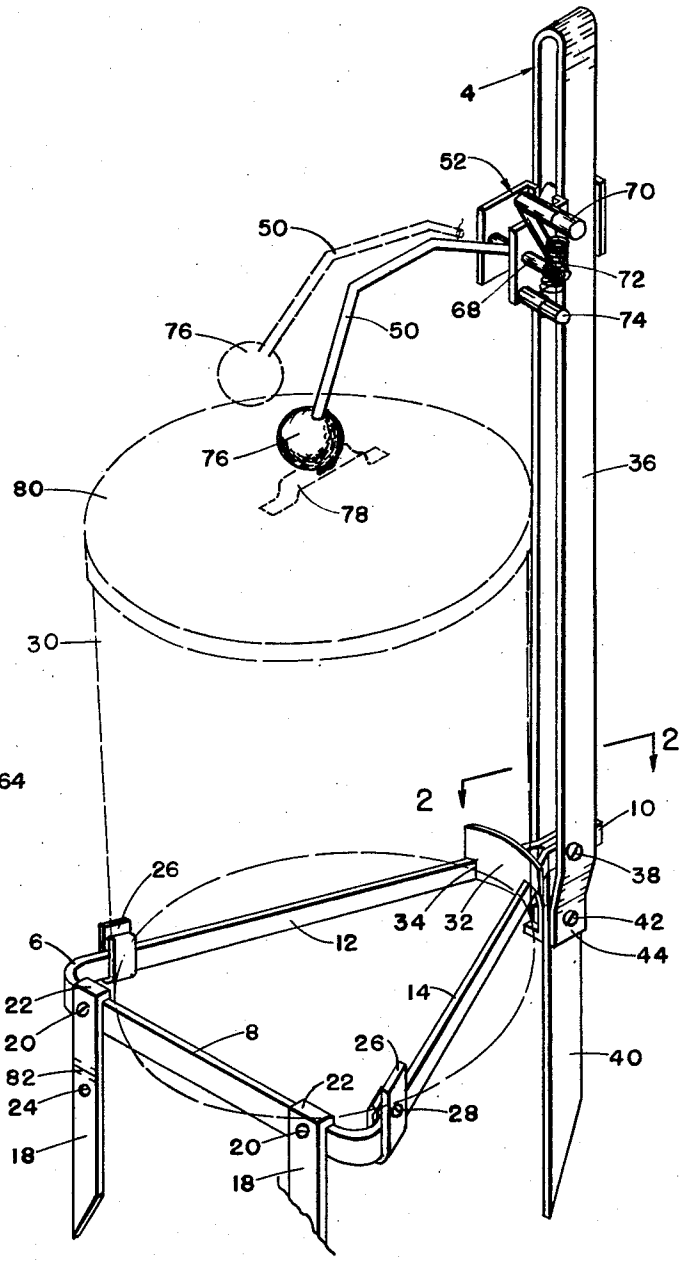

FIG. 1

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GARBAGE CAN HOLDER

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1 Claim. (Cl. 248—149)

This invention relates to improvements in garbage can holders or stands particularly adapted for domestic use.

In many of the present day garbage can holders, the holders are manufactured for a particular size garbage can. Ordinarily, the holder or stand is unduly complicated and cumbersome, making it expensive to manufacture and difficult to move between various locations. Also, the present holders usually have an arm or brace at the upper end thereof which is rigidly attached to the lid of the garbage can, thereby requiring an appreciable amount of time to install the garbage can on the holder.

The present invention contemplates a novel garbage can holder having a three-legged base, whereby the holder can be either inserted in the ground or readily secured on a permanent foundation, such as a concert foundation. The present holder has various adjusting features, whereby substantially any sized garbage can may be supported thereon. The can will be held in such a manner as to be unaffected by all normal wind conditions, and will withstand interference by domestic animals. Also, the holder will retain the lid on a garbage can without being attached rigidly to the lid. In using the present garbage can holder, the lid retaining arm is merely swung out of a locking or retaining position, whereupon the garbage can lid may be readily removed for the placement of garbage and the like in the can. When the garbage can lid is replaced, the retaining arm is simply swung back in to position and automatically locks the lid on the garbage can.

An important object of this invention is to provide a garbage can holder which is adjustable for holding substantially any size of garbage can normally used around a home.

Another object of this invention is to provide a garbage can holder wherein the lid of the can is securely retained in a closed position on the can, yet the lid is not rigidly connected to the holder.

A further object of this invention is to provide a novel garbage can holder wherein the can may be easily and conveniently removed from the holder for emptying the contents of the can.

Another object of this invention is to provide a garbage can holder which may be either coupled to the ground or to a suitable permanent foundation without the use of a complicated attaching mechanism.

A still further object of this invention is to provide a simply constructed garbage can holder which may be economically manufactured.

Other objects and advantages of this invention will be evident from the following detailed description, when read in conjunction with the accompanying drawings, which illustrate my invention.

In the drawings:

Figure 1 is a perspective view of my novel garbage can holder having a garbage can shown in dotted lines in an operating position thereon.

Figure 2 is a sectional view as taken along lines 2—2 of Fig. 1.

Figure 3 is a perspective exploded view of the upper bracket of the holder illustrating the construction of the bracket and its retaining or back-up plate.

Referring to the drawings in detail, reference character 4 generally designates my novel garbage can holder,

which comprises a triangular shaped base 6 having a wide outer end 8 and a narrower end 10, with the ends 8 and 10 interconnected by biased side members 12 and 14. It will be apparent that the base 6 may be readily formed by bending a single bar into a triangular configuration with the opposite ends 15 and 16 of the bar forming the small end 10 of the finished base, as shown more clearly in Fig. 2. The free ends 15 and 16 of the base side members 12 and 14, respectively, which form the narrow end of the base 6, are flared outwardly as shown in Fig. 2, for purposes as will be hereinafter set forth.

A pair of legs 18 are secured to the forward wide end 8 of the base 6 by bolts 20, and have their upper ends 22 bent over the top of the base end 8. The legs 18 are pointed or tapered at their lower ends for convenient insertion in the ground. Also, each leg 18 has an aperture 24 therein for connection with a permanent foundation (not shown) as will be more fully hereinafter set forth.

A U-shaped stop member 26 is adjustably secured by a set screw 28 on each of the base side members 12 and 14 for contacting substantially opposed sides of the garbage can 30. The stops 26 may be secured to the members 12 and 14 at any desired positions for conforming to substantially any diametrical sized garbage can. It will be apparent that when the stops 26 are moved toward the rear end 10 of the base 6, the stops 26 will be spaced closer together to contact smaller sizes of garbage cans, and vice-versa. An arcuately shaped stop member 32 is rigidly secured, as by welding, to the base side members 12 and 14 near the rear end 10 of the base 6. The lower outer edges 34 of the stop 32 may be slotted to receive the side members 12 and 14, if desired, to facilitate the connection of the stop 32.

A U-shaped supporting member 36 extends vertically upward from the base 6 and is secured to the end 10 of the base by a transversely extending bolt 38. The base side members 12 and 14 are suitably apertured to receive the bolt 38, and the flared ends 15 and 16 (Fig. 2) contact the rear edges of the support member 36 to prevent pivotal movement of the base 6 with respect to the support member 36. Also, a rear leg 40 exends upwardly in the support member 36 between the base side members 12 and 14 and is suitably apertured to receive the bolt 38. Another bolt 42 extends transversely through the extreme lower ends 44 of the support member 36 and through the leg 40 in downwardly spaced relation to the bolt 38. Therefore, the leg 40 will be retained in alignment with the support member 36.

The extreme lower ends 44 of the support member 36 are preferably bent inwardly to contact the sides of the leg 40 as indicated in Fig. 1. Also, one side of the support member 36 has its lower end 44 flared outwardly to form a flange 46, as shown in Fig. 2, with an aperture 48 through the flange 46 to facilitate the mounting of the garbage can holder 4 on a permanent foundation, as will be more fully hereinafter set forth. The extreme lower end of the rear leg 40 is also pointed or tapered in the same manner as the legs 18 for insertion in the ground.

A spring-loaded arm 50 is pivotly secured to the upper portion of the support member 36 by a retaining mechanism generally indicated at 52. The spring-loaded retaining or locking mechanism 52 (see Fig. 3) comprises a U-shaped bracket 54 having a back portion 56 for abutting the forward edge of the support member 36, and forwardly extending side plates 58. Aligned apertures 60 are formed through the side plates 58, and another aperture 62 is formed in the lower outer edge of one of the side plates, for purposes as will be hereinafter set forth. A back-up plate 64 is secured to the

bracket 54 by a bolt 66 (shown in dotted lines) to retain the mechanism 52 in the desired vertical position on the support member 36. It will be apparent that when the bolt 66 is tightened, the bracket 54 will be forced against the forward edge of the support member 36 and the back-up plate 64 will be forced tightly against the rear edge of the support member 36. The upper and lower ends of both the bracket 54 and the plate 64 are bent inwardly between the sides of the support member 36, thereby preventing a pivotal or lateral sliding movement of the mechanism 52 on the support member 36.

The arm 50 has a transversely extending shaft 68 on the rear end thereof of a size to extend through the aligned apertures 60 of the bracket side members 58. Also, the shaft 68 is smaller in diameter than the apertures 60 to provide a sliding fit of the shaft 68 in the bracket 54. One end of the shaft 68 has an arm 70 extending upwardly and outwardly therefrom to anchor one end of a helical spring 72. The opposite or lower end of the spring 72 is rotatably anchored on a stub shaft 74 extending outwardly from the aperture 62 of the respective bracket side plate 58. It will be observed that the arm 70 extends radially from the shaft 68 at a slightly different angle than, and to the right of, the arm 50. Thus, the shaft 68 will need to be rotated only a few degrees in a clockwise direction, as viewed in Fig. 1, to move the outer end of the shaft or arm 70 to the opposite side of the shaft 68.

The arm 50 extends forwardly and downwardly from the locking mechanism 52 and has an elastic ball 76, such as rubber, on the outer end thereof, for contacting the handle 78 of the garbage can lid 80. Also, the arm 50 is preferably of a length to extend forwardly from the support 36 a sufficient distance to contact the handle 78 of the garbage can lid 80. However, the ball 76 may contact substantially any portion of the lid 80 and yet retain the lid 80 securely on the can 30.

Operation

The operation of the garbage can holder 4 will be apparent, in that the legs 18 and 40 are inserted in the ground, and the stops 26 are adjusted to contact the lower edges of the garbage can 30. The retaining mechanism 52 is then adjusted to the desired height on the support member 36 to position the ball 76 on the lid handle 78 when the arm 50 is in a down position as shown in full lines in Fig. 1. When it is desired to remove the lid 80, the arm 50 is swung upwardly as indicated by the dotted lines in Fig. 1; whereupon the lid 80 will be free for removal from the can 30. As the arm 50 is swung upwardly, the arm 70 is turned clockwise to exert a tension on the spring 72. During continued upward movement of the arm 50, and clockwise rotation of the arm 70, the arm 70 is moved "over-center," whereby the arm 70 is again moved toward the stub shaft 74, to reduce the tension on the spring 72. It will then be apparent that the spring 72 will tend to rotate the arm 70 in a further clockwise movement to retain the arm 50 in a raised position. In other words, when the arm 70 is moved to the right side of an imaginary line (not shown) extending through the shaft 68 and stub shaft 74, the spring 72 will tend to continue the movement of the arm 70 in a clockwise direction, and vice-versa. Therefore, when the arm 50 is in a down position as shown in full lines in Fig. 1, the spring 72 will urge the arm 70 counter-clockwise to retain the ball 76 on the garbage can lid 80; and when the arm 50 is raised to an extent where the arm 70 is moved to the right of the shaft 68, the spring 72 will urge the arm 70 clockwise and retain the arm 50 in a raised position. The spring 72 preferably has sufficient tension to securely hold the garbage can lid 80 on the can 30, yet permit relatively easy swinging movement of the arm 50 when the arm is grasped by a person desiring access to the garbage can.

In the event a permanent garbage can foundation (not shown) is available, each leg 18 may be bent along the line 82 to extend the respective aperture 24 in a vertical direction. Suitable bolts (not shown) may then be secured in the apertures 24 of the legs 18 and in the aperture 48 of the support flange 46 to rigidly secure the holder 4 on the foundation.

Although the adjustable stops 26 are preferably secured on the base side members 12 and 14 in such position that the garbage can 30 is wedged between the stops 26 and 32, it will be apparent that the garbage can 30 may be moved in a vertical direction off of the base 6. Thus, the can 30 will be held on the holder 4 against sidewise blows (as when a dog jumps on the garbage can), yet the garbage can may be readily removed from and supported on the holder 4 when it is desired to empty the contents of the can.

From the foregoing it is apparent that the present invention provides a novel garbage can holder which may be adjusted for supporting substantially any size of garbage can which will normally be used around the home. The lid of the garbage can will be securely retained on the can, yet is not rigidly secured to the holder in any manner. Therefore, the lid may be completely removed from the holder for cleaning or replacement in an easy and convenient manner. Also, the entire garbage can may be easily and conveniently removed from the garbage can holder for emptying the contents thereof. The holder may be readily attached either to the ground or to a suitable permanent foundation without the use of any substantial attaching apparatus. Furthermore, it will be apparent that the present garbage can holder is simple in construction and may be economically manufactured.

Changes may be made in the combination and arrangement of parts as heretofore set forth in the specification and drawings, it being understood that changes may be made in the precise embodiment shown without departing from the spirit of the invention as set forth in the following claim.

I claim:

In combination with a garbage can having a removable cover, a holder, comprising a frame-type base for supporting the garbage can, stops adjustably secured on said base for contacting the lower edge of the garbage can in spaced relation around the can, a support member extending upwardly from said base, a bracket adjustably secured on said support member for vertical adjustment on said support, an arm pivotally secured in said bracket and extending outwardly therefrom over the garbage can, an elastic ball on the outer end of said arm for contacting the cover of the garbage can, said arm having a transversely extending extension thereon, said extension having an off-set portion, and a spring connecting said bracket from a point below the pivotal axis of said arm to the off-set portion of said extension, whereby said spring retains said arm down and said ball in contact with the cover of the garbage can, and, alternately, said spring retains said arm in a retracted position when manually placed in either of said positions.

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