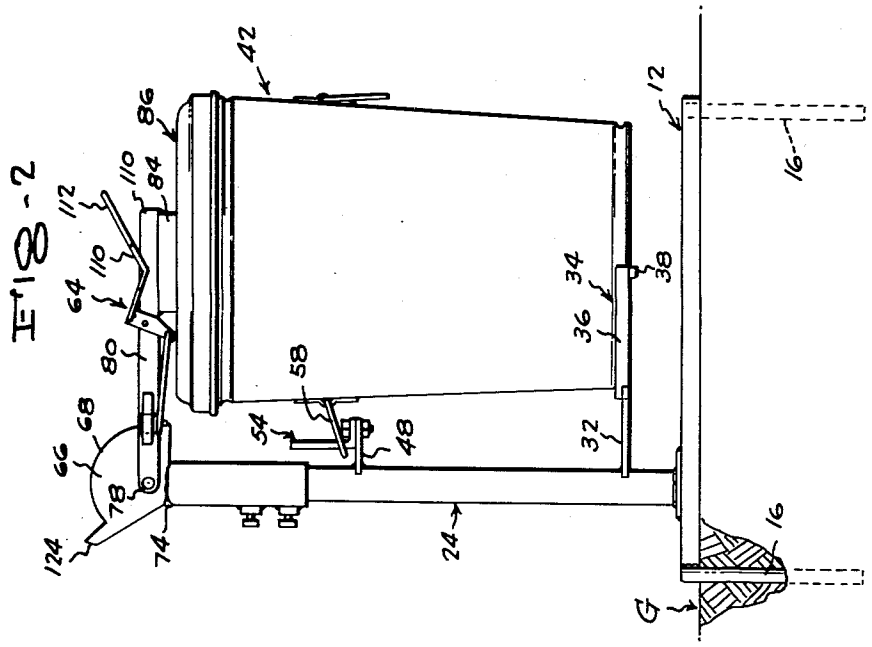
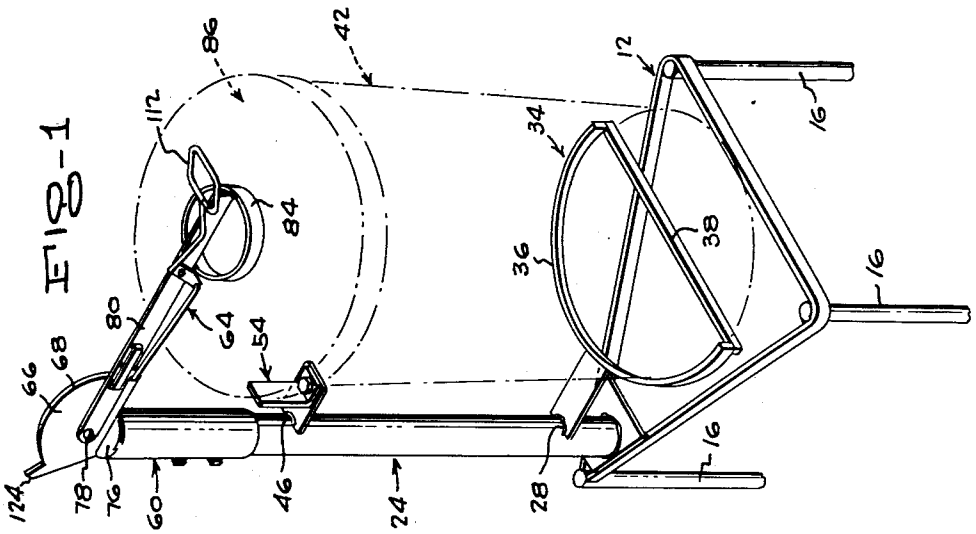
Oct. 10, 1961 A. K. SHAW 3,003,728

GARBAGE CAN STAND

Filed June 23, 1959 2 Sheets-Sheet 1





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GARBAGE CAN STAND

Filed June 23, 1959 2 Sheets-Sheet 2

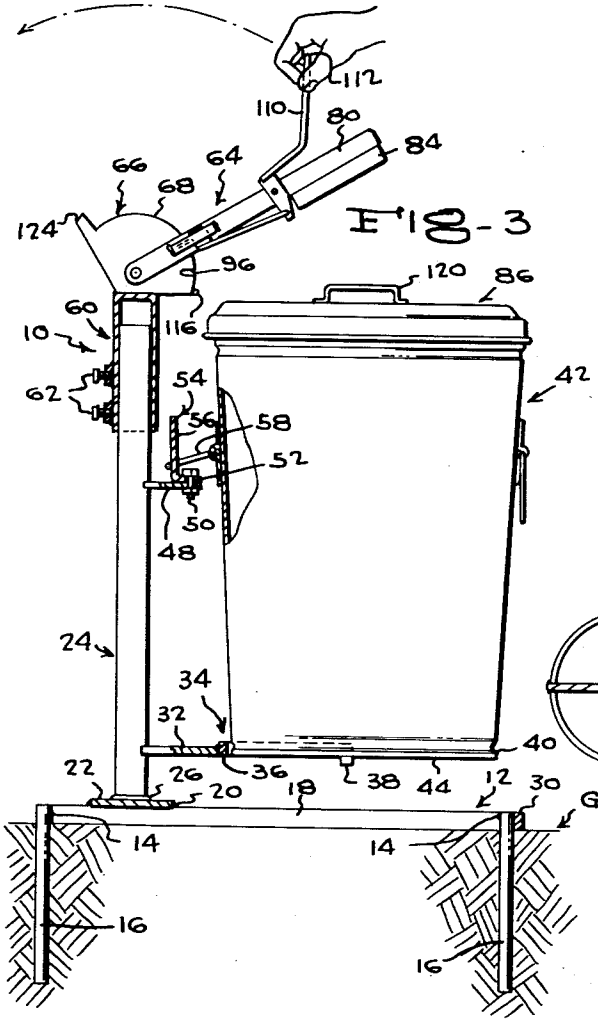


FIG-3

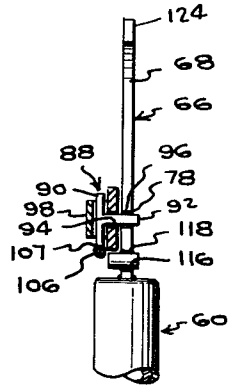


FIG-5

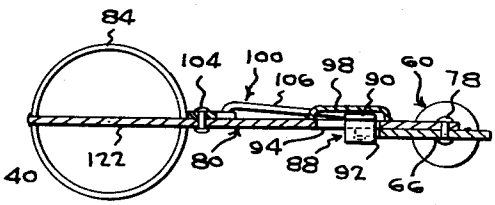


FIG-6

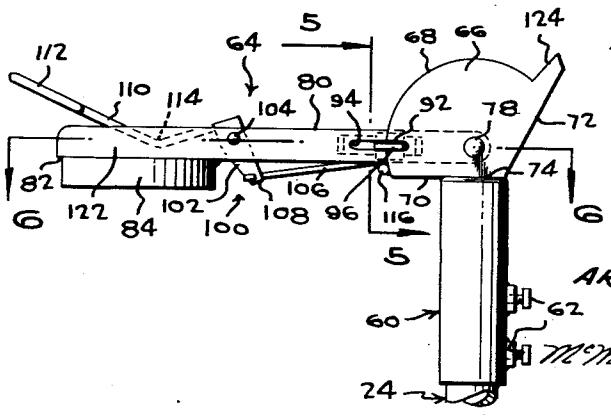


FIG-4

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United States Patent Office 3,003,728 Patented Oct. 10, 1961

3,003,728
GARBAGE CAN STAND

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Filed June 23, 1959, Ser. No. 822,252
5 Claims. (Cl. 248—154)

This invention relates to a novel garbage can stand.

The primary object of the invention is to provide a stand of this kind which is anchored in the ground by its own legged base, in a non-tippable condition, and which has positive locking lever means for holding the cover of a garbage can in place on the can, and which at the same time serves to positively hold the can seated on a support which is part of the stand, so that a garbage can mounted on the stand cannot be turned over by animals, children, or strong winds, or the cover thereof dislodged, to spill garbage on the ground and/or expose the contents of the can to the weather and give off odors.

Another object of the invention is to provide a can stand of the character indicated above wherein a garbage can is positively supported in spaced relation above the ground, so as to preclude corrosion and rusting of the can which would otherwise result from contact of the can with the ground.

A further object of the invention is to provide a stand of the character indicated above which is uncomplex in construction, and is composed of a small number of simple and easily assembled parts, and which can be made in rugged and serviceable forms at relatively low cost.

Other important objects and advantageous features of the invention will be apparent from the following description and the accompanying drawings, wherein, for purposes of illustration only, a specific form of the invention is set forth in detail.

In the drawings:

FIGURE 1 is a perspective view of a stand of the invention, on which a garbage can, partly in phantom lines, is mounted and locked in place;

FIGURE 2 is a side elevation of FIGURE 1, showing the legs of the base anchored in the ground;

FIGURE 3 is a view similar to FIGURE 2, portions being shown in vertical section, showing the locking lever assembly in released or retracted position;

FIGURE 4 is an enlarged side elevation of the locking lever assembly;

FIGURE 5 is a vertical transverse section taken on the line 5—5 of FIGURE 4; and

FIGURE 6 is a horizontal section taken on the line 6—6 of FIGURE 4.

Referring in detail to the drawings, wherein like numerals designate like parts throughout the several views, the illustrated stand, generally designated **10**, comprises an open, horizontal base **12**, preferably of triangular form, having secured within its corners, as indicated at **14**, straight round bar legs **16**, which depend below the base **12**, to be pressed into the ground G, so as preferably to rest the base **12** on the ground surfaces.

The base **12** is preferably of isosceles triangular shape, and secured upon the side bars **18** of the base, at the apex corner of the base, as indicated at **20**, is a flat plate **22** which extends across the frame and constitutes the foot of a perpendicular tubular stand **24**, which is fixed at its lower end to the plate, as indicated at **26**.

Fixed, as indicated at **28**, to the side of the standard **24** facing the base side bar **30** of the base **12**, at a level above the base **12**, and projecting toward the base bar **30**, is a lower horizontal bracket arm **32**, whose outer end is fixed radially to the middle of a horizontal garbage can platform **34**, which comprises a semi-circular bar **36** and a diametrical cross bar **38**. The cross bar

38 is suitably fixed at its ends to the underside of the semicircular bar **36** at the ends thereof. The platform **34** is of a diameter to snugly seat within the semi-circular bar **36**, the cylindrical lower end **40** of a garbage can **42**, wtih the bottom **44** of the can resting upon the cross bar **38**.

At a distance above the platform **34** about two-thirds of the height of the garbage can **42**, there is fixed, as indicated at **46**, to the side of the standard **24**, an upper horizontal bracket arm **48**, which is shorter than the lower bracket arm **32**, and is vertically aligned therewith.

Secured for rotary adjustment on the upper side of the upper bracket arm **48**, by means of a bolt **50** extending therethrough, is the foot **52** of an upstanding L-shaped holder **54**, having an upright **56** to retainably engage upwardly through a bail handle **58** on the side of the garbage can **42** at a point below the upper end of the can.

Telescoped on the upper end of the standard **24**, above the can holder **54**, is a vertically adjustable tubular head **60** which has vertically spaced set screw **62** threaded through its side wall to engage the standard and retain adjusted positions of the head **60** thereon. The head **60** constitutes the supporting component of a locking lever assembly **64**.

The assembly **64** comprises, as shown in FIGURES 4 to 6, an upstanding segmental locking plate **66** which has an arcuate upper edge **68**, a straight horizontal lower edge **70** and a straight outer or rear edge **72**, which is angled outwardly relative to the edge **70**. The lower edge **70** is suitably fixed, as indicated at **74**, upon the closed upper end **76** of the head **60**, and extends diametrically thereacross and reaches inwardly or forwardly beyond the standard **24**. Centered with respect to the arcuate edge **68**, a headed pivot **78** extends through the plate **66** and has pivoted thereon, at one side of the plate, the inward end of an elongated flat bar main lever **80**, long enough to reach beyond the vertical center of the garbage can **42**. Fixed diametrically, as indicated at **82**, to the lower edge of the main lever **80** at its inner or forward end, is a garbage can cover handle embracing ring **84**, to bear downwardly upon the center of the cover **86** of the garbage can when in place on the upper end of the can, the head **60** having been adjusted on the standard **24**, so that the ring **84** engages the cover **86** with the lever **80** in a horizontal position and at right angles to the standard.

The assembly **64** further comprises a sliding detent **88** which, as seen in FIGURE 5, is T-shaped and has a cross head **90** bearing against the side of the main lever **80** remote from the locking plate **66**, and a horizontal standard portion **92** which extends laterally inwardly from the cross head and slides back and forth and loosely in a closed horizontal longitudinal slot **94** provided in the main lever **80**. The slot **94** reaches inwardly beyond and outwardly beyond the arcuate edge **68** of the locking plate **66**, as seen in FIGURES 4 and 6, and horizontally aligned with the inward end portion of the closed slot **94** is an open slot **96**, formed in the lower end of the arcuate edge **68**, so that, at times the standard portion **94** of the detent **88** can engage in the open slot **96**, so as to prevent the main lever **80** from being swung upwardly out of its depressed horizontal garbage can retaining position, shown in FIGURE 4, to an elevated released and disengaged position, as shown in FIGURE 3. The detent **88** is held in place in the closed slot **94** by a longitudinally elongated retainer bale **98** which is fixed at its ends to the lever **80** at related ends of the slot **94** and bears against the laterally outward side of the detent crosshead **90**, as seen in FIGURE 6.

The detent **88** is operated in the slot **94** and **96** by means of a link and lever assembly **100**, which com-

prises a vertical toggle lever **102**, which is located at the same side of the main lever **80** as the detent crosshead **90**, and is pivoted, over-center, at its upper end to the main lever **80**, as by a headed pin **104**. A longitudinally elongated link **106** is fixed at one end to the crosshead **90**, at **107**, and is pivoted, as indicated at **108**, at its other end to the lower end of the toggle lever **102**. Fixed on the upper end of the toggle lever **102**, above the pivot pin **104** is the inner end of a generally horizontal operating lever **110**, which has a loop handle **112** on its other or outer end, the lever **110** extends diametrically across the top of the ring **84** and is bent at an intermediate point, as indicated at **114**, to dispose the outer part of the lever **110**, and the handle **112** at an upward angle, and to extend beyond the outer side of the ring **84**, as seen in FIGURE 4, in the locked, over-center position of the operating lever **110**. As also seen in FIGURE 4, the main lever **80** is stopped and held in its horizontal position, by a stop lug or bar **116**, which is fixed, as indicated at **118**, to the arcuate edge **68** of the locking plate **66** at the lower end thereof. The stop bar **116** also serves to prevent the main lever **80** from falling to an unwanted depressed position, while the garbage can **42** is off the stand.

In operation, the detent **88** is moved inwardly along the slot **94** and into detent relation with the slot **96** when the operating lever **110** is depressed from the elevated position, shown in FIGURE 3, to the depressed position shown in FIGURE 4. The detent is held in the locking plate slot **96** so as to lock the main lever **110**, in its depressed can holding position, by the over-center position which the toggle lever **112** assumes, in the depressed position of the operating lever **110**.

As seen in FIGURE 2, when the locking lever assembly **64** is in locking position, the ring **84** surrounds the upstanding bail handle **120** on the center of the garbage can cover **86**, so as to preclude any sidewise shifting of the cover **86** which might loosen the cover from the can, and the portion **122** of the main lever **80** within the ring **84** bears upon the cover handle **120** so as to hold the cover shown on the can **42**, and thereby hold the can seated in the platform **34**, at the same time that the holder **54**, engaged through a side handle **58** of the can prevents the can from being shifted off the platform **34** through the gap in the outer or front side of the semi-circular bar **36** of the platform.

To release and swing the assembly **64** upwardly, so as to free the cover **86** and the can **42**, to be removed from the can, and to be removed from the platform **34**, respectively, all that is necessary is to pull up on the handle **112** of the operating lever **110**. The assembly can then be swung upwardly and inwardly until it is in an out-of-the-way position, wherein it is supported by engagement of the standard portion **92** of the detent **88** with an upstanding finger **124** on the outer end of the arcuate edge **68** of the locking plate.

Although there has been shown and described herein a preferred form of the invention, it is to be understood that the invention is not necessarily confined thereto, and that any change or changes in the structure of and in the relative arrangements of components thereof are contemplated as being within the scope of the invention as defined by the claims appended hereto.

What is claimed is:

1. A stand for a garbage can, comprising a ground engaging base, a standard, a horizontal platform fixed on and extending laterally from the standard bracket fixed on the standard and spaced above said platform, a lateral garbage can side handle engaging holder mounted on said standard, and a locking lever assembly mounted on said standard above said holder, comprising a fixed locking element upstanding on said standard, a main lever having a rear end horizontally pivoted on said element, said main lever having a forward end having a horizontal garbage can cover handle embracing element thereon, and a toggle link and lever assembly mounted on said main lever and engageable with said locking element for releasably locking said main lever in a depressed position with the embracing element bearing upon the cover on a garbage can seated on said platform, said locking element comprising a sector plate having an arcuate upper edge facing said locking lever assembly, said main lever being engaged with a side of the locking plate and pivoted thereto at the center of said arcuate edge, said assembly comprising a detent slidably mounted on said main lever to move toward and away from the arcuate edge of the locking plate, said arcuate edge having an open locking slot therein, and said detent having an element to engage in the locking slot, and operating means mounted on the main lever for moving the detent into locking engagement with said slot only in the depressed can-engaging position of the main lever, said operating means comprising a link and lever assembly.

2. A stand for a garbage can, comprising a ground engaging base, a standard, a horizontal platform fixed on and extending laterally from the standard bracket fixed on the standard and spaced above said platform, a lateral garbage can side handle engaging holder mounted on said standard, and a locking lever assembly mounted on said standard above said holder, comprising a fixed locking element upstanding on said standard, a main lever having a rear end horizontally pivoted on said element, said main lever having a forward end having a horizontal garbage can cover handle embracing element thereon, and a toggle link and lever assembly mounted on said main lever and engageable with said locking element for releasably locking said main lever in a depressed position with the embracing element bearing upon the cover on a garbage can seated on said platform, said locking element comprising a sector plate having an arcuate upper edge facing said locking lever assembly, said main lever being engaged with a side of the locking plate and pivoted thereto at the center of said arcuate edge, said assembly comprising a detent slidably mounted on said main lever to move toward and away from the arcuate edge of the locking plate, said arcuate edge having an open locking slot therein, and said detent having an element to engage in the locking slot, and operating means mounted on the main lever for moving the detent into locking engagement with said slot only in the depressed can-engaging position of the main lever, said operating means comprising a link and lever assembly having a toggle lever pivoted off-center on said main lever, a link secured at one end to the detent and pivoted at its other end to one end of the toggle lever, and an operating rod fixed at one end on said one end of the toggle lever, and having a handle on its other end, said operating rod being operable to a depressed position to engage and maintain said detent in the locking slot.

3. A stand for a garbage can, comprising a ground engaging base, a standard, a horizontal platform fixed on and extending laterally from the standard bracket fixed on the standard and spaced above said platform, a lateral garbage can side handle engaging holder mounted on said standard, and a locking lever assembly mounted on said standard above said holder, comprising a fixed locking element upstanding on said standard, a main lever having a rear end horizontally pivoted on said element, said main lever having a forward end having a horizontal garbage can cover handle embracing element thereon, and a toggle link and lever assembly mounted on said main lever and engageable with said locking element for releasably locking said main lever in a depressed position with the embracing element bearing upon the cover on a garbage can seated on said platform, said garbage can cover handle embracing element comprising a ring to surround the cover handle, said ring being secured to the underside of the main lever and exposing a forward end portion of the main lever for hold-down engagement with the cover handle.

4. A stand for a garbage can, comprising a ground engaging base, a standard, a horizontal platform fixed on and extending laterally from the standard bracket fixed on the standard and spaced above said platform, a lateral garbage can side handle engaging holder mounted on said standard, and a locking lever assembly mounted on said standard above said holder, comprising a fixed locking element upstanding on said standard, a main lever having a rear end horizontally pivoted on said element, said main lever having a forward end having a horizontal garbage can cover handle embracing element thereon, and a toggle link and lever assembly mounted on said main lever and engageable with said locking element for releasably locking said main lever in a depressed position with the embracing element bearing upon the cover on a garbage can seated on said platform, said platform comprising a semi-circular bar fixed at its middle to said lower bracket and extending forwardly away from the lower bracket and having a gap in its forward side, and a cross bar fixed to the underside of the semi-circular bar at the ends thereof, the semi-circular bar and the cross bar defining a seat shorter than the lower end of a garbage can into which the lower end of a garbage can is to be partially seated.

5. A stand for a garbage can, comprising a ground engaging base, a standard, a horizontal platform fixed on and extending laterally from the standard bracket fixed on the standard and spaced above said platform, a lateral garbage can side handle engaging holder mounted on said standard, and a locking lever assembly mounted

on said standard above said holder, comprising a fixed locking element upstanding on said standard, a main lever having a rear end horizontally pivoted on said element, said main lever having a forward end having a horizontal garbage can cover handle embracing element thereon, and a toggle link and lever assembly mounted on said main lever and engageable with said locking element for releasably locking said main lever in a depressed position with the embracing element bearing upon the cover on a garbage can seated on said platform, said base being an open triangular form having corners including an apex corner, means mounting said standard on said form at said apex corner, said legs being vertical rods secured at their upper ends to said form at the corners thereof and extending downwardly therefrom.

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