Jan. 19, 1932. H. L. SCRUTON 1,842,210

COVER OPERATOR AND HOLDER FOR GARBAGE CANS AND THE LIKE

Filed May 15, 1929

Fig. 1

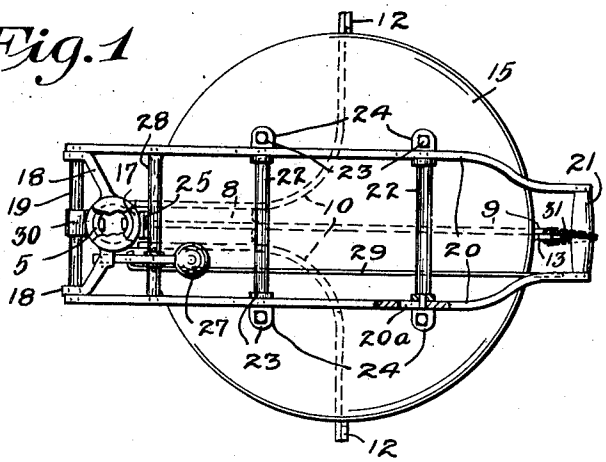



Fig. 2

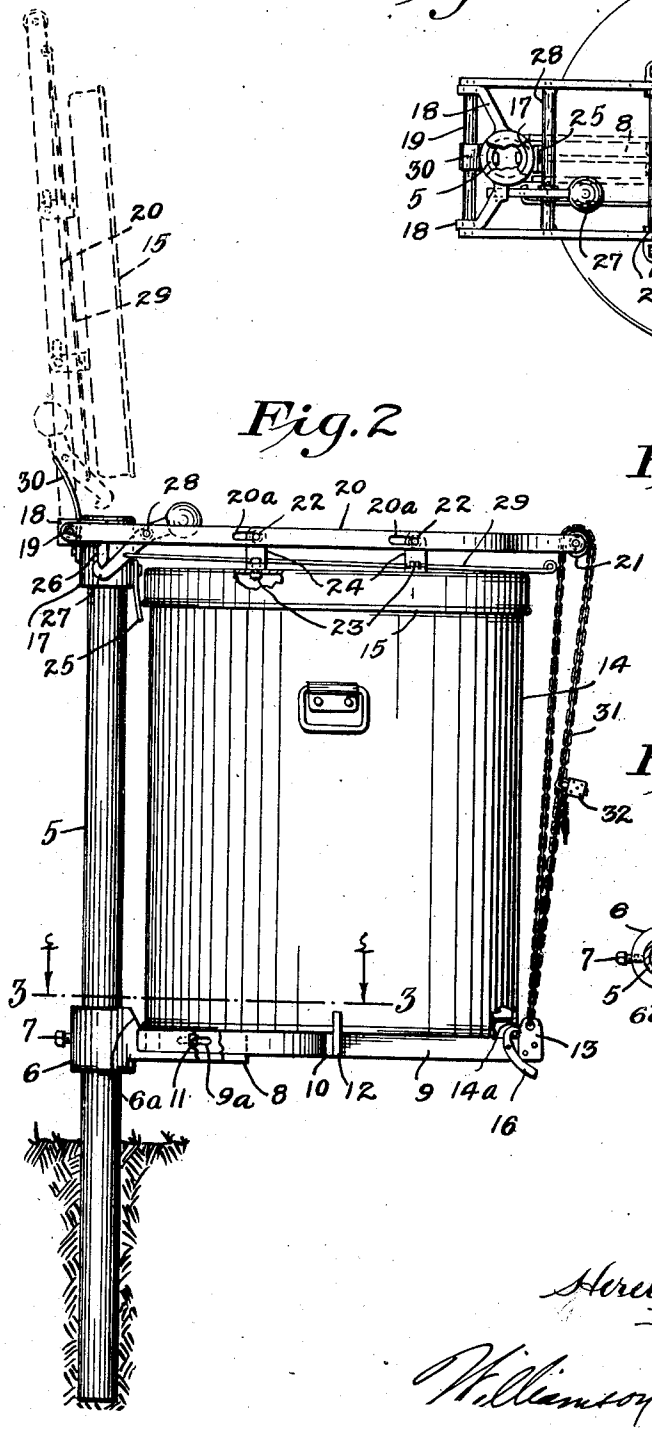



Fig. 4

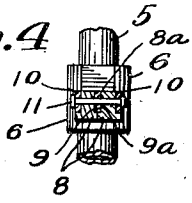
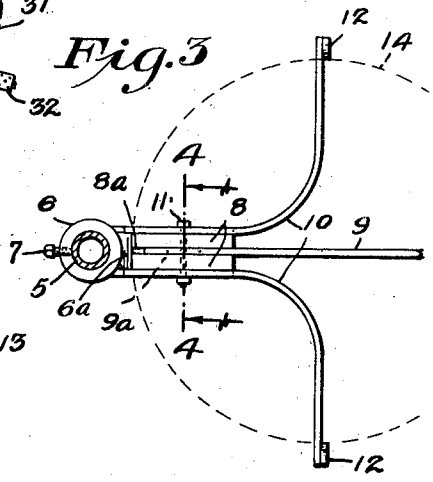



Fig. 3




Inventor

Howard L. Scruton

By his Attorneys

Williamson Reis & Williamson

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# UNITED STATES PATENT OFFICE

HEREWARD L. SCRUTON, OF MINNEAPOLIS, MINNESOTA

## COVER OPERATOR AND HOLDER FOR GARBAGE CANS AND THE LIKE

Application filed May 15, 1929. Serial No. 363,162.

It is the object of this invention to provide a novel and improved cover operator and can holder for garbage cans and the like, which can be used in conjunction with cans of different types and sizes to prevent the cans from being upset and the contents spilled, and will permit the covers of the cans to be readily lifted from and seated on the tops of the cans and will also releasably lock the covers of the cans in place, when closed, to prevent the covers being lifted by dogs or other animals.

To this end the invention consists in the novel parts and novel combinations of parts, hereinafter defined in the claims and described in the following specification, made in connection with the accompanying drawings, wherein like reference characters refer to the same or similar parts throughout the various views, and, in which,

Fig. 1 is a plan view of an embodiment of the invention applied to a garbage can, certain of the parts being broken away to show the construction thereof;

Fig. 2 is a view in side elevation of the device as shown in Fig. 1, certain of the movable parts being shown in full lines in one position and in dotted lines in another position, and certain other of the parts being broken away to more clearly show the construction thereof;

Fig. 3 is a horizontal section taken on the line 3—3 of Fig. 2 as indicated by the arrows, the garbage can being illustrated in dotted lines, and

Fig. 4 is a vertical section taken on the line 4—4 of Fig. 3, as indicated by the arrows.

Referring to the drawings, in accordance with the present invention, a suitable standard 5 is provided which, as illustrated, may consist of a vertical pipe driven into the ground or it may consist of any other suitable support. A collar 6 is mounted on the standard 5 adjacent the lower end thereof, and is vertically adjustable thereon by means of a set screw 7, to stand in spaced relation above the ground. The collar 6 has formed integral therewith, or secured thereto, a vertically split horizontal supporting arm 8, and a short diagonally inclined portion 6*a* of the collar runs downwardly from the top of the collar to the rear portion of the arm 8. The rear end of an extensible bar 9 is carried in a central groove 8*a* in the arm 8 and the two sides of the arm 8 are rabbeted to receive two bendable side bars 10. A nutted bolt 11 runs through the side bars 10, the arm 8 and through a central horizontal slot 9*a* in the rear end of the bar 9, and this bolt holds the said parts together and permits extension of the bar 9 from the arm 8 when the bolt 11 is loosened. An upwardly projecting lug 13 is secured to the forward end of the bar 9 and an aperture is provided in this lug for reception of a chain. Upwardly projecting lugs 12 are secured to the outer ends of the bars 10 and these bars are curved to extend laterally from the central bar 9. The arm 8 and bars 9 and 10, together with the lugs 13 and 12, and the inclined portion 6*a* of the collar 6, form a base for supporting a can, such as the garbage can 14. This base is adjustable to fit cans having bottoms of various sizes. The bar 9 is extensible from the arm 8 to vary the spacing between the lug 13 and the inclined portion 6*a*, and the bars 10 may be variably bent to extend at different angles relative to the central bar 9, so that the lugs 12 may be engaged against the side edges of the bottoms of cans of various sizes. The usual type of garbage can 14 now commonly employed, is provided with a flange 14*a* which projects downwardly below the bottom of the can and in order that the can may be securely held on the base so provided to prevent the can from raising upwardly when the cover 15 is raised, a U-shaped latch member 16 is provided and this latch member is pivoted to the forward end of the bar 9. The upper ends of the latch member 16 are pointed and curved outwardly and the lower portion of the latch member below the pivot thereof is curved slightly outwardly, so that the weight of the lower portion of the latch member will normally force the upper pointed ends of the latch member into a slot cut in the flange 14*a* of the garbage can. The latch member 16 can be detached from the can 14 by merely raising the lower end of the latch member 16 upwardly.

A collar 17 is secured to the top of the standard 5 and formed integral with or secured to the collar 17, are a pair of laterally and slightly rearwardly projecting arms 18 forming spaced pivot bearings for a pin 19. A pair of arms 20 are secured to the ends of pin 19 and normally project forwardly therefrom to overlie the top of a can, such as the can 14 supported on the base. The arms 20 are inwardly curved adjacent their forward ends and are secured together at their forward ends in spaced relation by means of a handle 21. Slots 20*a* are cut in the two arms 20 and extending through these slots are the reduced ends of a pair of transverse rods 22. Small angle brackets 23 are provided through which the rods 22 extend, and these angle brackets will be secured as by means of nutted bolts 24 to the cover 15 of the garbage can. The collar 6 will be so adjusted on the standard 5 that when the can 14 is supported on the base and the cover 15 is properly seated on the top of the can, the arms 20 will be horizontally disposed and the rods 22 will be slid to their forwardmost positions in the slots 20*a*. A short cover positioning plate 25 is secured to the forward side of the collar 17 to extend adjacent the lower edge of the cover 15 of the can, and this plate 25 will be made of bendable material, so that when the device is being fitted for use in holding a particular can, such as the can 14, the lower end of the plate 25 may be bent slightly forwardly until it just bears against the lower edge of the cover 15 for the can when the cover is properly seated on the top of the can. Formed integral with or secured to one side of the collar 17, is a beveled tooth 26 and a weighted pawl 27 is pivoted on a cross rod 28 secured to and running between the two arms 20, to co-operate with the tooth 26. An operating rod 29 for the pawl 27 is pivoted to the pawl adjacent its lower end and is adapted to run rearwardly over the cover 15 of the can beneath the rods 22, and between the two sets of brackets 23 to a point adjacent the handle 21 where the rod is provided with a loop. A stop member 30 is secured to and projects upwardly and rearwardly from the upper collar 17 to act against the rod 28 and limit upward and rearward swinging movement of the frame formed by the arms 20, pin 19 and associated parts.

In setting up the device for use in connection with a particular can, the bars 9 and 10 of the base will be first adjusted to fit the bottom of the can and the lower collar 6 will be adjusted on the standard 5 by means of the set screw 7 until the cover 15 of the can lays in proper position when applied to the top of the can, so that the angle brackets 24 may be applied to the cover 15 by means of the bolts 24 when the arms 20 are horizontally disposed. The plate 25 will then be properly bent to strike the lower edge of the cover 15 when the cover is seated on the top of the can, and the device will then be ready for use.

When the cover 15 is seated on the top of the can, the weighted pawl 27 will engage with the tooth 26 to releasably lock the cover in place and prevent dogs, cats and other animals from raising the cover of the can and strewing garbage or other contents of the can around the yard where the can is situated. When a housewife, or other party, desires to raise the cover 15 of the can, in order to dump garbage into the can, she will grasp the handle 21 with one hand and apply her finger through the loop at the forward end of the pawl operating rod 29. By pulling the rod 29 towards the handle 21, she may disengage the pawl 27 from the tooth 26, whereupon she can lift the cover of the can 15 by merely raising the frame formed by the arms 20 and associated parts from the full line position shown in Fig. 2 to the dotted line position shown in Fig. 2, the stop 30 acting to limit the raising movement. As the arms 20 are raised, the rods 22 will slide rearwardly in the slots 20*a*, thereby permitting the cover 15 to be raised from the top of the can without causing the cover to bind on the upper edge of the can. When the frame is raised to the position indicated in dotted lines Fig. 2, the rods 22 which carry the cover 15 will have slid by gravity downwardly to the lowest extreme position in the slots 20*a*. In lowering the can, due to the fact that the rods 22 are downwardly slid in the slots 20*a* when the cover 15 is upwardly raised, the lower rear edge of the cover will strike the directing plate 25 as the cover approaches the top of the can 14. The plate 25 will act to slide the cover forwardly, while it is being seated on the top of the can, the slots 20*a* allowing the rods 22 to move forwardly to permit this movement of the cover 15. In this manner, the cover 15 may be readily and properly seated on the top of the can. As the cover is seated, the weighted pawl 27 will engage with the tooth 26. The latch 16 will hold the base of the can securely in place to prevent upward movement of the can when the cover 15 is being raised.

When the garbage is to be dumped, the cover can be raised whereupon the garbage collector can press the lower end of the latch 16 upwardly with his foot to disengage the latch from the lower end of the can 14, to permit the ready removal thereof. In putting the can back in place after it has been emptied, the diagonally inclined surface 6*a* will permit the bottom of the can to slide readily in place on the base so that the can will be properly seated.

If it is desired to lock the can in place at any time, a chain such as the chain 31 may be drawn through the aperture in the lug 13 and around the handle 21, and the two ends

of the chain may be secured together as by a padlock 32.

The device is cheap in construction and is simple in operation. It is practically universally adjustable so that cans or other containers of practically any height and diameter may be accommodated. Preferably the various separate parts of the device which are assembled together will be spot welded, so that the parts cannot be taken apart or stolen. The base of the device will support the can well above the ground and accordingly the lower portion of the can will not rot and rust out in the manner of cans supported on the ground, and access can be had to the ground beneath the can to mow or clean the same.

It will, of course, be understood that various changes may be made in the form, details, arrangement and proportions of the various parts without departing from the scope of the present invention.

What is claimed is:

1. A cover operator for garbage cans and the like, comprising a support, an arm pivoted to said support for swinging movement over the can, a loose sliding connection for connecting said arm to the cover of the can to permit limited relative sliding movement between the cover and the arm and a directing member for sliding the cover on the arm to permit the cover to be properly seated on the top of the can when said arm is lowered.

2. A cover operator for garbage cans and the like, having in combination a support, an arm pivoted to said support and mounted to be swung downwardly over the top of the can and to be swung upwardly from the can, a loose sliding connection for attaching the cover of the can to said arm, and means for sliding the cover on said arm when said arm is downwardly swung, to seat the cover on the top of the can.

3. A cover operator for garbage cans and the like, having in combination a support, an arm pivoted to said support and mounted to be swung downwardly over the top of the can and to be swung upwardly from the can, a loose sliding connection for attaching the cover of the can to said arm, means for sliding the cover on said arm when said arm is downwardly swung, to seat the cover on the top of the can, and a co-operating tooth and dog adapted to be engaged with each other when the cover is lowered to lock the cover in position and adapted to be released from each other to permit the cover to be raised.

4. A cover operator for garbage cans and the like, having in combination, a suitable standard adapted to be positioned adjacent the top of a can, an arm pivoted to said standard and adapted to be swung downwardly to overlie the top of the can and to be raised upwardly to one side of the can, said arm having a slot therein, a pin adapted to be secured to the cover of the can and extending through said slot to permit sliding movement of the cover of the can relative to said arm when the arm is raised and lowered and a directing member adapted to engage the cover of the can to slide the cover relative to said arm as the arm is lowered and permit the cover to be properly seated on the top of the can.

5. A cover operator for garbage cans and the like, having in combination, a suitable standard adapted to be positioned adjacent the top of a can, an arm pivoted to said standard and adapted to be swung downwardly to overlie the top of the can and to be raised upwardly to one side of the can, said arm having a slot therein, a pin adapted to be secured to the cover of the can and extending through said slot to permit sliding movement of the cover of the can relative to said arm when the arm is raised and lowered, a directing member adapted to engage the cover of the can to slide the cover relative to said arm as the arm is lowered and permit the cover to be properly seated on the top of the can, a tooth secured to said standard and a weighted dog mounted on said arm and adapted to automatically engage with said tooth to lock the cover of the can in place when said arm is lowered.

6. The structure defined in claim 5, a handle mounted at the free end of said arm and a dog operating member secured to said dog and extending to a point adjacent said handle.

7. A holder and cover operator for garbage cans and the like, comprising a suitable standard, a base mounted on said standard and upon which a can is adapted to be seated, an arm pivoted to said standard and adapted to overlie the cover of a can seated on said base, a loose sliding connection for connecting the cover of the can to said arm to permit limited sliding movement of the cover on the arm and a plate acting to slide the cover relative to said arm when the arm and cover are lowered to direct the cover on to the top of the can.

8. A holder and cover operator for garbage cans and the like, comprising a suitable standard, a base mounted on said standard for vertical adjustment and upon which a can is adapted to be seated, an arm pivoted at the upper end of said standard and adapted to be swung downwardly over the top of a can seated on said base and to be swung upwardly to one side of the can, a loose sliding connection for attaching the cover of the can to said arm to permit relative sliding movement of the cover on said arm as said arm is raised and lowered and a directing member secured to the upper end of said standard and adapted to engage the cover of said can as said arm is lowered to slide the cover on

said arm and permit the cover to be properly seated on the top of the can.

9. A holder and cover operator for garbage cans and the like, having in combination a suitable standard, a base mounted on said standard and adjustable to support cans of various sizes, an arm pivoted to the upper end of said standard and adapted to be swung downwardly to overlie the top of a can supported on said base and to be swung upwardly to one side of such a can, a loose sliding connection for securing the cover of a can supported on said base to said arm to permit sliding movement of said cover relative to the arm as the arm is raised and lowered, a directing plate adapted to act against the cover of the can to slide the arm relative to said arm as the arm is lowered to permit the cover to be properly seated on the top of the can and a tooth and pawl lock adapted to be automatically engaged when said arm is lowered to lock the cover of the can in place and means for disengaging said lock to permit said arm to be raised.

10. A cover operator for garbage cans and the like comprising a support, a frame pivoted to said support for swinging movement over the top of a can, and to one side of the can, said frame having slots therein, rods mounted in said slots for sliding movement therein, members connected to said rods and adapted to be secured to the cover of the can, whereby as said frame is raised from the top of the can said rods may slide in said slots to permit relative movement between said frame and said cover and to permit said cover to be carried by gravity toward the pivot point of said frame and a cover directing plate so disposed that as said frame is lowered, said plate will strike a portion of the cover to slide the same against the force of gravity relative to said frame to properly seat said cover on the top of said can.

11. A holder and cover operator for garbage cans and the like comprising a suitable standard, a base mounted on said standard and upon which a can is adapted to be seated, an arm pivoted to said standard and adapted to overlie the cover of a can seated on said base, a loose sliding connection for connecting the cover of the can to said arm to permit limited sliding movement of the cover relative to the arm, a plate acting to slide the cover relative to said arm when the arm and cover are lowered to direct the cover on to the top of the can, and means on said base for engaging the bottom of the can to prevent the can from being raised with the cover as said arm is raised.

In testimony whereof I affix my signature.

HEREWARD L. SCRUTON.