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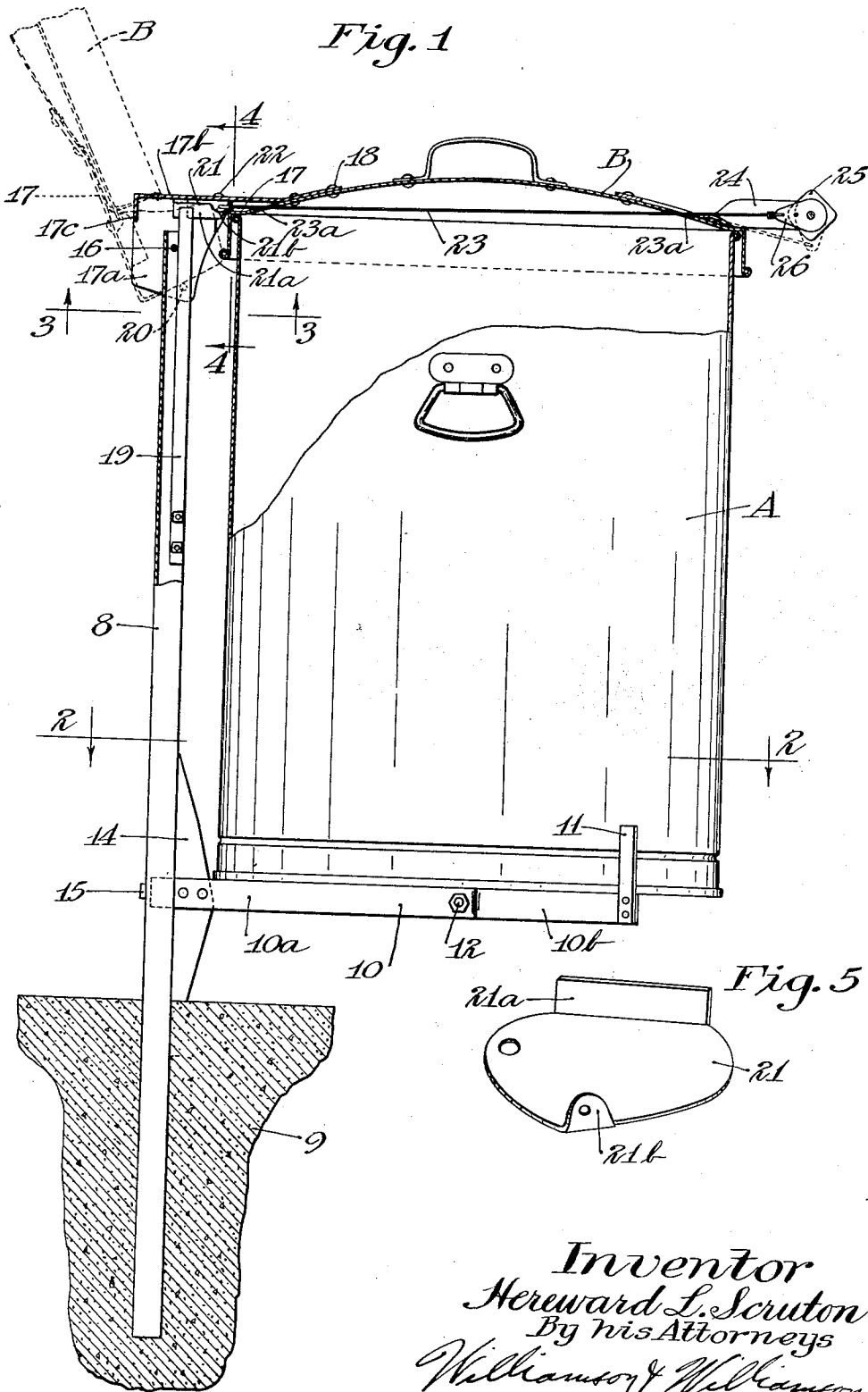
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COVER OPERATOR AND HOLDER FOR GARBAGE CANS AND THE LIKE

Filed May 2, 1932

2 Sheets-Sheet 1



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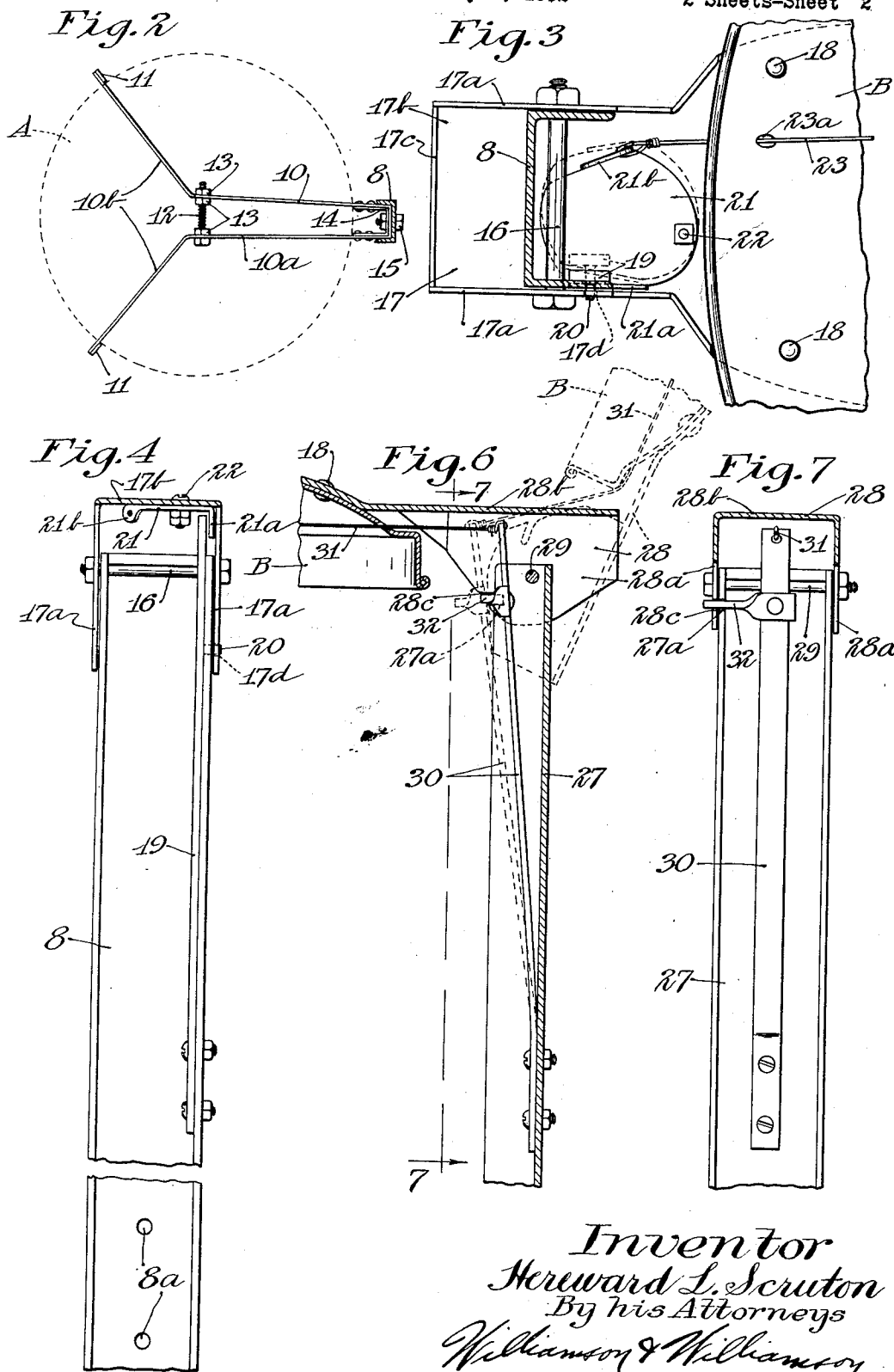
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COVER OPERATOR AND HOLDER FOR
GARBAGE CANS AND THE LIKE

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8 Claims. (Cl. 248—11.5)

This invention relates to cover operators and holders for garbage cans and the like.

It is the object of the invention to provide a novel and improved, efficient and inexpensive cover operator and holder for garbage cans and similar articles, whereby the can cover can be locked in place over the top of the can to prevent entry of dogs and the like to the can, and at the same time the cover can be readily unlocked and swung to raised position to permit the deposit of matter within the can.

To this end, generally stated, 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 view partly in side elevation and partly in vertical section showing the cover operator and holder in use in connection with a garbage can and cover therefor, certain of the movable parts being shown in one position in full lines and in another position in dotted lines;

Fig. 2 is a horizontal section taken on the line 2—2 of Fig. 1, as indicated by the arrows, the outline of the can being indicated by dotted lines;

Fig. 3 is a horizontal section taken on the line 3—3 of Fig. 1, as indicated by the arrows, the can not being illustrated but the cover therefor being shown;

Fig. 4 is a vertical section taken on the line 4—4 of Fig. 1, as indicated by the arrows;

Fig. 5 is a perspective view showing the cam plate in upside down relation.

Fig. 6 is a vertical section taken through a portion of a modified form of the invention; and

Fig. 7 is a vertical section taken on the line 7—7 of Fig. 6, as indicated by the arrows, the movable parts being shown in one position in full lines and in another position in dotted lines.

Referring first to the embodiment of the invention illustrated in Figs. 1 to 4, there is provided a vertical standard 8 which will preferably be embedded in cement 9 in the ground, and this standard may be conveniently constructed from channel iron or the like. A bottom support for a can, such as the garbage can A, equipped with cover B, is provided and this support is secured to the standard 8 so as to extend somewhat above the ground level. The support is chiefly formed by a piece of strap iron 10, bent to the shape shown in Fig. 2, and including the U-

shaped portion 10a which is partly received within the channel of the standard 8 and the arms 10b which project diagonally outwardly from the U-shaped portion 10a in diverging relation. Short upwardly projecting retainers 11 are secured to the ends of the arms 10b. Projecting through apertures in the U-shaped portion 10a of the support adjacent points where the arms 10b join the same, is a bolt 12 equipped with three nuts 13. Two of these nuts 13 are adapted to be drawn up in opposing relation against one side of the U-shaped portion 10a, while the remaining nut 13 is adapted to be drawn up against the other side of the U-shaped portion 10a to clamp the same against the head of the bolt. By manipulation of the nuts 13, it will be seen that the retainers 11 secured to arms 10b, may be spaced from each other different distances so that cans of different diameters may be received and supported. A vertically extending channel-shaped member 14 is received within that part of the U-shaped portion 10a adjacent standard 8 and this member projects both above and below the U-shaped portion 10a and the edges of the member 14 are diagonally cut above the U-shaped portion 10a, so that the member 14 may assist in guiding the can A to its seat between the retainers 11 and the member 14 on support 10. This member 14 also serves to brace and strengthen the support 10 against standard 8. Support 10 and member 14 are secured together and to the standard 8 as by means of a single nutted bolt 15 running through one of a series of openings 8a formed in the intermediate web of the standard. The support 10 can be raised or lowered to regulate the height of the particular can A in connection with which it is used with the upper end of the standard 8 by positioning the bolt 15 in the proper opening 8a.

Pivotally mounted on pivot 16 extending between the side webs of standard 8 adjacent the top thereof, is an arm 17. This arm 17 is preferably provided with sides 17a between which the upper portion of the standard 8 is received, a flat upper web 17b which projects forwardly and may be attached to the cover B as by rivets 18, and a rear down-turned web 17c which acts as a stop against the standard 8 to limit the upper and rearward swinging movement of the arm. Secured at its lower end to the inner side of one of the side webs of the standard 8 is a bar 19 which projects upwardly above the standard for a short distance and this bar is distorted so that the natural resiliency of the material forming the bar urges the same into contact adjacent its

upper and free end with the side web of the standard 8 to which the lower end of the bar is secured. Bar 19 carries a laterally projecting pin 20 adjacent its upper end and this pin normally extends through a pin opening in the adjacent side web of standard 8 and also through a pin opening 17d formed in one side 17a of arm 17. When the arm 17 is swung to horizontal position, the pin 20 normally fits within the pin opening 17d and thus locks the arm in this position.

The most common type of cover used for garbage cans and the like is constructed as illustrated and this cover has a dome-shaped top portion joining a downturned circular flange, the lower edge of which is rolled. A cam plate 21, shaped as best illustrated in Fig. 5, is pivotally mounted below the flat upper web 17b of arm 17 on a pivot bolt 22, and this cam plate has a downturned lip or cam portion 21a which normally projects between the upper end of the bar 19 and the side 17a of the arm 17 adjacent thereto. By swinging this cam plate when the arm 17 is in horizontal position, it will be seen that the upper end of the bar 19 may be moved against the spring tension of the bar to withdraw the pin 20 from the pin opening 17d, whereupon the arm will be released for upward swinging movement. Cam plate 21 is also equipped with a downturned ear 21b which is perforated to receive a wire, cable or rod 23 which projects through small openings 23a formed in the dome of cover B and extends to an opposite point above the cover from the point where the arm 17 is connected thereto. A pair of spaced straps 24 are secured to the cover B adjacent the point where the wire, rod, or cable 23 projects through the opening 23a remote from the standard 8 and pivotally mounted within these straps and extending between the same is a handle 25 carrying a short arm 26 to which the adjacent end of the wire, rod or cable 23 is connected. By turning handle 25 from the full line position shown in Fig. 1 to the dotted line position there shown, it will be seen that cam plate 21 can be swung to release pin 20 from engagement with arm 17.

It is believed that the operation of the device will be thoroughly understood without further description. Attention should be called to the fact that the pivot 16 upon which arm 17 is mounted, is located slightly above the lower edge of the cover B of the can and somewhat below the upper portion of the peripheral flange of the cover when the cover rests properly on the can A and the can is located in proper position for use, by adjustment of the support 10. By so locating the pivot 16, relative to the top of the can and to the flange of the cover of the can, the cover may be readily slid in place over the top of the can without difficulty as the arm 17 and cover are lowered from the upwardly swung dotted line position shown in Fig. 1. If the pivot 16 were located in a different relative position to the cover and top of the can, difficulty would be experienced in seating the cover on the top of the can unless special means were provided for guiding the cover in place onto the top of the can.

In Figs. 6 and 7, a slightly modified construction is illustrated, which in some respects is simpler than that disclosed in Figs. 1 to 4. This modified structure includes a standard 27 formed of channel iron and having a notch 27a in one side web adjacent the upper end of the

same. An arm 28 having sides 28a and a top 28b is pivoted to standard 27 adjacent its upper end on pivot 29 and the sides 28a of the arm receive the upper end portion of the standard between the same. A resilient bar 30 is connected at its lower end to the intermediate web of standard 27 and projects upwardly above the standard and has connected thereto a wire, rod or cord 31 which may be operated by mechanism of the type previously described and attached to the cover B. Of course, the arm 28 is secured to the cover B in much the same manner as arm 17 in the previously described construction. Bar 30 carries a short finger 32 adjacent its upper end and this finger is normally held within the notch 27a by the spring tension of the bar 30 and is also normally held within a notch 28c formed in one side 28a of the arm 28 when the arm is in horizontal position. By pulling the wire, rod or cord 31, it will be seen that the upper end of bar 30 may be swung against the spring tension of the bar to carry the finger 32 out of the notch 28c, thereby unlatching the arm 28 to permit the arm and the cover carried thereby to be swung upwardly from the full line position shown in Fig. 6 to the dotted line position there shown. The edge of the side 28a within which notch 28c is formed, is cut to hold the finger 32 in outwardly swung relation while the arm 28 and cover B are being raised and lowered and this edge is also constructed to guide the finger into the notch 28c when the arm and cover have been swung downwardly to approximately horizontal position.

It will be seen that a simple and efficient cover operator and holder for cans of different type has been provided. When the cover has been swung down over the can, the cover will be locked in place to prevent access of dogs and other animals to the contents of the can and to effectively close the can. When it is desired to raise the can cover, the cover can be unlocked and raised almost by one and the same movement.

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 and holder for garbage cans and the like, comprising a vertical standard, an arm pivoted adjacent the upper end of said standard and which may be attached to a can cover, supporting means secured to said standard for holding a can with its upper edge adjacent the upper end of said standard, a spring pressed locking means connected to said standard and adapted to cooperate with a portion of said arm to hold said arm in locked position when downwardly swung and means for withdrawing said locking means from locking relation with said arm against resilient tension.

2. A cover operator and holder for garbage cans and the like, comprising a standard, an arm pivoted to said standard adjacent its upper end and which may be attached to a can cover, means secured to said standard for supporting a can with its upper edge located adjacent the pivot of said arm, a spring locking bar secured at one end to said standard and having a portion normally in the path of movement of said arm from horizontal to upwardly swung position and means operable from the can cover for withdrawing the said portion of said locking

bar from a position in the path of said movement of said arm.

3. A cover operator and holder for garbage cans and the like, comprising in combination with a can and the cover therefor, a standard, a support to said standard and upon which the can rests, an arm pivoted to said standard adjacent its upper end and connected to said cover, a pin mounted adjacent the top of said standard, resilient means urging said pin into the path of movement of said arm from horizontal position to upwardly swung position and operating means having connection with said cover for forcing said pin out of said path of movement of said arm against the tension of said resilient means.

4. A cover operator and holder for garbage cans and the like, comprising a standard, an arm pivoted adjacent the upper end of said standard and which may be attached to a can cover, a resilient bar secured at one end to said standard and having a laterally projecting portion, said arm having an opening through which said projecting portion is resiliently urged to lock said arm when in horizontal position, a cam pivoted to said arm and having a cam portion located adjacent the free end of said bar and means which may be attached to the can cover for swinging said cam against said bar to withdraw said projecting portion thereof from said opening to permit said arm to be swung upwardly from horizontal position.

5. The structure defined in claim 4, said means

comprising a bracket which may be attached to the can cover at a point remote from the pivot of said arm, a member pivoted to said bracket and a flexible member running from said last mentioned member to said cam.

6. A cover operator and holder for garbage cans and the like, comprising a vertical standard, an arm pivoted to said standard adjacent the upper end thereof, a spring bar secured to said standard and having a free end projecting above the same, said arm having a notch at one side thereof, said bar having a finger urged by the resiliency of said bar into said notch when said arm is horizontally disposed and means for drawing said bar against the spring tension thereof to such a position that said finger is withdrawn from said notch.

7. A holder for garbage cans and the like, comprising a standard, a U-shaped supporting member secured to said standard and having outer arms projecting in diverging relation, upwardly projecting retainers at the ends of said arms, and means for spreading and holding spread the ends of said arms in different spaced relations whereby cans of different diameters may be held by said supporting member.

8. The structure defined in claim 7, and a directing member secured to said standard and projecting upwardly from said supporting member and inclining from said supporting member toward said standard.

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