E. SNICKERS.

LID LIFTER FOR RECEPTACLES.

APPLICATION FILED AUG. 23, 1918.

1,341,390. Patented May 25, 1920.

FIG. 1.

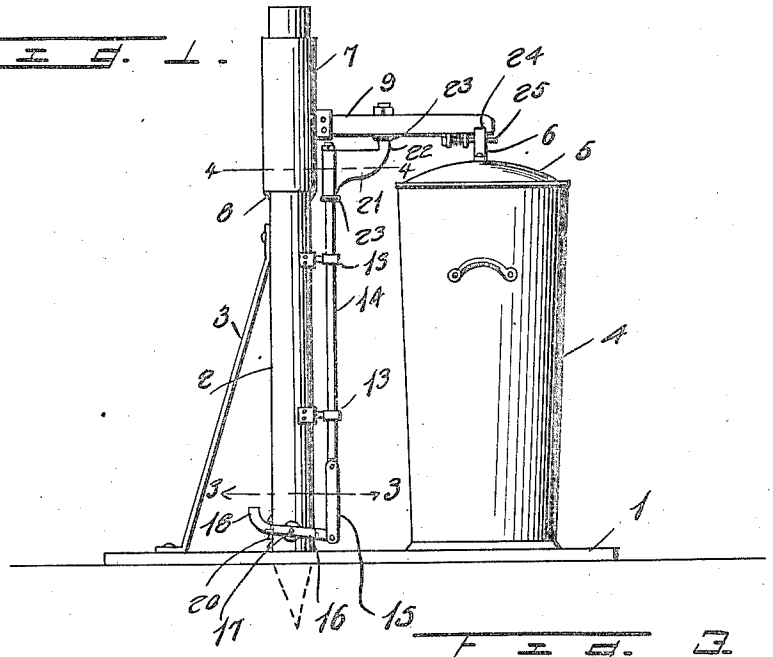


FIG. 3.

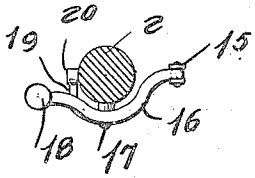
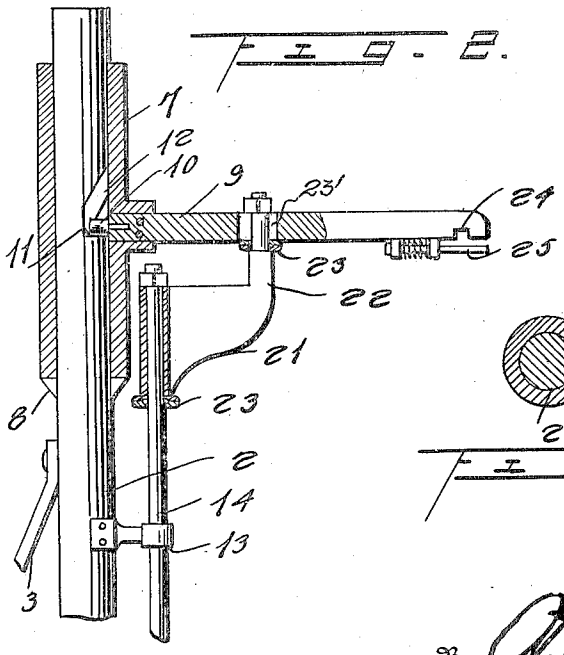


FIG. 2.



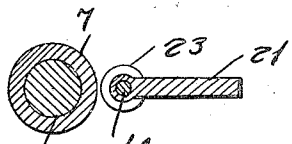


FIG. 4.

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LID-LIFTER FOR RECEPTACLES.

1,341,390. Specification of Letters Patent. Patented May 25, 1920.

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To all whom it may concern:

Be it known that I, EDWARD SNICKERS, a subject of Finland, residing at Matlock, in the county of Mason and State of Washington, have invented certain new and useful Improvements in Lid-Lifters for Receptacles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in lid lifters for receptacles and has for one of its objects the provision of means whereby the lid can be raised and swung laterally of the receptacle without the operator coming in contact with the same or the receptacle and also obviates the leaning over of the receptacle to remove the lid.

Another object of this invention is the provision of a supporting post having an arm that is secured to the lid and so connected thereto, that on upward pressure the arm will move upwardly and laterally of the receptacle thereby removing and supporting the lid to one side, giving free access to said receptacle.

A further object of this invention is the provision of means whereby pressure may be made on the arm by the foot of the operator.

A still further object of this invention is the provision of a lid lifter for receptacles of the above stated character, which shall be simple, durable, and efficient, and which may be manufactured and sold at a comparatively low cost.

With these and other objects in view as will become more apparent as the description proceeds, the invention consists in certain novel features of construction, combination, and arrangement of parts as will be hereinafter more fully described and claimed.

For a complete understanding of my invention, reference is to be had to the following description and accompanying drawings, in which:—

Figure 1 is a front elevation of a lid lifter for receptacles constructed in accordance with my invention,

Fig. 2 is a fragmentary vertical sectional view illustrating the manner of mounting the arm on the post,

Fig. 3 is a detail sectional view taken on the line 3—3 of Fig. 1,

Fig. 4 is a detail sectional view taken on the line 4—4 of Fig. 1.

Referring in detail to the drawings, the numeral 1 indicates a base provided with an opening 2 to receive a supporting post 2′. The supporting post 2′ may have its lower end driven into the ground or may be embedded within a foundation if so desired. The post 2′ is reinforced by a brace 3 secured to the same and to the base 1. A receptacle 4 is supported by the base 1 to one side of the post 2′ and is provided with a removable lid 5. The lid 5 is provided with a handle or strap 6 so that the same can be readily gripped for removing the lid from the receptacle.

A sleeve 7 is journaled upon the upper end of the post 2′ and is limited in its downward movement by a stop 8 formed upon the post at a point above the upper end of the brace 3.

The sleeve 7 is provided with an opening to receive one end of an arm 9 and which end of the arm extends through said opening and has journaled thereon a roller 10. The roller 10 fits within a recess or cutout portion 11 in the post 2′. A spiral rib 12 is formed within the cut-out portion or recess 11 of the post 2′ and its lower end is disposed at a point above the bottom wall of the cut-out portion or recess 11 so that the arm 9 and roller 10 may move upwardly before the roller 10 engages said spiral rib 12 to cause the arm to swing laterally of the post.

Brackets 13 are secured to the post 2′ and rotatably receive an actuating rod 14, having its lower end pivoted to a link 15 that is in turn pivoted to one end of a foot pedal 16. The foot pedal 16 is pivoted to the lower end of the post 2′ adjacent the base 1 as illustrated at 17 and is provided with a treadle portion 18. A lug 19 is formed upon the foot pedal 16 adjacent the treadle portion 18 for engagement with any one of the teeth 20 formed upon the post for locking the foot pedal in various positions. A lever 21 is journaled to the upper end of the op-

erating rod 14 and has a right angled extension 22 formed thereon which is disposed vertically and journaled within slot 23′ formed within the arm 9. A ball bearing cage 23 is carried by the extension 22 and is provided with ball bearings that bear against the arm to permit said arm to have free turning movement in relation to said extension during the operation of the device. The lever 21 is also mounted on ball bearings upon the upper end of the operating rod 14.

The free end of the arm is provided with a notch or recess 24 to receive the handle or strap 6 upon the lid 5 of the receptacle 4. A spring actuated bolt 25 is slidably mounted upon the free end of the arm 9 and is adapted to pass under the strap or handle 6 when the same is positioned within the recess 24 to lock the lid 5 to the arm 9.

In operation, when it is desired to remove the lid 5 from the receptacle 4, the operator presses down upon the treadle portion 18 of the foot pedal 16 raising the operating rod 14. As the operating rod 14 starts to move upwardly, the arm 9 moves upwardly until the roller 10 engages the lower end of the spiral rib 12 and when in this position, the lid 5 is raised upwardly a slight distance from the receptacle to give the same a clearance of the receptacle when swinging laterally thereof. On further upward movement of the rod 14, the roller 10 travels about the spiral rib 12 swinging the arm 9 laterally on its ball bearing 23 through slot 23′ which carries the lid 5 so as to position the same to one side of the receptacle giving free access thereto.

From the foregoing description, taken in connection with the accompanying drawings, it will be noted that a novel device is provided wherein the lid of the receptacle can be readily and conveniently removed and supported, making the device especially adaptable for garbage cans and the like which obviates the necessity of a person bending over the receptacle when removing the lid therefrom.

While I have shown and described the preferred embodiment of my invention, it will be understood that minor changes in construction, combination, and arrangement of parts may be made without departing from the spirit and scope of the invention, as claimed.

Having thus described my invention, what is claimed is:—

1. A lid lifter for receptacles comprising a supporting post having a recess, a spiral rib formed in said recess, a sleeve journaled and slidably mounted upon said post, an arm secured to said sleeve, means carried by said arm for engagement with the rib, means connecting the arm to the lid of a receptacle, and means exerting upward pressure upon said arm.

2. A lid lifter for receptacles comprising a supporting post having a recess, a spiral rib formed in said recess, a sleeve journaled and slidably mounted upon said post, an arm secured to said sleeve and extending through the same, a roller carried by said arm and extending into the recess and adapted to have an engagement with the spiral rib, means connecting said arm to the lid of a receptacle, and means for exerting upward pressure upon said arm.

3. A lid lifter for receptacles comprising a supporting post, an arm connected to said supporting post and adapted to have upward and lateral movement, means connecting said arm to the lid of a receptacle, an actuating rod slidably connected to said post, and a lever journaled to the upper end of said rod and to the arm, and a foot pedal pivoted to said post and connected to the actuating rod for exerting upward pressure upon the arm.

4. A lid lifter for receptacles comprising a supporting post, an arm mounted on said post for vertical and lateral movement, means for moving said arm vertically and laterally, said arm having a notch in the free end thereof and adapted to receive the handle of the lid of a receptacle, and a spring actuated bolt carried by said arm and adapted to overlie the notch for holding the handle of the lid therein.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD SNICKERS.

Witnesses:
C. E. RUNACRES,
A. N. WARD.