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R. DE BOER

COMBINED ASH RECEPTACLE AND LIGHTER MOUNTING

Filed Nov. 5, 1928

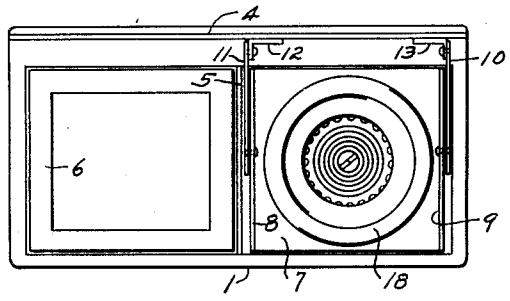

Fig. 1

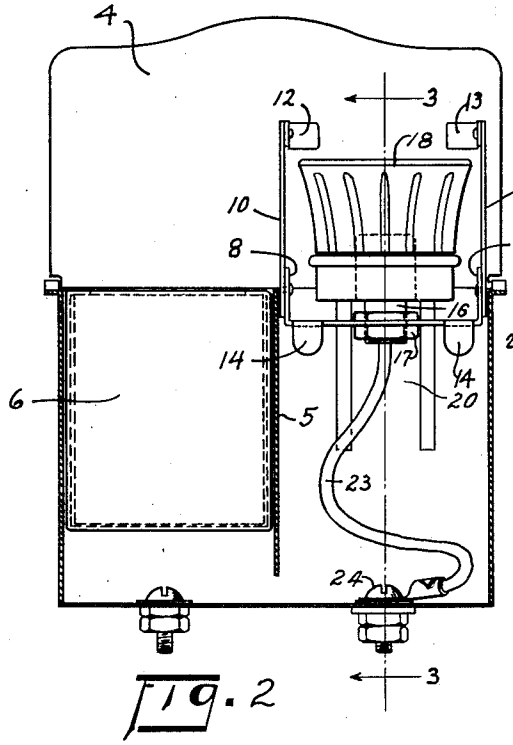

Fig. 2

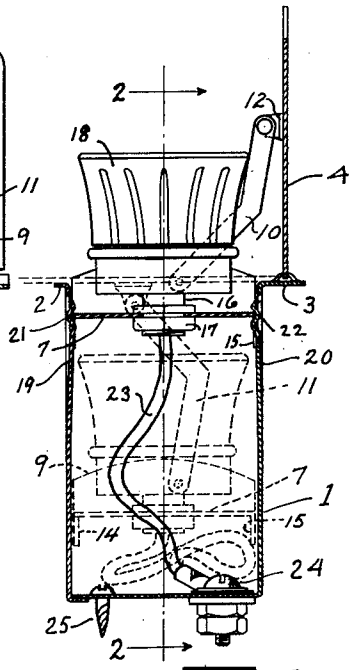

Fig. 3

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UNITED STATES PATENT OFFICE.

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COMBINED ASH RECEPTACLE AND LIGHTER MOUNTING.

Application filed November 5, 1928. Serial No. 317,186.

This invention relates to a combined ash receptacle and mounting for an electric lighter of the type known as pass-a-lite.

The main objects of this invention are to provide an improved container mounting of this type which is adapted to be embedded in the surface to which it is attached with the top end thereof substantially flush with such surface; to provide a device of this character in which the interior parts and mechanism may be quickly and readily removed in order to gain access to the bottom of the container; to provide a device of this character in which the raising of the lid will raise a platform upon which the lighter unit is mounted; and to provide improved means for frictionally retaining the platform in raised position so as to resist a limited amount of downward pressure thereon.

An illustrative embodiment of this invention is shown in the accompanying drawings, in which:

Fig. 1 is a top plan view of the device with the cover lid shown in raised position.

Fig. 2 is a vertical longitudinal medial sectional view taken on the line 2—2 of Fig. 3.

Fig. 3 is a vertical transverse sectional view taken on the line 3—3 of Fig. 2.

In the construction of devices of this character where they are embedded in the surface to which they are attached with the cover lid substantially flush with the surface thereof, it is highly desirable to have the attaching means for the receptacle concealed from view. This is best accomplished by having the attaching means, which are usually screws, pass through the bottom of the container. Therefore it is essential that the parts carried within the container be readily removable so that access may be had to these attaching screws.

In the present instance the device is a combined ash receptacle and cigar and cigarette lighter. The lighter unit is of the type having an electrically heated lighting element, the circuit to which is closed by a slight downward movement of the lighter unit upon its mounting stud. After the lighting unit has had contact made for a few moments and becomes heated, the unit is detachable and removable from its mounting stud, it having frictional engagement therewith. This lighter and combined mounting stud and contact switch are rigidly mounted on a vertically slidable platform which is raised and lowered by suitable link connections between it and the receptacle cover lid.

In the construction shown in the drawings, the receptacle comprises an outer sheet metal casing 1 of substantially rectangular shape having sides, ends and bottom with the top thereof open. An outwardly extending peripheral flange 2 is integrally formed around the open top end of the receptacle and at the rear side thereof said flange projects a greater distance as shown at 3 than at the front side and ends.

A closure cover 4 is hingedly mounted on said rearwardly extending flange 3 and is adapted to close the top of the receptacle when folded down to horizontal position. A transversely extending vertical partition wall 5 divides the receptacle into two substantially equal compartments and one of these compartments as shown at the left-hand side of Figs. 1 and 2 is adapted to slidably receive an ash receptacle 6 frictionally retained therein.

The other compartment of the container has a horizontally disposed platform 7 vertically slidable therein. The ends of the platform 7 are turned upwardly to form end flanges 8 and 9 to which are pivotally connected the lower ends of connecting links 10 and 11. The upper ends of said connecting links are pivotally attached to depending ears of mounting clips 12 and 13 which are secured to the under side of the closure lid 4.

The front and rear edges of the platform 7 have depending lugs 14 and 15 which together with the flanges 8 and 9 present a bearing surface for the platform during its vertical movement within the container 1, and hold it in a horizontal position.

The platform 7 has a lighter unit mounting stud 16 mounted in vertical position in the medial part thereof, by a nut 17 screwed on the lower end of the stud 16 on the under side of the platform. The removable and detachable lighter unit 18 is frictionally slidable upon the combined stud and switch 16.

Means are provided for holding the platform 7 in the raised position shown in Fig. 3 so as to resist a certain amount of downward and upward pull which is required to oper-

ate the lighting unit 18. Downward movement is required to close the switch to the heating element of the lighter and then upward movement to detach the lighting unit from its frictional hold upon the stud 16. These means comprise portions of the outer casing 1 struck inwardly from the front and back walls thereof to form spring arms 19 and 20. The upper ends of these arms are bent or kinked to form inwardly facing grooves 21 and 22 which frictionally embrace opposite edges of the platform 7.

An insulated electrical conductor 23 extends from the interior of the stud 16 to a binding post screw 24 mounted in the bottom of the container 1 and insulated therefrom.

The arrangement of the platform 7, links 10 and 11, and cover lid 4 is such that when the cover is in raised position the upstanding flanges 8 and 9 may be grasped by the fingers and the platform entirely removed from within the container 1 so that access may be had to the bottom of the container for putting in the attachment screws 25.

In the operation of this device the cover lid 4 is raised to a vertical position as shown in full lines in the figures of the drawings. Raising of the lid 4 to this position raises the platform from the position shown in dotted outline in Fig. 3 to the position shown in full lines therein in which position the inwardly facing grooves 21 and 22 in the upper ends of the spring arms 19 and 20 engage the opposite edges of the platform and hold it in semi-rigid position, so as to resist a certain amount of upward or downward movement.

When it is desired to use the lighting unit 18, the unit is grasped by the fingers and pressed downwardly a short distance so as to make electric switch contact in the interior thereof which construction is not shown nor is a part of this application for patent. When the heating element that is within the lighter unit 18 becomes hot, the unit is then removed vertically upwardly off of its stud 16 and after being used it is replaced thereon.

When it is desired to close the receptacle, the lid 4 is grasped and swung forwardly and downwardly, greater pressure being required for such action than is required for closing the contact switch within the lighter unit 18. Downward movement of the lid through the medium of the links 10 and 11 carry the platform 7 out of the grooves 21 and 22 and downwardly within the container to the position shown in dotted outline in Fig. 3.

Although but one specific embodiment of this invention has been herein shown and described, it will be understood that numerous details of the construction shown may be altered or omitted without departing from the spirit of this invention as defined by the following claims.

I claim:

1. A device of the class described comprising a rectangular shaped container having an open top, a cover lid pivotally mounted at the top end of said container, a platform vertically slidable in said container, links connecting said platform with said lid for raising and lowering said platform when said lid is open and closed respectively, a spring arm on said container having a groove therein for engaging said platform when said platform is in a raised position, said spring arm being adapted to yieldably retain said platform to resist a pre-determined amount of upward or downward pressure exerted thereon and to release said platform when a greater amount of pressure is exerted thereon.

2. A device of the class described comprising a rectangular shaped container having an open top, a cover lid pivotally mounted at the top end of said container, a platform vertically slidable in said container, links connecting said platform with said lid for raising and lowering said platform when said lid is open and closed respectively, spring arms on opposite sides of said container, said arms having grooves therein for engaging opposite sides of said platform when said platform is in a raised position, said arms being adapted to yieldably retain said platform to resist a predetermined amount of upward or downward pressure exerted thereon and to release said platform when a greater amount of pressure is exerted thereon.

3. A device of the class described comprising a rectangular shaped container having an open top, a cover lid pivotally mounted at the top end of said container, a platform vertically slidable in said container, links connecting said platform with said lid for raising and lowering said platform when said lid is open and closed respectively, portions of opposite sides of said container being struck inwardly to form spring arms, the top ends of said arms being kinked to form grooves for engaging opposite sides of said platform when said platform is in a raised position, said arms being adapted to yieldably retain said platform to resist a predetermined amount of upward or downward pressure exerted thereon and to release said platform when a greater amount of pressure is exerted thereon.

4. A device of the class described comprising a rectangular shaped container having an open top, a cover lid pivotally mounted at the top end of said container, a platform vertically slidable in said container, said platform having upwardly extending flanges on the opposite ends thereof and depending lugs on the opposite sides thereof, said flanges and lugs serving as bearings for retaining said platform in horizontal position during its sliding movement, links connecting said flanges with said lid for raising and lowering

said platform when said lid is opened and closed respectively, a spring arm on said container having a groove therein for engaging said platform when said platform is in raised position, said spring arm being adapted to yieldably retain said platform to resist a predetermined amount of upward or downward pressure exerted thereon and to release said platform when a greater amount of pressure is exerted thereon.

In testimony whereof I have hereunto set my hand at Grand Rapids, Michigan this 2nd day of November, 1928.

RUDOLPH DE BOER.