Nov. 19, 1935. A. C. GRUNWALD 2,021,723

ASH RECEIVER

Filed March 1, 1935

Fig. 1.

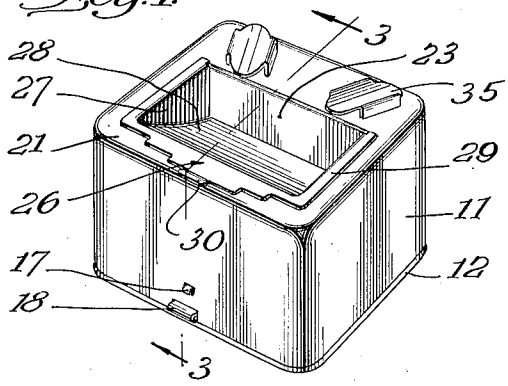


Fig. 4.

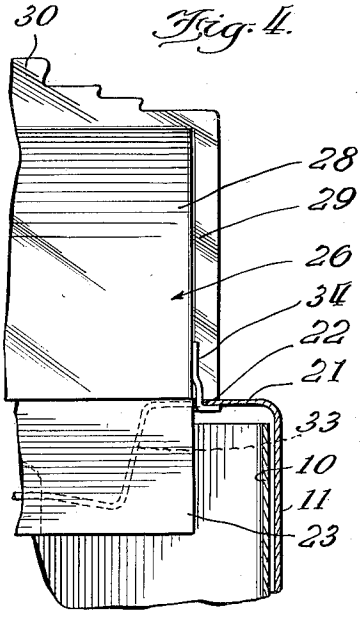


Fig. 2.

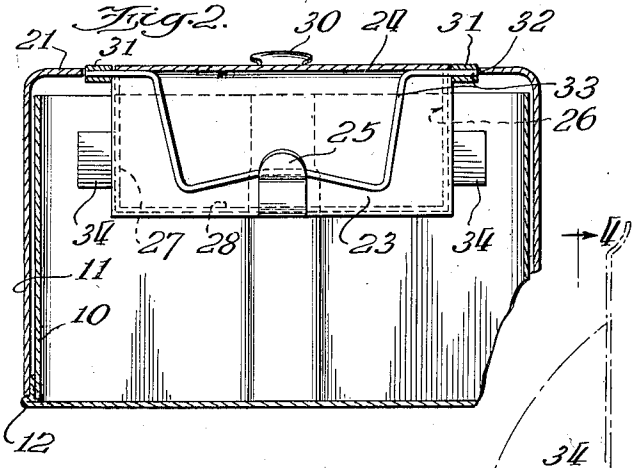


Fig. 5.

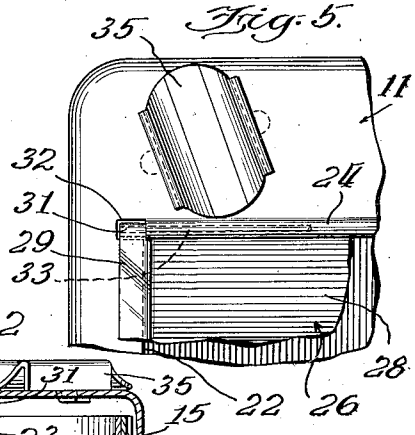
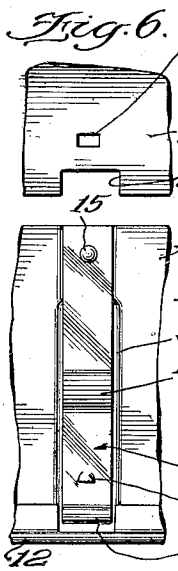


Fig. 6.



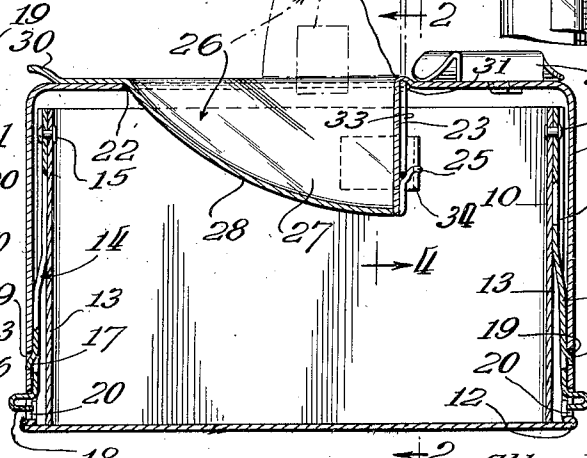


Fig. 3.

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2,021,723

ASH RECEIVER

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Application March 1, 1935, Serial No. 8,827

6 Claims. (Cl. 131—51)

My invention provides an ash receiver which is of sturdy and economical construction, of good appearance, convenient to manipulate, and easy to clean.

One of the salient features of the invention is a scoop-like tray, open at one end, which normally occupies and closes an opening in the top of a suitable receptacle. The receptacle has a wall, extending downwardly from one of the margins of the top opening, such wall normally constituting a stationary gate for the open end of the tray. The tray is pivoted to the receptacle and arranged to be swung upwardly from the receptacle opening, to permit the contents of the tray to drop between the gate and the adjacent edge of the tray bottom.

An important feature of the invention resides in the fact that the tray bottom is downwardly inclined, preferably in a curved line, toward the stationary gate which normally closes the open end of the tray. As a result of this arrangement, the contents of the tray naturally gravitate into the angle between the gate and the tray bottom, and are quickly discharged into the receptacle beneath, by but a slight upward pivotal movement of the tray.

Other distinguishing features of my improved ash receiver are novel means for pivoting the tray to its associated receptacle, and novel devices for detachably securing to each other the telescoping boxes which preferably constitute the receptacle by which the tray is carried.

Additional objects, features and advantages of my invention will appear from the following description, wherein reference is made to the accompanying sheet of drawing, in which:

Fig. 1 is a perspective view of my improved ash receiver;

Fig. 2 is a vertical section which may be regarded as taken on line 2—2 of Fig. 3 and looking in the direction indicated by the arrows;

Fig. 3 is a vertical sectional view which may be regarded as taken in the plane of the line 3—3 of Fig. 1 and looking in the direction indicated by the arrows;

Fig. 4 is a fragmentary view, partly in section and partly in elevation, which may be regarded as taken in the plane of the line 4—4 of Fig. 3 and looking in the direction indicated by the arrows,—after the scoop-like tray has been swung to an upright position;

Fig. 5 is a fragmentary top plan view of one corner of the ash receiver; and

Fig. 6 is a fragmentary side elevational view illustrating the cooperating fastening elements of the inner and outer boxes of the receptacle.

Similar characters of reference refer to similar parts throughout the several views.

My improved ash receiver preferably comprises a receptacle consisting of telescoping sheet metal boxes 10 and 11 arranged snugly one within the other. The inner box 10 is open at its top and is provided at its lower edges with a flange 12 to engage the lower edges of the walls of outer box 11, which has an open bottom.

Pressed into opposite walls of the inner box 10, are vertically extending outwardly opening channels 13. Each of these channels receives a flat spring 14, which has its upper end permanently secured in the channel by a rivet 15. Each spring is outwardly bent at 16, is provided with a lug 17, (preferably struck from the metal of the spring as shown) and a U-shaped finger piece 18.

The walls of the outer box 11, which overlie channels 13, are provided with apertures 19, to receive lugs 17, and notches 20, to receive finger pieces 18.

By virtue of the devices just described, the inner and outer boxes 10 and 11 are normally fastened together, in telescoping relation, by the engagement of lugs 17 with the apertures 19 of the outer box 11. However, the inner and outer boxes readily may be disengaged from each other by simultaneously pressing upon the finger pieces 18. The lower ends of springs 14 then move back into the channels 13, and the lugs 17 are moved out of the apertures 19. Thereupon the outer box 11 may be lifted off of the inner box 10. The devices described act automatically to secure the boxes 10 and 11 together when they are again telescoped to the relative positions shown in Figs. 1, 2 and 3.

Formed in the top 21 of the receptacle (being the top of outer box 11) is a rectangular opening 22. A part of the metal which is removed from top 21 to form opening 22, is turned downwardly from one of the margins of the opening to provide a vertical wall 23. A bead 24 is preferably formed at the junction of wall 23 and receptacle top 21, in order to provide a downwardly facing channel for the reception of the ends of the wire spring which serves to pivot the scoop-like tray presently to be mentioned.

Formed integral with the lower edge of the vertical wall 23 is a lug which is turned upwardly along the wall to provide a hook 25 for engaging the intermediate portion of the aforesaid wire spring which serves to pivot the scoop-like tray.

The tray, indicated as a whole at 26, has the

general shape of a scoop. It comprises the sides 27 and the curved (upwardly concave) bottom 28. The tray also comprises the substantially U-shaped marginal flange 29 which overlies three margins of the receptacle top opening 22, i. e., the flange overlies those margins of opening 22 other than the margin from which vertical wall 23 depends.

In making the scoop-like tray 26, I prefer to form the curved bottom 28, the two sides 27 and the U-shaped marginal flange 29 from a single piece of sheet metal, as illustrated. It should be understood, however, that these portions of the tray may be formed from separate pieces of metal and be soldered or otherwise joined together in any suitable manner.

That portion of the flange 29 which directly joins the curved bottom 28 is preferably given a decorative conformation, as illustrated, and is provided with a finger piece 30.

Those portions of the U-shaped flange 29 which directly join the sides 27 are extended beyond those edges of the sides 27 which lie adjacent the downwardly depending wall 23. These extended portions of the flange 29 are conformed to provide eyes 31 for the reception of the extremities of the wire whereby the tray is pivotally mounted in its receptacle. Rectangular apertures 32 are formed in the receptacle top 21, adjacent the ends of bead 24, to accommodate the eyes 31.

The spring wire wherewith the tray is pivotally mounted in its receptacle is shown at 33. It has a shape generally corresponding to the vertical section of an inverted hat having a dented crown (see Fig. 2). The spring 33 lies alongside depending wall 23 on the face of the latter which lies away from the tray 26. The lower portion of the spring is engaged by the hook 25. The end portions of the spring are engaged in the channel afforded by the bead 24, and the extremities of these end portions engage in the eyes 31 of the tray flange 29.

Soldered to, or otherwise carried by the tray sides 27, are lugs 34, the offset ends of which are adapted to engage under the lateral margins of the receptacle opening 22 to prevent the tray from being swung out of the receptacle beyond the upright position illustrated in Fig. 4.

When the scoop-like tray 26 is in its normal position (illustrated in Figs. 1 to 3 inclusive) the depending wall 23 acts as a stationary gate for the open end of the tray. Since the tray bottom curves downwardly to this stationary gate, the contents of the tray naturally tend to seek a position in the angle between the tray bottom 28 and the stationary gate 23. Therefore, and unless the tray is very full of ashes or other refuse, but a very slight upward movement of the tray is necessary in order to discharge all of the tray contents through the space opened between gate 23 and the open end of the tray which such gate normally closes.

When the tray is in its normal horizontal position, it cooperates with the gate 23, and with the margins of the receptacle opening 22, to prevent smoke or dust from escaping upwardly from the receptacle through the opening 22.

If desired, the top of the receptacle may carry a plurality of cigar supports, indicated at 35. These supports, and the manner of their attachment to the receptacle top, constitute no part of the present invention.

Having thus illustrated and described a preferred embodiment of my invention, what I claim as new and desire to secure by Letters Patent of the United States is:

1. An ash receiver comprising a receptacle having a rectangular opening in its top, said opening being spaced from all of the edges of the top, an interior wall for said receptacle depending from a margin of said opening, a scoop-like tray disposed in and closing said opening, said depending wall constituting a gate for said scoop-like tray, and a spring member mounted on the inner side of said wall and having ends resiliently projected outwardly for pivotally mounting the tray on the receptacle for movement away from and toward the gate constituted by said wall.

2. An ash receiver comprising a receptacle having an opening in its top and a wall extending downwardly from the margin of said opening, a scoop-like tray disposed in and normally closing said opening, said wall constituting a gate for said tray, and devices pivotally mounting the tray for movement toward and away from the gate constituted by said wall, said devices comprising bearing eyes formed on the tray and a wire spring member supported by the said wall, and having its extremities held in said bearing eyes due to the tendency of said wire spring member to move its extremities away from each other.

3. An ash receiver comprising a receptacle having an opening in the top thereof, the edges of said opening being spaced from the edges of the top of the receptacle, an interior wall for said receptacle depending from an edge of said opening, a tray disposed in and closing said opening, said tray having an open end for which said wall constitutes a stationary gate, and devices pivotally mounting the tray for movement with respect to the receptacle, said devices comprising bearing eyes formed on the tray, said receptacle top having apertures accommodating said eyes, a wire spring member removably supported on the concealed face of said wall, and a groove in the lower surface of the receptacle top receiving portions of the ends of said wire spring member, the extremities of said wire spring member being resiliently held in said bearing eyes due to the normal tendency of said wire spring member to separate its extremities.

4. In an ash receiver, a receptacle having an opening in the top thereof, the margins of said opening all being spaced from the margins of the top, an interior wall for said receptacle depending from one of the margins of said opening, a tray disposed in and normally closing said opening, said tray comprising an open end for which said depending wall constitutes a stationary gate, spaced bearing eyes carried by that end of the tray which lies adjacent said depending wall, said receptacle top having apertures accommodating said bearing eyes, and a spring member removably carried by said wall on its concealed face, said spring means comprising rod-like portions extending freely through said eyes.

5. An ash receiver comprising a receptacle having an opening in the top thereof, an interior wall for said receptacle depending from a margin of said opening, a scoop-like tray disposed in and normally closing said opening, the tray comprising two sides and a bottom and having an open end for which said wall constitutes a stationary gate, the bottom of said tray inclining downwardly toward said gate, bearing eyes formed on the tray, said receptacle top having apertures which accommodate said bearing eyes, a channel formed in the under surface of the receptacle

top, said channel being in substantial alignment with said eyes and said apertures, a substantially U-shaped spring carried by the concealed face of said wall, an abutment on said wall for engaging the base portion of said U-shaped spring, and oppositely turned offset portions formed on the legs of said U-shaped spring, said offset portions engaging in said channel and extending freely through said bearing eyes.

6. An ash receiver comprising a receptacle consisting of two telescoping boxes, the outer one of which supports an ash receiving tray adapted to be dumped into the inner one, vertically disposed outwardly opening channels formed in opposite walls of the inner box, leaf springs disposed in said channels and having their upper ends secured in said channels, said springs being so conformed that their lower ends are normally urged from said channels, detent lugs formed on said springs near the lower ends thereof, and outwardly turned finger pieces formed at the lower ends of said springs, the walls of the outer box which lie adjacent said channels being provided with apertures for the reception of said lugs and notches for the reception of said finger pieces.

ALBERT C. GRUNWALD.