Feb. 2, 1937. C. E. BERG 2,069,400

ASH RECEIVER

Filed Sept. 27, 1932

FIG. 1.

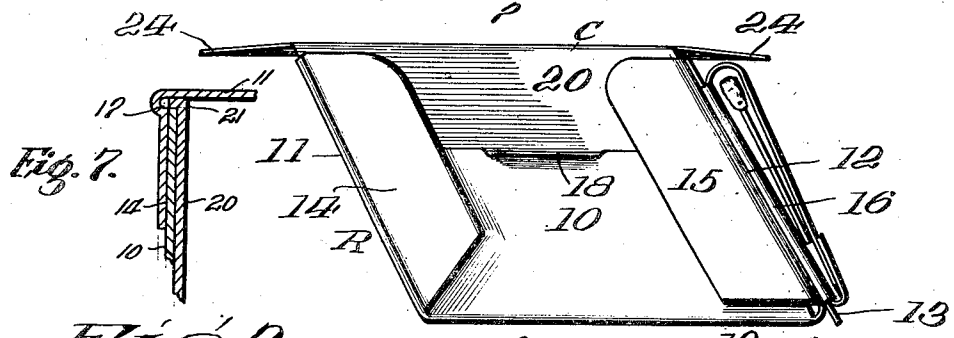


Fig. 7.

FIG. 2.

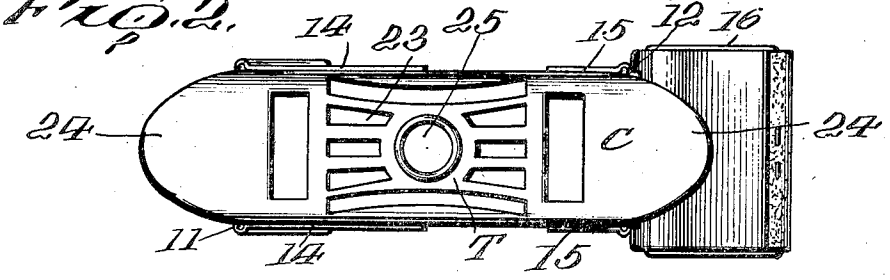


FIG. 3.

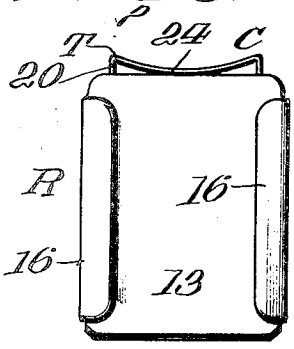


FIG. 6.

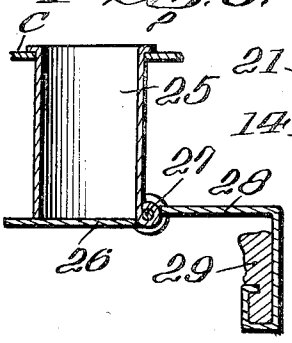


FIG. 4.

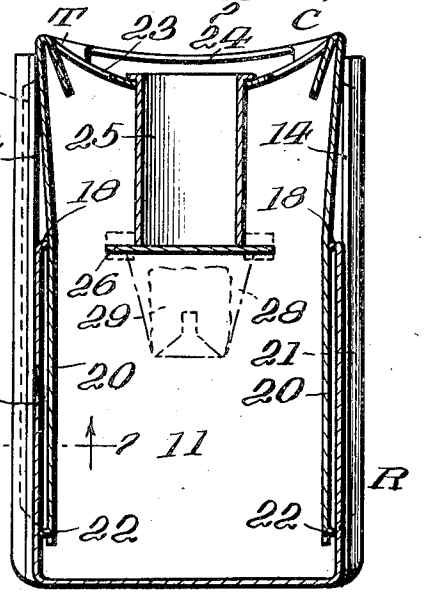
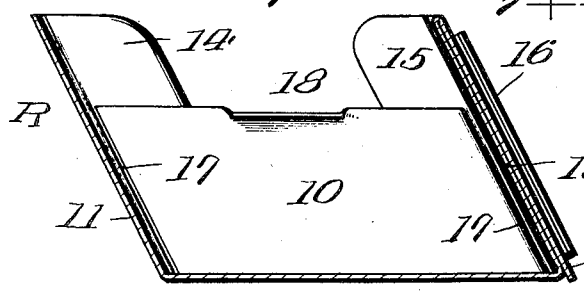


FIG. 5.



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ASH RECEIVER

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Application September 27, 1932, Serial No. 635,115

8 Claims. (Cl. 131—51)

This invention is a device for temporarily storing ashes dropped from burning cigars and cigarettes until they may be conveniently disposed of in a permanent way.

One of the objects of the invention is to provide an ash tray with an elevated grid-like portion through which ashes may freely drop, said grid-like portion being associated with butt-aprons for supporting partially consumed cigars and cigarettes, said grid-like portion being so disposed that ashes falling from lighted cigars or cigarettes resting upon said butt-aprons will fall through to a tray or other receptacle disposed beneath it. A further object is to provide an ash tray with simple and effective means for snuffing the burning ends of cigarettes. A further object is to provide a box-like receptacle for ashes, and a tray member slidably engaging the receptacle and forming a closure therefor, the parts being so constructed and arranged as to permit ready removal of ashes, etc., which may accumulate within the receptacle. A further object is to provide an ash receiver of the general character above described, constructed in the form of a simple metal stamping, and means at one end of the receptacle for retaining a match strip.

The invention will be hereinafter fully set forth and particularly pointed out in the claims.

In the accompanying drawing:—

Figure 1 is a side elevation illustrating an ash tray constructed in accordance with the invention. Figure 2 is a top plan view. Figure 3 is an end view. Figure 4 is a transverse section on the line 4—4, Figure 2. Figure 5 is a longitudinal section of the receptacle illustrating the guides. Figure 6 is a detail sectional view illustrating the snuffer. Fig. 7 is a detail sectional view taken on the line 7—7 of Fig. 4.

Referring to the drawing, R designates a box-like receptacle which may be of any desired shape or contour. For purposes of illustration it is shown as constructed of sheet metal, preferably in the form of a metal stamping. It is obvious, however, that it may be made by die-casting molding, or in any other well known manner. Said receptacle comprises a bottom wall provided with integral side walls 10, and end walls 11 and 12, the end walls being parallel and vertically inclined as shown. The end wall 12 may be provided with an integral extension 13. The end wall 11 has its side edges provided with longitudinal flanges 14 which are bent back so as to overlap the adjacent ends of the sides 10. The end wall 12 is provided with similar flanges 15 bent over to engage adjacent portions of the sides 10, all as clearly shown in the drawing. The extension 13 if employed is bent downwardly and back against the outer surface of end wall 12, and its side edges are provided with longitudinal flanges 16, bent toward each other to provide guides for the reception of the usual cardboard cover of a common type of match strip now in general use. Obviously, however, the match-holder feature may be omitted without departing from the spirit of the invention.

It will be noted that the flanges 14 and 15 firmly embrace the sides 10 so as to provide a rigid box-like structure, adapted to receive and store ashes and other débris until the same may be permanently disposed of. The end edges of the side walls are spaced a slight distance from the adjacent end walls so as to provide vertically inclined parallel guideways 17, and the top edges of said side walls have inwardly bent abutment portions 18, all as clearly shown in the drawing.

C designates a tray member, which for purposes of illustration is shown as a closure for the receptacle R. Said closure is preferably formed of a sheet metal stamping provided with side walls 20 which fit within the receptacle R, said end walls being joined by a top wall T. The end edges of said side walls 20 are bent laterally, as indicated at 21, to enter the guides 17, so as to permit a slidable movement of the member C with respect to the receptacle R. The said slidable movement is limited in the separating direction by abutment flanges 22 complemental to the flanges 18 of the receptacle R. It will be noted that the end walls 11 and 12 extend a considerable distance above the top edges of the side walls 10, so that while the tray member C is in closed position, the butt-aprons 24, hereinafter referred to, rest upon the top edges of said end walls. With the parts in maximum separated relation it will be observed that the open spaces between the ends of the sides 20, of the closure member C provide ample clearance for emptying the receptacle R of its contents.

The top wall T of closure member C is provided with a grid-like portion 23, and overhanging butt-aprons 24, the parts being so constructed and arranged that the grid portion is in a lower plane than the butt-aprons 24, and the top edges of the sides 20. Centrally located in the grid portion 23 is a snuffer, comprising a depending sleeve-like guide 25, the lower end of which is normally closed by a movably supported snuffer plate 26. It is preferred to pivotally mount said snuffer plate 26 on the lower end of the sleeve

25, as indicated at 27, and to keep the same in normally closed position over the lower open end of the sleeve 25 in suitable manner. For purposes of illustration, the snuffer 26 is provided with an extension 28 provided with a counterweight 29, for maintaining the snuffer plate in its closed position. It will be observed that the snuffer plate 26 normally closes the lower end of the sleeve 25 in such manner as to approximately prevent entrance of any air into the lower end of the sleeve. Therefore, if a lighted cigarette is placed in the sleeve with the lighted end downward, the light is quickly extinguished because of lack of the necessary air to support combustion.

In practice, the members R and C in their assembled relation as illustrated in the drawing, are placed in any suitable position within convenient reach of a smoker or group of smokers. The cigar or cigarette butts during the smoking period may be rested from time to time upon the butt aprons 24, with the lighted ends over the grid 23, so that any ashes which may fall therefrom will drop conveniently into the receptacle R. Also if it is desired to clean the ashes from the cigarettes or cigars, it is only necessary to lightly scrape the lighted or burned end over the grid 23 which will remove the excess ash, and permit it to drop into the receptacle.

It is well known that cigarettes very often continue to burn after the smoker is through with them, and therefore constitute a serious fire hazard. To reduce this hazard ready and positive extinguishment of a burning cigarette may be easily accomplished by inserting the lighted end into the sleeve 25, and pushing the cigarette end firmly against the snuffer 26, and leaving the cigarette in that position. In this way, the cigarette is supported in a vertical position with the lighted end downward so that if the light is not completely extinguished the ashes will rest upon the snuffer and if they drop at all, will drop into the receptacle. However, there being little or no air available to support combustion, the cigarette will soon be extinguished and may remain within the sleeve 25 until another cigarette is to be extinguished, or it may be pushed directly through into the receptacle.

When it is desired to empty the receptacle, it is only necessary to grasp the sides of the closure member and lift the same, thereby separating the closure and the receptacle to the limit permitted by the abutments 18 and 22, whereupon by tilting the receptacle toward one end, the ashes and other débris will readily drop out through the open end space between the sides 20, after which the receptacle may be placed upon a table or other support and the weight of the closure will cause it to slide downwardly to collapsed position.

For convenience, a strip of matches, such as the ordinary paper covered match strip now in general use may be inserted between the guides 16, so as to be readily accessible.

The advantages of the invention will be readily appreciated by those skilled in the art to which it belongs. For instance, it will be particularly noted that an exceedingly simple and inexpensive smokeless ash receiver structure is provided, in which the burning cigars or cigarettes are supported with their lighted ends slightly lower than their other ends, and so positioned over a grid that any ashes falling therefrom will drop into a receptacle, in which they may be safely retained until other and permanent disposition may be made of them. Another advantage is that the fire hazard is greatly reduced because partially smoked lighted cigarettes will be automatically extinguished if deposited upon the tray member and afterwards forgotten, because they will not burn beyond the outer edge of the wide moat defined by the front edge of a butt apron. A further advantage is that a very simple and effective means is provided for snuffing the burning ends of cigarettes, so as to positively and definitely prevent danger of fire by reason of the failure to completely extinguish the light. A further advantage is that the parts may be made of metal stampings and readily and quickly fabricated, in such manner as to provide an exceedingly strong and durable device, having means not only for the supporting of burning cigars and cigarettes and for the safe temporary storage of ashes and burning portions, but also having means for conveniently supporting matches where they are readily accessible.

Having thus explained the nature of the invention and described an operative manner of constructing and using the same, although without attempting to set forth all of the forms in which it may be made, or all of the forms of its use, what is claimed is:—

1. In an ash receiver, a box-like receptacle formed with end and side walls, said end walls having longitudinal flanges bent back upon and engaging the side walls, one of said end walls having an extension bent back upon and lying flatly against it, the longitudinal edges of said extension having bent over guide flanges to receive the cover of a match strip.

2. An ash receiver of the character described compriisng an ash receptacle of approximately rectangular cross section and having vertically inclined parallel guides therein, a closure member for said receptacle, said closure member having a grid-like portion extended across the top of the receptacle and so constructed as to rest thereon, said closure member also having portions depending from said grid-like portion and having telescopic slidable engagement with said receptacle, said depending portions having complemental means engaging said guides, and means for limiting separating slidable movement of said closure member and said receptacle.

3. An ash receiver of the character described comprising an ash receptacle having vertically inclined grooves in the sides thereof, a closure member for said receptacle, said closure member having a grid-like portion extended across the top of the receptacle and so constructed as to rest thereon, said closure member being provided with vertically inclined depending portions having telescopic slidable engagement with said receptacle, said depending portions having laterally extended portions complemental to and engaging said grooves, and means for limiting separating movement of said closure member and said receptacle.

4. An ash receiver of the character described comprising a box-like receptacle having end walls and side walls, said end walls having members overlapping and engaging the side walls, the end edges of the side walls being spaced from the end walls to provide grooves, and a closure member extended across the top of said receptacle and so constructed as to rest upon the end walls thereof, said closure member having depending side walls

telescoping within the receptacle and provided with bent edges slidably engaging said grooves.

5. In an ash receiver, a box-like receptacle having side walls and end walls, one of said end walls having its side edges provided with longitudinal flanges which are bent into overlapping engagement with said side walls, said last-mentioned end wall having one end bent downwardly and back upon itself in such manner as to lie over the outer surface thereof, the side edges of said extension having inwardly bent-over portions arranged in such manner as to provide opposite guides constructed and arranged to receive the cover of a match strip.

6. An ash receiver of the character described, comprising an ash receptacle of approximately rectangular cross section having upstanding side walls and inclined approximately parallel end walls, said end walls extending to a plane above the top edges of the side walls, said receptacle having internal guides in the corners thereof arranged parallel with said end walls, and the top edges of said side walls being provided with stops, a closure member having depending portions slidably engaging said guides, said depending portions being surmounted by a grid-like portion so positioned as to extend across the top of the receptacle while in closed position, said depending portions also having stops complemental to the first-mentioned stops, the respective stops being so positioned as to limit separating movement of the closure member and the receptacle.

7. An ash receiver of the character described, comprising an ash receptacle of approximately rectangular cross section having upstanding side walls and inclined approximately parallel end walls, said end walls extending to a plane above the top edges of the side walls, said receptacle having internal guides in the corners thereof arranged parallel with said end walls, the top edges of said side walls being provided with stops, a closure member having depending portions engaging said guides, said depending portions being surmounted by a grid-like portion so positioned as to extend across the top of the receptacle and rest upon the top edges of said end walls while in closed position, and means carried by the depending portions so positioned as to engage said stops during relative separating movement of the closure member and receptacle.

8. An ash receiver of the character described, comprising an ash receptacle of approximately rectangular form having side and end walls, the end walls being higher than the side walls, said receptacle being provided with internal guides, a closure for said receptacle having means for slidably engaging the guides so that the closure may slide with respect to the receptacle and be normally supported by the end walls while in closed position, said closure having butt-receiving means including a grid-like portion, means for limiting sliding movement of the closure in one direction, an open-ended tube depending from said grid-like portion, a movably supported closure plate for the lower end of said tube, and means for yieldably holding said closure plate in closed position against said tube, said yieldably holding means being capable of sustaining the weight of a cigarette located within said tube, said closure plate and said tube being so constructed and arranged as to approximately prevent entrance of atmospheric air into the lower end of the tube in such manner as to extinguish the lighted end of a cigarette projected axially downward into the tube.

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