

March 26, 1946.

A. G. WHEELER

2,397,394

ASH TRAY

Filed June 23, 1943

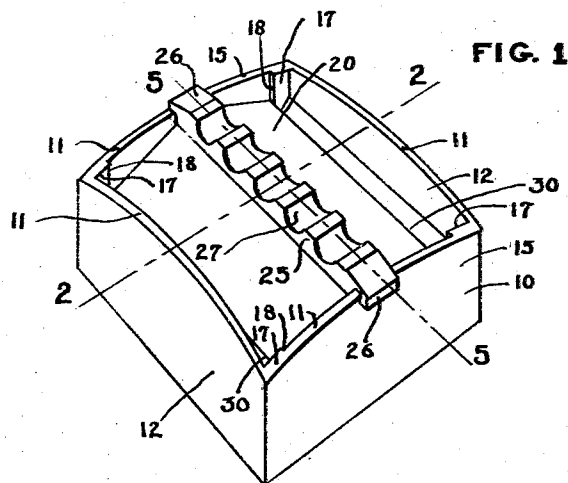


FIG. 1

FIG. 4

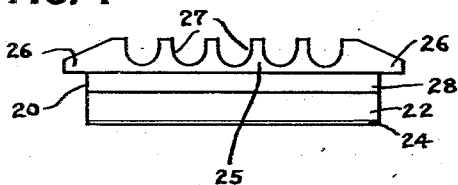


FIG. 2

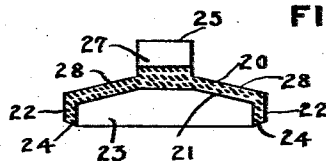


FIG. 5

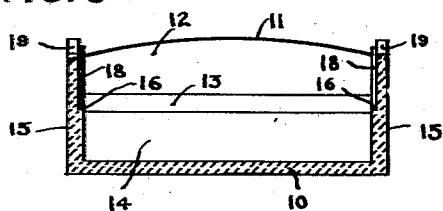
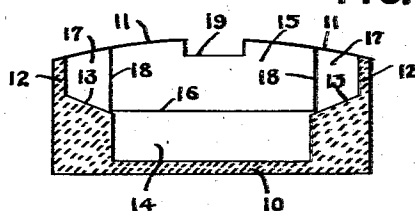


FIG. 3



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2,397,394

ASH TRAY

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Application June 23, 1943, Serial No. 491,898

10 Claims. (Cl. 131-235)

This invention relates to ash trays of the type provided with a support upon which a lighted cigarette may be temporarily placed. While particularly designed for cigarettes, the ash tray of the present invention may be made of a size to accommodate cigars or both cigars and cigarettes simultaneously, and references hereinafter to cigarettes should be interpreted to include cigars.

The general objects of the present invention are to provide an ash tray which is safe and convenient for the smoker to use, easy to wash or otherwise clean, simple and durable in construction and economical to manufacture. Among the more specific objects of my invention are to provide an ash tray having a safety rest for lighted butts, a choke channel for automatically extinguishing discarded or neglected lighted butts, and a substantially air-tight disposal chamber for temporarily storing ashes and butts.

Numerous schemes have been proposed for accomplishing one and sometimes two of the specific objects enumerated above, but, so far as I am aware, no one has hitherto successfully combined all three features in a simple and sturdy device free from mechanical gadgets which are difficult to keep clean and in working order. For the safety rest feature, my improved ash tray relies upon the well-known expedient of providing a support so arranged that, should a lighted cigarette placed upon it be neglected, any over-balancing of the lighted butt occurring upon continued burning will result in depositing the butt in the body of the ash tray, rather than upon the surface of the supporting table or the like. Ash trays have also been provided with choke channels in which a lighted cigarette which it is desired to discard may be placed and will automatically be choked or extinguished without need for tamping or pressing the lighted end. I have combined these two features in a novel way so that a burning cigarette topping from a safety rest will be automatically delivered into a choke channel, the same choke channel being conveniently available to a smoker who wishes to discard a burning butt. Ash trays have also been made in which a cover or partition may be lifted, tilted or slid away to deposit the accumulated debris in a sealed or semi-sealed disposal chamber. In some ash trays, a safety rest and a disposal chamber have been combined. In my improved ash tray, I have combined all three of these features in a novel manner so that the choke channel receives ashes and butts from the

safety rest or by direct discarding and may discharge its contents into the disposal chamber.

My improved ash tray, in its preferred form, consists of only two members each of which may be readily formed by molding or pressing and may be made of any suitable non-combustible material such as glass, earthenware, porcelain or plastics, although, if desired, my ash tray could be made of metal. The outer member constitutes the body of the ash tray and of the disposal chamber, and the inner member constitutes a cover for the disposal chamber and incorporates the safety rest, the two members together cooperating to form the choke channel. The cover member has a loose sliding fit in the body member and may easily be lifted a short distance to deposit the accumulated debris in the disposal chamber, or may with equal ease be completely separated from the body member to permit emptying of the disposal chamber and washing or otherwise cleaning the two members.

Other objects and advantages of my ash tray will be understood from the following detailed description and the accompanying drawing, in which:

Figure 1 is a perspective view of an ash tray according to this invention;

Figure 2 is a central vertical section through the removable cover member taken on the line 2-2 of Figure 1;

Figure 3 is a central vertical section through the body member also taken on the line 2-2 of Figure 1;

Figure 4 is a side elevation of the cover member; and

Figure 5 is a central vertical section through the body member taken on the line 5-5 of Figure 1.

Referring more particularly to the drawing, the body member 10 is illustrated as being square in top plan and of hollow box-like construction. The upper edges of the walls of the box are rounded as shown at 11 for the dual purpose of improving the appearance of the ash tray and preventing the user from balancing a lighted cigarette on one of these edges. The opposed side walls 12 of the body member 10 are provided on their inner faces intermediate their height with sloping shoulders 13 extending along their lengths and serving as the bottoms of the choke channels. The shoulders 13 slope inward and downward toward a central sump or basin 14 which serves as the disposal chamber. The opposed end walls 15 are provided on their inner faces with horizontal ledges or shoulders 16 ex-

tending across between the sloping shoulders 13 and at approximately the level of the inner edges of the shoulders 13. The shoulders 16 and the inner edges of the shoulders 13 together form a sealing seat surrounding the disposal chamber 14 for receiving the cover member to be presently described. The walls 15 are also provided with portions 17 formed with vertical edges 18 for guiding the cover member in its vertical sliding movement, and with central notches 19 for receiving projecting portions of the cover member.

The cover member 20 is preferably hollowed out at its under side, as best shown at 21 in Figure 2, for lightness and economy of material, forming depending side walls 22 and end walls 23. The dimensions of the cover member 20 are such that it will have an easy sliding fit between the guides 18 and that the bottom edges of its walls 22 and 23 will seat snugly on the shoulders 13 and 16 respectively, the cover member 20 thus serving to seal the disposal chamber 14. The bottom edges of the side walls 22 are preferably tapered as shown at 24 in order to form a more perfect fit against the sloping shoulders 13. Because of this substantially air-tight joint between the cover member 20 and the body member 10, odors are prevented from escaping from the disposal chamber 14 when the cover is in place.

The upper surface of the cover member 20 is provided with a safety rest 25 in the form of a central rib which is somewhat longer than the cover member and projects at either end into and through a notch 19. The projecting ends 26 of the rib 25 are preferably tapered at their tops as illustrated for the purpose of preventing the seating of a cigarette thereon and also for the sake of appearance. By grasping the projecting ends 26 between a thumb and finger, the cover member 20 may be conveniently raised either partially or wholly out of the body member 10. The upper surface of the rib 25 is provided with one or more preferably rounded notches 27 of such size as to accommodate a cigarette. The top surface of the member 20 slopes outward and downward away from the central rib 25 as shown at 28. When the cover member is in service position as shown in Figure 1, its depending side walls 22 cooperate with the shoulders 13 and the side walls 12 of the body member 10 to form two choke channels 30 of a size such as to accommodate a cigarette lying lengthwise in a choke channel.

When the device is in the assembled position shown in Figure 1, it will be obvious that a cigarette may be temporarily supported in a notch 27 during an intermission in smoking. Should a lighted cigarette be neglected there, it will usually, due to the length and depth of the notches 27, go out when the burning end reaches the notch. Any ash dropping off will usually roll down a sloping top surface 28 and fall into a choke channel 30. Should the lighted butt become overbalanced during burning, it will fall out of the notch 27 and roll down an inclined surface 28 into a choke channel 30, where it will be smothered due to the cooling effect of the walls of the channel and the lack of draft to support combustion. Should a smoker wish to discard a lighted cigarette, he need not tamp it or press it out, but may simply drop it on an inclined surface 28, whence it will roll into a choke channel 30, or may place it directly in a choke channel, whereupon it will be promptly extinguished as described. By lifting the cover member slightly

by means of the projecting ends 26, the accumulated debris will roll down the sloping shoulders 13 forming the bottoms of the choke channels into the disposal chamber 14.

When it is desired to clean the ash tray, the cover member may be lifted out entirely, the contents of the disposal chamber emptied into a suitable receptacle, and the two members washed or wiped to clean them thoroughly.

It will be observed from the foregoing description that the choke channels 30 also serve as temporary collection chambers for butts and ashes pending their discharge into the disposal chamber 14. It will also be observed that the choke channels 30 are so arranged as to receive either cigarettes intentionally dropped therein or those which may be abandoned and roll therein due to continued combustion in the safety rest 25. The ash tray being so designed that lighted cigarettes can be supported for re-use nowhere except in the notches 27, these notches are sure to be used by even the most careless smoker. No messy squashing or pressing with the fingers is necessary to extinguish a cigarette, and the almost immediate extinguishing of a cigarette in a choke channel eliminates a common source of objectionable odor.

As most people object to the unsightly appearance of butts and ashes, I prefer to make my ash tray of opaque glass or plastic material, which renders the contents of the disposal chamber invisible, but transparent material could be used if desired. The two members may be made, if desired, of contrasting colors.

The ash tray illustrated is substantially square in top plan, but it will be understood that it may be made rectangular or, indeed, of any other desired form, the essential consideration being that the ash tray have at least one substantially straight side of appropriate length to form a choke channel.

Other modifications of my ash tray will readily suggest themselves. The drawing correctly shows a hand made ash tray that I have constructed, but in adapting the design for commercial manufacture by molding or pressing, it will be understood that the straight walls would be given draft and the sharp corners illustrated would be rounded, as is common practice in forming articles by molding or pressing. The projecting ends 26 of the central rib are convenient for removing the cover member, but said ends 26 and the notches 19 are not essential since the cover member obviously can be raised simply by gripping and pulling upward the rib 25. The guides 18 are helpful in guiding and centering the cover member 20, but are not essential. The shoulders 16 assist in getting tight sealing of the disposal chamber, but are not essential, particularly if one is satisfied with a somewhat less air-tight construction.

Having thus described my invention in the best form now known to me, what I claim is:

1. An ash tray having surrounding walls including at least one substantially straight side wall, said walls being so shaped as to discourage balancing a cigarette thereon, a substantially straight elongated choke channel of greater depth and width than the diameter of a cigarette located adjacent said side wall, a liftable inner member having a top surface sloping downward toward said choke channel, a cigarette rest located on said inner member above said sloping top surface, whereby a cigarette toppling out of

said rest or deposited on said sloping top surface may roll down into said choke channel, and a sump located beneath said inner member constituting a disposal chamber for butts and ashes, said inner member constituting a cover for said sump permitting access thereto.

2. An ash tray having surrounding walls including two opposed substantially straight side walls, said walls being so shaped as to discourage balancing a cigarette thereon, two substantially straight elongated choke channels of greater depth and width than the diameter of a cigarette located adjacent said side walls, a separable inner member having a top surface sloping downward at either side toward said choke channels, a cigarette rest located on said inner member above and between the oppositely sloping portions of said top surface, whereby a cigarette toppling out of said rest or deposited on said sloping top surface may roll down into one of said choke channels, and a sump located beneath said inner member below the level of said choke channels and constituting a disposal chamber for butts and ashes, said inner member being so constructed and arranged that when in service position it serves as a cover for said disposal chamber and blocks communication between said choke channels and said sump and that when in separated position it permits discharge of butts and ashes from said choke channels into said sump.

3. An ash tray comprising a body member having surrounding walls including at least one substantially straight side wall, a downward and inward sloping shoulder of greater width than the diameter of a cigarette extending along the inside of said side wall intermediate the height of said wall, a sump within said body member constituting a disposal chamber for butts and ashes and located adjacent the inner edge of said sloping shoulder, a cover member for said disposal chamber supported on said body member for lifting movement relative thereto to provide access to said disposal chamber, said cover member having a side wall extending substantially parallel to said straight side wall of said body member and adjacent the inner edge of said sloping shoulder, the said side walls of said body member and cover member and the said sloping shoulder constituting an elongated choke channel adapted to discharge its contents into said disposal chamber upon lifting said cover member, said cover member having a top surface sloping downward toward said choke channel, and a cigarette rest located on said cover member above said sloping top surface, whereby a cigarette toppling out of said rest or deposited on said sloping top surface may roll down into said choke channel.

4. An ash tray comprising a body member having surrounding walls including two opposed substantially straight side walls, downward and inward sloping shoulders of greater width than the diameter of a cigarette extending along the inside of said side walls intermediate the height of said walls, a sump within said body member constituting a disposal chamber for butts and ashes and located between the inner edges of said sloping shoulders, a cover member for said disposal chamber supported on said body member for lifting movement relative thereto to provide access to said disposal chamber, said cover member having two side walls extending substantially parallel to said straight side walls of said body member and adjacent the inner edges of said sloping shoulders, the said side walls of said body

member and cover member and the said sloping shoulders constituting spaced elongated choke channels adapted to discharge their contents into said disposal chamber upon lifting said cover member, said cover member having a top surface sloping downward at either side toward said choke channels, and a cigarette rest located on said cover member above said sloping top surface, whereby a cigarette toppling out of said rest or deposited on said sloping top surface may roll down into one of said choke channels.

5. An ash tray comprising a body member having surrounding walls including two opposed substantially straight side walls, downward and inward sloping shoulders of greater width than the diameter of a cigarette extending along the inside of said side walls intermediate the height of said walls, a sump within said body member constituting a disposal chamber for butts and ashes and located between the inner edges of said sloping shoulders, a cover member for said disposal chamber fitting within said body member and removable by vertical lifting movement to provide access to said disposal chamber, said cover member having two side walls extending substantially parallel to said straight side walls of said body member and adjacent the inner edges of said sloping shoulders, the said side walls of said body member and cover member and the said sloping shoulders constituting spaced elongated choke channels adapted to discharge their contents into said disposal chamber upon lifting said cover member, said cover member having a top surface sloping downward at either side toward said choke channels, and a cigarette rest located on said cover member above and between the oppositely sloping portions of said top surface, whereby a cigarette toppling out of said rest or deposited on said sloping top surface may roll down into one of said choke channels.

6. An ash tray comprising a body member having surrounding walls including two opposed substantially straight side walls, downward and inward sloping shoulders of greater width than the diameter of a cigarette extending along the inside of said side walls intermediate the height of said walls, a sump within said body member constituting a disposal chamber for butts and ashes and located between the inner edges of said sloping shoulders, ledges at either end of said disposal chamber extending across between said sloping shoulders, a cover member for said disposal chamber fitting within said body member and having side and end walls seating upon the inner edges of said shoulders and said ledges respectively to tightly seal said disposal chamber and removable by vertical lifting movement to provide access to said disposal chamber, the said side walls of said body member and cover member and the said sloping shoulders constituting spaced elongated choke channels adapted to discharge their contents into said disposal chamber upon lifting said cover member, said cover member having a top surface sloping downward at either side toward said choke channels, and a cigarette rest located on said cover member above and between the oppositely sloping portions of said top surface, whereby a cigarette toppling out of said rest or deposited on said sloping top surface may roll down into one of said choke channels.

7. A multiple sump ash tray comprising, in combination, a body and a liftable cover which are arranged to provide, when the cover is closed, a sump which has at least two opposed straight sides and is substantially sealed by the cover, and

also to provide, when the cover is closed, two open and elongate higher sumps which extend longitudinally of and partly overhang said opposed straight sides of the first-mentioned sump, each of which said two higher open sumps increases in depth transversely thereof and of said straight sides of the first-mentioned sump substantially to the upper edge of the adjacent one of said straight sides of the first-mentioned sump, said cover forming one longitudinal wall of each of said higher sumps and having two opposite and substantially straight side edges which meet the opposed longitudinal wall of each said higher sump along the deepest part of the bottom of each said higher sump when the cover is closed, whereby upon lifting the cover relatively to the body, ashes and butts in a higher one of said sumps will slide into the normally sealed lower sump and will be sealed in the lower sump when the cover is again lowered.

8. An ash tray comprising a body having within its outer confines two opposed and substantially straight upwardly facing surfaces of substantially equal width sloping downward and inward toward each other, a transversely grooved rest for cigarettes or the like located between the higher edges of said sloping surfaces and extend-

ing longitudinally of said edges, and a liftably removable cover wall member for said body fixed to and pendent from said rest, said cover wall member sloping at its exposed exterior, when closed, in opposite directions downward and outward from said rest within the outer confines of the body to said sloping surfaces of the body below the higher edges of said sloping body surfaces and normally forming with said body a closed sump and two open and substantially parallel higher sumps each partly overhanging said closed sump, said body being shaped at its upper end to receive said cover wall member therewithin with said body extending upwardly at least substantially as high as the highest parts of said sloping surfaces of the body and said cover wall.

9. An ash tray as claimed in claim 8, wherein the body is of generally rectangular box-like form, opposite ends of the rest project beyond the cover wall member, and the body is notched to receive the projecting ends of the rest.

10. An ash tray as claimed in claim 7, wherein the body has its upper end so shaped as to substantially preclude balancing or resting a cigarette or the like on the upper edge of the body.

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