

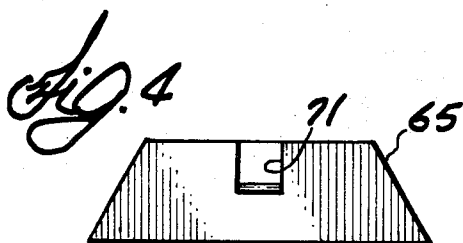
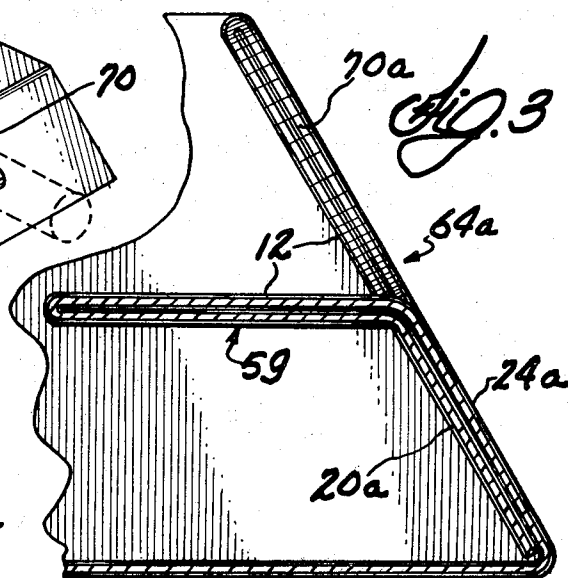
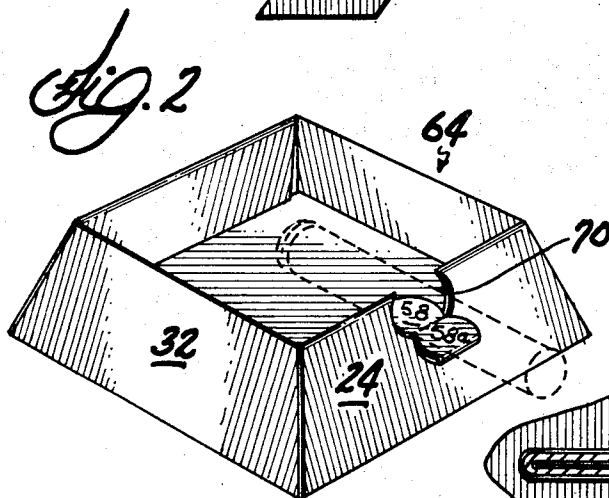
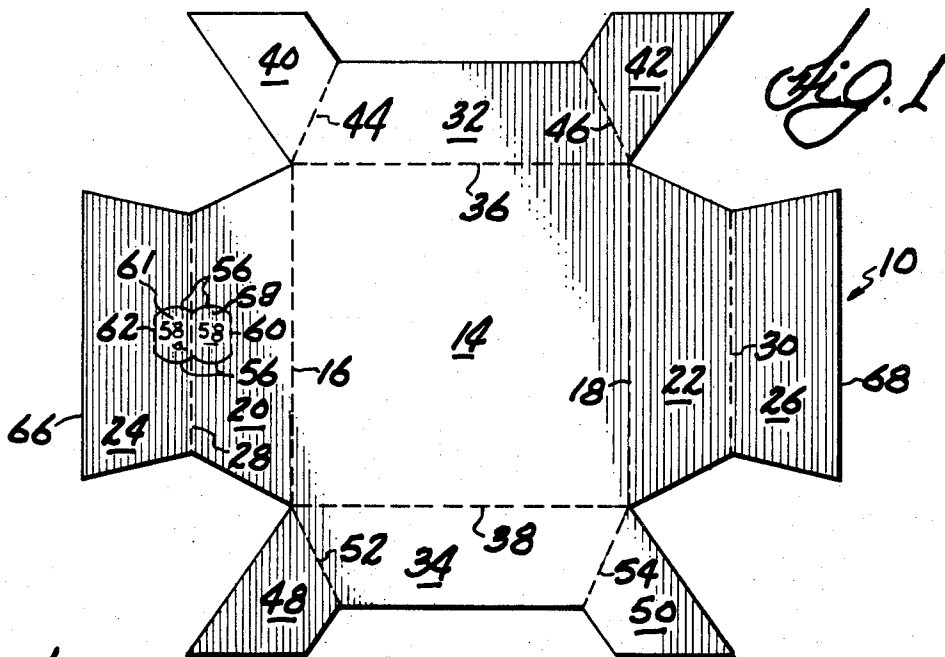
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ASHTRAY CONSTRUCTION

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ASHTRAY CONSTRUCTION
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ABSTRACT OF THE DISCLOSURE

A disposable ashtray composed of foil-lined paperboard has a cigarette supporting ledge formed in a double-wall portion thereof. The foil surfacing of the ledge and of the adjacent multiple layers of the wall serve to extinguish the cigarette when the lighted end is disposed on said ledge.

This invention relates to an ashtray construction, and more particularly pertains to an ashtray which is adapted to extinguish unattended, lighted cigarettes supported thereby.

The fire hazard inherent in lighted cigarettes is well known and generally recognized. However, fire tragedies created by lighted cigarettes of persons who doze off without extinguishing such cigarettes are all too common. Such tragedies could in many instances be avoided if a small, lightweight ashtray were readily accessible to the individual smoking. Such avoidance would be further guaranteed if the ashtray employed would assure extinction of the lighted end of the cigarette when held by the tray and left unattended.

An ashtray construction which is possessed of the above safety features, and in addition may be made of foil-lined paperboard or the like so as to be disposable in nature, is most desirable. Such constructions are particularly desirable where large gatherings of the smoking public are present and the space available must be efficiently utilized. Thus, such receptacles are desirable in large gatherings in auditoriums or the like where smoking is permitted, and in planes and other conveyances where permanent seat ashtrays are not conveniently accessible as when serving meals. The provision of individual trays which possess the above safety features and yet are so inexpensive as to be disposable in nature, serve to increase the comfort of the individuals smoking while maintaining maximum safety precautions.

It is an object of this invention, therefore, to provide an ashtray composed of foil-lined paper, paperboard or the like which is adapted to extinguish a lighted cigarette supported therein if forgotten or left unattended.

It is another object of this invention to provide a lightweight ashtray construction which is of such simple construction that it may be manufactured at very low cost and treated as a disposable item while inherently providing the utmost in safety.

It is a further object of this invention to provide an ashtray construction which is adapted for use as a novelty item and advertising medium, while possessing a safety feature not present in ordinary ashtray constructions.

The above and other objects of this invention will become more apparent from a reading of the following description in the light of the accompanying drawing and appended claims.

In one embodiment of this invention a paperboard blank lined on opposed surfaces with aluminum foil is folded along score lines into a receptacle having a planar bottom bounded by four surrounding wall portions. To assist tray permanence of assembly, two of the opposed

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walls are of double thickness, the inner thicknesses serving as locking flaps retaining the erected blank in a rigid state of assembly.

The blank is initially die cut so that an upper distal edge portion of one of the double walls, when erected, possesses a flap hinged along lowermost portions to the double wall thicknesses. After tray erection, the flap is pushed downwardly with each twin flap portion formed from each of the sidewall thicknesses bending in the middle thereof so as to form a substantially horizontal ledge for supporting a cigarette. The aperture resulting from the flap-ledge formation is of such dimension as to snugly engage a major peripheral portion of a cigarette placed on the ledge.

If left unattended, a lighted cigarette resting on the ledge will become automatically extinguished when the lighted end of the cigarette reaches the ledge. The snug engagement of the cigarette periphery prevents falling of the cigarette from the tray ledge, despite the cigarette length extending exteriorly of the tray, as will hereinafter be described in greater detail.

For a more complete understanding of this invention, reference will now be made to the drawing, wherein:

FIGURE 1 is a top plan view of a blank which may be employed for forming an ashtray in accordance with this invention;

FIG. 2 is a perspective view of an ashtray in the set-up condition formed from the blank of FIG. 1;

FIG. 3 is a fragmentary sectional view illustrated on an enlarged scale of an alternate manner of forming a cigarette-supporting ledge from the blank of FIG. 1; and

FIG. 4 is a front elevational view of an ashtray construction made in accordance with this invention utilizing a modified form of cigarette-receiving aperture.

Referring now more particularly to FIG. 1, an integral blank 10 is illustrated which may be formed of paper, paperboard, fiberboard, or similar materials and which has on opposed surfaces thereof a metal foil lining. Being formed of rather inexpensive materials of composition, the provided blank is of low cost, and as will become hereinafter apparent, because of its lack of any unusual structural feature, may be readily formed in an efficient manner by a simple die-cutting operation from a base sheet.

The blank 10 comprises a central bottom panel 14 which may be square as illustrated, or of other preferably rectilinear peripheral configuration having a plurality of sides. The bottom panel 14 is integrally connected by means of score lines 16 and 18 to opposed sidewall panels 20 and 22, respectively. The latter panels are in turn integrally formed with sidewall locking panels 24 and 26, respectively, by means of score lines 28 and 30, respectively.

Also joined to the bottom panel 14 and oppositely disposed to each other are single sidewall panels 32 and 34 which are hingedly connected to the bottom panel along score lines 36 and 38, respectively. Panel 32 is integrally formed with opposed tab portions 40 and 42 by means of score lines 44 and 46, respectively. Opposed sidewall panel 34 is integrally formed with opposed tab portions 48 and 50 by means of score lines 52 and 54, respectively.

It will be further noted from FIG. 1 that opposed, arcuate cuts 56 are formed in the sidewall panel 20 and the connected locking sidewall panel 24. It will be further noted that cut-out portion 58, defined by cuts 56, remains

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connected to sidewall panel 20 by means of score lines 60 and cut-out portion 58a also remains connected to locking sidewall panel 24 by means of score lines 62.

The blank 10 of FIG. 1 may be readily set up into the rigid ashtray 64 of FIG. 2. In the course of being set up, the blank first has the opposed flaps 40 and 42 of sidewall 32 inwardly folded along score lines 44 and 46 after which the sidewall and attached tabs are inwardly folded into an acute angular relationship along score line 36 relative to the bottom panel 14 of the blank 10. Opposed tabs 48 and 50 connected to sidewall 34 are similarly inwardly folded relative to sidewall panel 34, after which the sidewall and attached tabs are folded into an acute angular relationship with the bottom panel 14 along score line 38.

Following the latter folding operations, the opposed sidewall and locking wall assemblies 20-24 and 22-26 are inwardly folded along score lines 16 and 18, respectively. The locking wall panels 24 and 26 are then folded relative to the larger sidewalls 20 and 22 along score lines 28 and 30, respectively, and in the course of being downwardly folded, overlap tabs 40 and 48, and 42 and 50. It is preferred that the locking sidewall panels 24 and 26 be of a greater height than the larger sidewall panels 20 and 22, respectively, to which they remain attached. Thus, when folded downwardly to the position illustrated in FIG. 2, distal edges 66 and 68 of the locking sidewalls 24 and 26, respectively, will frictionally engage a surface portion of the bottom panel 14 adjacent the score lines 16 and 18, respectively. The latter frictional engagement will retain the set-up tray assembly 64 of FIG. 2 in a state of rigidity in which none of the flap or panel portions are free to move relative to adjacent portions to which such flap or panel portions are connected.

Cut-out portions 58 and 58a formed from the sidewall 20 and locking sidewall 24 may be then pushed downwardly, in the manner illustrated in FIG. 2, forcing cut-out portion 58, formed from sidewall panel 20, to fold along a transverse centerline. Simultaneously cut-out portion 58 formed from locking sidewall panel 24 is forced to similarly fold in half along a transverse fold-line. To facilitate the latter folding steps, score lines 59 and 61, as seen in FIG. 1, may be formed in the cut-out portions 58 and 58a.

The cut-out portions 58 and 58a, as will be noted from FIG. 2, define a substantial horizontal ledge portion in parallel relationship with bottom panel 14 on which a lighted cigarette may be rested with the lighted end disposed over the bottom panel 14. The cuts 56 made in the panels 20 and 24 are defined so that aperture 70, resulting from the formation of the ledge 58, 58a, is of such size and configuration so as to snugly receive a major peripheral portion of a cigarette member which is disposed on the ledge illustrated in FIG. 2. The intersection of the arcuate portions of the edges assists in preventing separation of the members 20 and 24, as may be seen in the same figure.

By virtue of such snug engagement, a cigarette may have the major portion of its length disposed exteriorly of the tray 64 without any danger of the cigarette tipping outwardly, free of engagement with the ashtray. It is believed apparent that if a cigarette is snugly retained within the opening 70 of the ashtray 64, the center of gravity of the cigarette constantly moves to the right, as viewed in FIG. 2, thereby creating an increasingly greater tendency for the cigarette to be free of engagement with the ledge on which disposed. However, while the cigarette is engaged by the portions of the panels 20 and 24 defining the opening 70, the cigarette will be firmly retained in place.

It has been found that by utilization of such a ledge and the snug peripheral engagement of the cigarette depicted in FIG. 2, a burning cigarette will automatically extinguish itself as the lit end approaches aperture 70 of the tray 64. For purposes of carrying out this inven-

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tion, the cut-out portions 58 and 58a need not be centrally folded in the manner illustrated in FIGS. 1 and 2 but may be urged as a unitary double-walled flap portion inwardly over the bottom panel 14 in the manner of flap 59 comprising a portion of the tray 64a illustrated in FIG. 3.

As will be seen more clearly from FIG. 3, inasmuch as all exposed surfaces of ashtray 64a are covered with the aluminum or other metal foil 12 comprising an excellent heat-conducting material, as the lighted end of the cigarette approaches ledge portion 59, the heat of the lighted cigarette will be conducted thereby. In addition, the foil lining of the opposed surfaces of each sidewall portion 20a and 24a also serves as heat-conducting means tending to dissipate the heat generated by the lighted end of the cigarette.

It is believed that this rapid heat dissipation carried out by the various foil layers reduces the temperature at the lighted end of the cigarette whereby the cigarette extinguishes itself while disposed on the ledge portion 58, 58a or 59 and while firmly retained by the opposed sidewall portions defining the cigarette-engaging apertures 70 or 70a of the two tray embodiments illustrated in FIGS. 2 and 3.

It is seen, therefore, that the simple foil lining on an integral paperboard blank construction efficiently serves to extinguish a lighted cigarette when placed in a holding aperture disposed in one of the sidewalls of the ashtray formed from such a blank.

The cuts 56, formed in the sidewalls 20 and 24, need not be of an arcuate character but may be straight so as to define aperture 71 such as illustrated in FIG. 4, depicting ashtray construction 65.

It is believed obvious that the uses to which the above-described ashtray construction may be put are many. Any or all of the exterior surfaces of the set-up tray may have advertising material printed thereon. Although so inexpensive as to be disposable, the provided ashtrays may last indefinitely while retaining their extinguishing properties indefinitely. The provided tray may be readily distributed to large gatherings where smoking is permitted, at a minimum of expense, while assuring the utmost in safety not found in the ordinary ashtray construction. The above-described tray may also be used to good advantage by being served with meal trays on airplanes where space is at a premium and the usual permanent ashtrays normally found in the seat arm are not readily accessible.

The blank 10 and the particular tray construction disclosed is not of primary importance since it is obvious that trays having radically different configurations from that shown in the drawing and possessing a totally unlike appearance may also incorporate the above invention. It is apparent that trays of constructions and appearances different from that described may still possess the extinguishing feature inherent in the ashtray of the drawing, and accordingly, this invention is to be limited only by the scope of the appended claims.

Without further elaboration, the foregoing will so fully explain the character of my invention that others may, by applying current knowledge, readily adapt the same for use under varying conditions of service, while retaining certain features which may properly be said to constitute the essential items of novelty involved, which items are intended to be defined and secured to me by the following claims.

I claim:

1. An ashtray construction comprising a bottom having sidewalls upwardly extending therefrom defining an ash-receiving receptacle, at least one of said sidewalls being of two separable layers, a substantially horizontal cigarette-supporting ledge of two layers and having intersecting arcuate edges formed from an upper portion of said sidewall of two layers; said ledge layers being joined to said sidewall layers to each other, said ledge layers

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forming a cigarette-receiving aperture in the sidewall layers and forming twin supporting ledge portions extending inwardly and outwardly of said receptacle; said ledge including an upper layer resting over said connections with said sidewall layers; said intersecting arcuate edges of said twin ledge portions engaging and assisting at the intersection in maintaining opposed thicknesses of said sidewalls in assembled relationship.

2. The ashtray construction of claim 1 in which said sidewall layers and ledge portions formed therefrom have metallic surfaces adapted to readily conduct heat to extinguish a cigarette when the lighted end is disposed on said ledge.

3. The ashtray construction of claim 1 in which said ashtray is formed of an integral blank comprising a paperboard core lined on opposed surfaces with aluminum foil.

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