Oct. 30, 1951 S. N. BONANOS 2,573,391

RESILIENT OPENABLE-TOP ASH TRAY

Filed May 12, 1949

FIG. 1

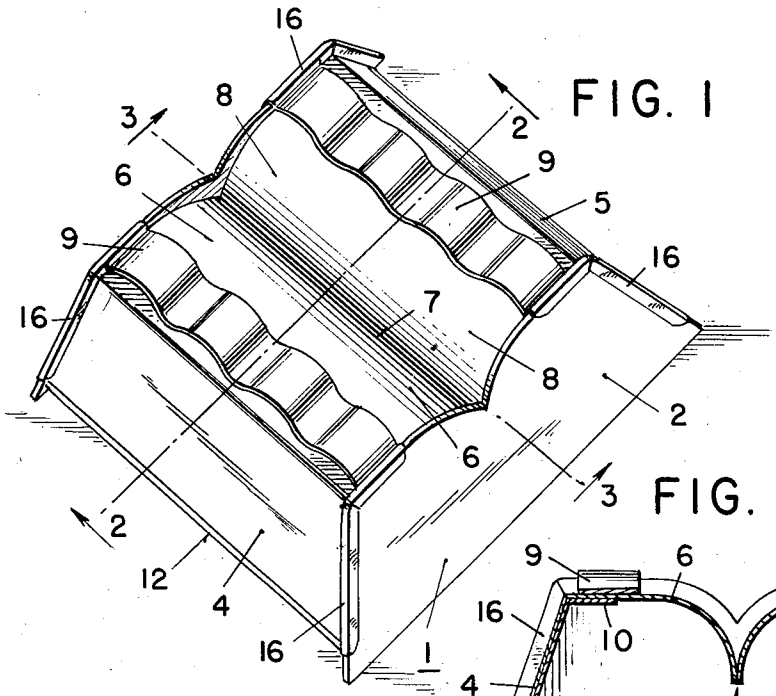


FIG. 2

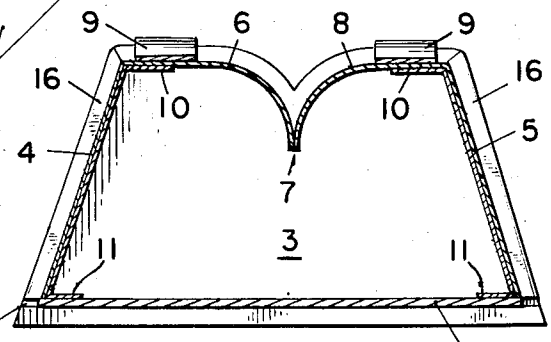


FIG. 3

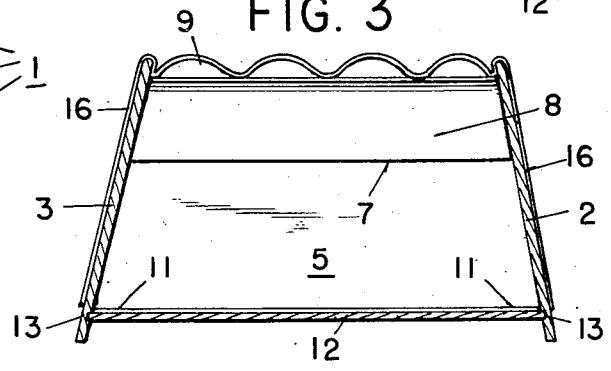
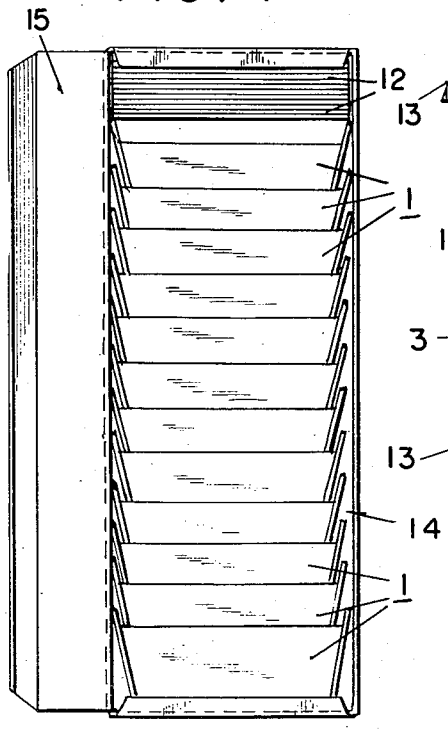


FIG. 4



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2,573,391

RESILIENT OPENABLE TOP ASH TRAY

Spyros N. Bonanos, New York, N. Y.

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1 Claim. (Cl. 232—43.1)

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My invention relates to improvements in ash trays the objects of which are to provide a box like structure or trap which extinguishes by suffocating the cigarette butts, thereby avoiding any fire danger or unpleasant odor.

The general objects of the present invention are to provide a particularly cheap disposable ash tray which is safe and convenient for the smoker to use, easy to clean, and to replace, simple and solid in construction and suitable to manufacture in large quantities.

Among the more specific objects of my invention are to provide an ash tray formed from a foldable and fireproof blank which may be lined with asbestos paper or the like or impregnated in any way. The lining not only provides a fire proof surface but provides means for accomplishing tight joints between the side panels and the bottom panel, forming a completely closed space.

A further object is to provide box like ash trays of such construction as to permit stacking in nested relation when empty whereby they occupy comparatively small space and are equally spaced one from another.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings, forming a part of this specification, and in which like numerals are employed to designate like parts throughout the same,

Fig. 1 is a perspective view of an ash tray according to this invention.

Fig. 2 is a central vertical section of the ash tray taken on line 2—2 of Fig. 1.

Fig. 3 is a central vertical section taken on line 3—3 of Fig. 1 or at right angles to Fig. 2.

Fig. 4 is a top view of an open receptable or package carrying one dozen ash trays arranged in nested relation with their bottom members or panels removed.

Referring more particularly to the drawing the body member 1 is illustrated as being substantially square in top plan and of hollow box like construction consisting of a front wall 2, a rear wall 3, and side walls 4 and 5. The side wall 4 extends upwardly in a flat plane, slightly inclined from the vertical to the top of the ash tray, thence laterally, and thence curves downwardly to the middle portion of the tray thus forming the curved top member 6 which may terminate along the line 7.

The side wall 5 in like manner extends upwardly to the top of the ash tray, thence laterally and thence curves downwardly to form the curved top member 8 which also may terminate along the line 7.

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Upon the straight horizontal portion of each member 6 and 8 may be secured a corrugated thin strip of sheet material such as aluminum or the like which is shaped into curved ridges and hollows for the purpose of supporting and spacing cigarettes which are placed thereon. The lighted portion of the cigarette which is supported by the metallic strip 9 or rest is positioned above the curved portion of the members 6 or 8 so that the ashes will readily fall into the trough directly above the line 7.

To add to the rigidity of the structure each member 6 and 8 may be reinforced by means of a narrow strip of asbestos paper 10, attached to the lower side of each member directly beneath the metallic strip or rest 9.

The asbestos paper lining not only provides a fire proof surface but the edges of the paper adjacent the bottom of the ash tray may be bent to a horizontal position thus forming tabs 11 which provide means for accomplishing tight joints between the front, rear, and side walls and the bottom panel 12.

It will be observed that the free edges of the curved top members 6 and 8 meet and contact each other forming along the line 7 a narrow trough within which the cigarette ashes and stubs collect and then are permitted to drop to the bottom of the container when the sides of the trough are pressed apart by a finger, pencil or the like.

Obviously, such a trough construction could be also used to remove refuse material from the end of a dental tool or the like.

As shown in Fig. 3, the bottom panel 12 may easily be snapped into position and removed by sliding in the grooves 13.

The easy removal of the bottom panel 12 is an important feature of the invention since it affords the dual function of permitting the bottomless ash trays to be packed closely adjacent to each other in a suitable box or receptacle as clearly shown in Fig. 4 and causing easy removal of the ashes.

This Figure 4 shows a top view of an open receptacle 14 provided with a lid 15 and filled with one dozen ash trays closely packed together and having their bottom panels 12 assembled at one end of the receptacle.

The ash tray shown and described is constructed preferably of inexpensive material such as asbestos paper or similar fireproof material

strengthened or stiffened by means of card board or similar heavier material.

The ash tray may be constructed without the use of asbestos paper by merely spraying the card board with a fireproof solution.

The edges and corners of the box like structure, if desired, may be reinforced and bound together, as shown in Fig. 1, by thin metallic strips 16 such as are well known and in common use in the art of box making.

Ash trays, such as described above, could also be made of suitable plastic material at a slight additional expense.

Such ash trays could also be made of any fire-resisting but elastic sheet material.

The ash tray, as illustrated, shows two flexible curved top members 6 and 8 which contact each other but obviously it would be within the scope of the invention to provide a single curved top member which would contact with either of the side walls 4 or 5.

Such side walls could carry advertising matter if desired.

Various modifications may be made in this invention without departing from the spirit thereof or the scope of the claim and therefore the exact forms shown are to be taken as illustrative only and not in a limiting sense, and it is desired that only such limitations shall be placed thereon as are disclosed in the prior art or are set forth in the accompanying claim.

I claim:

A disposable ash tray comprising a box like container structure of sheet material having a bottom and upstanding front, rear and two side walls, a top portion formed by a horizontal extension of each of the side walls, the extremities of said extensions being curved downwardly to meet and contact each other along a line located at the center of the ash tray between the side walls thereof so as to completely enclose the box like structure and to form a narrow trough within which the cigarette ashes and stubs collect and then are permitted to drop to the bottom of the container when the sides of the trough are pressed apart.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,239,307	Schmid	Sept. 4, 1917
1,639,760	Wise	Aug. 23, 1927
1,658,885	Darney	Feb. 14, 1928
1,709,330	Thomas	Apr. 11, 1929
1,867,080	Kraft	July 12, 1932
1,912,531	Lowson	June 6, 1933
2,298,146	Mersbach	Oct. 6, 1942
2,319,761	Bodkin	May 18, 1943

FOREIGN PATENTS

Number	Country	Date
316,047	Italy	Mar. 15, 1934