April 19, 1949. L. COUGHLIN 2,467,660

COMBINED CIGARETTE CONTAINER AND ASH TRAY

Filed Sept. 19, 1944

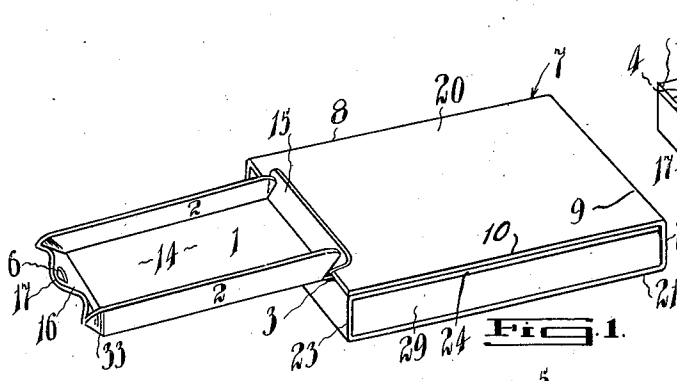

Fig. 1.

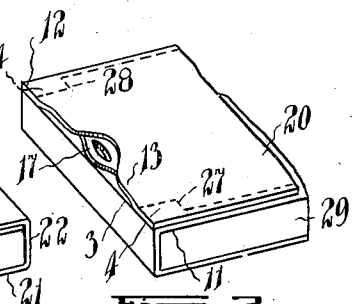

Fig. 2.

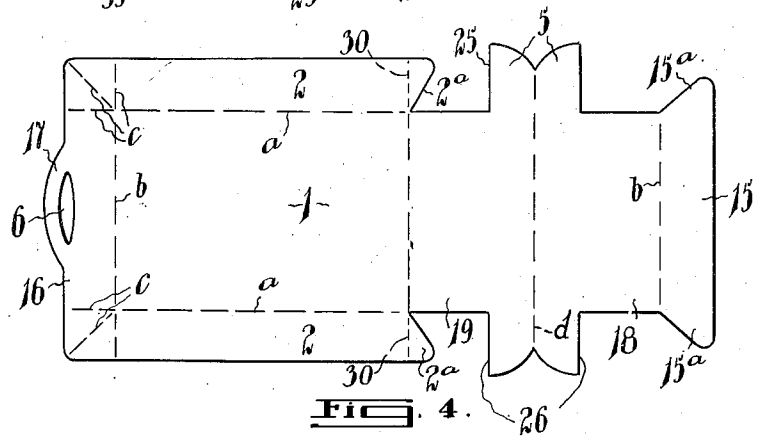

Fig. 4.

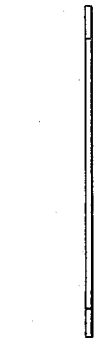

Fig. 5.

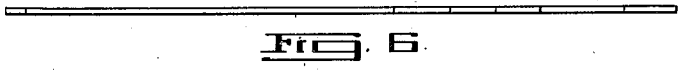

Fig. 6.

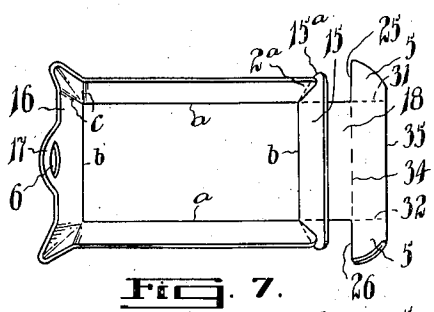

Fig. 7.

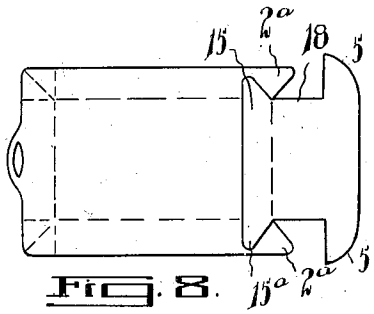

Fig. 8.

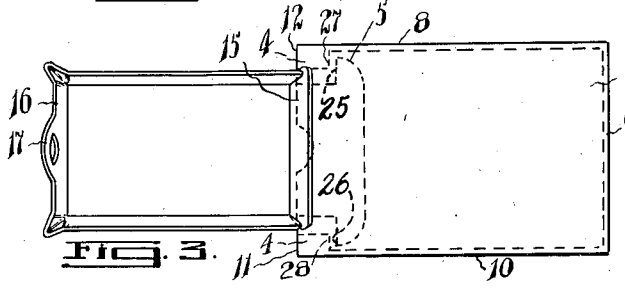

Fig. 3.

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COMBINED CIGARETTE CONTAINER AND ASH TRAY

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Application September 19, 1944, Serial No. 554,794

6 Claims. (Cl. 206—38)

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My invention relates to a cigarette package or case, having associated therewith means acting as an ash tray.

The object of the invention is to provide a means which is so designed and constructed that it can be quickly and easily pulled out from a cigarette or cigar case or box, and then easily formed by the fingers into an ash tray for use in any place, such as on a table or other support, and which when formed will be sufficiently rigid to be supported by and project out from the cigarette or cigar case or box above the table or other support.

Other objects will present themselves from a perusal of this specification and claims to those skilled in the art.

In the accompanying drawings an illustrative example is shown of a construction of a combined cigarette package and ash tray which will produce the desired objects herein outlined and in which like numerals refer to like parts throughout the several different views, and in which—

Figure 1 is a perspective view of a combined cigarette box and ash tray with the ash tray shown in its open position,

Figure 2 is a perspective view of a combined cigarette box and ash tray with the ash tray shown as being in its closed position,

Figure 3 is a plan view of a cigarette box and ash tray, with the ash tray shown in its open position,

Figure 4 is a plan view of the ash tray in blank form before being formed,

Figure 5 is an end elevation of the blank,

Figure 6 is a side elevation of the blank,

Figure 7 is a plan view slightly in perspective of the ash tray as formed, and

Figure 8 is a plan view of the ash tray as it appears ready for insertion into its receptacle in the cigarette box.

The embodiment of my invention chosen for purpose of illustration comprises; cigarette box 7, with the usual top 20, bottom 21, ends 22, 23, and open sides, for the reception of an ordinary cigarette holding tray 29. Beneath the top 20, is a partition 24, which with top 20 forms a pocket or guideway 3 for the ash tray 14. The edges 8, 9, and 10 of the top 20 and the partition 24, and the corners 11 and 12 are secured together in any suitable manner, such as by gluing. Corners 11 and 12 of the top 20 and partition 24 are glued across the ends on either side as indicated at 4, 4. The rear edges 27, 28 of the corner pieces serve the purpose of preventing accidental

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withdrawal of the tray. Edge 13 is left open for insertion of the tray into the receptacle.

A single blank of any suitable material is used for forming the tray 14. The tray comprises, bottom portion 1, foldable side margins 2, 2, foldable end margins 15, 16, projection tab 17 with an aperture 6 therein for withdrawing the tray from the receptacle, and a rearwardly projecting supporting member 18 having lateral projection members 5, 5, forming shoulders 25, 26, for engagement with shoulders 27 and 28 to prevent the tray from being completely withdrawn from the receptacle means 3. The tray is provided with folding lines *a*, *a*, on which sides of tray may be turned up, *b*, *b*, on which ends of tray may be bent up and *c*, *c*, on which corners of tray are folded. The supporting member 18 is formed as may be seen from a reference to Figures 4 and 7 by folding it along the line of fold *d* back over the rear extension 19 of the tray, so that the supporting member is of double thickness of material and is thus reinforced and stiffened. The sides 2 have rearwardly angularly projecting ends or tabs 2^a, 2^a and the end 15 has projections 15^a, 15^a against which the parts 2^a, 2^a bear when the tray is formed.

This engagement of the projections 2^a, 2^a and 15^a, 15^a assists in retaining the sides in their raised positions, and this in turn stiffens the tray so that it will remain supported by the cigarette box above the surface on which it rests.

The ash tray is preferably formed of cardboard treated with or having a coating or cover of fire resistant material, although tin foil or a very thin sheet of copper, aluminum, or other non-inflammable plastic material may be used.

It is to be understood that specific terminology herein used is not intended to be restrictive or confining, since rearrangement of parts and modification of structural details may be resorted to in manufacturing the combined cigarette box and ash tray, or the ash tray alone.

The device is made and formed as follows. The blank of metal or cardboard used for the tray is stamped by means of the usual dies, thereby giving the preferred form as shown in Figure 4. After stamping, the supporting member 18 is formed by folding as set out above. The tray is then inserted into receptacle 3 in the cigarette box. It is to be observed that the glueing together of the ends of the top 20 and partition 24 at 4, 4, forms stopping means positioned in the corners of the receptacle, preventing an easy entry of the tray therein. Entry is accomplished by inserting one tang or projection member 5

so as to slide by one stopping means, then moving the tray to its normal position and pushing it into the receptacle leaving projecting therefrom only the tab 17 which is used for withdrawing the tray. After insertion of the tray accidental complete withdrawal is prevented as the shoulders 25 and 26 shown in Figure 7 ride against the stopping edges 27, 28 formed by the glueing of the parts at 4, 4, as shown in Figure 3. As it is necessary to angle the tray in order to enter it into the receptacle means, so likewise, it is necessary to angle it before it can be completely withdrawn. This is accomplished by moving the tray to one side in the receptacle, after which, it is angled therein, in order that one projection will be freed from the corner stopping means, so that the tray can be withdrawn completely from the receptacle.

On withdrawing the ash tray blank from the receptacle until the shoulders 25, 26, on it contact the stopping edges 27, 28 of the stopping means 4, 4, the tray may then be easily formed by gently bending the sides and ends margins upwardly along the folding lines *a*, *a*, and *b*, *b*. The corners between the sides 2, 2 and the end 16 may be pinched out, folding on the lines *c*. The end margin 15 is folded back on the rigid portion 18 just sufficient to allow the extensions 2^a, 2^a, of the sides 2, 2 to bear against the extensions 15^a, 15^a of the end 15 as shown in Figure 7. The end 15 tends to fall forward, thus pressing against the extensions 2^a, 2^a and holding the sides 2, 2 erect. When thus arranged a serviceable ash tray is formed and it may be gently pushed back into the receptacle until the rear side of end 15 contacts the end 13 of the receptacle. In such position the ash tray is very rigid, neat, compact, pleasing to the eye, and has its side margins and end margins angled at approximately 45 degrees from the vertical. It will be understood however that the sides can be formed to give any desired angle with the base 1, so likewise the end 16 may have different angled positions to the base.

After use the tray can be returned to its position in the receptacle by returning the sides and ends to their original flat position. If desired the end 15 and sides may be bent so as to be at right angles to the base 1, simply by squaring the ends of sides 2, 2 as shown by dotted lines 30 and 30 in Figure 4.

If the tray is desired to be used separate from the cigarette box, it can be completely withdrawn as outlined herein, after which the side margins and end margins can be formed as set out above. It may then be placed on a support or table in a flat position for use. However, to reduce to a minimum the possibility of heat from the hot ashes reaching a table, or the like, the tangs 5, 5, can be bent downwardly along the lines 31, 32, Figure 7, so as to be at right angles to the base 1, thus giving the ash tray a three point suspension, comprising the two tangs and the end 33 of base 1. Also, by bending the rigid part of the tray downwardly along the dotted line 34, Figure 7 so as to be at right angles to the base 1, the tray will be supported by resting on edges 35 and 33. If desired the base of the tray can have embossed letters or designs thereon, and such will help to eliminate the heat from the hot ashes reaching a table or other support.

It is believed that the operation of the device as a whole will be clear, in view of the foregoing description which has been given in connection with the construction of the same.

While I have herein shown and described a preferred arrangement, it will be readily understood that changes and modifications therein may be found desirable or essential in meeting the various exigencies of use, and I desire to be understood as reserving the right to make any and all such changes or modifications as may be found desirable or essential in so far as the same may fall within the spirit and scope of the invention as expressed in the accompanying claims when broadly construed.

What I claim is:

1. An ash tray comprising a one piece foldable blank formed to provide a rectangular flat bottom, two trapezoid sides positioned one on each side of the bottom and connected thereto along a longitudinal edge, an end having its longitudinal edge connected to the edge of the bottom and the ends of the sides, the trapezoid sides and the end being bent on the connected longitudinal edges upwardly to form the side walls and one end wall of the tray means, a projecting portion connected to the bottom portion and having therewith a trapezoid end margin which will form the other end wall of the tray on being bent upwardly after the projecting portion is folded back on itself, and which end margin and projecting portion will be held and locked in such position by the sloping ends of the trapezoid side margins.

2. An ash tray comprising, a one piece foldable blank formed to provide a rectangular flat bottom portion, two trapezoid sides positioned one on each side of the bottom and connected thereto along a longitudinal edge; an end having its longitudinal edge connected to the edge of the bottom and the ends of the sides, the trapezoid sides and the end being bent on the connected longitudinal edges upwardly to form the side walls and one end wall of the tray means; a projecting portion connected to the bottom and having therewith a trapezoid end margin which will form the other end wall of the tray on being bent upwardly and outwardly after the projecting portion is folded back on itself, which end margin and projecting portion will be held and locked in such position by the sloping ends of the trapezoid side margins; and a tang projecting from each side of the projecting portion, said tangs being bent downwardly at right angles to the projecting portion to form two of three supporting members of the ash tray, the third member being the longitudinal edge of the end of the ash tray.

3. An ash tray comprising a bottom, side walls and end walls, and including a projecting portion connected to the bottom, the side walls and one end wall extending outwardly from the bottom when the ash tray is not set up and being separated from the bottom by lines of fold along which they may be bent up relative to the bottom, the projecting portion being folded back upon itself along a line of fold and having an end margin with projecting tabs which will form the other end wall of the tray on being bent upwardly and outwardly from its overlying position along a line of fold but tending to return to its overlying position, so that the projecting tabs bear against the end edges of the side walls to retain said side walls in a raised position.

4. An ash tray comprising a bottom, side walls and end walls, and including a projecting portion connected to the bottom, the side walls and one end wall extending outwardly from the bottom when the ash tray is not set up and being separated from the bottom by lines of fold along which they may be bent up relative to the bottom,

the projecting portion being folded back upon itself along a line of fold and having an end margin with projecting tabs which will form the other end wall of the tray on being bent upwardly and outwardly from its overlying position along a line of fold but tending to return to its overlying position, so that the projecting tabs bear against the end edges of the side walls to retain said side walls in a raised position, and a tang projecting from each side of the projecting portion adapted on being bent downwardly at right angles to the projecting portion to form two of three supporting members for the ash tray, the third member being the end of the ash tray.

5. In a combined cigarette box and ash tray, an outer casing, a partition beneath the outer casing forming with said outer casing a guideway, stops in said guideway at each side thereof adjacent the entrance of said guideway, and an ash tray slidable in said guideway, said ash tray comprising a bottom, side walls and end walls, and including a rearwardly projecting portion connected to the bottom, the side walls and one end wall extending outwardly from the bottom when the ash tray is not set up and being separated from the bottom by lines of fold along which they may be bent up relative to the bottom, the projecting portion being folded back upon itself along a line of fold and having an end margin with projecting tabs which will form the other end wall of the tray on being bent upwardly and outwardly from its overlying position along a line of fold but tending to return to its overlying position, so that the projecting tabs bear against the end edges of the side walls to retain said side walls in a raised position, the rearwardly projecting portion serving as a supporting member and having tangs projecting from each side adjacent its end adapted to engage the aforesaid stops when the tray is pulled out of the guideway a predetermined distance.

6. In a combined cigarette box and ash tray, an outer casing, a partition beneath the outer casing forming with said outer casing a guideway, a cigarette holding receptacle in the casing, and an ash tray slidable in said guide way, said ash tray including an ash receiving portion and a rearwardly projecting supporting member, the ash receiving portion having side walls and an end wall, the projecting supporting member and end wall of the ash receiving portion being formed by folding back a portion of the ash tray on itself and bending the free end of said folded back portion upwardly to form the end wall of the ash receiving portion, said end wall having projecting tabs adapted to bear against the end edges of the side walls to retain said side walls in a raised position.

LEO COUGHLIN.

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