July 22, 1952 F. V. TERRY 2,604,100

CIGARETTE ASH TRAY

Filed Aug. 30, 1949

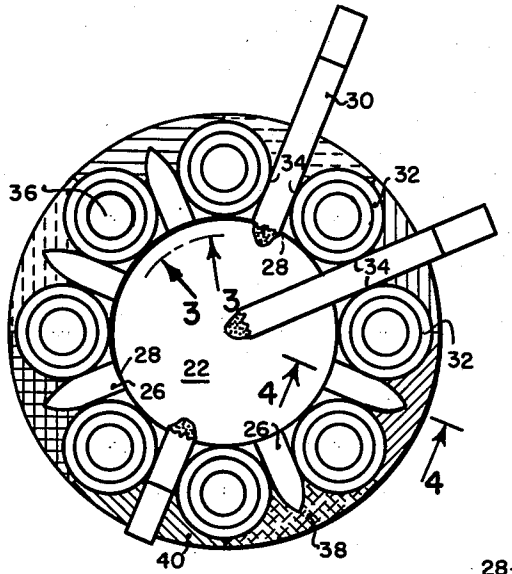


FIG. 1

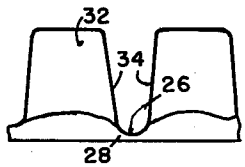


FIG. 3

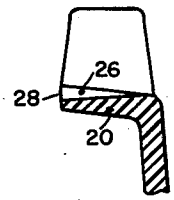


FIG. 4

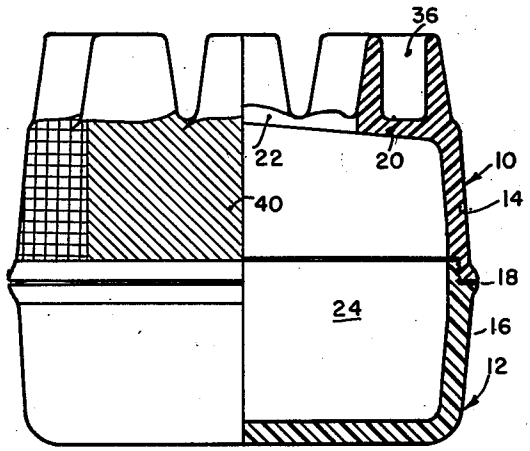


FIG. 2

Frank V. Terry

INVENTOR.

BY *Ernest O. Johnson*

ATTORNEY

Patented July 22, 1952 2,604,100

UNITED STATES PATENT OFFICE

2,604,100

CIGARETTE ASH TRAY

Frank V. Terry, El Cerrito, Calif.

Application August 30, 1949, Serial No. 113,169

1 Claim. (Cl. 131—235)

1

It is the principal object of this invention to provide an ash tray which embodies the following features of advantage: first, insurance against the cigarette falling off the tray due to burning away of the cigarette after deposit on the tray by the smoker; second, a cigarette which has burned very little may be lodged on the ash tray in one of two ways so that it will either (*a*) burn for a long period of time before being automatically extinguished, or (*b*) burn for a short period of time before being automatically extinguished; third, all cigarettes placed on the tray will be automatically extinguished before they can burn completely, the unburned portion being positively gripped in a region displaced a substantial distance from the point of extinguishment of the cigarette so that the gripping function is not impaired by the burning; fourth, many cigarettes may be placed securely on the tray without contacting each other; fifth, cigarettes burn for long periods of time with the burning occurring in free space, thereby avoiding disagreeable tastes commonly experienced in smoking a cigarette after it has burned while in contact with a solid body; sixth, the ashes from the burning cigarette fall into a cavity from which they cannot readily escape or be blown; seventh, the tray provides simple means by which a large number of cigarettes may be positively and immediately snuffed out; eighth, the tray provides means by which the smoker may readily identify his own cigarette among all others; and ninth, provision is made so that the mouth-piece ends of the cigarettes may be placed to remain at maximum distances in free space away from the tray itself so as to avoid the possibility of transmission of infections from one smoker to the other through contact of the cigarettes with each other or with the tray itself.

With these objects in view, reference is made to the following specification and accompanying drawings, in which:

Fig. 1 is a plan view of my cigarette tray and ash receptacle;

Fig. 2 is an elevational view thereof, partly in section;

Fig. 3 is a fragmentary view taken at the curve 3—3 of Fig. 1; and

Fig. 4 is a fragmentary section, as at plane 4—4 of Fig. 1.

The tray and receptacle comprise a ring shaped top portion 10 and a cup-like bottom portion 12, having respectively, frustro-conical skirt 14 and side wall 16 separably united as by threaded interfitting parts at 18. The top portion 10 has

2

an annular flange 20 extending radially inwardly terminating in and surrounding a round hole 22 over a space 24 formed by portios 10 and 12.

The flange 20 is inclined somewhat upwardly and inwardly as shown and at equiangularly spaced points on the top face of flange 20 there are formed straight radial grooves 26, the groove surfaces transverse to the groove axes being arcuate and the arc radius being equal to the radius of a standard manufactured cigarette so that the cigarette can lie on the groove with its paper in contact with the entire adjacent surface of the groove, particularly near the inner ends thereof. It will be observed that the grooves 26 are deepest in the region at the inner ends 28 so as to contact the cigarette paper for about one half of its circumference. A burning cigarette 30 lying in this groove with its burning end over space 24 will burn until the burning portions reach the end of groove 26 at 28 whereupon it may be automatically extinguished due to heat dissipation. If it is not extinguished at this point it is extinguished upon reaching the gripped portion at 34.

It frequently occurs in the use of ash trays heretofore known that cigarettes are placed on trays as is cigarette 30 in Fig. 1, in which position, except for the construction now to be described, it is impossible for it to remain after a certain amount of burning has occurred because it eventually becomes unbalanced and drops from the tray, still burning, and may cause extensive fire damage. This danger I prevent by providing a positive gripping of the cigarette in a region remote from the position 28 at which the cigarette must be automatically extinguished. This gripping action holds the cigarette in the groove 26 while it burns and insures that the cigarette paper remains in contact with the sides of the groove at 28 in order to effect its extinguishment at that point.

The gripping action is provided for the cigarette by spaced apart conical projections 32 which are integral with the flange 20 arranged in a ring or circle with their axes on about the mid-circle of the flange, each projection being positioned between two grooves 26 and of such base diameter that their near side elements at 34 together form divergent walls which grip the cigarette sides while it is thrust between them from above into groove 26. Only a slight compression over a very narrow portion of the cigarette length is thus effected, but this compression is adequate to hold the cigarette without impairing its shape and draft for further smok-

ing substantially. It will be observed that the points of gripping at **34** are substantially removed axially of the cigarette from the point **28** where extinguishment may have been effected due to the contacting walls of the groove. Therefore the gripping is unimpaired by the burning.

Each of the projections **32** is provided with a vertically opening snuffing well **36** into which the burning end of a cigarette may be thrust and left with confidence that its fire will immediately be extinguished. Any number of such projections may be provided but the diameter of the tray will be in proportion to the number of projections in order to provide space for the cigarette.

The cover portion **10** is preferably formed of Bakelite or other material which does not impart a distasteful flavor to the tobacco when the cigarette is burned to the point **28**.

Each groove **26** is preferably identified by an area of a different color. The zones **38**, **40**, etc. have been hatched to indicate different colors of the underlying surface of the cover part **10**. These identification marks enable the smoker to identify his own cigarette.

Having described my invention, what I claim as new is:

A cover for a smoker's ash receptacle comprising a horizontally disposed flange portion having a downwardly disposed annular skirt having a lower edge adapted to engage the upper edge of said ash receptacle to support the cover thereabove, said flange having a centrally located opening and a series of equi-angularly disposed upwardly directed cigarette engaging projections surrounding the central opening, said projections

having frusto-conical exterior surfaces whereby adjacent pairs provide substantially V-shaped notches therebetween, said projections being separated by a distance so as to receive and clamp a cigarette when forced downwardly into one of said notches, each of said projections having a downwardly extending cylindrical well having a closed bottom formed by the flange, each of said wells being of a diameter to snugly receive the lit end of a cigarette and to extinguish the same when placed therein, and the bottom of each notch being formed with an arcuate groove radially directed and inwardly inclined toward the center of said central opening, said bottom having a radius of curvature so as to snugly engage a cigarette forced into the bottom of one of said notches.

FRANK V. TERRY.

REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
D. 141,182	Levinger	May 8, 1945
D. 152,656	Schwisow	Feb. 8, 1949
1,780,258	Weinberg	Nov. 4, 1930
1,813,467	Smith	July 7, 1931
2,029,192	Ray	Jan. 28, 1936
2,504,597	Sewald, Jr.	Apr. 18, 1950

FOREIGN PATENTS

Number	Country	Date
105,202	Austria	Jan. 10, 1927
510,805	Great Britain	Aug. 9, 1939