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CIGARETTE AND ASH SEPARATOR

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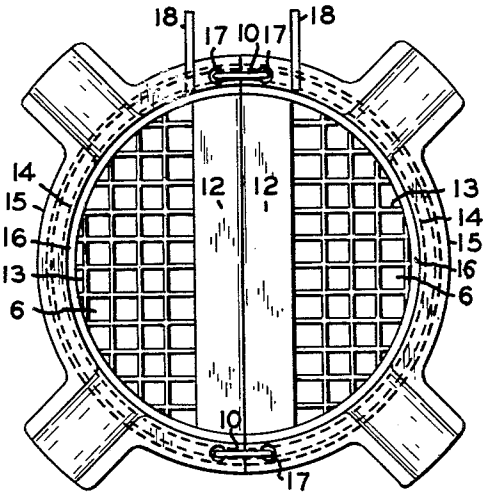



FIGURE 1.

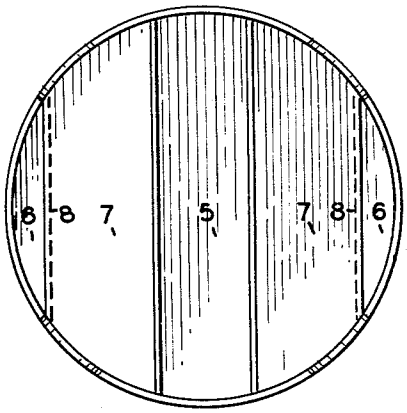



FIGURE 2.

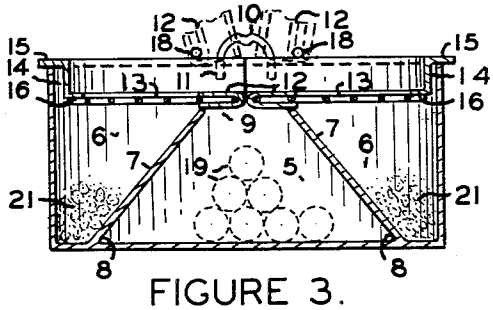



FIGURE 3.

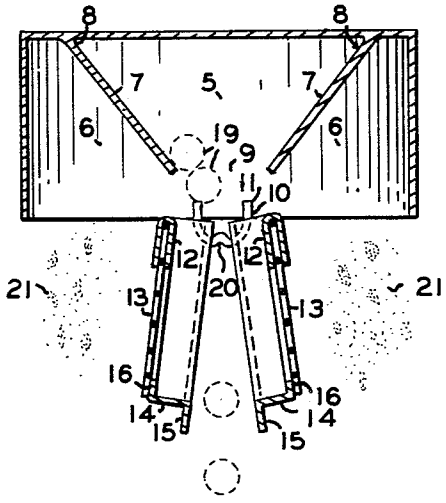



FIGURE 4.

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# CIGARETTE AND ASH SEPARATOR

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1 Claim. (Cl. 220—20.5)

This invention relates to an improvement in a cigarette and ash separator and more particularly to the structural convenience thereof.

Heretofore other ash trays have been made with separate compartments for the cigarettes and ashes but it is usually necessary to remove a stopper or cover on those designs to manually place the cigarettes in the receptacle. When it is necessary to empty them a cover must usually be entirely removed and in some designs the cigarettes often choke the opening of the cigarette receptacle requiring a certain amount of probing action to extract the cigarettes.

An object of the present invention is to provide an improved cigarette and ash separator that the users thereof will normally separate the ashes from the cigarettes and the cigarettes may be automatically aligned and dropped into the cigarette hopper by the opening of a gate hinged above the cigarette receptacle and provided with a manual lift or tilting member for opening the gate. A grate is provided over the ash receptacle and is rigidly attached to the gate whereby it is lifted or opened with the gate.

Plural grates and ash receptacles are also employed. The grates are provided with openings smaller than the diameter of the cigarettes and the average smoker will normally scrape off the ashes on one of the grates allowing ashes to fall into the ash receptacle and if he has a cigarette butt which he desires to dispose of he places it on one of the grates and normally walks away. Where there is a crowd of smokers smoking, usually several cigarette butts are placed on the grate or grates and but few smokers will take the time to place the cigarettes in the hopper. However, one of the smokers or a caretaker may conveniently lift the gates with the grates on the hinges thereof and the cigarettes will automatically roll and fall into the elongated cigarette hopper in a parallel relation to each other.

This improved cigarette receptacle has inverted spaced hopper sides with the top edges thereof forming an opening parallel with the longitudinal axis of the cigarettes, the cigarettes falling through the hopper opening whereby when the receptacle is inverted the cigarettes will automatically expel themselves by gravity. The ashes will also fall out of the ash receptacle or receptacles by gravity when the cigarette and ash separator is inverted.

With these objects in view the invention may be more fully understood from the accompanying drawing, the specification and the scope of the claim appended.

In the drawing:

Figure 1 is a plan view of the cigarette and ash separator with four conventional cigarette rests illustrated thereon.

Figure 2 is a plan view of the cigarette and ash separator as illustrated in Figure 1 with the top including the divided gate and grates removed.

Figure 3 is an elevation of Figure 1 with certain parts broken away to illustrate the interior structure thereof



and the four conventional cigarette rests being omitted because of old construction.

Figure 4 is an inverted view of Figure 3 with the divided gate and grates automatically opened by gravity to permit the cigarettes shown dotted to fall therebetween and the ashes to also fall from the ash receptacles.

An elongated longitudinal cigarette receptacle 5 is separated from the ash receptacles 6 by partitions 7 extending between the receptacles and having the bottoms 8 of the partitions spaced further apart than the top edges thereof forming opening 9 at the top of the cigarette receptacle. Hinges 10 preferably made of wire and having an inverted U shape have the ends 11 attached to the ends of the receptacle 5.

Divided plates or elongated closure gates 12 are spaced over the opening 9 of the cigarette receptacle and have grates 13 rigidly attached thereto. The grates are preferably shaped to segments of a circle and cover the top of the ash receptacles 6.

Preferably semi-annular rings 14 are provided with top flanges 15 and bottom flanges 16, the plates or gates 12 and grates 13 are attached to the lower flanges 16. The flanges 15 are projected outward to rest on the outer walls of the receptacles 5 and 6.

The flanges 15 have holes 17 therein for the reception of the hinge wires 10, the flanges 15 being spaced sufficiently above lower flanges 16 by the semi-annular rings 14 to form a shallow tray and provide the proper spacing for the opening 9 of the cigarette receptacle 5 when the gates are opened. The opening of the gates with the grates is accomplished by the flanges 15 moving toward the center of the hinge wires 10 thus opening the divided gate 12 with rigid grates 13.

In the operation the cigarette and ash separator is placed on a convenient table or stand. When a smoker desires to extract the ashes from his cigarette he scrapes the lighted or ash portion over the grating 13 causing the ashes to fall within one of the ash receptacles 6. The divided gates 12 are preferably made of solid plate to prevent any burning ashes from falling into the cigarette receptacle 5.

If a group of smokers use the separator the ash receptacles will become partially filled and cigarette and butts will be thrown on top of the grates 13 and gates 12 and be confined by the semi-annular rings 14. The ordinary smoker or a caretaker may lift the two lift members 18 which are attached to the semi-annular flanges 15 with the result that the cigarettes and butts will become longitudinally aligned with the gates 12 and pass through the opening 9 into the cigarette receptacle 5. The cigarettes and butts shown in dotted lines at 19 may be of various lengths and have their longitudinal axis aligned with the divided gate 12 by the raising of the gates and grates. When it is desired to empty the receptacles it is only necessary to invert them allowing the grates 13 with divided gates 12 to fall downward and open by gravity on wire hinges 10. The cigarettes being in parallel alignment with the opening 9 will roll off the plates 7 and between the divided gates 12, grates 13 and flanges 15, the flanges 15 being held apart by an offset 20 in the wire hinges 10. The ashes 21 will fall from the ash receptacles 6 and with a little horizontal vibration of the separator the receptacles will become reasonably emptied for return to use on a table or stand.

What I claim as new and desire to secure by Letters Patent is:

A cigarette and ash separator comprising a receptacle for cigarettes, said receptacle being horizontal and elongated with the top thereof being open so as to receive horizontal cigarettes, said receptacle for cigarettes having end walls, side walls and a bottom, a pair of ash receptacles, said ash receptacles being on opposite sides of said

receptacle for cigarettes and continuous therefrom with the openings thereof being upward at least to the same plane of the opening of the receptacle for cigarettes, a pair of gates, said gates being plate members longitudinally extended over the opening of the receptacle for cigarettes and meeting substantially on the longitudinal center line of the opening for cigarettes, a pair of open mesh grates, said grates having the mesh openings smaller than the diameter of the cigarettes to be used, each of said grates being normally extended substantially over an opening of the receptacles for ashes, said gates being rigidly connected with said grates above the longitudinal side walls of said receptacle for cigarettes, a pair of U-shaped wires, one U-shaped wire being inverted and attached to an upward projection of each end wall of said receptacle for cigarettes, a plate extended upward from each end of each gate and extended around the outer periphery of the attached grate to form a flange, said plates having the upper ends thereof bent over horizontally with holes therein to engage the inverted U-shaped wires so as to hinge the gates on the inverted U-shaped wires to separate them along the center lines of the in-



verted U-shaped wires and the longitudinal center line of the opening of the receptacle for cigarettes whereby the grates may be manually lifted to admit cigarettes into the receptacle for cigarettes, or fall by gravity to suspend them from the U-shaped wires in a dependent position when the receptacles are emptied by inversion.

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