Nov. 30, 1954 L. SOULE 2,695,619

CIGARETTE ASH RECEIVER

Filed Jan. 19, 1950

Fig. 1

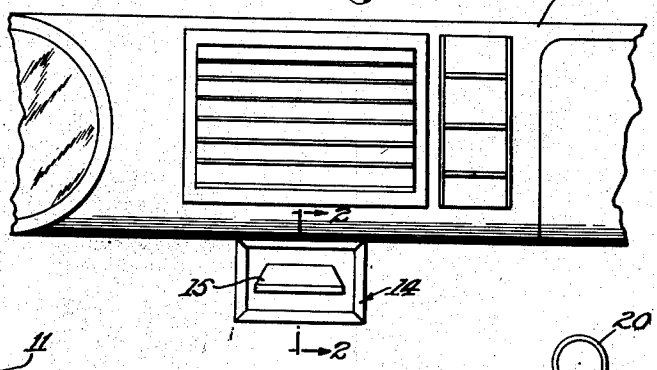
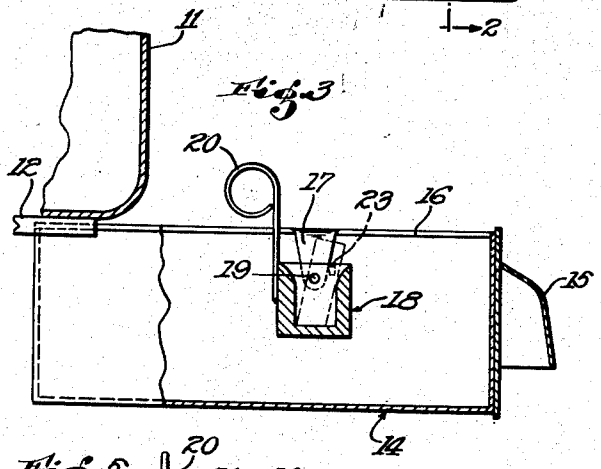


Fig. 3



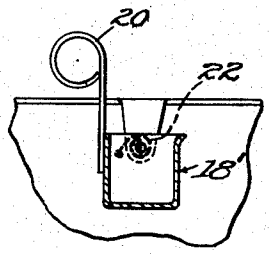


Fig. 6

Fig. 5

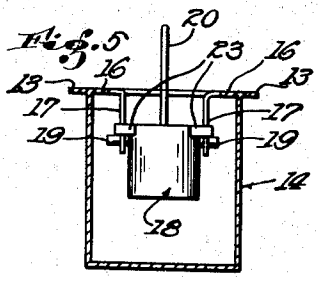


Fig. 2

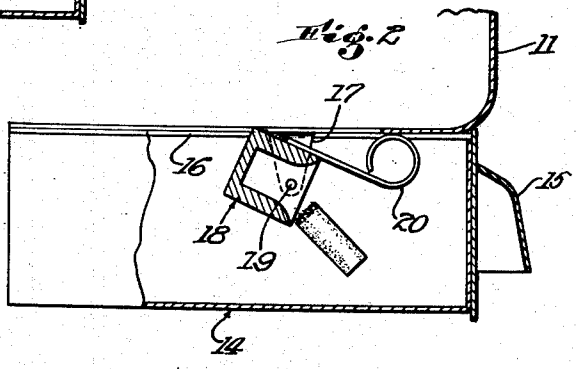
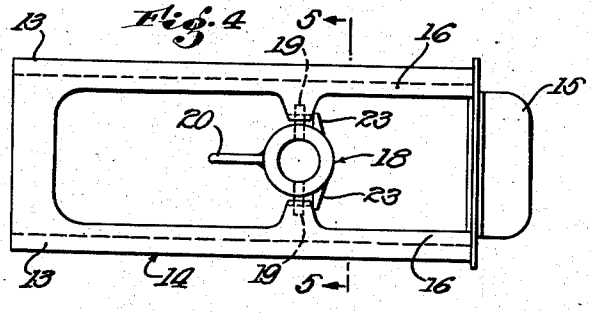


Fig. 4



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CIGARETTE ASH RECEIVER

Leslie Soule, Dover, Mass.

Application January 19, 1950, Serial No. 139,491

6 Claims. (Cl. 131—235)

My invention relates to cigarette ash receivers such as are commonly employed in automobiles and the like. See also my co-pending companion application Serial No. 193,329, filed November 1, 1950, now Patent No. 2,623,529, issued December 30, 1952, relating to the same subject.

Such ash receivers as now made customarily comprise a sliding or swinging tray or drawer with a perforated member against which a lighted cigarette stub can be extinguished by being rubbed out after which the stub is dropped into the tray. In actual use, however, it is found that the fire is frequently only partly extinguished and that sparks which have dropped through the perforations or the burning stub sets fire to unburned cigarette stubs and charred tobacco in the tray. Often the entire contents of the tray is ignited and smoulders, giving off unpleasant smoke and fumes. If the vehicle is in motion, the driver must either submit to the discomfort of the smoke, or stop the vehicle, take out the tray which in some cases is too hot to handle with comfort, and empty it and replace it.

Furthermore, a person who has been annoyed by burning cigarette stubs in an ash tray is likely to take particular pains to rub out the burning cigarette thoroughly, with the result that his attention is dangerously distracted from the management of the vehicle. Or, as is frequently the case, the operator throws the lighted stub out of the window rather than go to the trouble of rubbing it out and dropping it in the tray.

Accordingly, the object of the present invention is to provide an ash receptacle of simple economical construction which will extinguish the cigarette effectively and with a minimum of effort on the part of the operator, so that attention will not be distracted from the management of the vehicle.

The improved cigarette ash receiver embodying my invention includes a cup with a closed bottom to receive the cigarette stub and by which it is extinguished, and is so constructed that when the tray is pushed back into closed position, the extinguished cigarette stub is automatically tipped out of the cup and deposited in the tray. The cup is then empty and in position to receive the next cigarette stub when the tray is again pulled out.

In the drawings:

Fig. 1 is a front elevation of the panel of an automobile with a cigarette ash receiver embodying my invention located in a customary position underneath the panel;

Fig. 2 is a section on line 2—2 of Fig. 1 showing the parts in the position which they occupy when the tray is closed;

Fig. 3 shows the same parts with the tray pulled out and the cup in position to receive a cigarette stub;

Fig. 4 is a plan view of the tray and attached parts;

Fig. 5 is a section on line 5—5 of Fig. 4; and

Fig. 6 is a modification of the device in which the cup is normally held in upright position by means of a spring.

Referring to the drawings, the panel of an automobile is designated **11**. On its underside are two guides **12** to receive flanges **13** on the sides of a tray or drawer **14** having the usual handle **15** by which it can be moved in or out beneath the underside of the panel **11**. The tray has an open top, as shown in Fig. 4, and there are two horizontal inwardly extending flanges **16** from which depend lugs **17**. At **18** is shown a cup having a closed bottom as shown in Figs. 2 and 3 and provided with pivots or trunnions **19** on which the cup can swing or tilt, the pivots being received in hubs or bearings in the lugs **17**.

The cup is also provided with an upwardly extending portion **20** conveniently in the form of a bail. This upwardly extending portion **20** extends above the level of the underside of the panel, and the cup **18** is pivoted with its pivots or trunnions **18** above the center of gravity of the combined unit consisting of the cup **18** and the upwardly extending portion **20**, so that when the tray is open, the cup **18** is held by gravity in a vertical position as shown in Fig. 3. However, when the tray is pushed in to the position shown in Fig. 2, the upwardly projecting portion or bail **20** engages the front edge of the underside of the panel **11** and tilts the cup into the position shown in Fig. 2. This is the position which it occupies when the tray is closed. The cup is slightly larger than the cigarette and is flared at the top so that the cigarette can be placed in it easily and will drop out when the cup is inverted.

The embodiment of my invention shown in Fig. 6 is the same as that already described, except that a spring **22** is provided to maintain the cup **18'** normally in upright position if for any reason it is found to be more convenient to pivot the cup at or below the center of gravity. In Fig. 6 I have shown the cup as being made of a thin stamping of metal so that it would be over-balanced by the upwardly projecting portion or bail **20**.

I also provide on the cup one or more projections **23—23**, see Figs. 4 and 5 which engage the downwardly depending lugs **17** when the cup is in upright position and prevent it from tipping out of the vertical into position which might interfere with closing the tray.

While I have shown my improved ash receiver as embodied in a drawer-like tray which slides underneath the bottom wall of an automobile panel, it will be understood that the invention can be employed wherever the tray in open position is clear of its support and in closed position has passed under or beside some member which will tilt the cup and dump out the cigarette stub.

The operation of my device is as follows: Assuming that the tray is closed, that is, has been pushed in under the bottom wall of the panel **11**, the parts will then be in the position shown in Fig. 2 with the bail or projection under the bottom wall of the panel and the cup in an inclined position. When the tray is drawn out to the position shown in Fig. 3, the weight of the cup or the spring **22** tilts it to the position shown in Fig. 3. At this time it is empty and ready to receive a cigarette stub. The user then puts the cigarette stub in the cup with the burning end downward, and the fire is extinguished almost immediately by the lack of air and by the absorption of heat by the cup. The user then pushes in the tray as shown in Fig. 2, tilting the cup, whereupon the cigarette drops out of the cup into the tray. If by any chance the cigarette stub should stick in the cup, the vibration of the vehicle will cause it to drop out almost immediately.

The cigarette ash receiver embodying my invention has the great advantage that the fire in the cigarette stub is extinguished completely and almost instantaneously and before it comes in contact with the accumulation of cigarette stubs and tobacco usually found in an ash receptacle and, therefore, cannot set fire to them. It has the further advantage that the user does not have to rub out the fire and, therefore, is less likely to have his attention distracted from the manipulation of the car.

I claim:

1. An improved cigarette ash receiver comprising in combination a stationary member, a tray mounted for movement in and out relative to the said stationary member, an open-topped cup pivotally suspended in the tray and adapted to be tilted from a vertical receiving position in an emptying position, there being a space in the tray below the cup to receive cigarette butts and ashes, the cup having a portion extending outside the tray adapted to engage the stationary member to tilt the cup from its receiving position to its emptying position when the tray is pushed in.

2. An improved cigarette ash receiver comprising in combination a stationary member, a tray mounted for movement in and out beneath the said stationary member, an open-topped cup pivotally suspended in the tray and adapted to be tilted from a vertical receiving position into an emptying position, there being a space in the tray

below the cup to receive cigarette butts and ashes, and an upwardly extending bail attached to the cup adapted to engage the stationary member to tilt the cup from its receiving position to its emptying position when the tray is pushed in.

3. An improved cigarette ash receiver comprising in combination a stationary member, a tray mounted for movement in and out beneath the said stationary member, an open-topped cup pivotally suspended in the tray and adapted to be tilted from a vertical receiving position into an emptying position, there being a space in the tray below the cup to receive cigarette butts and ashes, an upwardly extending bail attached to the cup adapted to engage the stationary member to tilt the cup from its receiving position to its emptying position when the tray is pushed in, and a spring acting on the cup to move it to an upright position when the tray is pulled out.

4. The combination as set forth in claim 1 and a spring acting on the said open-topped cup maintaining it in its said vertical receiving position when the said tray is pulled out.

5. An improved cigarette ash receiver comprising in combination a stationary member, a tray mounted for movement in and out beneath the said stationary member, an open-topped cup pivotally suspended in the tray and adapted to be tilted from a vertical receiving position into an emptying position, there being a space in the tray below the cup to receive cigarette butts and ashes, an attached upwardly extending bail attached to the cup, said

bail having an outwardly curved portion adapted to engage the stationary member to hold the cup in its emptying position when the tray is pushed in.

6. An improved cigarette ash receiver comprising in combination a stationary member, a tray mounted for movement in and out beneath the said stationary member, an open-topped cup suspended on a pivot in the tray and adapted to be tilted from a vertical receiving position into an emptying position, there being a space in the tray below the cup to receive cigarette butts and ashes, an upwardly extending bail attached to the cup adapted to engage the stationary member to tilt the cup from its receiving position to its emptying position when the tray is pushed in, and a coil spring mounted surrounding the said pivot and acting on the cup to move it to upright position when the tray is pulled out.

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