Oct. 14, 1952 D. STEPKIN 2,613,676

CIGARETTE HOLDER FOR AUTOMOBILE ASH TRAYS

Filed Sept. 30, 1950

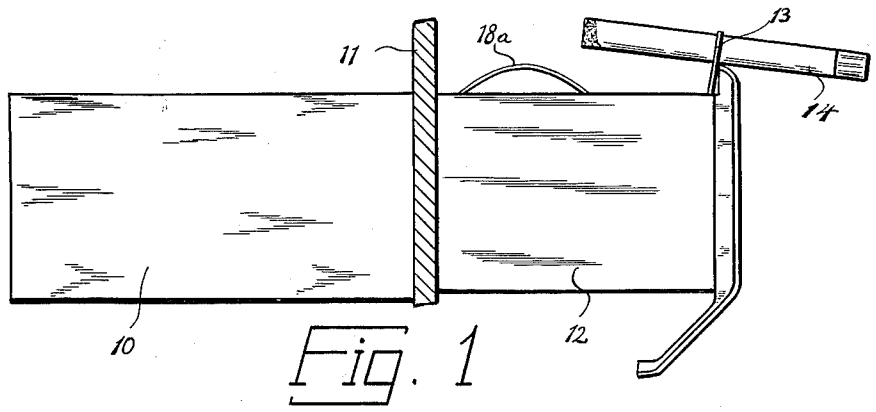


Fig. 1

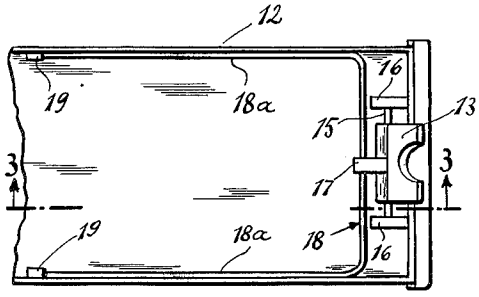


Fig. 2

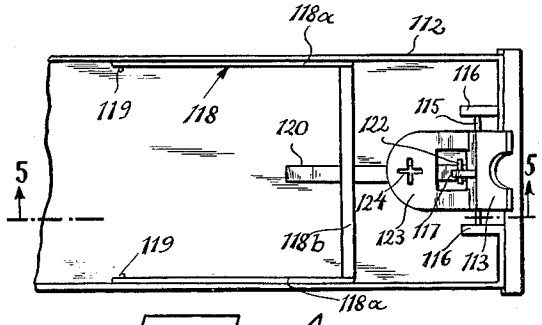


Fig. 4

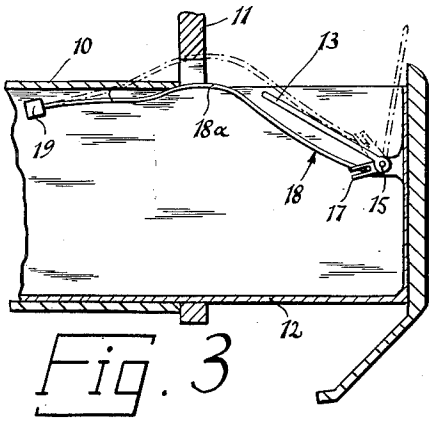


Fig. 3

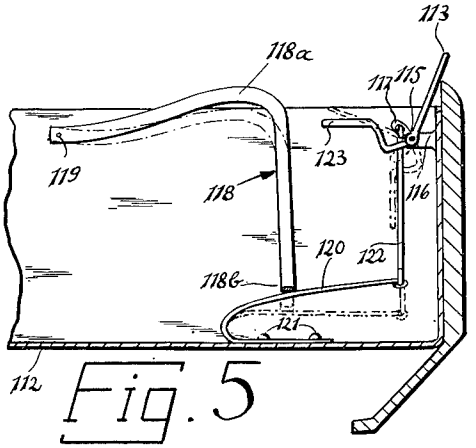


Fig. 5

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CIGARETTE HOLDER FOR AUTOMOBILE ASH TRAYS

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10 Claims. (Cl. 131—235)

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My present invention relates to improvements in cigarette holders of the type disclosed in my co-pending application Ser. No. 180,475, filed August 19, 1950, and which has been subsequently abandoned, of which this application is a continuation-in-part.

In my co-pending application, above identified, I have described a bifurcate member fixedly secured to a conventional automobile ash receiver and adapted to retain a cigarette which the driver may temporarily deposit therein in order to have full freedom of both hands.

The general object of the present invention is to provide a retractable cigarette holder in combination with means for automatically withdrawing such holder into the receptacle or tray when the latter is restored to its inoperative position in the dash board of an automobile, the holder projecting from the receptacle when the tray is pulled out for use.

A more specific object of this invention is to provide a retractable cigarette holder so mounted that it will not yield to finger pressure when the user attempts to deposit a cigarette therein, whereby distraction of the driver's attention during use of the holder will be avoided.

Another specific object of the instant invention is to arrange the parts in an unostentatious manner and with a minimum of obstruction of the interior of the receptacle.

It is also an object of my present invention to couple a cigarette holder of the character set forth with a cigarette extinguisher retractable simultaneously with the former.

The invention will be described in detail with reference to the accompanying drawing in which:

Fig. 1 is a side elevation of an ash receiver equipped with a retractable cigarette holder according to the present invention;

Fig. 2 is a top plan view of the forward portion of the receiver of Fig. 1 incorporating the retractable holder;

Fig. 3 is a section taken on the line 3—3 of Fig. 2, a portion of the adjacent part of the dash board being included for clarity;

Fig. 4 is a top plan view similar to Fig. 2 but representing a modification; and

Fig. 5 is a section taken on the line 5—5 of Fig. 4.

Referring first to Figs. 1–3, there is shown an ash receiver consisting, essentially, of a stationary housing 10 set in the dash board 11 and a receptacle 12 slidable into and out of the housing. The receptacle is shown in Fig. 1 in its operative, or partly withdrawn, position permitting the driver to drop ashes into the forward part thereof; complete removal of the receptacle from the housing enables the emptying of the receptacle.

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The holder 13, whose bifurcate shape is adapted to retain a cigarette 14 as seen in Fig. 2, is pivotally mounted on a shaft 15 journaled in lugs 16 which extend inwardly from the front wall of the receptacle 12. Also pivoted on the shaft 15 and rigid with the holder 13, forming an acute angle therewith, is a fork member 17 whose prongs straddle the bight of a generally U-shaped spring member 18. This spring member is seen to consist of a single wire of adequate resiliency, the ends of which are fixed at 19, as by soldering, to the side walls of the receptacle 12. The wire 18 is formed with two aligned cam portions or humps 18*a*, one on each arm of the U, which in the operative position of the receptacle project above its upper edge as clearly seen in Fig. 1. These humps are adapted to be cammed downwardly by the front edge of the housing 10 when the receptacle 12 is restored to its closed position. The entire assembly 13, 17, 18 is thereby rocked from its operative position, shown in dot-dash lines in Fig. 3, to its retracted position illustrated in full lines in the same figure; it will be seen that in the latter position the tip of holder 13 lies within the outline of the receptacle 12, enabling the latter to be fully inserted into the housing 10. When the receptacle is again pulled out, the resiliency of spring member 18 causes the humps 18*a* and the holder 13 to return to the position shown in Fig. 1. It will be noted that the holder 13 when projecting from the receptacle is slightly inclined in a forward direction, thereby resting against the front edge of the receptacle; thus the holder will not alter its position when the cigarette 14 is forced down upon it.

The embodiment shown in Figs. 4 and 5 operates essentially in the same manner as the device just described, except that use has been made of lever action to reduce the travel of the cam member so that its humps will project less prominently above the receptacle.

A yoke member 118, provided with humps 118*a* similar to the humps of wire 18 in the preceding embodiment, is pivotally secured to the side walls of the receptacle 112 at 119. This member, which consists of a rigid strip of rectangular cross section, is formed at its center with a cross bar 118*b*, the latter bearing upon a J-shaped blade spring 120 riveted at 121 to the bottom of the receptacle. The free end of spring 120 is hinged to the lower end of a link 122 whose upper end is linked to a spur 117 which is rigid with the holder 113, extending at an acute angle thereto,

and together with the latter is pivoted on shaft 115 journaled in lugs 116.

A tongue 123, provided with a cross-shaped cutout 124, serves as an extinguisher and is pivoted on the shaft 115 in rigid relationship with the members 117 and 113. When an automobile driver wishes to use the extinguisher, he will reach for the holder 113 whose projecting end serves as a guide to the extinguisher, thus permitting use of the latter without requiring the driver to take his eyes off the road. The alternate positions are shown in Fig. 5, full lines indicating the operative and dot-dash lines the retracted position. It will be seen that the extinguisher 123, which in the operative position is maintained horizontal by the upward pressure of spring 120, extends vertically downwardly when the receptacle is replaced, thereby dumping any ashes or cigarette butts that had been deposited thereon. Because the lever action of the movable arm of flat spring 120 magnifies the vertical displacement of the yoke member 118, it is only necessary for the humps or cam portions 118a to rise a small distance above the upper edge of the receptacle 112.

It should be noted that the invention is not limited to the specific forms described and illustrated; more particularly, the arrangement disclosed may be readily adapted to other types of automobile ash trays without departing from the scope and spirit of the invention. Thus it will be apparent that the downward camming action depressing an operating member such as 18 or 118 may be executed by any stationary element fixed to the dash board or even by the dash board itself; also, the wire spring 18 or the blade spring 120 may be replaced by an equivalent arrangement comprising a spring-biased lever pivoted at one end or at some intermediate point. These and other modifications and adaptations will be readily apparent to persons skilled in the art and are intended to be included within the scope of the appended claims.

I claim:

1. In an ash receiver adapted to be mounted in an automobile dash board, in combination, a receptacle movable relative to said dash board, operating means in said receptacle including a cam, a portion of said means being resilient to urge said cam beyond said receptacle into an operative position, said cam being repressible into an inoperative position within said receptacle upon the latter being completely retracted inside said dashboard, and a holder member adapted to retain a cigarette and linked to said operating means, said holder member projecting beyond said receptacle upon said cam occupying said operative position and being withdrawn inside said receptacle upon said cam occupying said inoperative position.

2. In an ash receiver adapted to be mounted in an automobile dash board, in combination, a receptacle movable relative to said dash board, operating means in said receptacle including a cam, a portion of said means being resilient to urge said cam beyond said receptacle into an operative position, said cam being repressible into an inoperative position within said receptacle upon the latter being completely retracted inside said dash board, a cigarette holder provided with a bifurcate end and pivotally mounted inside said receptacle, and link means operatively connecting said holder with said operating means, said link means causing said bifurcate end to project from said receptacle upon said cam occupying said operative position and withdrawing said bifurcate end into said receptacle upon said cam occupying said inoperative position.

3. The combination according to claim 2 wherein said link means includes an element rigid with said holder and mounted on a common pivot therewith.

4. The combination according to claim 3 wherein said element encloses an acute angle with said holder.

5. The combination according to claim 2 wherein said resilient portion comprises a resilient arm integral with said cam.

6. The combination according to claim 5 wherein said operating means comprises a resilient wire of generally U-shaped configuration, said cam comprising a hump provided on an arm of the U.

7. The combination according to claim 2, including lever means translating the displacement of said cam into a magnified displacement of said holder.

8. The combination according to claim 7 wherein said lever means is part of said resilient portion.

9. The combination according to claim 2, including extinguisher means rigid with said cigarette holder and mounted on a common pivot therewith so as to become accessible, together with said holder, upon partial withdrawal of said receptacle from said dash board, said holder by virtue of its projecting end then serving as a guide to said extinguisher.

10. In an ash receiver adapted to be mounted in an automobile dash board, in combination, a housing fixed in said dash board, a receptacle received in said housing and displaceable relative thereto, operating means in said receptacle including a cam, a portion of said means being resilient to urge said cam beyond said receptacle into an operative position, means including said housing repressing said cam into an inoperative position within said receptacle upon the latter being completely retracted inside said housing, and a holder member adapted to retain a cigarette and linked to said operating means, said holder member projecting beyond said receptacle upon said cam occupying said operative position and being withdrawn inside said receptacle upon said cam occupying said inoperative position.

DAVID STEPKIN.

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