Sept. 26, 1939. R. C. JACOBS 2,174,244

REMOVABLE ASH RECEIVER

Filed May 20, 1935 2 Sheets-Sheet 1

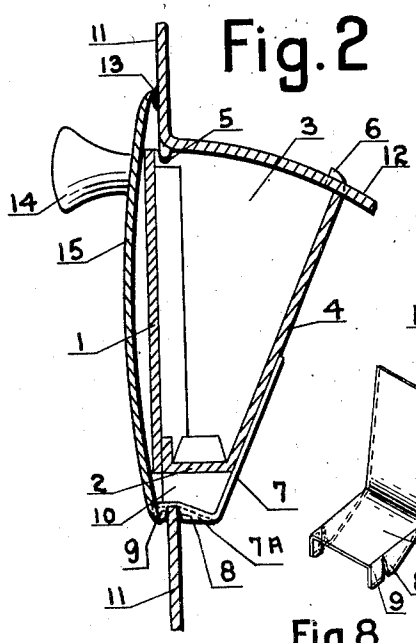

Fig.2

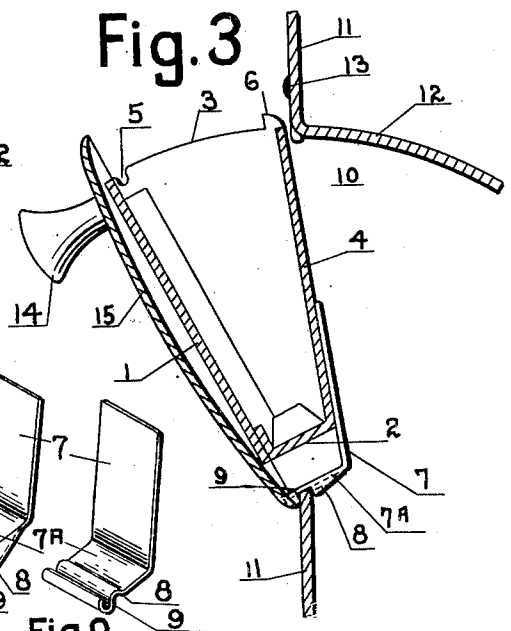

Fig.3

Fig.8 Fig.9

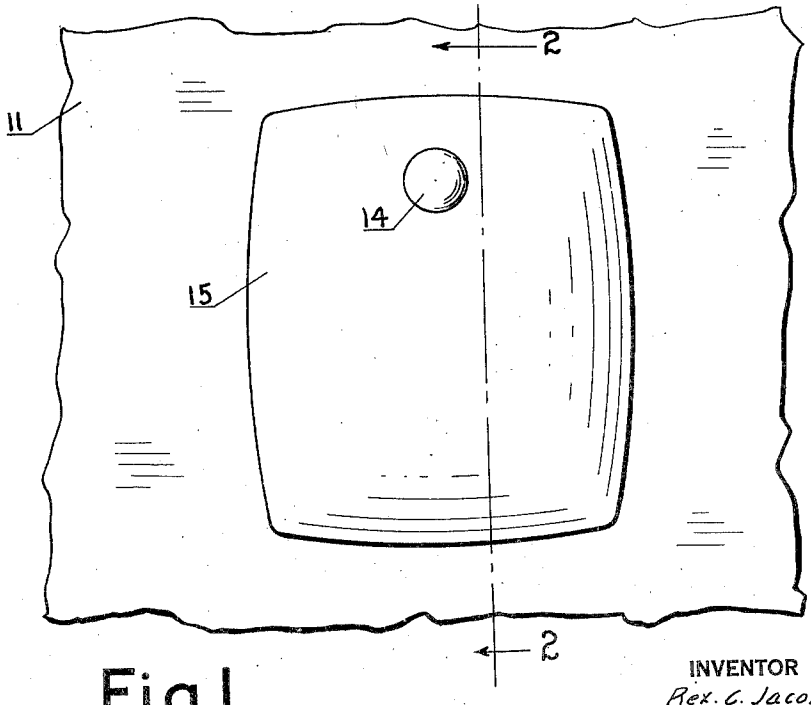

Fig.1

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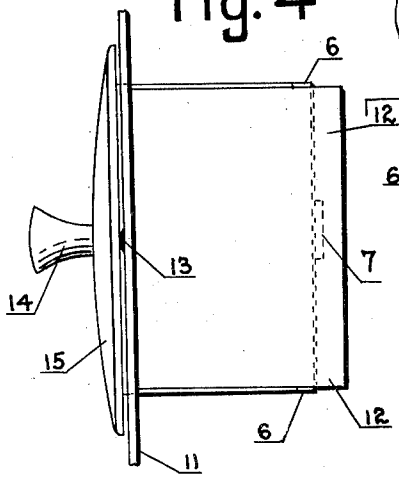
Fig. 4



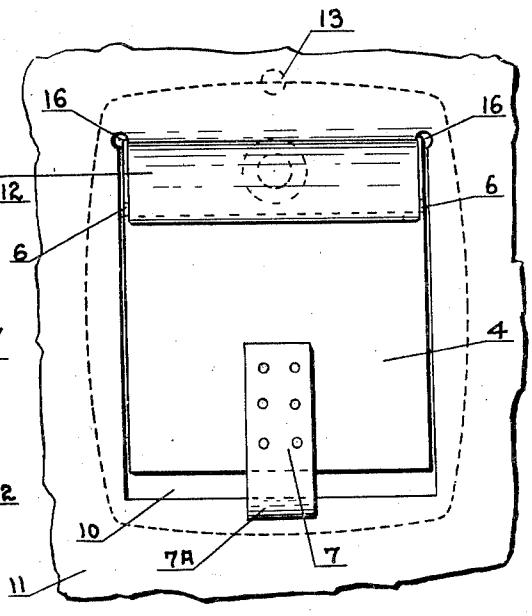


Fig. 5

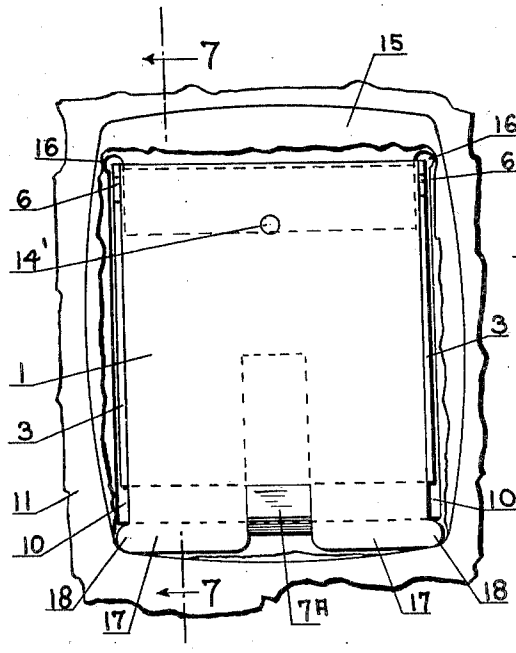


Fig. 6

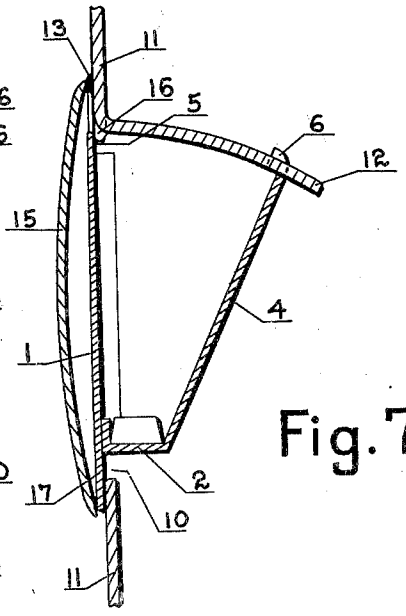


Fig. 7

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UNITED STATES PATENT OFFICE

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REMOVABLE ASH RECEIVER

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Application May 20, 1935, Serial No. 22,381

1 Claim. (Cl. 206—19.5)

This invention relates to ash receivers and particularly to the concealed type receiver especially adapted to be inserted within and removed from an opening in the instrument panel of an automobile or other interior wall for receiving ashes from cigars and cigarettes, and for the deposit of the unused portions of the same therein.

An ash receiver of this type should be provided with means for eliminating rattles due to the vibrations in the automobile not only when the receiver is in closed position, but when it is in fully open or partially open position as when in use. It is also necessary that the receiver may be readily removable for emptying and when empty should be easily replaceable.

One of the many objects of my invention resides in the fact that the container is entirely concealed from view when it is not in use and furthermore it does not protrude and thus it is not only out of sight but is also out of the way. In other words, its concealment is desirable for both esthetic and utilitarian reasons.

The principal object of this invention is to provide an ash receiver pivoted resiliently about its lower front side.

Another object of this invention is to provide hinge parts on the resilient mounting so that the receiver may be easily applied to or detached from its mounting plate but nevertheless is securely located in its closed or operative position. Furthermore, it remains in any position to which it is adjusted.

Another object of the invention is to disengageably lock the receiver in closed position.

Another object of this invention is to provide a positive but disengageable stop for the receiver when tilted to its extreme forward position.

Another advantage is attained by the flexibility of the hinge mounting of the structure, this permitting the container to be slid directly into the opening in the mounting plate at a right angle thereto, the flexible hinge plate compressing during this operation and then snapping to operative position. This method of assembly is easily accomplished inasmuch as only direct inner force is required to cause the proper engagement of the hinge.

Another very important feature of my device resides in the resiliency of the hinge member, this hinge member thrusting the container or receiver upwardly to a released position whenever the same is tilted outwardly beyond its normal outward position, this being accomplished by the release of stop means as will be set forth later in the specification.

Still another advantage of my invention resides in utilizing a portion of the material struck from the opening through the mounting plate, this material being bent rearwardly to form a cover for the receiver when the same is located in its concealed position.

It is also to be noted that the receiver has an artistically decorated panel plate concealing its outer face and a further advantage lies in the locating of the edges of this panel plate in spaced relationship to the mounting plate, this preventing any contact therebetween and consequently any defacing of the finished surface of the mounting plate is eliminated. Thus, no chipping of the enamel or mutilation of the surface of the mounting plate is had.

A further object is to provide an ash receiver that can be made from stamped metal parts, one that will be durable and free from the objections heretofore present in receivers of the type in which the hinge upon which the receiver tilts is rigidly connected to the container.

As previously pointed out, my device is very convenient to operate and is easy to detach in order to empty the same. Also, the device is simple in construction whereby its cost of manufacture is relatively low. Also, it is durable and neat appearing.

Fig. 1 is a front view of the receiver and a section of the panel in which it is mounted with the receiver in closed position.

Fig. 2 is a section through Fig. 1 on the line 2—2 looking in the direction of the arrows with the receiver in closed position.

Fig. 3 is a view similar to Fig. 2 but with the receiver in position to be removed from the panel.

Fig. 4 is a top view of Fig. 1.

Fig. 5 is a rear view of Fig. 1.

Fig. 6 shows a front view like Fig. 1, but of a modified form with the ornamental cover broken away to show the front wall of the receiver.

Fig. 7 shows a section through Fig. 6 on the line 7—7 with the ornamental cover in plate.

Figs. 8 and 9 show two types of hinge and spring construction.

The receiver body comprises an open top box formed from the metal sheet stampings having a front wall 1, a bottom wall 2, two side walls 3 and a rear wall 4. In the upper edge of each of the side walls 3 is provided a notch 5 and a lug 6, the purpose of the notches and lugs will be presently explained. Rigidly attached, by spot

welding or otherwise, to the outer surface of the rear wall 4 is a spring member 7 having a portion 7a which extends under the box to about the plane of the front wall 1. This portion 7a is always under tension when the receiver is in inserted position.

Hinge parts 8 and 9 are formed in the portion 7a of the spring member 7 for detachably engaging the lower edge of an opening 10 in a panel wall or supporting plate 11. This permits the receiver to be adjusted to various tilted positions between the closed and open positions under the tension of the spring portion 7a. The body portion comprising the box part is smaller than the opening 10 and is readily inserted therein or withdrawn therefrom.

A cover for the ash receiver is formed by the part 12, which may be integral with the panel 11 as shown. Contact with the front wall of the panel is prevented by the button 13 which may be made of rubber or other suitable material and by the hinge part 9 on the spring portion 7a. To the front wall 1 of the receiver is attached at 14^1, Fig. 6 an ornamental cover 15 finished to match the finish of the instrument panel and larger than the opening 10 in the panel. A knob 14 serves to attach the plate 15 to the wall 1. While I have shown the receiver as mounted directly in an opening in the instrument panel of the autmobile I may if desirable mount the receiver in an opening of a separate small panel which may be bolted to the instrument panel. Either method may be used as desired.

From Figs. 4 and 5 it will be seen that the cover 12 is not as wide as the receiver and that the lugs 6 are outside of the cover. The metal at the upper corners of the opening 10 in the panel 11 is slightly cut away as shown at 16 in Fig. 5.

As shown in Figs. 6 and 7 the front wall 1 of the receiver has been extended downward forming two lugs 17 with ears 18 thereon. These portions will form contact parts at the lower portion of the cover 15 to assist in holding it firmly to the front wall 1.

The operation of the receiver is as follows: Assuming the receiver to be in the closed position shown in Fig. 1, the notches 5 will have been engaged with cut away 16 at the upper corners of the opening 10 in the panel wall, due to the spring portion 7a having forced the entire receiver upward to lock it when in closed position. A pull on the knob 14 causes the spring portion 7a to further compress as the notches pass in front of the panel 11 and the top edge of the side walls 3 are held against the upper edge of the opening in the panel by spring portion 7a. The receiver may be opened as wide as desired and there will be no position in which the spring portion 7a will not act to maintain the receiver pressed against the upper edge 16 of the opening 10 in the panel. When the lugs 6 have contacted the panel 11 the receiver is in full open position and movement positively stopped. To completely remove the container a downward push on the knob 14 causes a downward movement of the ash receiver, carrying the lugs 6 below the upper edge 16 of the opening 10 in the wall 11 and further compressing spring portion 7a. After the rear wall 4 of the receiver passes beyond the panel 11 the force stored in the spring portion 7a causes an upper movement of the receiver to assist in completely removing the receiver from the opening 10. The hinge parts 8 and 9 are loosely fitted on the lower edge of the opening 10 in the panel 11 so that the receiver may thus be easily removed for cleaning.

Upon reinsertion of the receiver into the opening 10 the hinge parts 8 and 9 should first be fitted over the lower edge of the opening 10 and the spring 7 compressed until the lugs 6 have passed beyond the upper edge of the opening 10. If desired the receiver may be slid directly into the opening at right angles to the plate. The flexible hinge compressing during this operation and then snapping into operative position on the panel 11 at the lower edge of the opening 10. The distance between this edge and the bottom wall 2 of the receiver and the design of the spring 7 controls the amount of spring pressure used in the resilient control of the tilting movement of the receiver. It will be thus seen that the device within shown and described may be readily inserted and seated within and conveniently removed from the opening in the panel or supporting plate and that the device is economical in manufacture, attractive in appearance and utilitarian in use.

While but several specific embodiments of this invention have been herein shown and described it will be understood that details of the construction shown may be altered or omitted without departing from the spirit of this invention as defined by the following claim:

In combination with a mounting panel having an opening, a removable receptacle tiltably disposed in said opening, the lower edge of said opening and the bottom of said receptacle being connected by a hinge including a spring for urging said receptacle upwardly and for permitting said receptacle to be moved downwardly, the top portion of said receptacle and the panel being provided with rigid interengaging stop means so related to each other that downward movement of the receptacle accomplishes the disengagement of said stop means, and that upward movement of said receptacle engages said stop means.

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