May 19, 1953 E. S. CARLSON 2,639,055

ASH RECEIVER WITH MOUNTING PLATE

Filed May 1, 1947 2 Sheets-Sheet 1

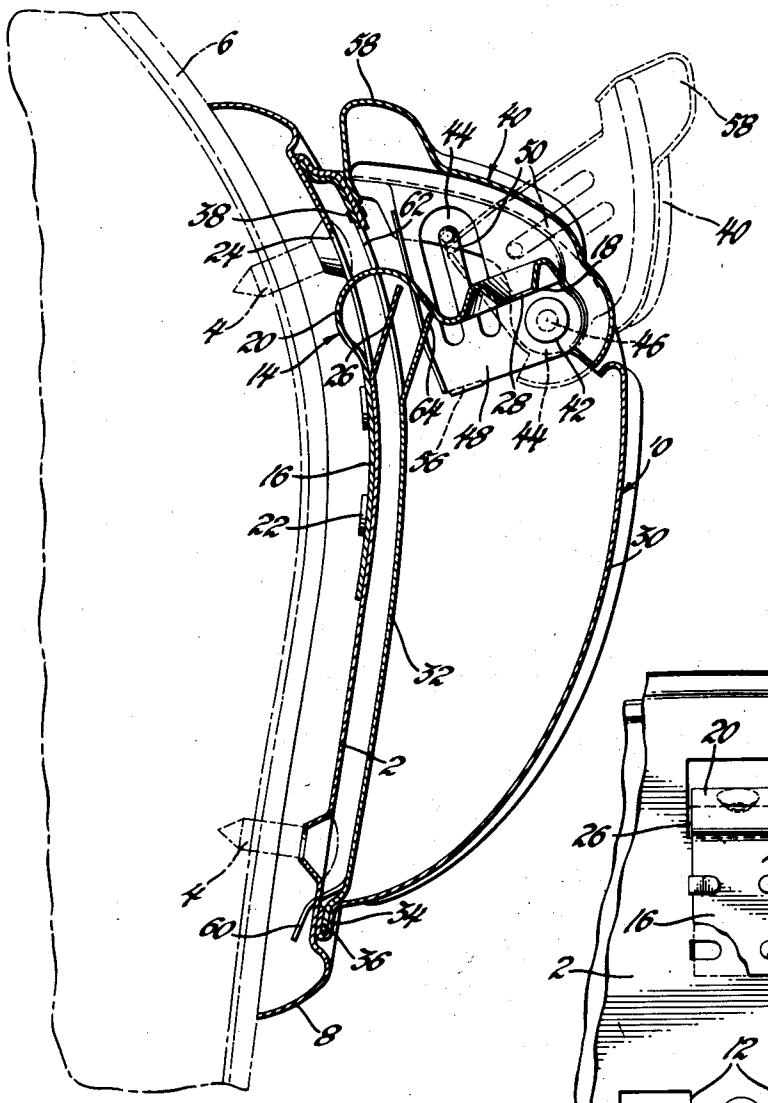


Fig. 1

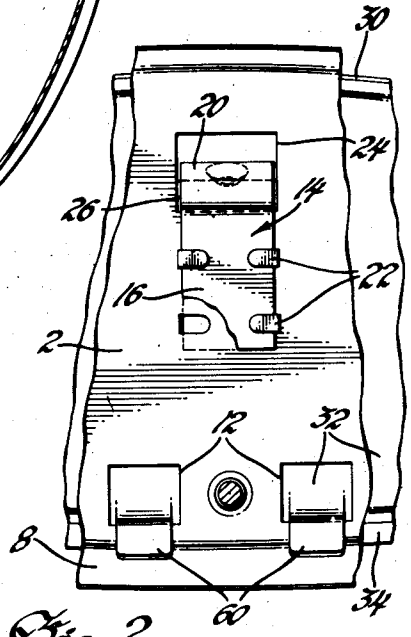


Fig. 2

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ASH RECEIVER WITH MOUNTING PLATE

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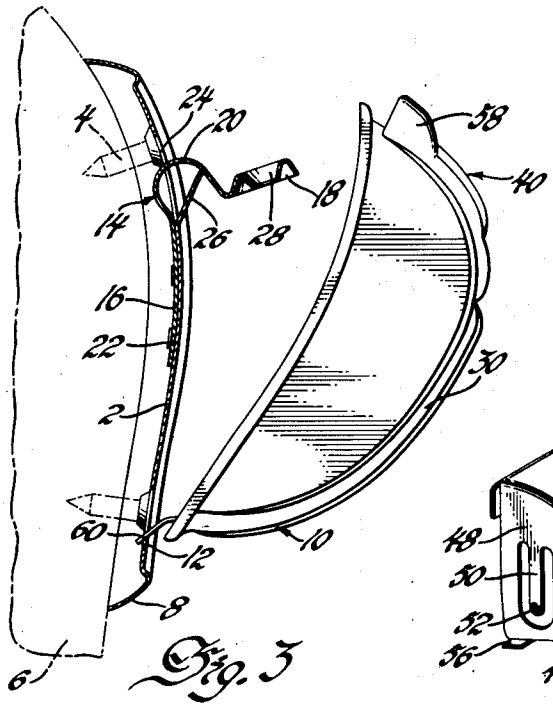


Fig. 3

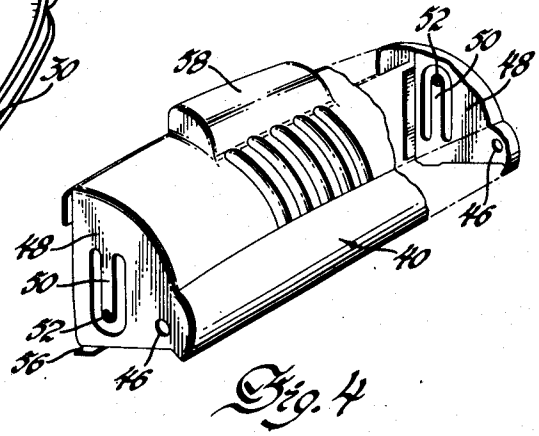


Fig. 4

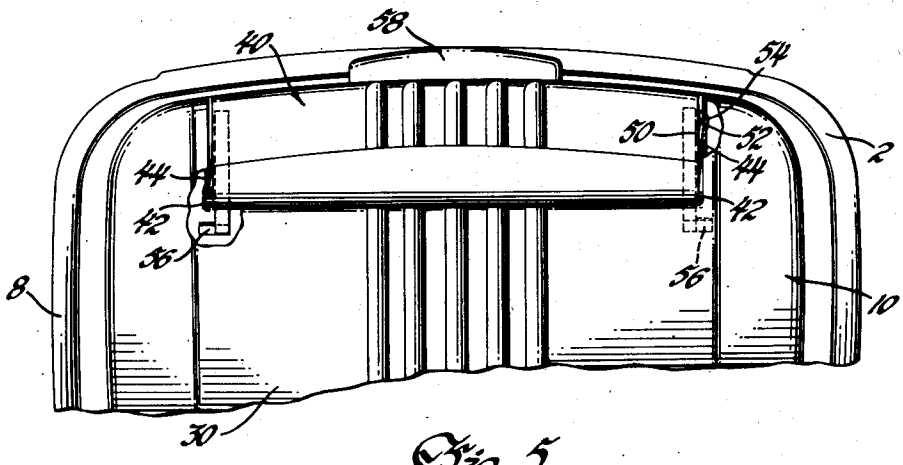


Fig. 5

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ASH RECEIVER WITH MOUNTING PLATE

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1 Claim. (Cl. 220—18)

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This invention relates generally to ash receivers and particularly to the construction and mounting of an ash receiver adapted for use on the back of the front seat of an automobile.

According to the present invention, the ash receiver is provided with a lid or pivoted cover and is normally supported against accidental displacement on an escutcheon or mounting plate but may be readily detached when it is desired to empty the contents thereof.

One feature of the invention relates to the support of the ash receiver on the mounting plate by the provision of an interlocking connection with a spring latch to normally prevent any movement of the ash receiver relative to the mounting plate.

Another feature involves the construction of the ash receiver and its lid to provide means to frictionally hold the lid in open and closed positions.

Further features and the advantages of the present invention will be apparent from the following description of the embodiment shown in the accompanying drawings, in which:

Figure 1 is a central vertical section of the ash receiver and mounting plate with the lid shown in open position in dot and dash lines;

Figure 2 is a fragmentary rear elevation;

Figure 3 is a side elevation with the mounting plate in section and the ash receiver partly separated therefrom;

Figure 4 is a perspective of the ash receiver lid with parts broken away; and

Figure 5 is a fragmentary front elevation with parts broken away.

In the drawings, a mounting plate 2 is shown as secured by screws 4 to a suitable support such as the curved back 6 of the front seat of an automobile. The mounting plate 2 is formed with a curved peripheral flange 8 to space the central portion of the plate from the support and also provide an ornamental bezel around the ash receiver indicated generally at 10.

The mounting plate 2 is provided adjacent its lower edge with a pair of transversely spaced openings 12 and adjacent its upper portion with a centrally located spring latch indicated generally at 14. As will be hereinafter described, the openings 12 and latch 14 cooperate with the ash receiver 10 to provide for the detachable connection of the ash receiver to the mounting plate.

The latch 14 is preferably of spring steel and is formed as shown in Figures 1 and 3 with substantially flat inner and outer end portions 16 and 18, respectively, and with a bowed or curved intermediate portion 20. The inner end portion 16 is adapted to be rigidly secured against the inner face of the mounting plate 2 as by means of retainer ears 22 punched out of the plate, with the intermediate portion 20 extending outwardly through an opening 24 in the plate and downwardly to join the outer end portion 18 which extends forwardly and slopes upwardly in front of the mounting plate.

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The intermediate portion 20 is adapted to flex on movement of the portion 18 and an outwardly bent lug 26 may be provided on the mounting plate 2 to limit the extent of movement in one direction. The portion 18 may, if desired, be bent upwardly between its edges and formed with a cupped depression having an aperture 28 to provide a snuffer for cigarettes and the like or to dislodge ashes therefrom.

The ash receiver 10 is shown as constituted by a forwardly bulging front portion 30 which may be of any desired form and a rear wall 32 which is substantially of the same contour but slightly smaller than the mounting plate 2 so as to fit within the bezel formed by the flange 8 of the mounting plate. The front portion 30 and the rear wall 32 are provided with mating peripheral flanges 34 and 36, respectively, which may be offset rearwardly to space the wall 32 from the mounting plate 2 with the portion 30 and wall 32 secured together to form the ash receiving chamber in any desired manner as by bending a portion of the flange 34 around the flange 36 to reinforce the bottom edge of the ash receiver and riveting the parts together adjacent the upper edge as indicated at 38 in Figure 1.

The ash receiver is provided adjacent the upper portion thereof with an opening adapted to be normally closed by a lid 40 which is pivotally mounted to swing outwardly to the open position shown in dot and dash lines in Figure 1. The lid 40 is preferably formed as shown in Figure 4 and may be pivoted to the ash receiver by pins or rivets 42 which extend through inwardly projecting flanges 44 on the ash receiver at each end of the opening and are riveted within the openings 46 in end walls 48 of the lid 40.

To frictionally retain the lid 40 in its closed and open positions, each of the end walls 48 of the lid is provided with an ear or finger 50 which can be formed by punching out an elongated U-shaped portion of each end wall. Each of the fingers 50 is slightly resilient and is preferably bent outwardly from its respective end wall and formed with a small boss 52 on the free end which is adapted to frictionally engage one of the flanges 44 on the ash receiver in certain positions of the lid 40.

As shown in Figure 4, the spring fingers 50 are oppositely arranged so that the free ends of the fingers are respectively adjacent the upper and lower edges of the end walls 48. By reason of this arrangement of the fingers it will be apparent that when the lid 40 is in closed position, as shown in Figures 1 and 5, only one of the fingers 50 will frictionally engage the adjacent flange 44 on the ash receiver and when the lid is in open position,

the other finger 50 will then frictionally engage the other flange 44 as diagrammatically illustrated in dot and dash lines in Figure 1. If desired, each flange 44 may be formed with a slight indentation, as indicated at 54 in Figure 5, to receive the boss 52 on the adjacent spring finger when the lid is respectively in either the fully open or fully closed position, and an outwardly extending ear 56 may be provided on the bottom edge of each end wall 48 to contact the bottom edge of the adjacent flange 44 on the ash receiver to limit the outward pivotal movement of the lid 40 and define the fully open position.

The lid 40 may be provided with an upwardly extending protuberance 58 at the central portion of its upper edge to serve as a handle for opening and closing the lid, and both the lid and the front portion 30 of the ash receiver may be provided with vertical flutes as shown, or otherwise embossed or ornamented in any desired manner to enhance the appearance thereof.

Proceeding now to a description of the manner in which the ash receiver is detachably supported on the mounting plate, it has been heretofore noted that the mounting plate 2 is provided adjacent its lower edge with the transversely spaced openings 12. The rear wall 32 of the ash receiver 10 is provided adjacent its bottom edge with two tongues 60 which are transversely spaced and may be constituted by integral portions of the wall 32 that are bent rearwardly and downwardly in spaced relation to the bottom edge of the ash receiver. The tongues 60 are adapted to be inserted through the openings 12 and extend below the openings behind the mounting plate to provide an interlocking connection between the bottom of the ash receiver and the mounting plate.

It has also been heretofore noted that the mounting plate 2 is provided adjacent its upper edge with the outwardly extending spring latch 14. The rear wall 32 of the ash receiver 10 is provided with a centrally located opening 62 adjacent its upper edge to receive a portion of the spring latch 14 with a part of the wall 32 inclined forwardly from the bottom of the opening 62 to provide a shoulder 64 adapted to be engaged by the spring latch 14 to normally hold the ash receiver on the mounting plate in the position shown in Figure 1. The downwardly extending portion of the spring latch 14 engages over the shoulder 64 and is displaced upwardly to a slight extent from its normal untensioned position so that it exerts tension on the ash receiver both rearwardly and downwardly to prevent outward or upward movement of the ash receiver and hold it firmly against accidental displacement from the mounting plate.

To remove the ash receiver from the mounting plate when it is desired to empty the contents of the ash receiver, it is necessary to first open the lid 40 and manually raise the outer end portion 18 of the spring latch to release the latch from its engagement with the shoulder 64 and then swing the upper end of the ash receiver away from the mounting plate. After the shoulder 64 has been moved outwardly beyond the downwardly extending latching portion of the latch 14, the latch may be released and the ash receiver bodily removed by a continued outward and upward movement to withdraw the tongues 60 from within the openings 12.

To replace the ash receiver on the mounting plate, the tongues 60 are first inserted into the openings 12 as shown in Figure 3, and the upper end of the ash receiver is then swung inwardly so that the tongues slide down behind the mounting plate and the outer end portion 18 of the spring latch passes into the ash receiver through the opening 62. The relative location and upward inclination of the portion 18 of the latch is such that on continued inward swinging movement of the upper end of the ash receiver the shoulder 64 will engage the latch adjacent the downwardly extending portion and force the latch upwardly as the downwardly extending portion passes over the shoulder 64 and into latching engagement therewith. In replacing the ash receiver it is therefore not necessary to open the lid 40 and manually operate the latch as is required when the ash receiver is being removed.

Although a preferred embodiment has been shown and described herein, it will be understood that the present invention is not to be limited to the exact details of such embodiment but various changes and modifications may be made within the scope of the invention as defined in the claim appended hereto.

I claim:

The combination with a mounting plate of an ash receiver having a front, back, sides, bottom, and top, said top having an ash receiving opening and a lid for closing said opening, and means for detachably supporting said ash receiver on said mounting plate including transversely spaced openings in said plate adjacent the lower edge thereof, tongues projecting rearwardly from said receiver back adjacent the lower edge thereof and extending inwardly and downwardly through the openings in said plate, said receiver back having an opening adjacent the upper edge thereof, and a spring latch which is normally concealed by said lid having one end thereof secured to said plate adjacent the upper edge thereof and extending through said receiver back opening and releasably engaging the lower edge of said receiver back opening to exert a downward and inward pressure on said receiver to normally prevent movement of said receiver in a direction to disengage said tongues from said plate and accessible for manual release through said ash receiving opening when said lid is in open position.

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