June 1, 1937. C. A. PRESSNALL 2,082,181

ASH RECEIVER

Filed June 13, 1936 2 Sheets-Sheet 1

Fig. 1

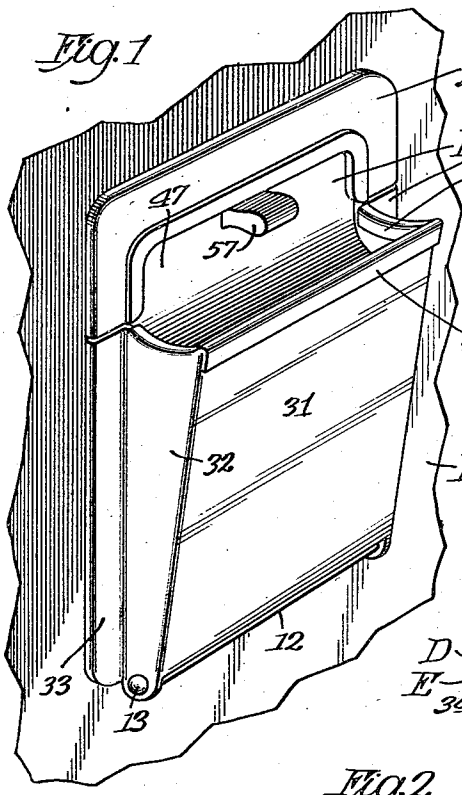


Fig. 3

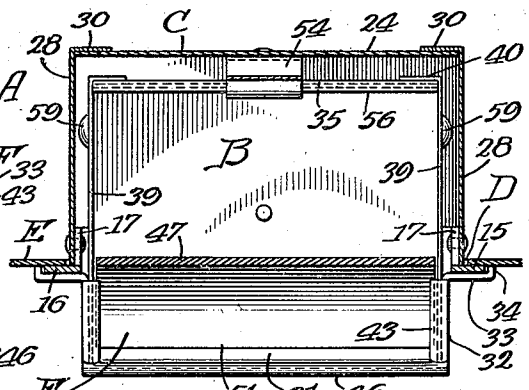


Fig. 4

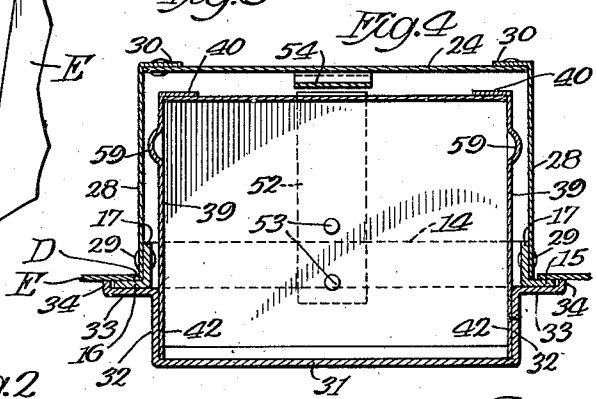


Fig. 2

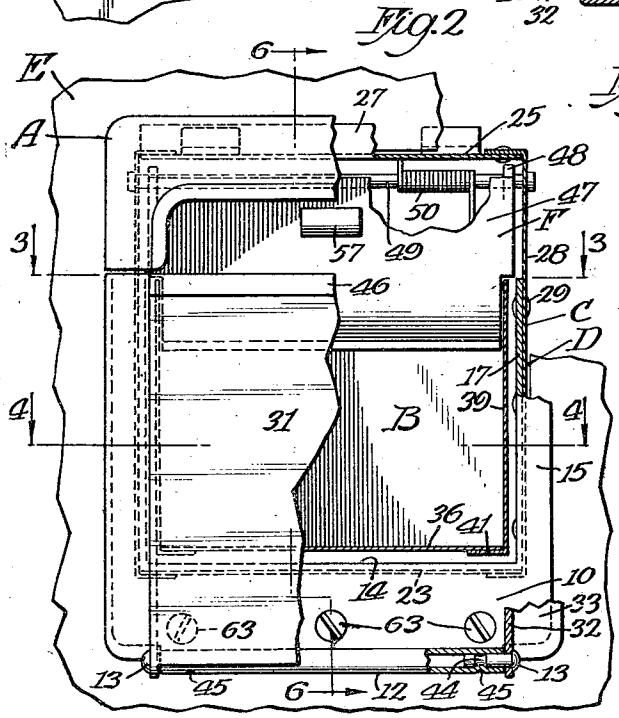
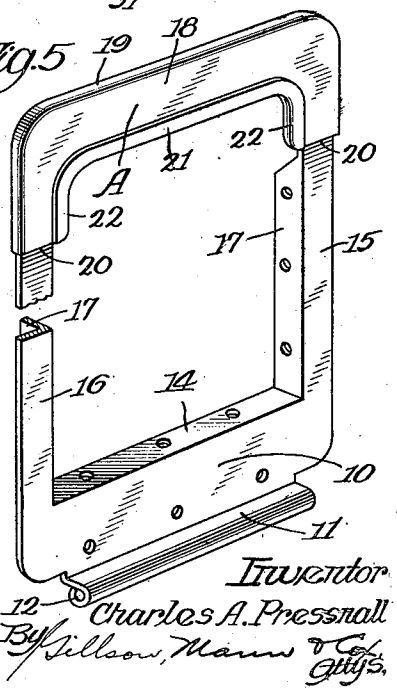


Fig. 5

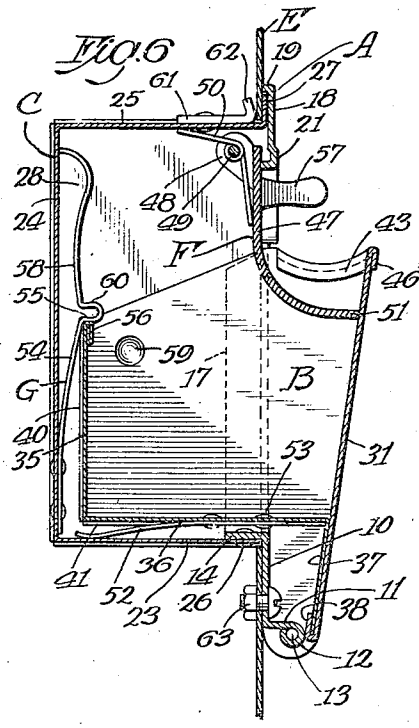


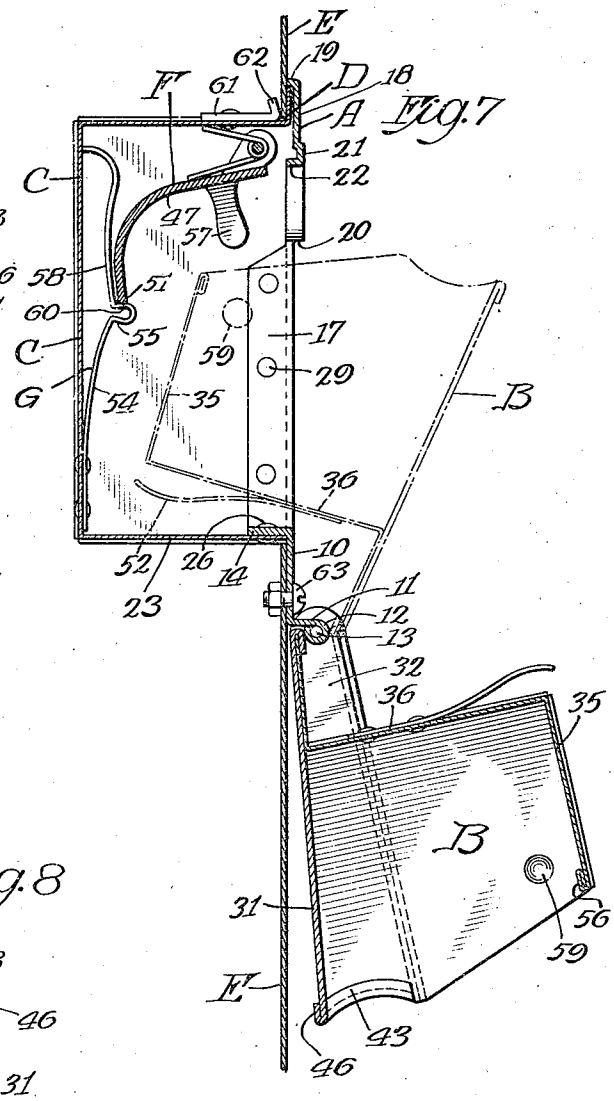
Inventor
Charles A. Pressnall
By Wilson, Mann & Co.
Attys.

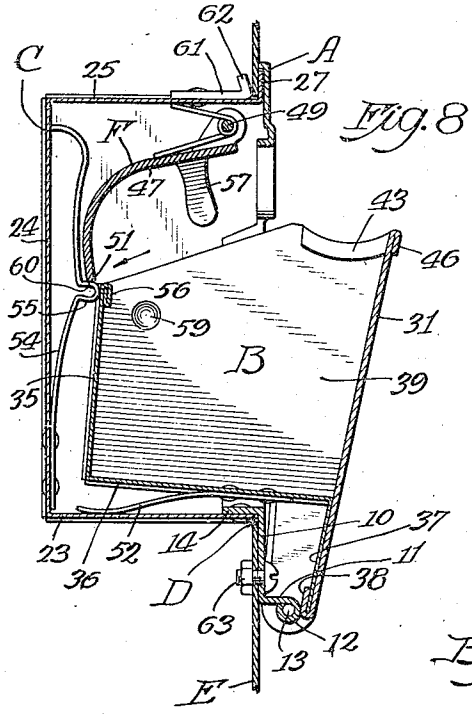
June 1, 1937. C. A. PRESSNALL 2,082,181

ASH RECEIVER

Filed June 13, 1936 2 Sheets-Sheet 2







Inventor:
Charles A. Pressnall
By Gilson, Mann & Cox,
Attys.

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UNITED STATES PATENT OFFICE

2,082,181

ASH RECEIVER

Charles A. Pressnall, Elkhart, Ind., assignor to The Adlake Company, a corporation of Illinois

Application June 13, 1936, Serial No. 85,071

9 Claims. (Cl. 206—19.5)

This invention relates to ash receivers for cars, clubs and such places, and has for its principal object to provide a readily accessible ash tray having a sort of trap door arrangement by which the contents can be discharged into a large storage receptacle concealed within a wall, the back of a seat, or the like, but easily brought out, inverted and returned by servants when cleaning.

Further objects and advantages of the invention will be revealed as the disclosure proceeds and the description is read in connection with the accompanying drawings, in which

Fig. 1 is a perspective view of the ash receiver with the parts in normal position for use, and a portion of a supporting wall;

Fig. 2 is a front elevation of Fig. 1, with the right side broken away to reveal the interior construction;

Figs. 3 and 4 are horizontal transverse sections taken on the lines 3—3 and 4—4 of Fig. 2;

Fig. 5 is a perspective view of the frame or face plate upon which the various parts are assembled and by which the assembly is made fast to the supporting wall;

Fig. 6 is a vertical section on the line 6—6 of Fig. 2, showing the parts in the positions they assume in normal use;

Figs. 7 and 8 are sections similar to Fig. 6, but showing the parts in the various positions they assume during the cleaning operation.

But this embodiment, now regarded as the best yet developed, is used for the purpose of disclosure only, and the claims are intended to cover various other embodiments.

Generally speaking, the device comprises a frame, or facing plate A, shown in perspective in Fig. 5, a large storage receptacle B, shown in several positions on Sheet 2, a housing or casing C, projecting inwardly from the frame A through a rectangular hole D, in a wall, the back of a chair, or the like E, a tray-forming plate F, shown in several positions on Sheet 2, and a latch G, cooperating with the receptacle and the tray plate. The frame or facing plate A and the housing or casing C comprise a supporting member for the receptacle B, the tray plate F and the latch G.

The frame, or facing plate A, in this instance is formed up of sheet metal, and the bottom rail 10 has a flange 11 rolled at 12 to form a bearing for the hinge pintles 13 upon which the receptacle B is mounted.

The upper edge of the bottom rail 10 is provided with an inwardly directed flange 14 and the side rails 15 and 16 have similar flanges 17 stopping somewhat short of the top rail 18. A narrow inturned flange 19 finishes off the upper edge of the top rail 18 and extends down on the side rails 15 and 16 to shoulders 20. A bead 21 extends along the lower edge of the top rail 18 and down the inner side of the side rails 15 and 16 and is continuous with an inwardly directed flange 22, terminating in line with the flange 19.

The bottom 23, the back 24 and the top 25, of the casing or housing C is formed by a single plate. The front edge of the bottom lies under the flange 14 and is riveted to it at 26. The front edge of the top 25 is turned upwardly at 27 and lies along the top rail 18 just underneath the flange 19, to which it may be secured but, as a rule, that will be found unnecessary.

The sides of the casing or housing C are formed by plates 28, riveted at 29 to the flanges 17 on the side rails of the frame A, and having their rearmost edges turned in at 30 and riveted to the edges of the back 24.

The receptacle B is formed of four sheets which, for convenience, will be called the front sheet, back sheet and the side sheets. The body of the front sheet forms the outwardly directed front wall 31, which has side wall portions 32 and they, in turn, have wings 33, the edges of which are turned inwardly to form finishing flanges 34. They, together with the flange 19, mask the frame.

The back sheet, (Figs. 6, 7, and 8) forms the back wall 35 and the bottom 36 of the storage receptacle. The front edge of the bottom is bent down, as indicated at 37, and clamped by the turned over lower edge 38 of the front wall 31.

The side sheets 39 (Figs. 2, 3, and 4) have back and bottom flanges 40 and 41 riveted to the corresponding parts 35 and 36 of the back sheet, and their front edges 42 lie just within and along the side wall portions 32 of the front sheet, the upper edges 43 of which are turned over the corresponding edges of the side sheets, as best shown in Figs. 1, 2, 6, 7, and 8. As a rule this will be sufficient fastening though, of course, other means may be added.

Adjacent to their lower ends the side wall portions 32 are provided with openings through which the headed pintles 13 are inserted to hinge the receptacle to the bottom rail 10 of the frame or facing plate.

The pintles have reduced portions 44 (Fig. 2) into which the hinge bearing is crimped at 45, to make the pintles fast.

The upper edge of the front wall 31 is turned back, as indicated at 46, and this, together with the turned over portions 43, gives the normally exposed part of the receptacle a finished appearance.

The tray plate F is formed by a downwardly and outwardly directed sheet 47 (Sheet 2) having hinge ears 48 receiving a hinge pintle 49 supported by the sides 28 of the casing or housing C.

A spring 50 wound about the pintle 49, with one end against the top 25 of the casing and the other against the plate 47, normally holds the front edge 51 of the latter against the inside of the front wall 31 to form a tray.

A leaf spring 52 riveted at 53 to the bottom of the receptacle B and bearing on the bottom 23 of the casing C, urges the receptacle to swing outwardly from the position shown in Fig. 6. This is restrained, however, by a spring latch 54, having a catch 55 normally engaged with the rolled-over edge 56 of the back wall 35 of the receptacle.

With the parts in the positions shown in Figs. 1 and 6 the receptacle is concealed and only the convenient tray is conspicuous. When it has been used light pressure on the handle 57 of the tray plate 47 will cause the latter to swing downwardly and inwardly, after the fashion of a trap door, and discharge the contents into the receptacle. Upon relieving the pressure the plate will return to normal position and check odors and smoke that would otherwise arise from the receptacle.

After a suitable period of use, when it is desired to discharge and clean the receptacle, the tray plate is swung from the position shown in Fig. 6 to that shown in Fig. 7, thus coming in contact with the upper portion 58 of the latch 54 and releasing the catch 55 from the bead 56 on the receptacle, when the spring 52 urges it to the dotted line position shown in Fig. 7. Unless checked somewhere about that position, there is danger of the receptacle turning over to the solid line position in Fig. 7, and discharging its contents on the floor.

To prevent this the sides 39 of the receptacle are bulged at 59 (Figs. 4, 6, and 7) to form yielding projections to strike against the flanges 17 of the frame A, and retain the receptacle in the dotted line position of Fig. 7, until moved on to the right by the operator who, at the same time, will hold a container in position to receive the contents, as the receptacle assumes the solid line position in Fig. 7.

That figure also shows that upon being moved to the position necessary to unlatch or release the receptacle B, the tray plate F becomes engaged with a catch 60, or another part of the catch 55 on the spring latch 54, and is retained in that position.

When the operator swings the receptacle B towards the normal position, the projections 59 again engage the flanges 17, and a little extra force is necessary to make them pass. As the receptacle approaches its normal position, the rolled-over edge 56 will shift the latch and release the tray plate. Preferably the arrangement is such that the release of the tray plate is simultaneous with, or immediately followed by the latching of the receptacle B, for that will prevent the porter, or other servant, from leaving the receptacle slightly out of place and, therefore, partially open for undesirable odors to escape into the car or room.

This particular embodiment described and illustrated is made chiefly of aluminum and riveting is a preferred fastening means, although properly equipped shops might just as well use welding or soldering. If the device was made of steel, or other ferrous metal, in a properly equipped shop welding would be preferred, and some of the details would be changed to suit fabrication from such metal.

In making a device of either aluminum, ferrous metal, brass, bronze, or white metal, many of the parts could be conveniently made by casting, and the choice between suitable forms and that illustrated would undoubtedly be dictated by the available equipment.

The frame or face plate A, with the attached parts, forms a complete assembly suitable for sale as an article of commerce, to be applied according to the choice of the customer. When the application is to be made on a wall, a seat back, or the like, the top 25 of the receptacle C may be fitted with metal strips 61, having inclined lugs 62, and the bottom rail 10 may be provided with openings for screws 63 for making it fast to the wall, as best shown on Sheet 2, wall E.

In making such an application the receptacle C would be inserted through the opening D, tilted so as to catch the upper margin of the wall, as shown in Figs. 6, 7, and 8, then the bottom would be swung to the assembled position, and the screws 63 inserted. This means of mounting, of course, is also illustrative, but it has the advantage of completely masking all of the fastening means, and gives the whole a finished appearance.

I claim as my invention:

1. In an ash receiver, a supporting member having a large opening, an ash receptacle mounted on said member to swing between an ash receiving position in the opening of the member and a substantially inverted discharge position, a latch mounted on said supporting member for holding the receptacle in receiving position, said receptacle being provided with a cooperating ash receiving tray plate mounted to move with respect to the supporting member and the receptacle to discharge the contents of the tray plate into the ash receptacle and movable further to engage and release the latch, and means to yieldably restrain the receptacle short of discharge position.

2. In an ash receiver, a supporting member having a large opening, an ash receptacle hinged on said member below said opening to swing between an ash receiving position in the opening of the member and a substantially inverted discharge position, a latch mounted on said supporting member for holding the receptacle in receiving position, said receptacle being provided with a cooperating ash receiving tray plate mounted to move with respect to the supporting member and the receptacle to discharge the contents of the tray plate into the ash receptacle and movable further to engage and release the latch, and means to yieldably restrain the receptacle short of discharge position.

3. In an ash receiver, a supporting member having a large opening, an ash receptacle hinged on said member below said opening to swing between an ash receiving position in the opening of the member and a substantially inverted discharge position, a latch mounted on said supporting member for holding the receptacle in receiving position, an ash receiving tray plate hinged

on the supporting member, resilient means to hold the tray plate normally in position to close the receptacle and constitute an ash receiving element, said tray plate being movable on its mounting to discharge its contents into the receptacle and being movable further to engage and release the latch, and means to yieldably restrain the receptacle short of discharge position.

4. In an ash receiver, a receptacle adapted to be mounted in an opening in a wall so as to be movable from receiving position within the opening to a forwardly tilted discharge position outside of the opening, a latch mounted in fixed relation to the wall for holding the receptacle in receiving position and having a catch, and latch releasing means mounted at a point fixed with relation to the wall, said latch releasing means being movable to engage and release the latch and thereupon to engage and be held by said catch.

5. In an ash receiver, a receptacle adapted to be mounted in an opening in a wall so as to be movable from receiving position within the opening to a discharge position outside of the opening, cooperating latch and latch releasing means movable on mountings fixed with relation to the wall, said latch being provided with means so positioned thereon as to selectively hold the receptacle in receiving position and the latch releasing means in releasing position, and each of said receptacle and latch releasing means being automatically released by the latch when said latch moves to hold the other.

6. In an ash receiver, a receptacle adapted to be mounted in an opening in a wall so as to be movable from receiving position within the opening to a discharge position cutside of the opening, means mounted in fixed relation to the wall for holding the receptacle in receiving position, movable means for releasing the holding means, and means for holding the releasing means after it has moved to release the receptacle holding means.

7. In an ash receiver, a receptacle adapted to be mounted in an opening in a wall so as to be movable from receiving position within the opening to a discharge position outside of the opening, a latch mounted in fixed relation to the wall for holding the receptacle in receiving position, releasing means for the latch, means for holding the releasing means in releasing position, and means carried by the receptacle and the latch adapted to cooperate, when the receptacle is moved to latched position, to release the releasing means.

8. In an ash receiver, a receptacle supporting member, means for mounting said supporting member in an opening in a wall member comprising spaced portions of the supporting member for engaging the outer and inner surfaces of the wall member at a margin of the opening, and means for securing the supporting member to the wall at an opposite margin of the opening.

9. In an ash receiver, a receptacle supporting member, means for mounting said supporting member in an opening in a wall member comprising spaced portions of the supporting member for engaging the outer and inner surfaces of the wall member at a margin of the opening, means for securing the supporting member to the wall at an opposite margin of the opening, and an ash receiver hingedly mounted on the supporting member and masking said last named securing means.

CHARLES A. PRESSNALL.