

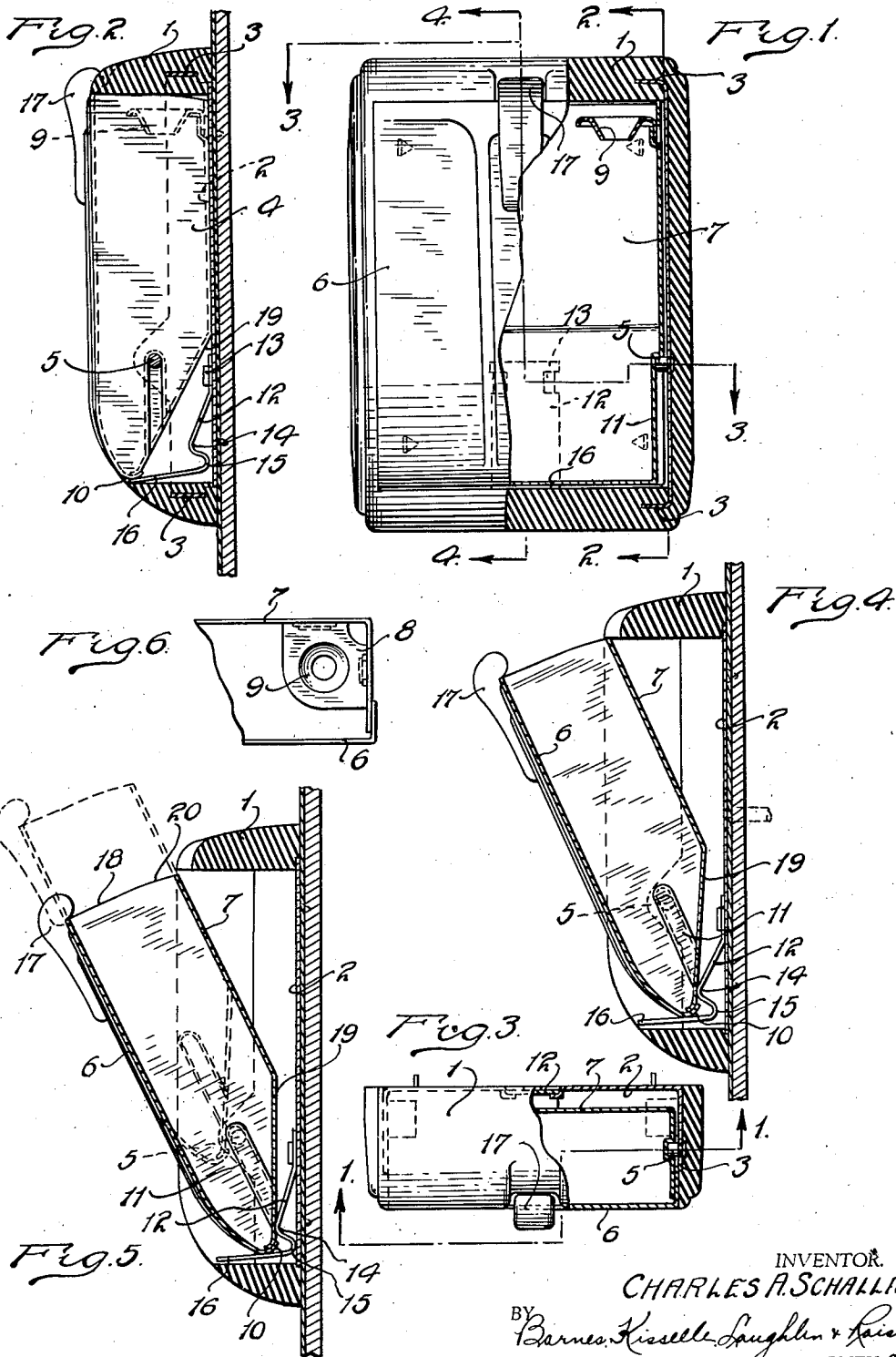
Feb. 23, 1943.

C. A. SCHALLIS

2,311,968

ASH TRAY

Filed Oct. 16, 1939



INVENTOR.
CHARLES A. SCHALLIS.
BY *Barnes, Kessell, Laughlin & Riesel*
ATTORNEYS.

UNITED STATES PATENT OFFICE

2,311,968

ASH TRAY

Charles A. Schallis, Highland Park, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a corporation of Michigan

Application October 16, 1939, Serial No. 299,662

10 Claims. (Cl. 206—19.5)

This invention relates to ash receptacles or receptacles for a similar purpose. It is the object of the invention to provide an ash receptacle particularly adapted for use in automobile bodies. This receptacle is very simple and yet effective as appears in the description following.

In the drawing:

Fig. 1 is a front elevation, partly in section, taken on the line 1—1 of Fig. 3.

Figs. 2 and 3 are sections on the corresponding 10 section lines of Fig. 1.

Fig. 4 is a section on the line 4—4 of Fig. 1, showing the receptacle tilted outwardly.

Fig. 5 is a vertical section taken on the line 4—4 of Fig. 1 showing, in dotted lines, how the 15 receptacle can be lifted out.

Fig. 6 is a detail of the snuffer.

The frame 1 is made of molded plastic, such as Tenite, Bakelite or some other phenol-condensation product. A back plate 2 of metal is molded 20 into the plastic at the top and bottom by reason of the turned in ears 3. Secured to this back plate are side flanges 4 of which the ears 3 are a continuation. These side flanges have pins or trunnions 5 riveted in place. The ash receptacle 25 itself is made of a pair of stampings which are pressed together. The front stamping 6 is preferably grained with an imitation wood graining. The back stamping 7 has a corner plate 8 riveted in place. This corner plate is provided with a 30 pressed in hole 9 which tapers from top to bottom. This forms a snuffer to snuff out the cigar or cigarette when the same is pressed in this depression and turned. The front and back plate are fitted together by a press fit and with the 35 turned under flange 10. The sides of the ash receptacle are provided with an elongated recess or groove 11 into which the pin 5 fits. It is upon this pin or trunnion that the receptacle turns in tilting to the position shown in Figs. 4 and 5. 40

A spring 12 is secured to the back plate by the struck out lugs 13. This spring has a hump 14, an elbow 15 and an arm 16. These perform useful functions as will be presently seen. A plastic 45 handle 17 is riveted to the front of the receptacle by means that need not be here detailed as this is no part of the invention.

Referring to Fig. 2: It will be seen that the end of the spring arm 16 bears against the rounded bottom of the receptacle. Inasmuch as this 50 spring is inclined upwardly and backwardly from the horizontal and, inasmuch as the top 18 of the receptacle is near the horizontal when the receptacle has retreated within the frame, this holds the receptacle in its upright or closed position as

shown in Fig. 2. However, it is fairly easy by grasping the handle to pull outwardly on the top of the receptacle. Thereupon, the receptacle turns on the trunnions 5 and the lower end of the receptacle tends to depress the spring as shown in Figs. 4 and 5. The back of the receptacle converges inwardly at the bottom, as at 19, forming the tapered lower end. This converging wall 19 is arranged to abut against the hump 14 in the spring and this, acting in conjunction with the trunnions 5, acts as a stop to hold the receptacle in the outwardly tilted position as shown in Figs. 4 and 5. In this position, the receptacle may be easily lifted, as shown in the dotted lines in Fig. 5, the grooved portion of the receptacle sliding over the trunnions 5. Hence, the receptacle may be easily removed to remove the ashes.

All that is necessary to replace the receptacle is to cause the recesses 11 to fit over the trunnions 5 and, when the lower end of the receptacle has reached the arm 16 of the spring, the hump 14 forms a stop cooperating with the trunnions 5 to hold the receptacle in place. It may be then pushed into the frame and the spring arm cooperates with the top of the receptacle which bears frictionally against the underside of the top of the frame to hold the receptacle in place.

The top near the rear is beveled off slightly as at 20 so as to permit the receptacle to swing easily outwardly when it is grasped by the handle. It will facilitate the swinging of the receptacle to press down slightly as it is being swung outwardly.

I claim:

1. An ash tray having in combination a frame forming an opening to receive a receptacle, a receptacle fitting into the opening in the frame, a spring for stressing the lower end of the receptacle to hold the receptacle in closed position in the opening and a separable trunnion engagement between the frame and the receptacle intermediate the top and bottom thereof and on which the receptacle can be turned from the closed to the open position and conversely and by means of which the receptacle after it has been 45 turned to open position may be freely lifted from the frame to empty the same, said trunnion engagement comprising an open ended slot on one member and a pin on the other.

2. An ash tray having in combination a frame forming an opening to receive a receptacle, a receptacle fitting into the opening in the frame, a spring for stressing the lower end of the receptacle to hold the receptacle in closed position in the opening and a separable trunnion engagement between the frame and the receptacle in-

intermediate the upper and lower ends thereof and comprising open-ended elongated recesses in the receptacle side walls and pins in the frame and on which the receptacle can be turned from the closed to the open position and conversely and by means of which the receptacle after it has been turned to open position may be freely lifted from the frame to empty the same.

3. An ash tray having in combination a frame forming an opening to receive a receptacle, a receptacle fitting into the opening in the frame, a spring for stressing the lower end of the receptacle to hold the receptacle in closed position in the opening by causing the receptacle to bear against the inside of the frame and a separable trunnion engagement between the frame and the receptacle intermediate the top and bottom thereof and on which the receptacle can be turned from the closed to the open position and conversely and by means of which the receptacle after it has been turned to open position may be lifted from the frame to empty the same, said trunnion engagement comprising an open ended slot on one member and a pin on the other, and a stop supported by the frame and cooperating with the pin to hold the receptacle in the outwardly tilted position.

4. An ash tray having in combination a frame forming an opening to receive a receptacle, a receptacle fitting into the opening in the frame, a spring secured to the frame for stressing the lower end of the receptacle to hold the receptacle in closed position in the opening and a separable trunnion engagement between the frame and the receptacle intermediate the top and bottom thereof and on which the receptacle can be turned from the closed to the open position and conversely and by means of which the receptacle after it has been turned to open position may be lifted from the frame to empty the same, said trunnion engagement comprising an open ended slot on one member and a pin on the other, and said spring stressing the bottom of the receptacle to hold the same in closed position by causing the receptacle to frictionally bear against the inside of the frame.

5. An ash tray having in combination a frame forming an opening to receive a receptacle, a receptacle fitting into the opening in the frame, a spring secured to the frame for stressing the receptacle to hold the receptacle in closed position in the opening and a separable trunnion engagement between the frame and the receptacle and on which the receptacle can be turned from the closed to the open position and conversely and by means of which the receptacle after it has been turned to open position may be separated from the frame to empty the same, said trunnion engagement comprising an open ended slot on one member and a pin on the other, and the said spring having a spring arm bearing against the bottom of the receptacle and tending to hold the same in closed position by reason of pressing the top of the receptacle against the inside of the frame.

6. An ash tray having in combination a frame forming an opening to receive a receptacle, a receptacle fitting into the opening in the frame, a spring secured to the frame for stressing the receptacle to hold the receptacle in closed position in the opening and a separable trunnion engagement between the frame and the receptacle and on which the receptacle can be turned from the closed to the open position and conversely and by means of which the receptacle after it has

been turned to open position may be separated from the frame to empty the same, said trunnion engagement comprising an open ended slot on one member and a pin on the other, and said spring having a spring arm bearing against the bottom of the receptacle and tending to hold the same in closed position by reason of pressing the top of the receptacle against the inside of the frame, the said spring inclining upwardly and rearwardly tending to provide a drag in the opening of the receptacle.

7. An ash tray having in combination a frame forming an opening to receive a receptacle, a receptacle fitting into the opening in the frame, a spring for stressing the bottom of the receptacle to hold the receptacle in closed position in the opening and a separable trunnion engagement between the frame and the receptacle intermediate the upper and lower ends and on which the receptacle can be turned from the closed to the open position and conversely and by means of which the receptacle after it has been turned to open position may be lifted from the frame to empty the same, said trunnion engagement comprising an open ended slot on one member and a pin on the other, said spring secured to the frame and comprising an L-like member having a hump on the upright of the L to form a stop cooperating with the lower end of the receptacle and the trunnions to hold the receptacle in outwardly tilted position.

8. An ash tray having in combination a frame forming an opening to receive a receptacle, a receptacle fitting into the opening in the frame, a spring for the stressing the bottom of the receptacle to hold the receptacle in closed position in the opening and a separable trunnion engagement between the frame and the receptacle intermediate the upper and lower ends and on which the receptacle can be turned from the closed to the open position and conversely and by means of which the receptacle after it has been turned to open position may be freely lifted from the frame to empty the same, said trunnion engagement comprising an open ended slot on one member and a pin on the other, said spring secured to the frame and comprising an L-like member having a hump on the upright of the L to form a stop cooperating with the lower end of the receptacle and the trunnions to hold the receptacle in outwardly tilted position, the said bottom of the L forming a spring arm stressing the bottom of the receptacle to hold the same in closed position.

9. An ash tray having in combination a frame forming an opening to receive a receptacle, a receptacle fitting into the opening in the frame, a spring for stressing the lower end of the receptacle to hold the receptacle in closed position in the opening and having a portion forming a stop and a separable trunnion engagement between the frame and the receptacle intermediate the upper and lower ends and on which the receptacle can be turned from the closed to the open position and conversely and by means of which the receptacle after it has been turned to open position may be freely lifted from the frame to empty the same, the bottom of the receptacle having converging walls and one of said walls arranged when the receptacle is tilted in the outward position to bear against said stop which cooperates with the trunnions to hold the receptacle in outwardly tilted position.

10. An ash tray having in combination a frame forming an opening to receive a receptacle, a

receptacle fitting into the opening in the frame, a spring for stressing the receptacle to hold the receptacle in closed position in the opening and a separable trunnion engagement between the frame and the receptacle intermediate the upper and lower ends and on which the receptacle can be turned from the closed to the open position and conversely and by means of which the receptacle after it has been turned to open position may be lifted from the frame to empty the same, 10 the lower end of the receptacle having converging

walls, said spring having a hump forming a stop cooperating with the trunnions to hold the receptacle in outwardly tilted position by engaging one of said converging walls and the lower end of the spring having an elbow forming a spring arm bearing against the lower end of the receptacle to hold the same frictionally in engagement with the top of the frame to support the receptacle in closed position.

CHARLES A. SCHALLIS.