

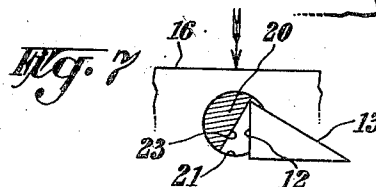
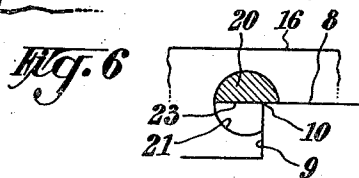
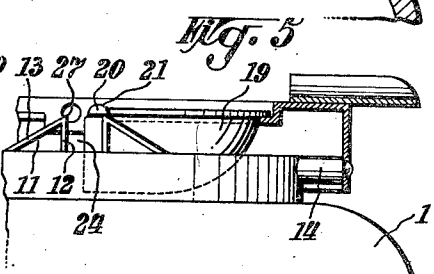
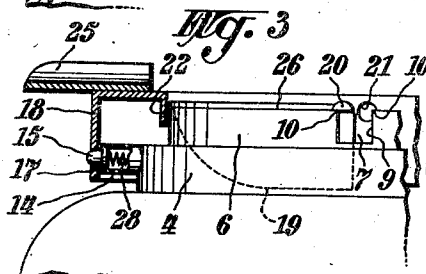
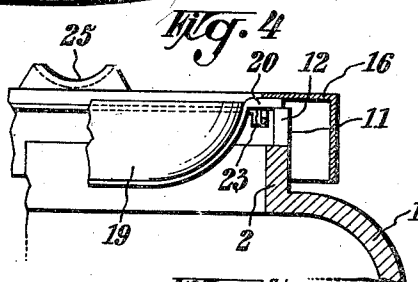
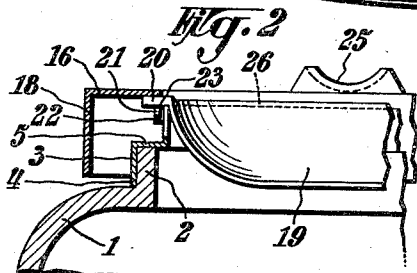
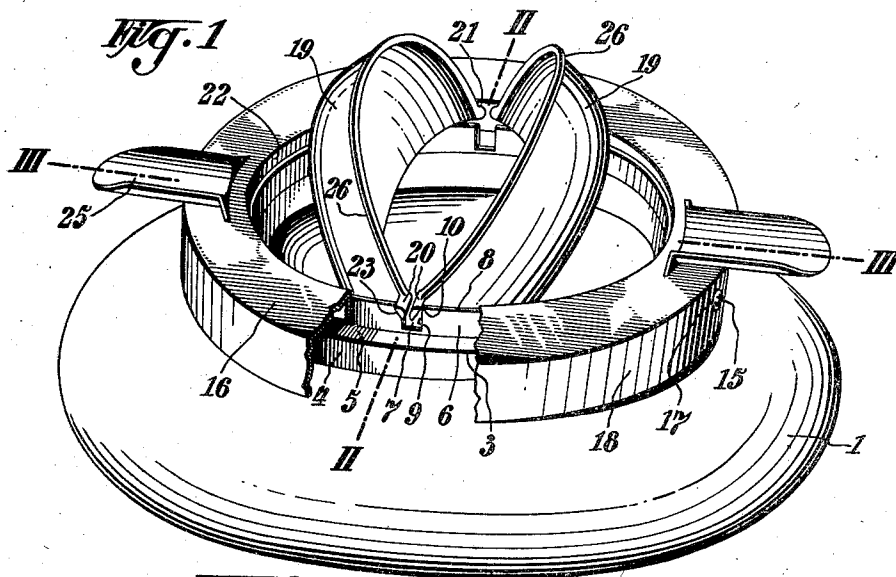
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ASH TRAYS

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ASH TRAYS

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7 Claims. (Cl. 220—20.5)

The invention relates to an ashtray in which a top receptacle opening is closed by two semi-circular bowl halves mounted to be rockable about horizontal axes. In order to allow the ash lying on the bowl halves to slide into the receptacle it is known to provide the pivot axis of one bowl half with a small handle outside, by rotation of which one bowl half is swung open or raised. The second bowl half is also moved in a symmetrical movement by a pivotal or gear-wheel connection of the two bowl halves.

The invention is concerned with an improvement in the ashtray described, wherein the special handle mentioned is eliminated and the emptying of the bowl halves is effected by a simple pressure on approximately any desired point of the bearing ring carrying the bowls.

According to the invention a bearing ring carrying the bowl halves is rockable about a horizontal axis, lying at right angles to the pivot axes of the bowls, of the ashtray. The ashtray possesses stops, which cooperate with the bowl pivots and by which the bowl halves are rocked into the emptying position or raised on rocking of the bearing ring. The advantage achieved according to the invention consists in that the emptying of the bowls is effected by simple finger pressure on the bearing ring, all points of the bearing ring with the exception of two points situated opposite each other being eligible for application of the human finger.

According to a further feature of the invention, the individual pivot pins, which are firmly connected to the bowl halves and mounted in a hole in the bearing ring, have a lower surface which lies in a horizontal plane on the top of the ashtray when the latter is closed. Preferably, the fulcrum points are arranged in pairs and define between them a slot.

In order to still further simplify the manufacture of the ashtray and to afford improved closure thereof from outside, there is further provided an inner ring which projects into the bearing ring proper. This inner ring also has the stops which cooperate with the pivot pins of the bowl halves. The stops are formed by the corners which are formed at points on the edge of the ring by the vertical edges of the recesses.

Reference is made to the following description and the claims for further features of the invention.

Two exemplified embodiments of an ashtray are illustrated in the drawing, in which:

Figure 1 is a view of one form of construction of the ashtray in the open position and with the bearing ring partly broken away;

Figure 2 is a cross-section through one half of the ashtray in the construction on the line II—II in Figure 1, in the closed position with the lower part of the ashtray omitted;

Figure 3 is a cross-section through one half of the ashtray in the construction on the line III—III in Figure 1, in the closed position with the lower part of the ashtray omitted;

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Figure 4 is a section corresponding to Figure 2 according to another form of construction;

Figure 5 is a section corresponding to Figure 3 in the form of construction according to Figure 4; and

Figures 6 and 7 show diagrammatically and on an enlarged scale the cooperation of a pin of one bowl half with a fixed stop in the two embodiments shown in Figures 3 and 5 respectively.

An ashtray 1 has at the top a cylindrical rim 2, on which are disposed the stops, which are disposed in pairs and which are situated diametrically opposite one another.

In Figures 1 to 3 an inner ring 3 is attached to the ashtray either rigidly or detachably and with its bottom part 4 and its horizontal inwardly directed middle part 5 encircles the rim 2 of the ashtray. The said inner ring 3 has two diametrically opposed slots 7. The corners 10 formed by the horizontal edge 8 of the ring and the sides 9 of the vertical slots 7 serve as the fulcrum points for the ashtray halves.

In the form of construction according to Figures 4 and 5, no special ring is provided but there are situated on the cylindrical rim 2 in each case two triangular bridges 11, the vertical edges 12 of which at the point of intersection with the inclined edges 13 likewise form the fulcrum points or stops 10.

At the periphery of the ashtray rim 2 are situated two diametrically opposed sleeves 14, in which small pins or balls 15 are mounted so as to be displaceable inwardly. Each pin or ball is constantly pressed outwards by a spring 28, which is located inside the sleeve 14. The two pins or balls 15 together constitute the horizontal pivot axis for a special bearing ring 16, the balls 15 engage in corresponding holes 17 in a vertical outer wall 18 of the bearing ring 16. Since the balls 15 yield resiliently, the bearing ring 16 can easily be removed from the ashtray. Fixed pins could, however, also be used, in which case the bearing ring could be removed by elastic deformation.

Each of the two semi-circular bowls 19 carries two pins 20, which are axially aligned and which engage in preferably circular holes 21 in an inner vertical wall 22 of the bearing ring 16. The two axially aligned pins 20 constitute the horizontal pivot axis of the individual bowl halves 19. The two pivot axes or pairs of pins 20 lie parallel to one another adjoining one another relatively closely. The bearing pins 20 of the two bowls 19 and the pivot pins 15 of the bearing ring 16 are at right angles to one another in the example shown. The bowl bearing pins 20 have a semi-circular cross-section. Each pin 20 is therefore limited at the bottom by a plane surface 23, which lies horizontally, when the bowls 19 are closed, as shown in Figures 3 to 6. When the bowls 19 are closed, the pins 20 lie with their surfaces 23 on the stops or corners 10 in such manner that the contact of each surface 23 with the actual stop 10 lies to the side of the centre of the pivot pin. Each pair of adjacent stops 10 are spaced a distance from one another to form the slot 7 in Fig. 3 or slot 24 in Fig. 5.

In order to empty the bowl halves 19, the finger of the human hand is pressed on any point of the rockably mounted bearing ring 16. The only exception is formed by the two points located above the pivot pins 15, at which plate cigarette or cigar rests 25 are fastened on the bearing ring 16.

As a result of the pressure on the bearing ring 16, the stops 10 likewise exert a pressure on the bottom surfaces of the pins 20. The pins are thereby turned and pressed into the slots 7 or 24, whereby at the same time the two bowl halves 19 are raised, so that the ash situated on them slides into the receptacle. At the same time only those corners work on the side of which pressure on the bearing ring is effected. At the beginning of the rocking

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and of the simultaneously occurring unilateral downward movement of the bearing ring 16, according to the construction of Figures 1 to 3, the knife-edge mounting between the edge 8 of the inner ring 3 and the bottom surface 23 of the pin 20 changes to a point suspension, as clearly shown in Figure 7. The friction is thereby reduced to a minimum. If the pressure on the bearing ring 16 ceases, all the parts return to the position of rest automatically through the force of gravity acting on the surfaces of the bowls, the bowl halves 19 then closing the ashtray opening. A point suspension, is also achieved in the form of construction shown in Figures 4 and 5.

The upper part 6 of the inner ring 3 engages, in the construction of Figures 1 to 3, with slight play in the cylindrical inner wall 22 of the bearing ring 16. In the closed state the bowls 19 lie with their edges 26 on the ring edge 8, so that a very tight closure of the receptacle is thus ensured.

I claim:

1. An ashtray comprising a body having an upper rim, fulcrum means mounted on said rim to constitute a horizontal pivot axis, a bearing ring mounted on said fulcrum means, two semicircular bowl halves each having pivotal support means projecting therefrom, means in said bearing ring above the fulcrum means and at right angles to said horizontal pivot axis receiving said pivotal support means and rockably supporting said bowl halves on said ring about horizontal axes close to and parallel to each other, and engagement means mounted on the rim of the body and cooperating with the pivotal support means for rocking the bowl halves into an emptying position when pressure is applied on the bearing ring intermediate the fulcrum means.

2. An ashtray according to claim 1, wherein the sup-

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port means are mounted in holes of the bearing ring and are provided with a flat bottom surface which, when the bowl is closed, lies in a horizontal plane on said engagement means.

3. An ashtray according to claim 1, wherein the engagement means are disposed in pairs, and form between themselves a slot to receive the pivotal support means.

4. An ashtray according to claim 1, having an inner ring which engages from below in the bearing ring and on which the bowl halves lie in the closed state.

5. An ashtray according to claim 4, wherein the inner ring is provided, beneath the pivotal support means of each pair of bowl axes, with a vertical slot, and wherein the corners formed by the intersection of the vertical edges of the slot with the horizontal ring edge serve as the said engagement means.

6. An ashtray according to claim 1, wherein the bearing ring is detachably connected by its fulcrum means to the body of the ashtray.

7. An ashtray according to claim 6, wherein the fulcrum means of the removable bearing ring are formed by two pins spring pressed to be engaged in holes of the bearing ring.

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