

Sept. 8, 1925.

1,552,693

W. E. GRAY

ASH TRAY

Filed Oct. 10, 1921

3 Sheets-Sheet 1

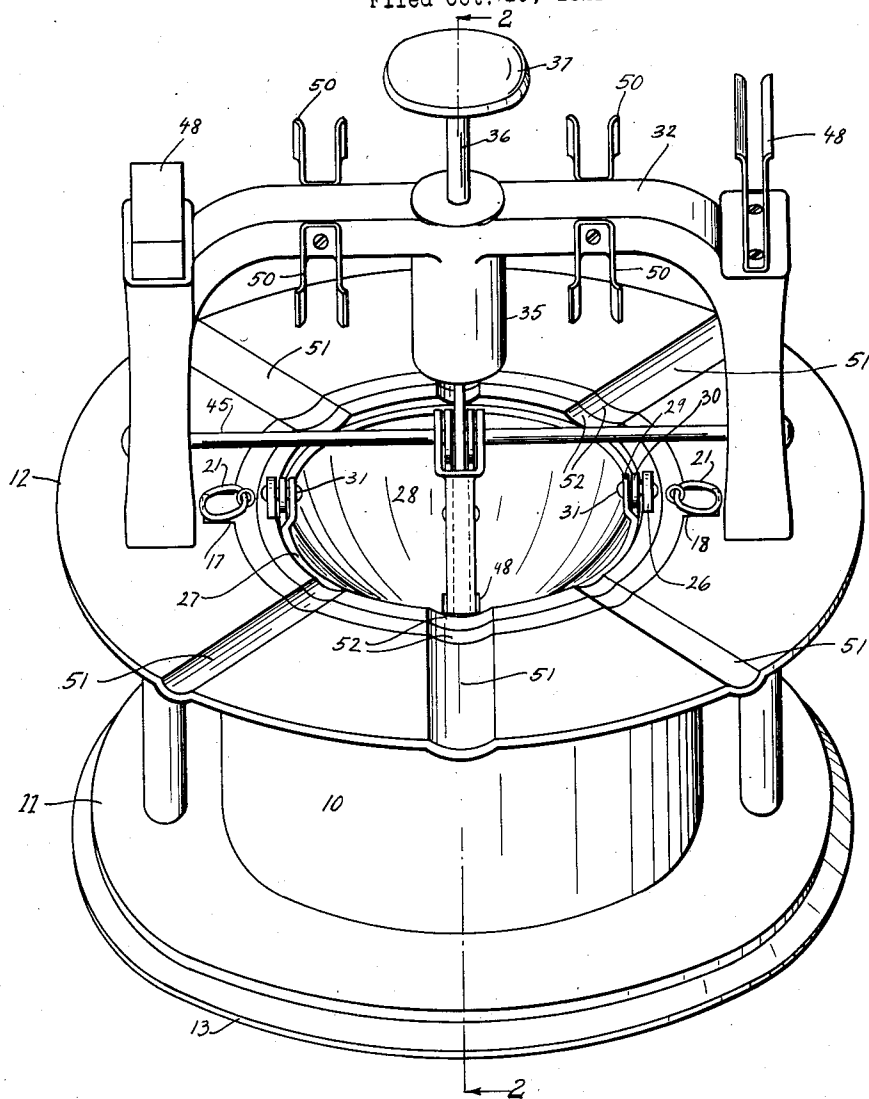


Fig. 1

Witnesses:

Wm. Schnellhardt.

C. C. Speed

Inventor

William E. Gray

By Joshua H. Hays

His Attorney

Sept. 8, 1925.

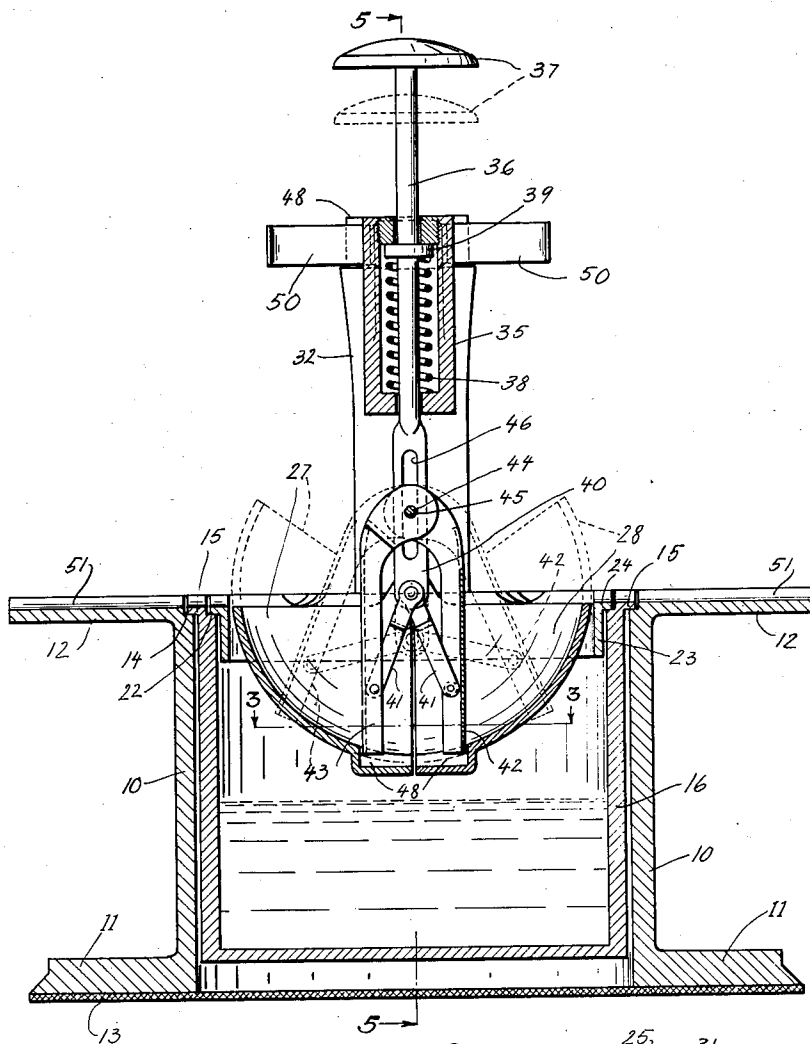
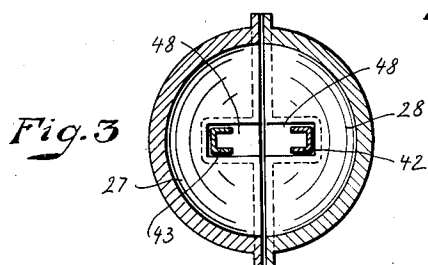
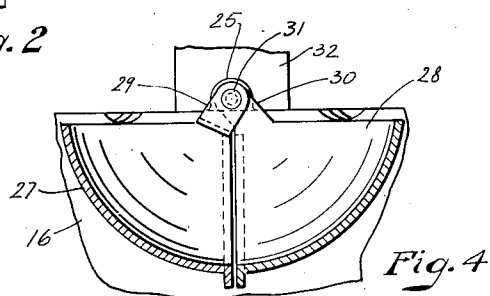
1,552,693

W. E. GRAY

ASH TRAY

Filed Oct. 10, 1921

3 Sheets-Sheet 2



Witnesses:

Wm. Schnellhardt.

L. E. French

Inventor
William E. Gray
By Joshua A. Horne
His Attorney

Sept. 8, 1925.

1,552,693

W. E. GRAY

ASH TRAY

Filed Oct. 10, 1921

3 Sheets-Sheet 3

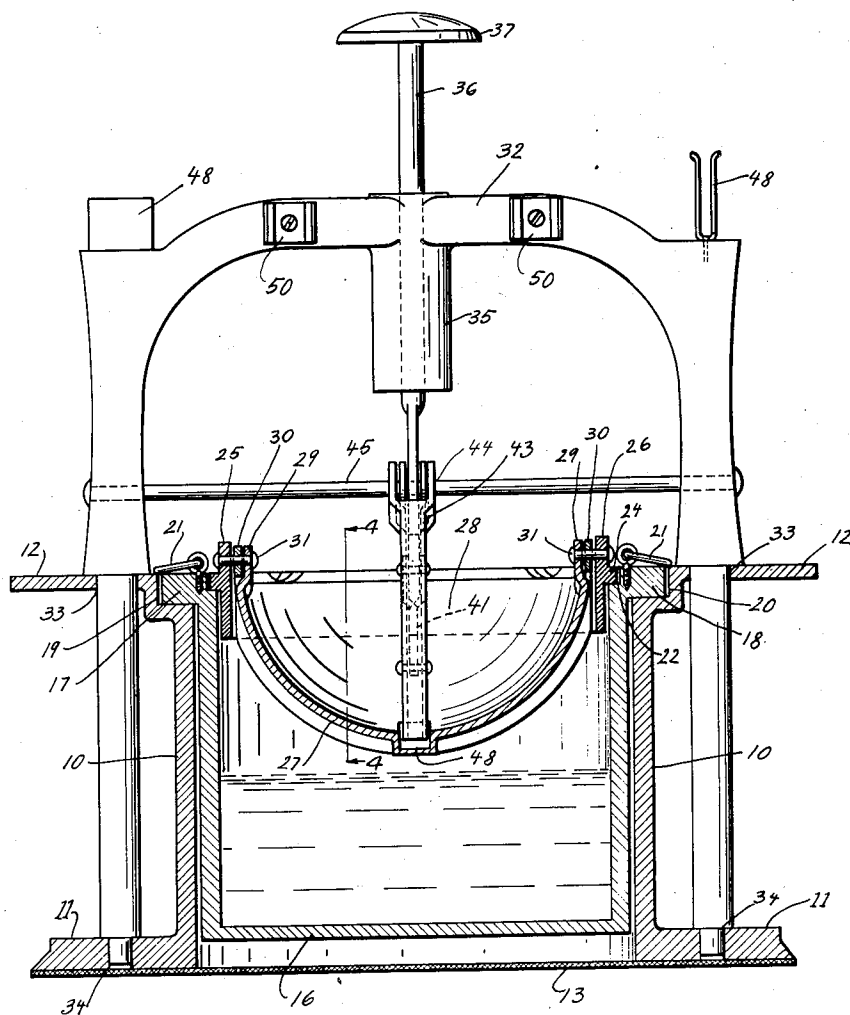


Fig. 5

Witnesses:

Wm. Smellthardh

C. E. Mundy

Inventor

William E. Gray

By Joshua H. Torrs
His Attorney

His Attorney

UNITED STATES PATENT OFFICE.

WILLIAM E. GRAY, OF CHICAGO, ILLINOIS, ASSIGNOR TO MOORE ELECTRIC CORPORATION, OF CHICAGO, ILLINOIS.

ASH TRAY.

Application filed October 10, 1921. Serial No. 506,858.

To all whom it may concern:

Be it known that I, WILLIAM E. GRAY, a citizen of the United States, and a resident of the city of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Ash Trays, of which the following is a specification.

My invention relates to new and useful improvements in ash trays, and has for its principal object the provision of an improved construction of this character which will be highly efficient in use.

A further object of my invention is the provision of a liquid receptacle, mounted within which, is a pair of co-operating ash tray parts pivotally connected together, and which will, upon a pivotal movement, discharge the ashes or the like, received by same, into the receptacle thus eliminating the unnecessary smoke from a cigar, or the like, which would otherwise be the case if there were no means for quenching the burning cigar or the like.

Other objects will appear hereinafter.

The invention consists in the combinations and arrangements of parts hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawings forming a part of this specification, and in which,

Fig. 1 is a perspective view of my improved ash tray,

Fig. 2 is a sectional detail view of the same, taken substantially on line 2—2 of Fig. 1,

Fig. 3 is a horizontal sectional detail view of the tray embodied in the invention, taken substantially on line 3—3 of Fig. 2,

Fig. 4 is a vertical sectional detail view of the tray embodied in the invention and taken substantially on line 4—4 of Fig. 5, and

Fig. 5 is a vertical sectional detail view taken substantially on line 5—5 of Fig. 2.

In carrying out my invention, the preferred form of construction, as illustrated in the drawings, comprises an outer hollow cylindrical supporting casing or body 10, provided at its lower end with a base flange 11 and at its upper end with a supporting shelf 12. The casing is preferably formed from sheet metal or any suitable non-inflammable material. In order to prevent the base flange 11 from marring or other-

wise injuring a table top or the like, upon which the tray is placed, I secure to the undersurface of the flange 11 a felt pad 13 which is secured to the same by any suitable adhesive material.

The upper edge of the casing 10 is provided with an annular recess 14 adapted to receive and support an annular supporting flange 15 which is integrally formed around the upper edge of the liquid receptacle 16 movably positioned within the cylindrical casing 10, for the purpose which will be hereinafter especially pointed out.

Means is provided whereby the liquid receptacle 16 can be readily removed; said means comprises oppositely disposed laterally extending ears 17 and 18 formed integral on the upper edge of the liquid receptacle and snugly engaging oppositely disposed corresponding recesses 19 and 20 formed in the supporting shelf 12. Secured to each of the ears 17 and 18 is a ring member 21 which facilitates the removing of the liquid receptacle 16.

The liquid receptacle 16 is also provided with an annular recess 22, formed in the upper edge thereof and adapted to receive a removable annular supporting ring 23, which is provided with an annular flange 24 resting in the recess 22. Formed on the annular ring 23 on opposite corresponding sides thereof, are ears 25 and 26, extending upwardly therefrom and to which, a pair of co-operating tray parts 27 and 28 are pivotally connected, said tray parts being provided with ears 29 and 30 integrally formed thereon and connected to the adjacent ears 25 and 26 by means of pins 31 pivotally supporting the tray parts 27 and 28. As clearly shown, by dotted lines, in Fig. 2 of the drawings, the tray parts 27 and 28 are arranged and adapted to be swung in an upward direction, opposite of each other, and as will be readily understood, the tray parts will of their own accord swing downwardly into normal position by force of gravity.

Means is provided for effecting a pivotal movement of the tray parts 27 and 28 in opposite direction of each other, said means comprises a U-shaped support 32 provided with oppositely disposed leg members 33 arranged and adapted to removably engage apertures 33 formed in the supporting shelf 12 and apertures 34 formed in the base

flange 16, as shown in Fig. 5 of the drawings. Formed centrally on the U-shaped support 32 and depending therefrom, is a cylinder 35, through which a reciprocatory plunger 36 is mounted, said plunger being provided with an operating knob 37. The operating knob 37 upon engagement with the palm of the hand (not shown), forces the plunger downwardly as shown by dotted lines in Fig. 2 of the drawings. The plunger is normally held in an upper position by means of an expansion spring 38, positioned around the plunger within the cylinder 35, and which engages a collar 39 formed on the plunger 36 for the purpose as will be readily understood.

Pivotally connected to the inner end 40 of the plunger 36 by means of diverging connecting links 41 is a pair of oppositely disposed operating fingers 42 and 43, pivoted together at 44 by means of a pin 45 mounted to work in a slot 46, formed in the flattened portion 47 of the plunger 36. The lower ends of the fingers 42 and 43 engage grooves 48 formed in each of the trays. This arrangement is such that when the plunger 36 is forced downwardly, the fingers 42 and 43 cause the tray parts 27 and 28 to swing outwardly and upwardly discharging ashes or the like, received by the tray parts, into the liquid receptacle 16.

Mounted on each end of the U-shaped support 32 is a match box holder 48, of any suitable construction.

Means is provided whereby a number of pipes can be supported on the U-shaped supporting member 32, said means comprising suitable clamps 50 secured to the opposite sides of the support.

Formed in the supporting shelf 12 and equally spaced apart, is a number of grooves 51, as shown in Fig. 1, for the reception of cigars, cigarettes, or the like. The annular flanges 15 and 24 are also provided with grooves 52 which register with the grooves 51 formed in the supporting shelf 12.

In an ash tray, of the class herein described, cigar or cigarette butts are discharged into the ash tray parts 27 and 28, where they are discharged into the liquid receptacle 16, by means of the plunger 36, as will be readily understood. By this arrangement unnecessary smoke from the butts of a cigar or cigarette and the danger of setting fire to the table linen or the like is avoided. The pin 45 which serves as a pivotal connection for the fingers 42 and 43 also serves as a means whereby ashes on the end of a cigar, cigarette or the like, can be scraped or knocked off into the ash tray parts, and finally discharged into the liquid receptacle 16.

As will be noted in Fig. 5, the bottom of the receptacle 16 is located above the bottom of the casing 10. This arrangement pre-

vents any moisture, due to condensation, from settling on and injuring the object supporting the ash tray.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, this is capable of variation and modification without departing from the spirit of the invention. I, therefore, do not wish to be limited to the precise details of construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

Having described my invention, what I claim as new and desire to secure by Letters Patent is:

1. An ash receptacle including a cylindrical hollow body, a receptacle removably arranged in said body, a tray comprising parts mounted for pivotal movement in opposite directions with respect to each other, carried by said receptacle, and means for pivoting said tray parts, said means including pivotal mounted fingers, and a plunger for pivoting said fingers.

2. An ash receptacle including a cylindrical hollow body, a tray comprising parts mounted for pivotal movement in opposite directions with respect to each other, a support extending upwardly from said body, and means carried by said support for pivoting said tray parts, said means comprising fingers mounted for pivotal movement and engaging said tray parts and a spring controlled plunger for pivoting said fingers.

3. An ash receptacle including in combination a cylindrical hollow body and a tray removably carried by said body comprising parts mounted for pivotal movement, a support removably carried by said body and extending upwardly therefrom, a spring controlled plunger carried by said support and having a flattened end portion and a slot formed in said flattened end portion, and fingers carried by said plunger and engaging said tray parts for pivoting said tray parts in opposite directions with respect to each other, the pivot connection of said fingers being adapted to work in said slot.

4. An ash receptacle including a cylindrical hollow body, a tray comprising parts mounted for pivotal movement in opposite directions with respect to each other, a support having means movable therein, and a toggle mechanism carried and actuated by said means for engaging said tray parts and swinging them apart.

5. An ash receptacle including in combination a cylindrical hollow body and a tray removably carried by said body comprising parts mounted for pivotal movement, a support removably carried by said body and extending upwardly therefrom, a spring plunger carried by said support, and fingers

carried by said plunger engaging said tray parts for swinging them apart.

5 6. An ash receptacle including in combination a hollow body and a tray removably carried by said body comprising parts mounted for pivotal movement, a support carried by said body and extending upwardly therefrom, a slotted plunger carried by said support, and fingers pivotally connected through the slot in said plunger and engaging said tray parts for swinging them
10 apart.

7. An ash receptacle comprising a hollow body having a flanged base and a supporting flange at the upper end thereof and registering openings formed in said flanges; a support having leg portions engaging said openings; a receptacle within said body; a tray at the mouth of said receptacle and
20 mounted for pivotal movement; and means carried by said support and engaging said tray for pivoting the same.

8. An ash receptacle comprising a body having flanges at the upper and lower ends thereof and registering openings formed in said flanges; a support removably engaging said openings and extending upwardly from said body; a receptacle removably arranged in said body; a ring member removably carried by said receptacle at the mouth thereof; a tray comprising parts pivotally carried by said ring member; and means carried by said support and engaging said tray parts for pivoting same.
30

9. An ash tray comprising a cylindrical hollow support, an annular recess formed in the upper edge of said support, a liquid receptacle having a flange removably engaging said recess, ash receiving means pivotally and removably mounted in said receptacle at the upper end thereof, and finger and link means engaging said ash receiving means for effecting a swinging movement thereof.
40

10. An article of the class described including a hollow support, a receptacle mounted within the support and open at one end, a receiving tray pivotally carried by the receptacle at the open end thereof, and means including a plunger having operative engagement with the tray for pivoting the tray to discharge the contents therein into the receptacle.
45

11. An article of the class described including a hollow support, a receptacle mounted within the support and open at one end, a receiving tray pivotally carried by the receptacle at the open end thereof, means including a plunger having operative engagement with the tray for pivoting the tray to discharge the contents therein into the receptacle, and resilient means resisting movement of the plunger adapted to return the tray to receiving position.
55
60

In testimony whereof I have signed my name to this specification.
65

WILLIAM E. GRAY.