

June 20, 1944.

W. H. STEWART
PIPE CLEANING ASH TRAY

2,352,033

Filed April 2, 1941

Fig. 1.

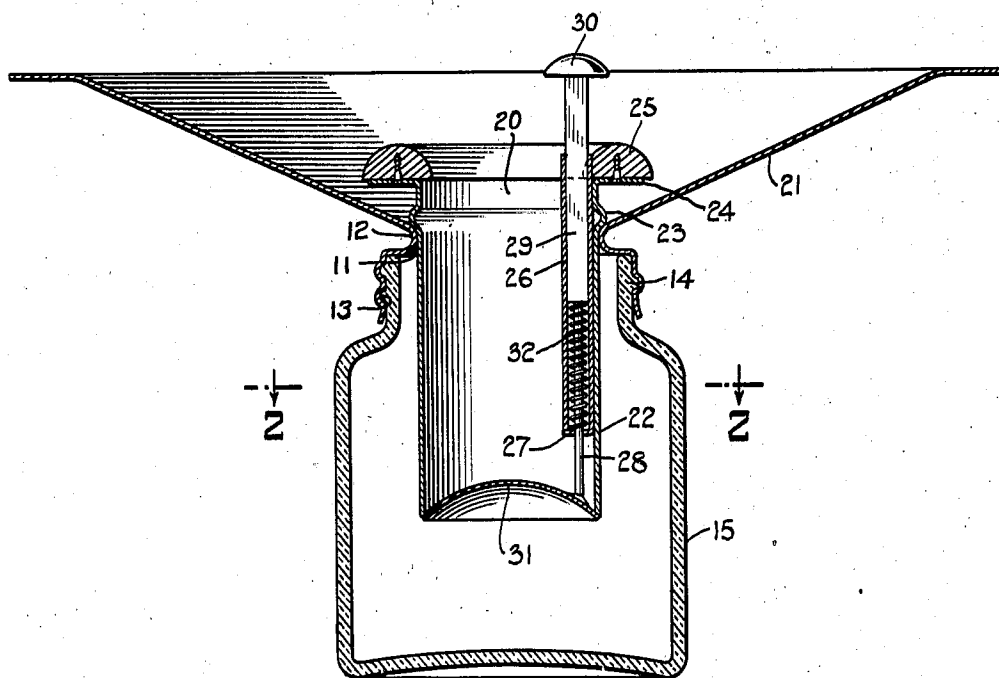
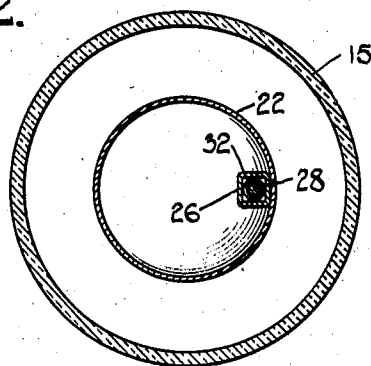


Fig. 2.



INVENTOR
Walter H. Stewart
By *Henry J. Locke*
HIS ATTORNEY

UNITED STATES PATENT OFFICE

2,352,033

PIPE CLEANING ASH TRAY

Walter H. Stewart, Passaic, N. J.

Application April 2, 1941, Serial No. 386,389

4 Claims. (Cl. 131-242)

My present invention relates to ash trays, and more particularly to an improved pipe cleaning ash tray.

An object of my invention is an improved pipe cleaning ash tray in which the pipe cleaning element comprises essentially an anvil of resilient material against which the pipe bowl may be struck to dislodge the ashes or spent tobacco remaining in the bowl.

Another object of my invention is an improved pipe cleaning ash tray in which the pipe cleaning element is an annular member of relatively hard resilient material such as cork, and which cleaning element is arranged at the upper end of a receiving chamber.

A further object of my invention is an improved pipe cleaning ash tray in which the pipe cleaning element is in annular form and arranged in the top end of a movable tube associated with the ash receiving tray and has combined therewith a resiliently mounted closure member for the bottom of a tubular member extending into the ash receiving chamber and on which is mounted the pipe cleaning member.

Other objects and novel features of the construction and arrangement of parts comprising the device will appear as the description of the invention progresses.

In the accompanying drawing—

Fig. 1 is a vertical sectional elevation of an embodiment of my invention having in combination therewith the closure member for the lower end of the pipe cleaning member; and

Fig. 2 is a section view taken on the line 2-2 of Fig. 1.

Referring to the drawing 21 designates a tray preferably of metal, and also preferably circular in shape, provided with a centrally arranged orifice 11. Surrounding the orifice 11 on the lower face of the tray 21 is a tubular portion 12 which may be provided with internal threads 13 to receive the corresponding threads 14 of an ash receiving chamber member 15. The chamber member may be of any desired material such for example as metal, plastic or glass and for convenience in cleaning, it is preferred that such member be made in glass, such for example as the well known "Mason" jar.

Slidably mounted in the interior of the tubular portion 12 is a tubular member 22 which extends into the chamber member 15 and is spaced apart from the bottom thereof as shown. Secured to the top end of the tubular member 22 is a flange 24 U-shaped in cross-section, as clearly shown in Fig. 1. The member 22 and the flange 24 are

preferably made of metal, although any other material may be used if desired. When made of metal, the member 22 and flange 24 may be connected together by soldering, brazing, or in any other convenient manner.

Fitting into the flange 24 and secured thereby in any convenient manner, as by adhesive, screws or the like, is the lower half of the pipe striking element 25 composed of a relatively hard but resilient material such as cork, cork composition, hard rubber, wood, or the like.

The member 22, flange 24, and pipe striking element 25 form a unitary structure which may be removed from the position shown in Fig. 1 in order to permit any ashes or other debris, such as matches or the like, which collect in the tray 21 to be brushed or swept into the chamber 15, and for purposes of cleaning, as may be desired. The chamber 15 may be unscrewed from the tubular portion 12 and the ashes or other debris contained therein may be emptied into any suitable receptacle, and where the ash receiving chamber 15 is made of glass the same may be readily cleansed and the same then restored to the position shown in Fig. 1.

In use, and assuming the elements to have been constructed and assembled as above described, a person using the device will strike the edge of the pipe bowl on the pipe cleaning element 25 preferably in the position shown when most, if not all, of the ashes or other debris contained in the pipe will pass through the opening 20 of the pipe cleaning element 18 and fall into the ash receiving chamber 15. It is found that where the lower end of the tubular member 22 is spaced apart from the bottom of the ash receiving chamber 15 and the tubular member 22 is of less diameter than the main diameter of the ash receiving chamber 15 that any smoke arising from burning tobacco will rise up in the annular space between the inner wall of the ash receiving chamber 15 and the outer wall of the tubular member 22 and will so collect the carbon monoxide gas as to rapidly extinguish any spark in the burning tobacco and thus prevent obnoxious odors from arising through tubular member 22 into the outer atmosphere.

Ash receiving chamber 15 has screwed thereon the tray 21 and through the central orifice of which passes the tubular member 22. The circular rib 23 spaces the upper end of the tubular member 22 away from the tray 21, and the pipe cleaning element 25 is secured to the flange 24 formed on the upper end of the tubular member 22.

As clearly shown in Fig. 1, I provide a closure for the bottom of the tubular member 22 which extends into the ash container 15, and provide means for operating the closure from a point outside the device. Such means comprises a non-cylindrical tubular element 26 secured to a side wall of the tubular member 22 by soldering or in any other suitable manner, such non-cylindrical tubular member 26 lying parallel to the axis of the tubular member 22. If necessary the annular pipe cleaning element 25 is cut away as shown in Fig. 1 to allow the non-cylindrical element 26 to extend up slightly beyond the flange 24 which is formed integrally with the cylindrical member 22. A portion of the non-cylindrical element 26 at its lower end is folded over as indicated at 27 and is provided with a perforation through which slidably extends a rod 28. The rod 28 is formed integrally with or secured to the lower end of a non-cylindrical plunger element 29 which plunger element is freely slidable in the non-cylindrical element 26. Secured to the top end of the plunger element 29 is an operating knob or handle 30 and by means of which the plunger element 29 may be depressed. Secured to the lower end of the rod 28 by soldering or in any other suitable or desired manner is a closure element 31 which acts as a closure for the lower open end of the cylindrical member 22. Such closure member 31 is crowned or dome shaped to facilitate the sliding or removal of material therefrom. Between the lower end of the plunger element 29 and the folded over element 27 of the non-cylindrical element 26 is arranged a coil spring 32 for the purpose of urging the plunger element 29 and also the closure element 31 upwardly so as to bring the closure element 31 into closing position with relation to the bottom of the cylindrical member 22.

In operation, when a pipe has been cleaned or other debris passes into the tubular member 22, the same will collect on the crowned or domed closure 31. Periodically, and usually after each cleaning of a pipe, the operator will depress the operating knob or handle 30, thus forcing the plunger element 29 and rod 28 downwardly and moving the crowned or domed closure 31 from the position shown in Fig. 1 to a lower position and allowing the ashes or other debris to slide off the same into the ash receiving chamber 15. This action also and simultaneously compresses the spring 32. Upon realizing the pressure from the operating knob or handle 30, the spring 32 will expand and will move the crowned or domed closure 31 back into closing position again as indicated in Fig. 1.

Whereas I have described my invention by reference to a specific form thereof, it will be understood that many changes and modifications may be made without departing from the spirit of the invention.

I claim:

1. An improved pipe cleaning ash tray comprising a base having a chamber formed therein, an ash tray removably mounted on the base and having an opening therethrough communicating with the chamber, a tubular member movable within and extending through said opening, means for limiting the movement of the tubular member into the chamber, an annular anvil of resilient material mounted on the top of the tubular member, a resiliently mounted domed closure for the lower end of the tubular member, and operating means located within the ash tray for operating the closure member.

2. An improved pipe cleaning ash tray comprising a base having a chamber formed therein, an ash tray removably mounted on the base and having an opening therethrough, communicating with the chamber, a tubular member movable within and extending through said opening, means on the tubular member for limiting the movement of the tubular member into the chamber, a resilient flange formed at the upper end of the tubular member within the confines of the ash tray, a domed closure for the lower end of the tubular member, and means for operating said closure means.

3. An improved pipe cleaning ash tray comprising a base having a chamber formed therein, an ash tray removably mounted on the base and having an opening therethrough communicating with the chamber, a tubular member extending through said opening and into the chamber, an annular anvil of resilient material mounted at the top of the tubular member, a shaft resiliently mounted on the inner side wall of the tubular member, and extending to a point above the ash tray, a domed closure for the lower end of the tubular member attached to said shaft, and means for returning the closure and shaft to initial position after operation.

4. An improved pipe cleaning ash tray comprising a base having a chamber formed therein, an ash tray mounted on the base, a tubular member mounted in the ash tray and extending into the chamber, an annular anvil of resilient material mounted at the top end of the tubular member, a non-circular hollow guideway secured to the inner wall of the tubular member, a non-circular shaft slidably mounted in the upper end of the non-circular guideway, an operating handle mounted on the non-circular shaft, a rod at the lower end of the non-circular shaft, extending downwardly therefrom, a closure for the lower end of the tubular member secured to the lower end of said rod, and resilient means mounted within the non-circular guideway and urging the non-circular shaft and closure into their uppermost positions.

WALTER H. STEWART.