Feb. 21, 1928. 1,660,143

L. M. WAITE

ASH RECEPTACLE

Filed Feb. 28, 1927

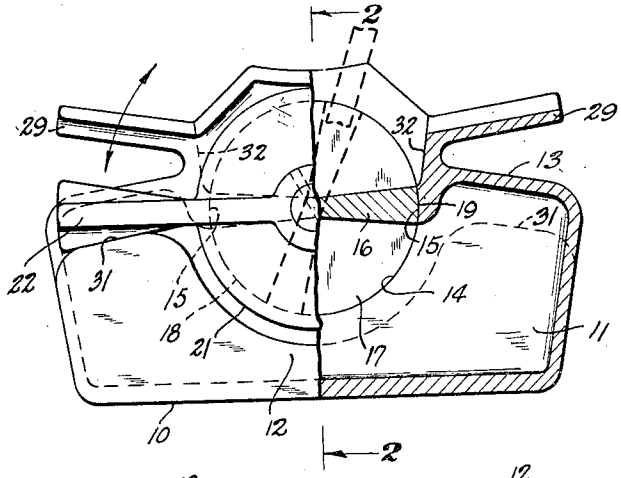


Fig. 1.

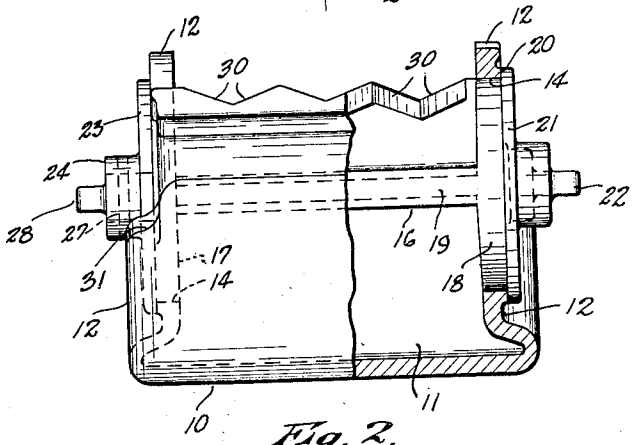


Fig. 2.

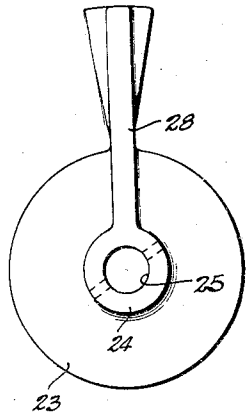


Fig. 5.

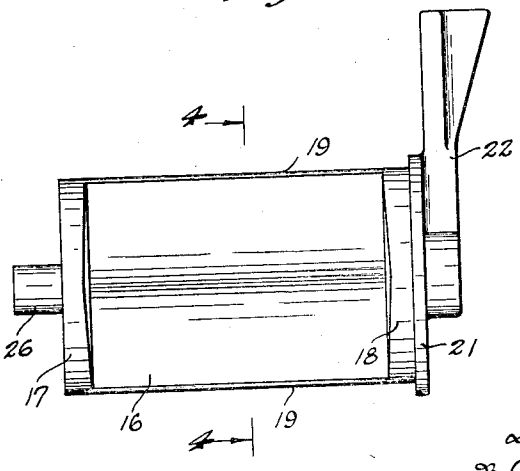


Fig. 3.

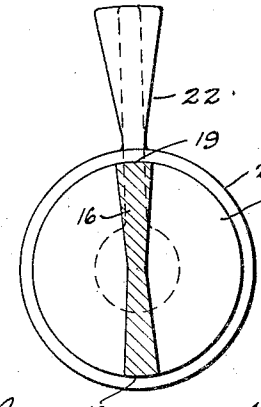


Fig. 4.

Inventor

Lyman M. Waite

By Wooster & Davis

Attorneys

Patented Feb. 21, 1928. 1,660,143

UNITED STATES PATENT OFFICE.

LYMAN M. WAITE, OF SOUTH NORWALK, CONNECTICUT.

ASH RECEPTACLE.

Application filed February 28, 1927. Serial No. 171,493.

This invention relates to an ash receptacle for smoker's use, and has for an object to provide a device of this character which will be neat and attractive in appearance, and is of such a weight, contour and balance as to retain an upright position under any except unusual conditions to prevent spilling of the ashes or other refuse; and it is a special object of the invention to provide a device of this character in which the receptacle is sealed to prevent draft through the device, and therefore, will quench a lighted cigar or cigarette and will prevent escape of smoke. The device is, therefore, unobjectionable to a non-smoker and practically eliminates the fire hazard.

With the foregoing and other objects in view, I have devised the construction illustrated in the accompanying drawing forming a part of this specification. In this drawing,

Fig. 1 is a partial end elevation and a partial vertical section through the device with the parts in position to close the receptacle.

Fig. 2 is a partial end elevation and a partial vertical section, but showing the closure in elevation, the section made substantially on line 2—2 of Fig. 1.

Fig. 3 is a top plan view of the closure.

Fig. 4 is a transverse section thereof substantially on line 4—4 of Fig. 3, and

Fig. 5 is an end elevation of the retaining and sealing plate at one end of the closure.

My improved receptacle comprises a body 10 preferably cast in one piece and of substantially the shape shown to form a chamber or receptacle 11 for ashes, cigar or cigarette butts, matches and so forth. This body or receptacle includes upright end walls 12 and a top wall 13. Formed in the end walls are two circular openings 14 of comparatively large diameter, and the top wall is provided with a substantially rectangular opening in alignment with these openings. In other words the side edges 15 of the opening in the top wall are substantially in alignment with the sides of the openings 14, and a convenient way of finishing both the surfaces of the openings 14 in the end walls and the sides 15 of the opening in the top wall is to pass a reamer through these openings, which will finish the walls of both the circular openings and the faces of the sides 15 to the same radius, and the finishing of these surfaces may be performed at a single operation, thus greatly reducing the cost of manufacture. In order to close the receptacle to quench the lighted butts or matches and to prevent escape of smoke, a closure is provided for the opening in the top wall and also closures for the circular openings 14 in the end walls, which latter closures also provide bearings for the first closure on which it may be rotated. This closure is preferably made in one piece and includes a body or plate portion 16 and flanges 17 and 18 at its opposite ends. The outer surfaces of these flanges and the edges 19 of the central portion are turned to the same diameter, and therefore, radius which is substantially the diameter of the openings 14 in the end walls of the body and same radius as the side edges 15 of the opening in the top wall, so that when placed in position, as shown in Figs. 1 and 2, these flanges will close the openings 14 in the end walls of the body and when lying in the horizontal position the plate portion 16 will lie in radius alignment contact with the edges 15 of the opening in the top wall and will form a tight closure for the same throughout the length and thickness of the members. As these surfaces are finished it will be apparent that the compartment within the body will be substantially sealed and there will be no draft of air through this compartment. The edges 15 of the opening are of sufficient depth or thickness throughout their entire length to allow the reamer to leave a more or less pronounced radius, and the edges 19 of the closure are also of sufficient depth or thickness to permit the turning tools to leave a similar more or less pronounced radius the entire length, so that when the plate portion 16 lies in horizontal alignment with the edges 15, the four (two on each side) curved surfaces will be in radius contact, and therefore, there can be no open crack or space along the edges, and thus it is not necessary to provide additional members to seal up such a crack or opening.

The outer surfaces 20 of the end walls about the openings 14 are also finished to have a good bearing with the inner surface of a stop flange 21 formed on the flange 18, and cast integral with this flange is a handle 22 of any suitable shape by which the closure may be operated. In assembling the closure it is inserted from one end through the openings 14, as indicated in Figs. 1 and 2, the longitudinal movement being limited by the

flange 21 engaging the outer surface of an end wall of the body. To retain this closure in position a separate plate 23 is provided of a similar size and shape to the stop flange 21, and it has a boss 24 having a bearing opening 25 to receive the stud 26 on the outer side of the flange 17. This plate engages the outer surface of the other end wall of the body, and as it is secured to the stud 26 by any suitable means, such as a pin 27, it retains the closure in position. The plate 23 also has cast integral therewith an operating handle 28 which is of the same size and shape as the handle 22. It will, therefore, be apparent that after the plate 23 and handle 28 are applied the device has a uniform appearance and finish at its opposite ends, and it should be noted that when applying the plate 23 the handle 28 should be in alignment with the handle 22.

Also formed on the top wall of the body are suitable rests 29 for lighted cigars, cigarettes, or pipes, and they may have in their upper surfaces inclined grooves or recesses 30 to prevent the articles rolling about. It will be noted from Fig. 1 these rests are so positioned that the lighted ends of the cigars or cigarettes will lie over the closure 16 so that should ashes fall off they would drop onto this closure. Also the end walls of the body are so shaped on opposite sides of the openings 14 to provide shoulders 31 in the paths of movement of the handles 22 and 28 to form stops to limit movement of these handles in opposite directions, and they are so located as to be engaged by the handles when the closure 16 is in alignment with the side walls 15 of the opening in the top of the receptacle to close the same, as shown in Figs. 1 and 2. As there are shoulders on opposite sides of the closure they will form indexing means to automatically stop the closure in the proper position when the handles are either to the right or left and when the closure is either side up.

In operation, ashes, lighted matches, butts and so forth are merely deposited on the top wall of the closure 16, and it is preferred that the sides 15 of the opening in the top wall be located below the rests 29 to form a sort of pocket or receptacle above the closure and of which the closure forms the bottom, the upright walls 32 the sides, and the flanges 17 and 18 the ends, as will be apparent from Figs. 1 and 2. The user then merely swings one of the handles 22 or 28 from one horizontal position to the other either to the right or left depending on which side they happen to be lying. This single movement reverses or turns the closure 16 over so that the ashes or other refuse are deposited in the receptacle and the opening is automatically closed. It is, therefore, not necessary to swing the handles first in one direction to deposit the refuse in the receptacle and then back again to close the same. Also no springs or other operating means are required to close the receptacle or retain the closure in the closed position as the weight of the handles will do this. It will also be apparent there is no chance for a draft through the receptacle to support combustion of the lighted butts deposited therein, and there is no chance for escape of smoke to the annoyance of non-smokers. Attention is also directed to the fact that the device is extremely simple in construction involving only three different elements, the body, the closure and the separate finishing flange, which may be easily and quickly assembled so that it may be manufactured at comparatively low cost.

Having thus set forth the nature of my invention, what I claim is:

1. In a device of the character described, a receptacle having an opening in its top wall, a substantially flat closure pivoted in bearings at its opposite ends in the receptacle and arranged in alignment with the side walls of the opening to close the same and retain refuse when either side up, means for turning the closure in opposite directions in its bearings to first expose one side and then the other, and means for limiting said movements of the closure in both directions so that it will come to rest when it is in alignment with said side walls.

2. In an ash receiver, a body forming a receptacle having a top wall provided with a substantially rectangular opening and end walls having bearing openings therein in alignment with said top wall and of a diameter substantially equal to the width of said opening, a closure adapted to be brought into alignment with the side walls of the opening to close the same and having flanges at its opposite ends mounted to rotate in said bearings and close the same, means for turning said closure, and means to limit movements of the closure in opposite directions when it is in closing position.

3. In an ash receiver, a body forming a receptacle having a top wall provided with an opening, a closure for said opening pivoted to close the opening when either side up, said body also having upwardly extending side walls at the sides of said opening to provide a receiver for refuse the lower wall of which is formed by said closure and said walls extending laterally outward at their upper edges to form a cigar or cigarette rest at one side of the opening arranged to hold the cigar or cigarette with the lighted end over the closure, a handle to swing the closure on its pivot to reverse its position in the opening to dump ashes thereon into the receptacle, and means to limit movement of the closure in opposite directions when in the closing position.

4. In an ash receiver, a body forming a

receptacle provided with end walls having aligned circular openings forming bearings and a top wall having an opening with curved side edges coaxial with the bearings and of substantially the same diameter, a one piece closure having a substantially plane body portion and flanges at its opposite ends, the edges of the body and the flanges being of the same diameter as the bearing openings and mounted to turn therein, a handle to swing the closure in said bearings, and means to limit movements of the closure in opposite directions when in the closing position.

5. In an ash receiver, a body forming a receptacle provided with end walls having aligned circular openings forming bearings and having a top wall provided with an opening with its side edges substantially in alignment with the opposite sides of the openings, a closure comprising a plate adapted to lie in the top opening to close the same and having flanges at its opposite ends to fill the openings in the end walls and form bearings therein for the closure, one of said flanges having an enlargement on the outer wall to cover the bearing, a separate flange secured outside the other flange to close that bearing, means to swing the closure to reverse its position in the opening, and means to limit the movements of the closure to stop it in closing position.

6. In an ash receiver, a body forming a receptacle having a substantially rectangular opening in the top thereof, a closure mounted to turn in said opening comprising a substantially plane body portion of a size to fill said opening, the opposite side edges of the opening and also of the closure being transversely curved substantially corresponding to the walls of a cylinder whose axis is the axis about which the closure is mounted to turn so that said edges cooperate to prevent passage of smoke and odors when they are in alignment and will allow free movement of the edges of the closure past the edges of the opening, means for operating the closure, and indexing means for holding the closure in closed position within the opening and with its edges in alignment with those of the opening.

In testimony whereof I affix my signature.

LYMAN M. WAITE.