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TOBACCO ASH RECEPTACLE

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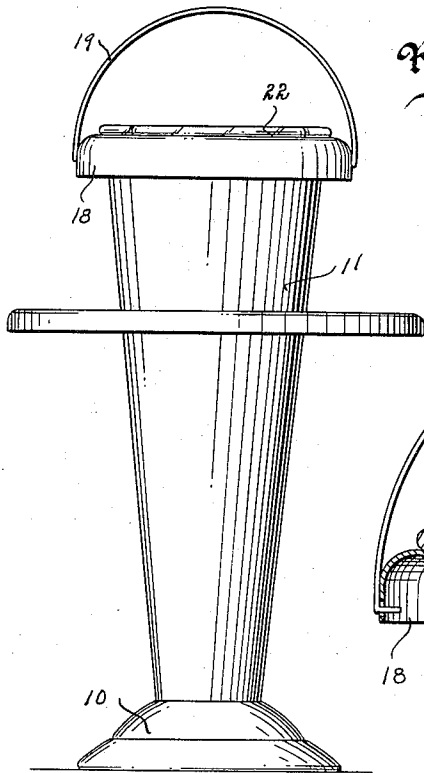


Fig. 1.

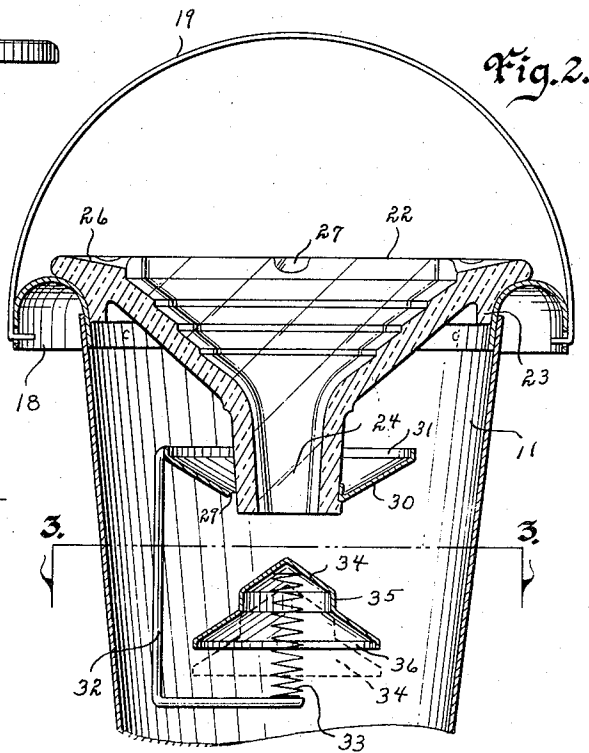


Fig. 2.

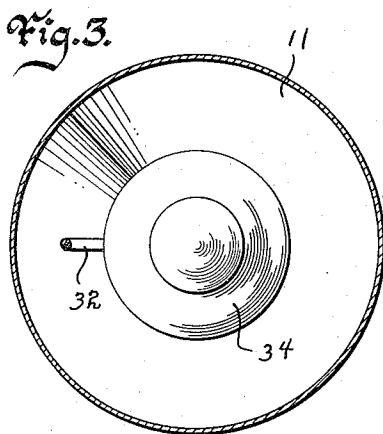


Fig. 3.

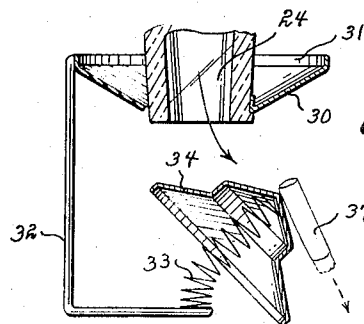


Fig. 4.

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TOBACCO ASH RECEPTACLE

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Application July 14, 1955, Serial No. 522,122

1 Claim. (Cl. 220—1)

This invention relates to smoke stands, desk ash receptacles and like, used for receiving tobacco residue, such as cigarette butts, cigarbage, and pipe ashes and is an improvement on my smoke stand filed August 25, 1954, Serial No. 452,175.

Herebefore, most smoke stands have a receiving compartment, a hopper portion, and a hand actuated mechanical trapdoor for sealing the receiving compartment against the escape of smoke and odors from the smoldering tobacco deposited therein. The objections to such trapdoors are that they must be manually operated, have smoke-leakage at adjacent parts, are expensive to manufacture, and by being mechanical, often break down in use. These trapdoors must be manually operated and are unsanitary. Furthermore, all previous smoke stands of the smoke trap type are of metal which either rapidly corrodes and becomes unsightly or is of bright chromium plated metal, which while sanitary, clashes with the refined and subdued surroundings of a living room.

My application above referred to did have a glass hopper top, but the smoke and odor baffle cone directly below the hopper top opening was rigid thereby interfering with the passage of certain matter into the smoke stand and in general clogging up.

Therefore, one of the principal objects of my invention is to provide a smoke stand wherein the cone baffle is yieldingly supported, thereby allowing for the passage of large items such as cigars, wads of paper, cellophane and like into the receptacle portion.

A further object of my invention is to provide a smoke stand that has no moving lever parts, yet is capable of successfully trapping the smoke and odors.

A still further object of this invention is to provide a smoke stand or like tobacco ash receptacle that is easily kept in a clean and sanitary condition.

A still further object of my invention is to provide an ash receptacle that rapidly extinguishes the burning cigarette or cigar, once it is deposited in the receptacle.

A still further object of my invention is to provide a smoke stand receptacle that is economical in manufacture, refined in appearance, and durable in use.

These and other objects will be apparent to those skilled in the art.

My invention consists in the construction, arrangement and combination of the various parts of the device, whereby the objects contemplated are attained as hereinafter more fully set forth, pointed out in my claim, and illustrated in the accompanying drawings, in which:

Fig. 1 is a side view of my smoke stand,

Fig. 2 is an enlarged sectional view of the upper portion of my device,

Fig. 3 is a horizontal sectional view of my smoke stand taken on line 3—3 of Fig. 2, and

Fig. 4 is an enlarged sectional view of the baffle member showing its tilting action when engaged by an object dropped through the hopper top opening.

In these drawings I have used the numeral 10 to designate the base portion, which may be of any suitable de-

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sign. The numeral 11 designates the column or standard. This portion of the device may be of any suitable design, but in the drawing I show it as an elongated inverted cone. On the top of the standard 11 is a curved

collar rim 18 having the usual lifting bail 19. The numeral 22 designates my glass hopper top. This hopper top has its outer underside rim portion concave to conform to and engage the convex supporting rim 18. Adjacent to and inside this concave under rim portion of the hopper top is a circular depending centering flange 23 extending into the top of the column as shown in Fig. 3. This hopper top extends downwardly and inwardly terminating in a downwardly extending tubular neck portion 24. The inside of this tube portion 24 is of slightly greater diameter at its top than at its bottom to encourage an inflowing of cold air and discourage the outflow of warm obnoxious odors from the device. The outer upper circular rim portion of the hopper top is concave to support a cigarette or like. By this structure a cigarette is laid within this circular trough 26 and transversely of the tube portion 24. Glass is not only easily and quickly cleaned of tobacco stains and tars but is an excellent heat conductor for extinguishing ignited cigarette butts, when the ignited end engages the glass mass. The numeral 27 designates cigar and cigarette rests imbedded in the top rim portion, and which extend inwardly and downwardly toward the center of the hopper. The inside wall of the hopper top that extends downwardly and inwardly comprises a series of circular continuous steps 28 decreasing in diameter as they are arranged downwardly as shown in Fig. 2. The hopper top thus far described is of one molded piece of glass and may be lifted from the smoke stand for cleaning and washing purposes or for the removal of ashes, butts and like from the column 11, which may be used per se as an ash receptacle. The numeral 30 designates a circular washer baffle member slidable on the lower end portion of the tube portion 24. The number 30 has its width extending upwardly and outwardly to terminate into an upwardly extending rim flange 31.

The numeral 32 designates a bracket rod extending from the member 30 and terminating a considerable distance below the opening of the hopper neck 24. The numeral 33 designates a compressible resilient flexible loose coil spring having its lower end secured to the free end portion of the bracket and normally extending upwardly as shown in Fig. 2. The numeral 34 designates a pointed cap baffle member secured on its bottom center to the top of the spring 33. By this construction the baffle 34 will be yieldingly, compressibly and flexibly held in spaced relationship directly below the hopper neck opening. This baffle cap extends downwardly and outwardly but has a circular step 35 to prevent wet cigarette butts from sticking thereon. The numeral 36 designates a downwardly peripheral rim on the cap 34. This rim 36 and the rim 31 are important in the control and trapping of certain air currents. When a cigar or cigarette butt is dropped into the hopper top, it will by gravity tumble in and through the tube neck 24. Thence it will drop through space until it strikes the cap 34. Due to the high flexibility of the spring 33, the baffle, under the weight of the dropped object, will cant or tilt sidewise to dump the object such as a cigarette butt 37 into the standard 11 which is the receiving receptacle. This action is illustrated in Fig. 4. In the case of larger articles, the cap baffle may move directly downwardly due to the loose winding of the spring for making sufficient room for the passage of such large article between the bottom of the hopper neck and the top of the cone cap baffle. However, in either case, once the object has passed the cone baffle, the coil spring will automatically return the

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baffle to an upright proper effective position below the hopper neck as shown in Fig. 2. The object such as ignited tobacco products will have objectionable odors until such objects are extinguished, but I retain them within the smoke stand by a series of baffle members and their relative arrangements and construction. Rising gases would be required to pass upwardly and then outwardly to the side of the column to clear the baffle flange cap 34. This action will be amplified by the flange 36, which also aids directing cold current directly downwardly toward the bottom of the smoke stand. The raising current, however, carrying the odors and smoke particles will be deflected away from the open bottom end of the tube 24 of the hopper. Instead they will move upwardly and outwardly to clear the inverted baffle 30. The rim 31, will permit their upward movement but direct them up and under the underside of the hopper top, where they will be effectively trapped and cooled. This is promoted by the cool heavy glass hopper top. Any gases leaving this area will have to pass downwardly around the outside of the tube portion 24. The flange 31 will aid in preventing lateral flow, but the top of the baffle 30 will guide such gases inwardly and downwardly through the passageway 29. The direction of travel will be directly downwardly and outside of any cold current moving downwardly through the neck tube 24. Furthermore, the inside taper of the member 24 will discourage any gas or smoke to escape. Any movement of gases downwardly from this area will engage the cap 34, spread out and move to the bottom inside of the smoke stand. Thus it will be seen that all odors and obnoxious hot gases will be retained in the smoke stand. All that is necessary is to drop the lighted cigarette butt into the hopper and it will be automatically extinguished and its odors trapped without further effort on the part of the user, and without the use of moving lever parts.

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By the baffle member 34 being pointed and cone shaped an item may engage any side and it may cant or tip in any side direction. Any suitable resilient, flexible compressible member such as spring or rubber-like material may be used to support the cone baffle.

Some changes may be made in the construction and arrangement of my tobacco ash receptacle without departing from the real spirit and purpose of my invention, and it is my intention to cover by my claim, any modified forms of structure or use of mechanical equivalents which may be reasonably included within their scope.

I claim:

In a tobacco ash receptacle, a receptacle, a hopper top on said receptacle having a downwardly and inwardly sloping wall terminating in a depending neck opening, an inverted cone baffle secured to said hopper top and embracing the lower end of said neck opening, a spring supporting member having one end connected to said inverted cone baffle, a coil spring on the other end of said supporting member, and a cone-shaped baffle member below the said opening in said hopper top resting in a space completely below the horizontal plane of the lower end of said neck opening and solely supported by said coil spring.

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