Dec. 8, 1953 P. M. MANION 2,661,747

SMOKER'S RECEPTACLE

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Fig 2

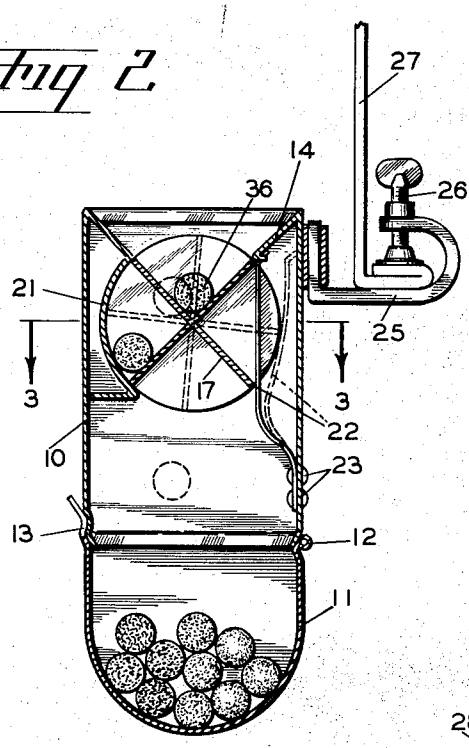
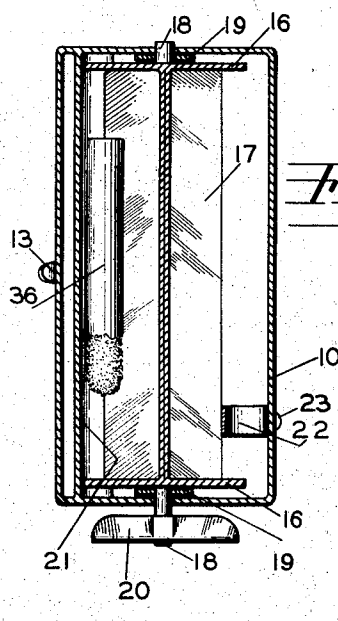


Fig 3



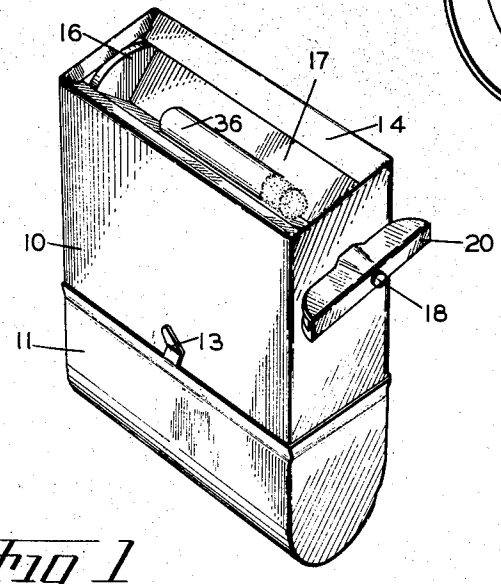


Fig 1

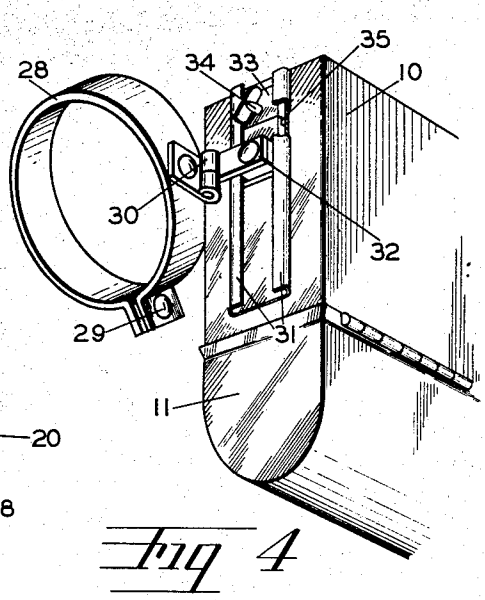


Fig 4

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SMOKER'S RECEPTACLE

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1 Claim. (Cl. 131—237)

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The present invention relates to a smoker's receptacle adapted to receive burning cigar and cigarette butts and burning embers, to extinguish them, and to store them pending more permanent disposal. It comprises a container having a first zone for receiving the burning refuse material, a second zone sealed against the entry of air for extinguishing the burning refuse material, a third zone for storing the extinguished material, and means for transferring the refuse material successively from the receiving zone to the extinguishing zone and thence to the storing zone.

The disposition of cigar and cigarette butts, burning ashes, smoking matches and other smoker's refuse presents a problem in that, if such material is not fully extinguished, it continues to burn, emitting offensive odors and presenting a distinct fire hazard. The problem is particularly acute in automobiles, where adequate means usually are not provided for extinguishing the foregoing materials and where the prevalent tendency is to dispose of them by throwing them from the car, even though this is forbidden by law in some states. It therefore is a primary object of the present invention to provide a smoker's receptacle which will rapidly and completely extinguish burning refuse material and store it pending its permanent disposal. Still another object of the present invention is the provision of a smoker's receptacle provided with means for attachment to the steering post or dashboard of an automobile and hence conveniently accessible to the smoker. Still other objects are the provision of a smoker's receptacle which is of simple, efficient construction and which is provided with means for adjusting its position with respect to the object to which it is attached.

The manner in which the foregoing and other objects of the present invention are accomplished will be apparent from the following specification and claim considered together with the accompanying drawings wherein:

Fig. 1 is a perspective view of the receptacle of the present invention;

Fig. 2 is a sectional view in elevation of the hereindescribed receptacle;

Fig. 3 is a sectional view taken along the lines 3—3 of Fig. 2; and

Fig. 4 is a perspective view illustrating the manner of attachment of the receptacle of the invention to the steering post of an automobile or similar object.

The hereindescribed smoker's receptacle broadly comprises the container 10 which may be of any suitable size or shape and fabricated from an appropriate fireproof or fire resistant material, such as metal. It is open at the top and preferably is provided with a dished bottom 11 which is detachable from the upper portion of the container or, as illustrated, hinged by means of the hinge 12 at one side and provided on the

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opposite side with a snap fastener 13 engaging the upper portion of the receptacle.

The open end of the receptacle is provided with flanges 14 extending inwardly. Directly below the flanges 14 and in communication therewith is a compartmented member rotatably mounted within the container, as by being provided with a shaft extending through perforations in the opposite side walls of the container.

The compartmented member in the illustrated form comprises a bladed wheel 16, having blades 17 and being rotatably mounted within the container on the shafts 18, washers 19—19 being provided to space the wheel from the inner walls of the container. A handle or key 20 is attached to the shaft 18 outside of the container to furnish means for rotating the wheel.

The dimensions of the bladed wheel 16 are such that the blades define, together with the flanges 14 and the inner walls of the container, a plurality of compartments or zones. The first of these is that which is presented to the exterior through the top of the container and which comprises a receiving zone into which burning cigarette butts and other smoker's refuse may be placed. The second, which is particularly evident in Fig. 2, is an intermediate or extinguishing zone of limited air capacity so that the burning material is quickly extinguished when introduced therein. The third zone is a storage zone of substantial capacity into which the extinguished refuse material may be introduced for storage pending more permanent disposal.

To seal off the intermediate or extinguishing zone and make it substantially air tight, there is provided a sealing member 21, the inner surface of which is concentric with the bladed wheel 16 and is spaced therefrom so that as the wheel rotates the blades 17 are in sliding contact with the arcuate surface of the sealing member. Hence when two adjacent blades are thus in contact with the sealing member, there is formed a space which is sealed against the entry of air so that any burning material enclosed therein will be extinguished rapidly.

Stop means are provided for arresting the motion of the bladed wheel 16 so that material contained between adjacent blades may be moved successively and positively to each of the above three zones. In the illustrated form, such stop means comprise the spring 22 attached to the inside of the container by means of rivets 23 or other suitable means. The dimensions and position of the spring are such that it bears against the outer edges of the blades of wheel 16 as the latter rotates. It will be apparent that the spring flexes with the rotation of the wheel, the amount of flexing increasing as each of the blades approaches the spring more closely. As any given blade moves away from the spring, however, and as the next blade approaches it, there will be a

position in which the spring bears equally against the outer edges of both blades. This creates a positive stop so that, in order to rotate the wheel further, additional force is required. The spacing of the blades on the bladed wheel is such that, when one pair of blades is in contact with the spring 22, an opposite pair of blades has its edges in contact with the sealing member 21. In this manner, there is afforded means for rotating the bladed wheel in stages so that the burning material may be transferred from the receiving zone to the extinguishing zone and thence into the storage compartment.

Suitable means also may be provided if desired for attaching the receptacle of the present invention to some external object. As illustrated in Fig. 2, the attaching means may comprise a bracket 25 fastened to the outer wall of the receptacle and provided with a screw clamp 26 which is adapted to engage the member 27 which may be, for example, the dashboard of an automobile. Alternatively, the attaching means may comprise the ring 28 provided with flanges and screws 29 and adapted to encircle the steering post of an automobile. The ring 28 and the container 10 may be interconnected in any suitable manner, preferably through means permitting adjustment of the position of the container with respect to the object to which it is attached. Such means thus may comprise the hinge 30 or, alternatively, a conventional ball and socket joint.

In many instances, it is convenient to have the container adjustable vertically with respect to the object to which it is attached. This may be accomplished, as is illustrated particularly in Fig. 4, by providing a vertical guide 31 on an exterior end wall of the receptacle. A slide 32 carried by the attaching means moves in the guide 31 so that the vertical position of the container 10 may be adjusted as desired. It may be locked in the selected position by means of the stop member 33 which also moves in the guide 31 below the attaching means and which carries the screw 34 adapted to engage the side wall of the container. Thus when the stop member 33 is fixed at a given position, the position of the container 10 may be adjusted until the slide 32 engages the stop member. The weight of the container then suffices to maintain it in this position.

The stop member 33 preferably is provided with an extension or flange 35 adapted to underlie a portion of the slide 32. This makes possible securing the container in the selected position, since turning of the screw 34 exerts clamping pressure on the slide 32 and holds it firmly in place. This has the further advantageous feature of preventing the rattling which might otherwise occur when the receptacle is used in automobiles.

The container preferably is detachably connected to the attaching means, as by forming the guide 31 with an open end through which the slide 32 may be removed. Hence it is possible to furnish with a single receptacle a plurality of attaching means which may be stationed permanently in various convenient locations, the receptacle being transferred from one to the other as desired.

To operate the hereindescribed smoker's receptacle, the burning cigar or cigarette butt is placed in the top of the receptacle in the receiving zone defined by two adjacent blades of the bladed wheel 16. The handle 20 then is turned, moving the wheel against the tension of the spring 22. Rotation of the wheel is continued until stopped or inhibited by contact of the spring with two adjacent blades of the wheel as explained above. At this point, the cigarette butt will be stationed in the intermediate or extinguishing zone sealed off from access of air by the sealing member 21. Here it is rapidly extinguished in a matter of only 10 or 15 seconds. It then may be transferred to the storage zone by further rotation of the bladed wheel or, as may be more convenient, permitted to remain in the extinguishing zone until a further quantity of burning refuse material is introduced into the receiving zone. Transfer of the latter to the extinguishing zone then automatically will transfer the extinguished material into the final or storage zone. Here the extinguished refuse may be permitted to accumulate in the substantial space provided. It may be emptied conveniently at intervals by releasing the snap fastener 13 and discharging the accumulated material.

Thus I have provided by the present invention a receptacle of simple, effective construction into which burning smoker's refuse and similar material may be introduced, rapidly extinguished and stored. This prevents the emanation from such material of offensive odors, and also eliminates the fire hazard usually attending its disposal.

Having thus described my invention in preferred embodiments, I claim:

A smoker's receptacle comprising a rectangular container open at its top, a bladed wheel rotatably mounted within the container between the ends thereof and adjacent the open top, a sealing member secured to one side of the container and comprising an inwardly and downwardly directed top flange and a sealing surface, the sealing surface being concentric with the bladed wheel and proportioned to be contacted by at least one pair of adjacent blades whereby to form a sealing chamber, a second top flange extending obliquely inwardly from the upper edge of the side of the container opposite the sealing member and terminating adjacent the bladed wheel, the said flanges forming with a pair of said blades a receiving trough substantially sealed from the lower portion of the container, and a leaf spring secured to the side of the container opposite the sealing member, the spring being adapted to contact the edges of a pair of said blades when another pair of blades are in contact with said sealing surface and when still another pair of blades are aligned with the said inwardly directed flanges, the spring thereby functioning to resiliently position the bladed wheel in successive stations of rotation, and a storage zone in the container below the bladed wheel adapted to receive the extinguished material from the sealing chamber upon rotation of the bladed wheel.

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References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
589,152	Baker	Aug. 31, 1897
1,637,172	Burress	June 26, 1927
1,662,171	Savery	Mar. 13, 1928
1,744,123	Kolar	Jan. 21, 1930
1,751,463	Backus et al.	Mar. 25, 1930
1,815,701	Butscher	July 21, 1931
1,912,598	Snadden	June 6, 1933

FOREIGN PATENTS

Number	Country	Date
116,639	Great Britain	June 20, 1918
517,211	Great Britain	Jan. 23, 1940