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Harreld

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[54] **PORTABLE HAND-OPERATED CUSPIDOR**

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[52] **U.S. Cl.** **4/271,** 4/258, 4/267

[51] **Int. Cl.** **A61j 19/00**

[58] **Field of Search** 4/267, 258, 259, 271, 274, 4/285

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[57] **ABSTRACT**

A portable hand-operated cuspidor having an easily openable hinged lid which it tightly closed in place by means of a spring and cam lever arrangement. Replaceable cups confirming to the general shape of the cuspidor may be used for more easily maintaining the cuspidor in a sanitary condition.

5 Claims, 4 Drawing Figures

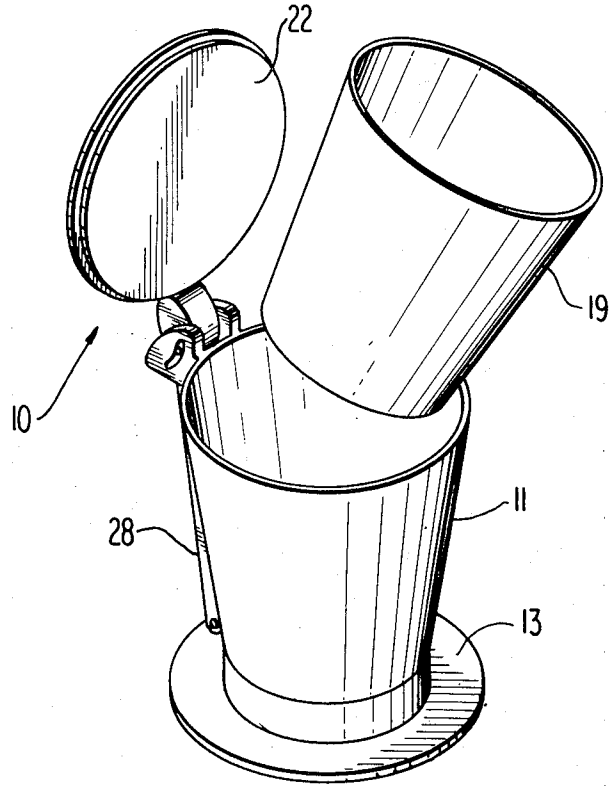


FIG.1

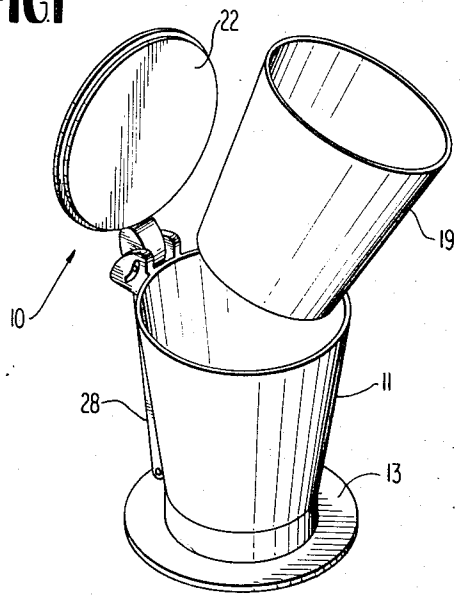


FIG.2

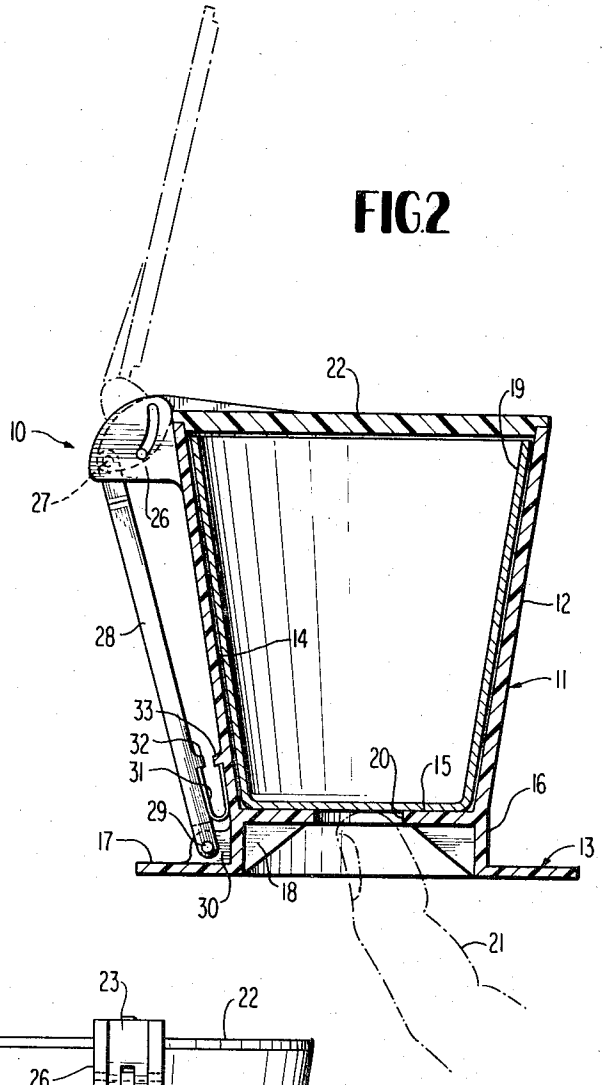
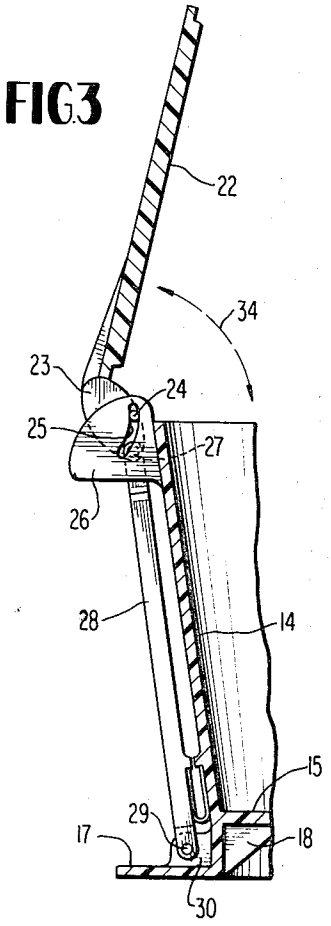


FIG.3



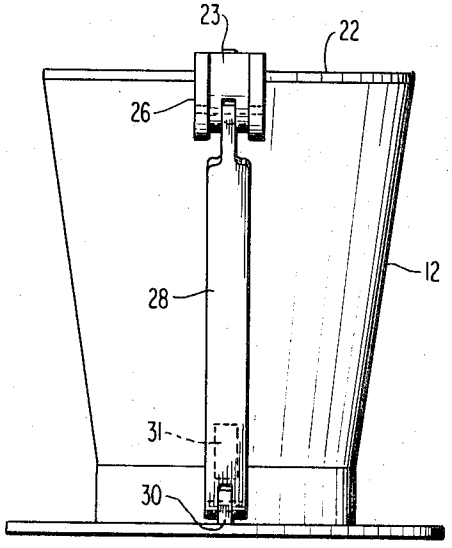


FIG.4

PORTABLE HAND-OPERATED CUSPIDOR

Most cuspidors or spittoons in use today are generally of such a design as having an open top portion into which the tobacco chewer may deposit his tobacco refuse, the spittoon bowl being of course emptied through the same open end. Most of such cuspidor bowls are however relatively unstable and have a tendency to easily tip over thereby creating a most unsanitary and untidy condition in and around the cuspidor. A cuspidor capable of being maintained in a more sanitary condition therefore becomes desirable.

The primary object of the present invention is to devise a cuspidor which not only avoids the need for repeated cleaning but is provided with a tight lid over its open end so that even if the cuspidor were inadvertently toppled over, its contents will remain wholly inside the bowl.

Another object of this invention is to provide such a cuspidor wherein the lid may be opened and tightly closed by means of a spring and cam lever arrangement, the lid being biased into a tightly closed position and capable of being opened simply by depressing the lever to rotate a cam mounted on the lid.

Another object of this invention is to provide such a cuspidor wherein the bottom wall of the container thereof is provided with an opening through which a replaceable and/or disposable cup may be manually dislodged thereby avoiding any unnecessary cleaning of the cuspidor during prolonged periods of use.

Other objects, advantages and novel features of the invention will become apparent from the following detailed description of the invention when considered in conjunction with the accompanying drawings, wherein:

FIG. 1 is a prospective view of the cuspidor and cup in accordance with the present invention;

FIG. 2 is a sectional view through the cuspidor in elevation showing the various details thereof;

FIG. 3 is a view similar to FIG. 2 showing a portion of the cuspidor and the manner in which its lid may be opened; and

FIG. 4 is a rear elevational view of the cuspidor of FIG. 1 with its lid closed.

Turning now to the drawings wherein like reference characters refer to like corresponding parts of the several views, the cuspidor generally designated **10** is shown in FIG. 1 and in more detail in FIG. 2 as comprising a holder **11** in the form of a container or bowl **12** having a base **13** integral therewith for placement of the cuspidor on any horizontal supporting surface. The holder **11** may be of plastic, or any other similar material, made by a plastic molding process in any one of a variety of attractive colors. The container **12** has a downwardly tapering, sidewall **14** and is closed at its lower end by means of a circular bottom wall **15.** A cylindrical sidewall portion **16** is made integral with bottom wall **15** and base **13.** A number of strengthening webs **18** may be located between walls **13** and **16,** as shown in FIG. **2,** for stability purposes.

A disposable or replaceable plastic foam rubber cup or the like of generally conical, downwardly tapered configuration, may be easily received within container **12** and be easily dislodged therefrom for the purpose of replacement by means of a central opening **20** in the bottom wall **15** which permits a person's finger **21** to push upwardly against the underside of cup **19.** The cup is shown in FIG. **1** in the process of being inserted within container **12.**

A lid **22,** of a material similar to that of holder **11,** is fitted across the open mouth of the container with the peripheral edge of the lid being stepped as shown so that the lower portion thereof may fit into the mouth of the container and the remainder thereof rest upon the upper edge of sidewall **14,** thus securely closing the container.

A cam element **23** is integral with or otherwise connected to lid **22,** extends outwardly thereof and is located between a pair of spaced flanges **26** connected to sidewall **14** near the top portion thereof. Cam element **23** has a pin member **24** extending outwardly from both sides thereof so as to be freely slideable within an arcuate slot **25** in each of the flanges **26,** as clearly shown in FIGS. **2** and **3.** A lever arm **28** is pivotally connected to cam element **23** at the outer end thereof as at **27.** The lower end of lever arm **28** is pivotally connected as at **29** to a lug **30** formed integrally with base **13.** A leaf spring **31** is disposed between lever arm **28** and the outer surface of the sidewall **14** and is retained in position by means of shoulders **32** and **33,** formed respectively on lever arm **28** and on the outer surface of sidewall **14.**

Plate spring **31** urges lever arm **28** away from sidewall **14** thereby causing pin members **24** on cam element **23** to be positioned substantially at the outer end of each slot **25** thereby causing cam element **23** to rotate about its center of rotation between its ends and therefore maintain the connected lid **22** in a closing position tightly over the mouth of the container **12,** as shown in FIG. **2.** In order to open lid **22,** as shown in FIG. **2,** the operator simply pushes against lever arm **28** and moves it toward sidewall **14** of the container whereupon lever arm pivots at **29** and causes cam element **23** to rotate counterclockwise about its center of rotation from a position shown in FIG. **2** to a position shown in FIG. **3.** Cam element **23** is simply guided during its rotation by means of pin members **24** moving along slots **25** thereby simply pivoting the lid **22** about this center of rotation in direction of the arrow **34.** Upon release of lever arm **28,** the lid **22** is returned to its closed position as the cam element is rotated clockwise by means of the lever arm **28** being urged to pivot away from sidewall **14.**

From the foregoing, it can be seen that a simple and economical but highly effective cuspidor or spittoon has been devised as having a lid which may be easily opened yet may be tightly closed over the mouth of the container opening thereby avoiding accidental spillage of the cuspidor contents. Moreover, a cup may be easily and quickly replaced by simply pushing through an opening in the bottom wall of the container thereby avoiding the need for periodic cleaning of the cuspidor container.

Obviously, many modifications and variations of the present invention are possible in the light of the above teachings. It is therefore to be understood that within the scope of the appended claims, the invention may be practiced otherwise than as specifically described.

What is claimed is:

1. A portable hand-operated cuspidor comprising a container having an open top end, a support stand at its lower end, a lid tightly covering said top end, and a means for opening and closing said lid, said means comprising a pair of spaced flanges secured to said con-

tainer, a cam element secured to said lid and extending outwardly thereof between said spaced flanges, a lever arm pivotally connected at one end eccentrically to said cam element and pivotally connected at its other end to said support stand; means for guiding said cam element for rotation about its center of rotation thereby causing said attached lid to be pivotally moved between an open and closed position over said container open end and when said lever arm is manually moved toward said container.

2. The cuspidor according to claim **1** wherein said guide means comprises an arcuate slot in each of said flanges and a pin member on said cam element extending into each of said slots.

3. The cuspidor according to claim **1** wherein said lever arm is biased outwardly away from said container by means of a spring, said one end of said lever arm being connected eccentrically to said cam element outwardly of its center of rotation thereby serving to tightly close said lid over said container open end.

4. The cuspidor according to claim **3** wherein said spring comprises a plate spring located between said lever arm and said container.

5. The cuspidor according to claim **1** wherein said container top end is larger than said lower end thereof and tapers between said ends, the bottom wall of said container having an opening therein to facilitate pushing upwardly at the bottom wall of a cup located within said container for removal thereof.

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