W. C. WELLS.

CUSPIDOR.

APPLICATION FILED NOV. 2, 1910.

994,352.

Patented June 6, 1911.

2 SHEETS—SHEET 1.

FIG. 1.

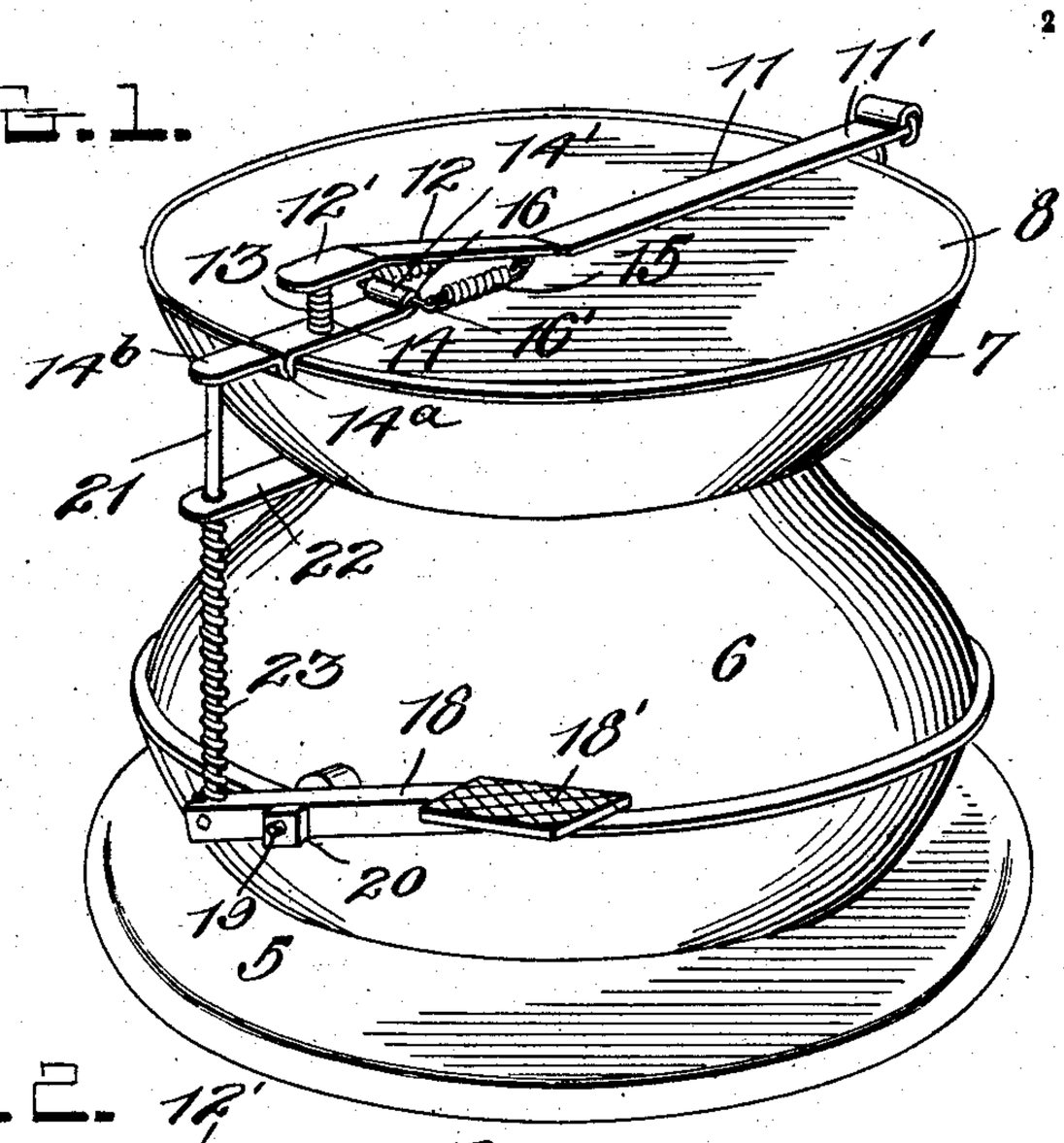
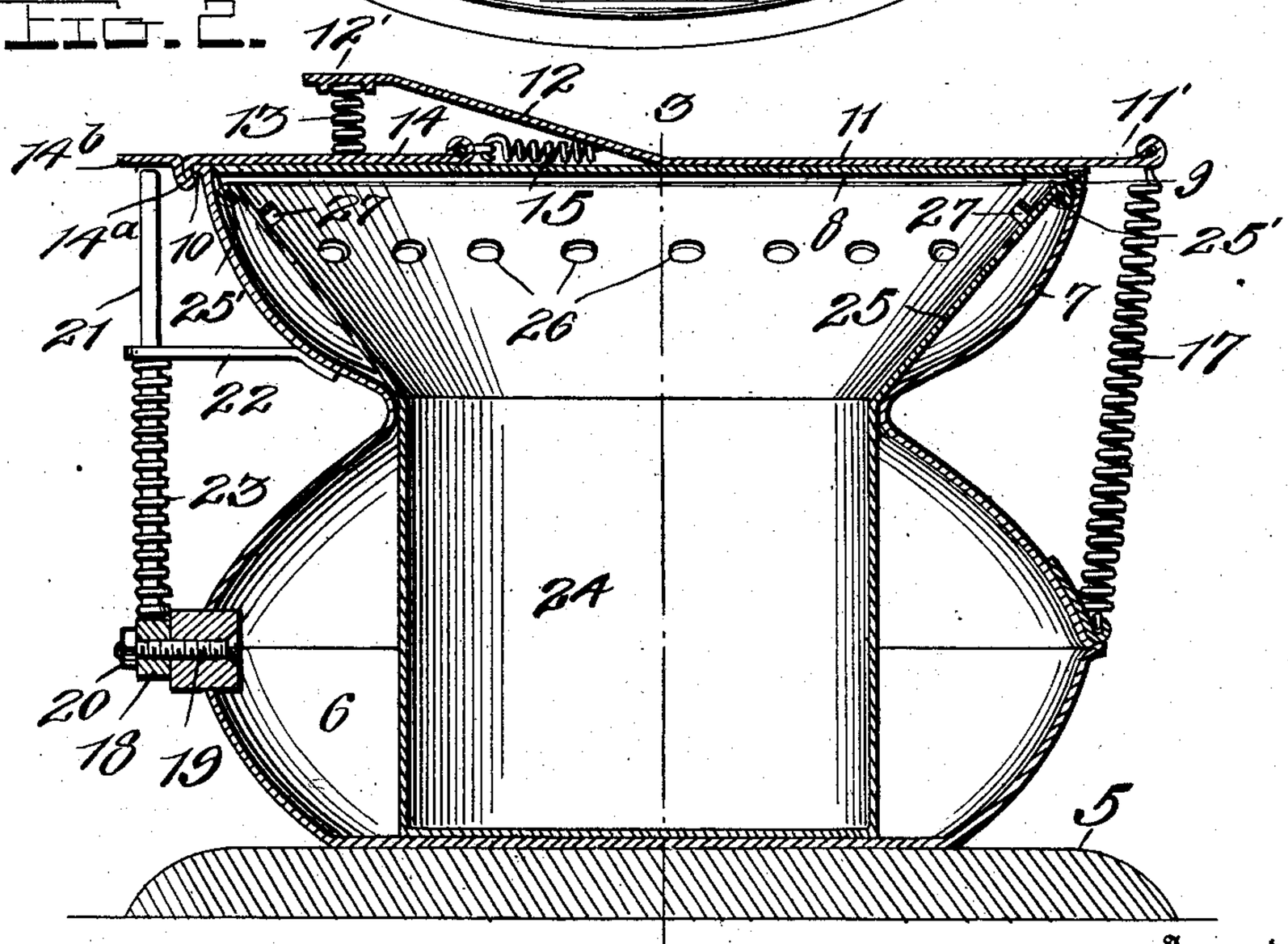


FIG. 2.



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2 SHEETS—SHEET 2.

FIG. 3.

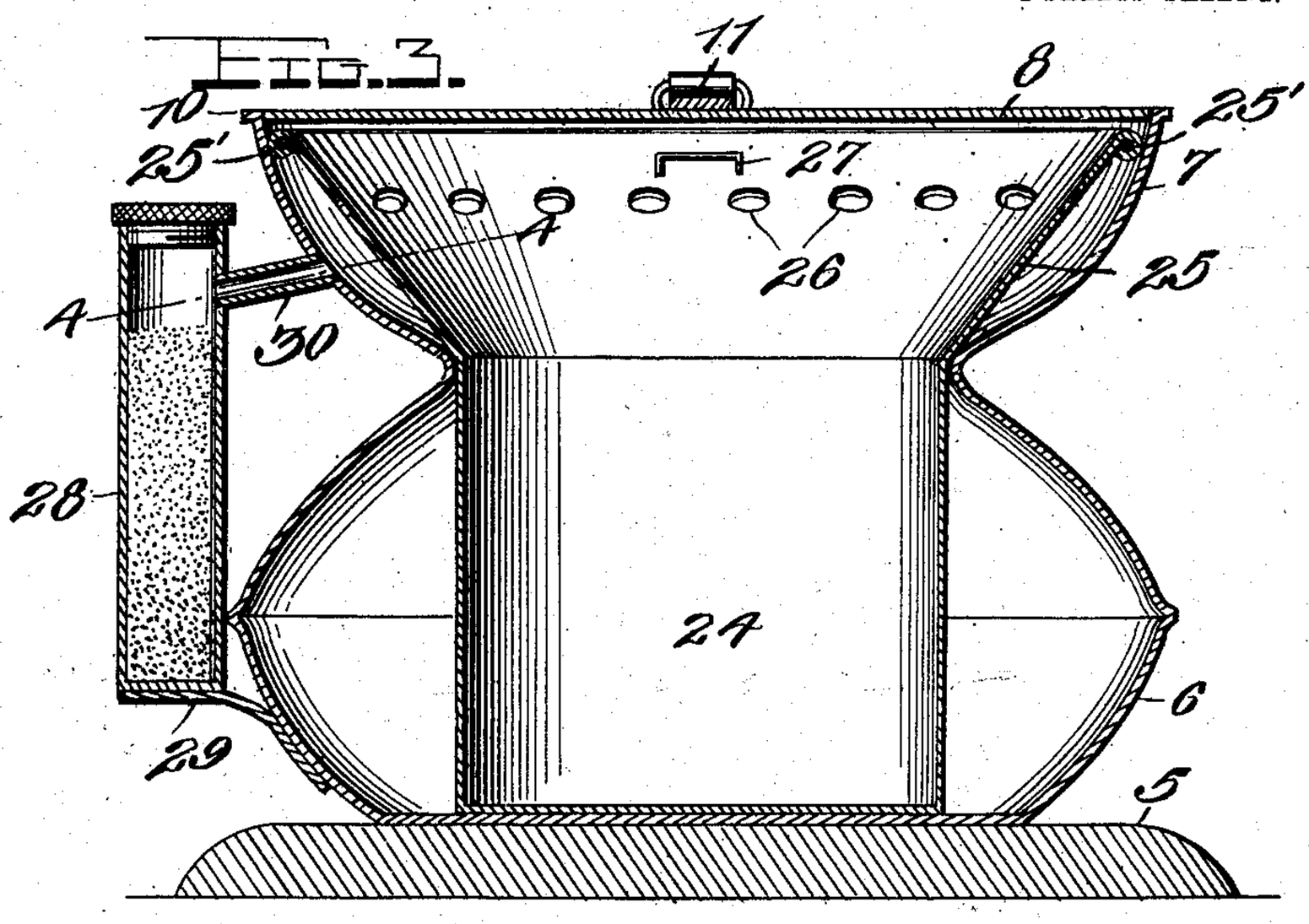


FIG. 4.

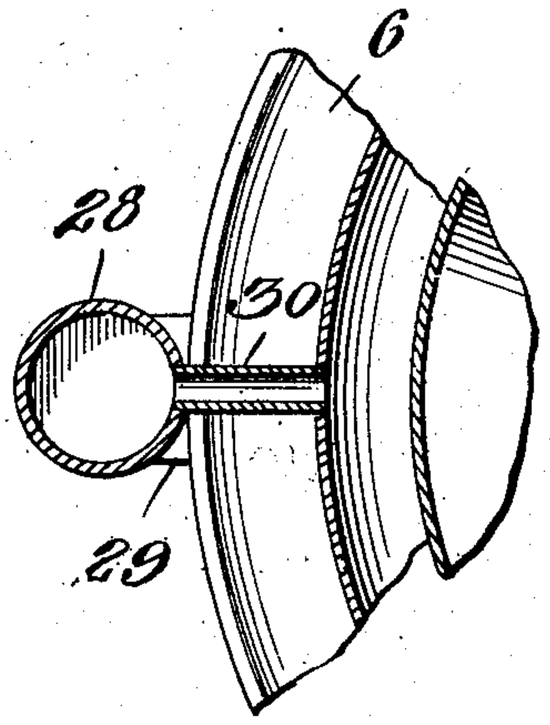
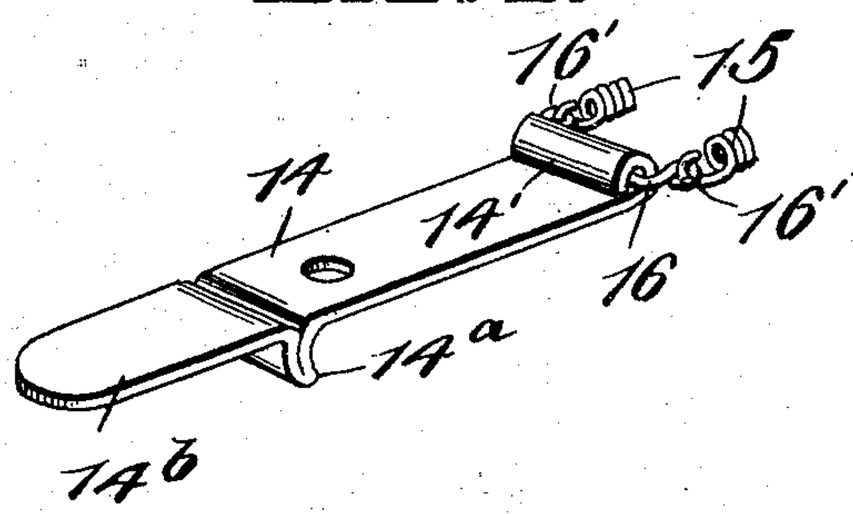


FIG. 5.



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UNITED STATES PATENT OFFICE.

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CUSPIDOR.

994,352. Specification of Letters Patent. **Patented June 6, 1911.**

Application filed November 2, 1910. Serial No. 590,347.

To all whom it may concern:

Be it known that I, WILLIAM C. WELLS, a citizen of the United States, residing at Waterbury, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Cuspidors, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to an improved cuspidor and has for its object to provide a device of this character which will reduce the spread of disease through the accumulation of filth to a minimum.

Another object of the invention resides in the provision of a sanitary cuspidor which when not in use is closed by means of an air-tight cover, and foot operated means for opening the cover.

A still further object of the invention is to provide means for easily and quickly cleaning the same.

The invention finally resides in the provision of a disinfectant container arranged exteriorly of the cuspidor and connected to the same by means of a short pipe or tube whereby the cuspidor is at all times thoroughly disinfected.

With the above and other objects in view, the invention consists of the novel features of construction, combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a cuspidor embodying my improvements; Fig. 2 is a vertical section through the same; Fig. 3 is a section taken on the line 2—2 of Fig. 2; Fig. 4 is a detail section taken on the line 4—4 of Fig. 3; and Fig. 5 is a detail perspective view of the latch plate.

Referring in detail to the drawings 5 designates a base and 6 the spherical-shaped body which is suitably secured upon said base. It will be obvious that if desired the body of the cuspidor may be made of a great many different forms without affecting the operation of the device as will later appear.

The upper end of the body of the cuspidor is formed with an enlarged outwardly extending concavo-convex rim 7 and upon this rim the cover plate 8 is hinged as indicated at 9. The rim 7 is formed with a circumscribing flange 10 upon its edge to receive the cover plate whereby practically an air-tight closure is provided for the cuspidor. A plate 11 is secured upon the cover 8, and one end thereof extends over the hinge 9 and projects beyond the same as indicated at 11′. The other end 12 of the plate 11 extends upwardly from the cover 9 and upon its extremity is enlarged as shown at 12′ to provide a seat for one end of a spring 13. The other end of this spring bears upon a latch plate 14, a suitable socket or recess being provided in the plate to receive the end of the spring. The spring 13 retains the latch plate yieldingly upon the cover 9 and to the rear end of the plate one end of the springs 15 are connected, the other ends of these springs being secured to the opposite edges of the plate 11. While the springs may be connected to the end of the latch plate in any desired manner, as shown in the drawing the end of the plate is bent upon itself to form a sleeve as indicated at 14′, and in this sleeve a short rod 16 is disposed. The ends of the rod are formed with eyes 16′ to receive the ends of the springs 15. The outer end of the latch plate is formed with a flange 14ª for engagement over the upper edge of the cuspidor, and this flange is adapted to be held in close engagement upon the annular flange 10 which receives the cover 9, by means of the springs 15, said springs acting to slide the latch plate inwardly upon the cover. The end of the latch plate which extends beyond the flange 14ª forms a finger-piece 14ᵇ. This finger-piece is adapted to be engaged and actuated by suitable mechanism to lift the latch plate from engagement with the flange 10. The cover is then swung upwardly by means of a coiled spring 17, one end of which is secured to the end 11′ of the plate 11, and the other end thereof is suitably secured to the body 6 of the cuspidor. When the cover is closed this spring is placed under tension and upon the release of the latch the spring 17 contracts and lifts the cover.

The latch operating means comprises a

foot bar 18 having a treadle plate 18′ formed on one end thereof. This bar is pivotally mounted intermediate of its ends upon a stud 19 which is fixed to the body of the cuspidor. The end of the stud is threaded to receive a nut 20. To the end of the foot bar 18 one end of a rod 21 is pivoted, said rod being vertically disposed and extended through the end of an arm 22 which is provided with an aperture to receive said rod. A coiled spring 23 is arranged upon the rod between the end of the arm 22 and the foot bar 18. This spring normally forces the rod downwardly out of engagement with the projecting end 14ᵇ of the latch plate 14. The upper end of this rod is normally disposed slightly below the end of the latch plate. Upon foot pressure on the bar 18 it will be obvious that the rod 21 will be elevated and the spring thereon placed under tension. The elevation of the rod raises the latch against the tension of the spring 13, above the annular flange 10 of the cuspidor thereby permitting the cover to open.

In order to provide for easily and quickly cleaning the cuspidor, an inner vessel is utilized which comprises a cylindrical body portion 24 and the frusto-conical flange 25 formed on the upper end thereof. This flange is formed with a circular series of openings 26 and upon its inner surface is provided at diametrically opposite points with the finger-pieces 27 with which the fingers are adapted to be engaged to lift the inner vessel from the body of the cuspidor. A cylindrical receptacle 28 is fixed upon a bracket plate 29 secured to the lower portion of the body 6, and the upper end of this receptacle is connected by means of a short tube or pipe 30 with the concavo-convex rim portion 7 of the cuspidor. It will be observed upon reference to Fig. 2 that the outer edge of the flange 25 of the inner vessel is formed with a bead 25′ which spaces said flange from the concavo-convex rim 7. Thus the disinfected air circulates between the flange 25 and the rim 7 and escapes through the openings 26 to the interior of the inner vessel. In this manner said vessel is thoroughly disinfected and the odors which would otherwise arise therefrom are allayed. The contraction of diseases through this source are thus effectually eliminated.

From the foregoing it is thought that the construction and operation of my improved cuspidor will be readily understood without requiring any further explanation. The device is comparatively simple in construction, easy and quick of operation and will effectually accomplish the various purposes hereinbefore set forth. The cuspidor may be made of any desired material and of any size, shape or form.

It will further be understood that various minor modifications may be resorted to in the construction and arrangement of the various elements without departing from the essential feature or sacrificing any of the advantages of the invention.

Having thus described the invention what is claimed is:—

1. A cuspidor comprising a body, a cover hinged thereon, a spring normally acting to raise the cover, a latch plate slidable on the cover to engage the upper edge of the body and hold the cover closed, springs tending to move the latch plate inwardly on the cover whereby said plate is held in frictional engagement upon the upper end of the body, and foot actuated means mounted upon the body of the cuspidor to engage the latch plate and elevate the same whereby the cover is released.

2. A cuspidor comprising a body, a cover plate hinged upon said body, a spring to swing said cover upwardly to its open position, a sliding latch plate arranged on the cover, coiled springs secured to one end of the latch plate to slide the same inwardly on the cover, an arm secured to the cover extending above the latch plate, a spring arranged between the end of the arm and the latch plate and bearing upon the latter to hold the same on the cover, and a foot actuated vertically movable rod mounted upon the body of the cuspidor adapted to engage the latch plate and elevate the same to release the cover.

3. A cuspidor comprising a body, a cover hinged upon the same, means normally acting to elevate the cover to its open position, latch mechanism carried by the cover to engage the body and hold the cover closed, a pivoted foot bar mounted on the body, a rod pivoted to one end of the bar, a guide arm to receive the upper end of the rod, a spring disposed upon said rod between the foot bar and said arm, pressure upon said bar elevating the rod to engage the latch mechanism and release the cover, said spring returning the rod to its normal position upon the release of pressure upon the bar.

4. A cuspidor comprising a body having an annular flange on its upper edge, a hinged cover plate to be received within said flange, an inner vessel removably arranged within the body of the cuspidor, said vessel having an annular flange on its upper edge spaced from the wall of the body, a disinfectant receptacle mounted upon the exterior of the body, and a tube connecting said receptacle with the space between the flange of the inner vessel and the body wall.

5. A cuspidor comprising a base, a body arranged upon said base having a concavo-convex rim formed upon its upper end, a circumscribing flange on the edge of said rim, a hinged cover to be received within said flange, an inner vessel removably dis-

posed within the body and having a frusto-conical flange formed on its upper end, the edge of said flange being beaded to space the flange from the inner wall of said rim, said flange having a circular series of perforations therein, finger holes on said flange, a disinfectant receptacle mounted exteriorly upon the body of the cuspidor, and a tube connecting the upper end of said receptacle to the space between the frusto-conical flange of the inner vessel and said rim.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

WILLIAM CLARENCE WELLS.

Witnesses:
LOUIS OLIVIER,
CHRISTOPHER SULLIVAN.