O. COHEN.

CUSPIDOR CLEANER.

APPLICATION FILED FEB. 28, 1918.

1,298,295. Patented Mar. 25, 1919.

FIG. 1

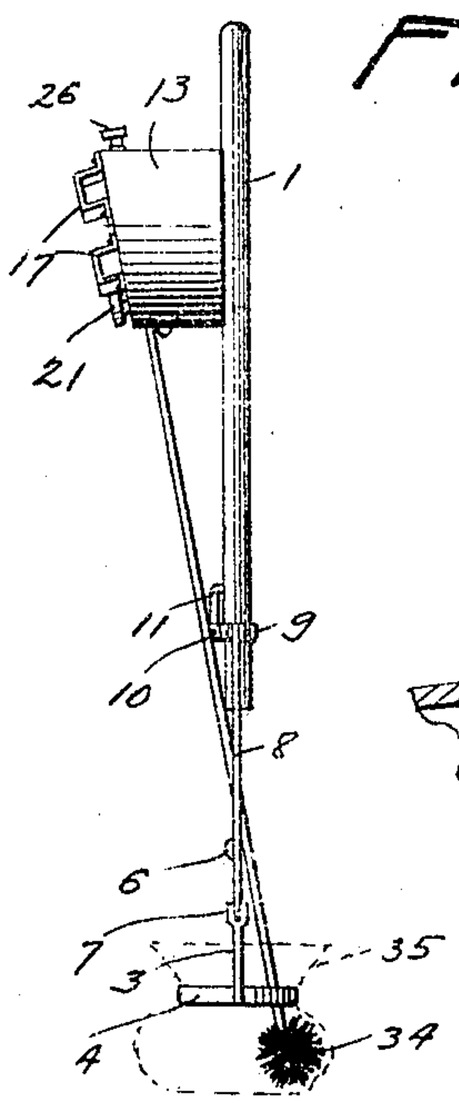


FIG. 5

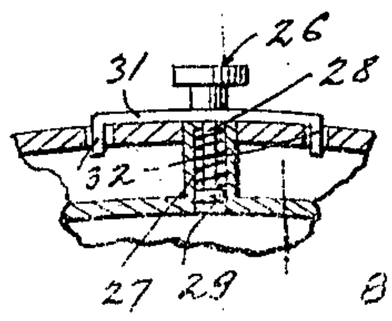


FIG. 2.

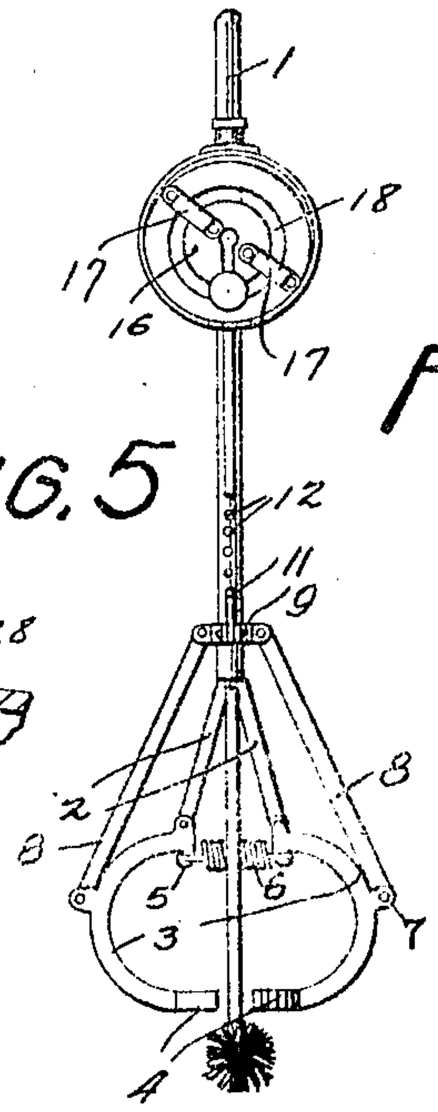


FIG. 3

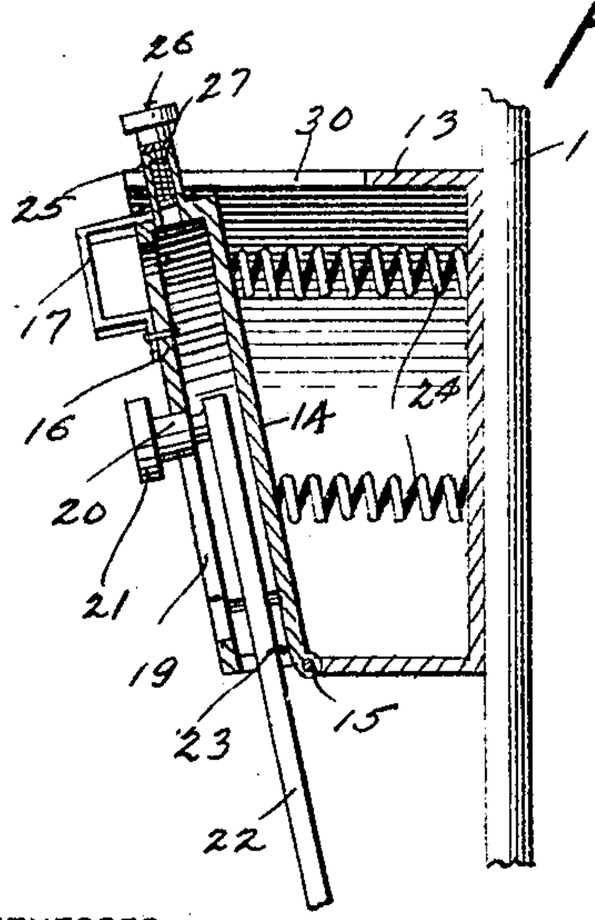
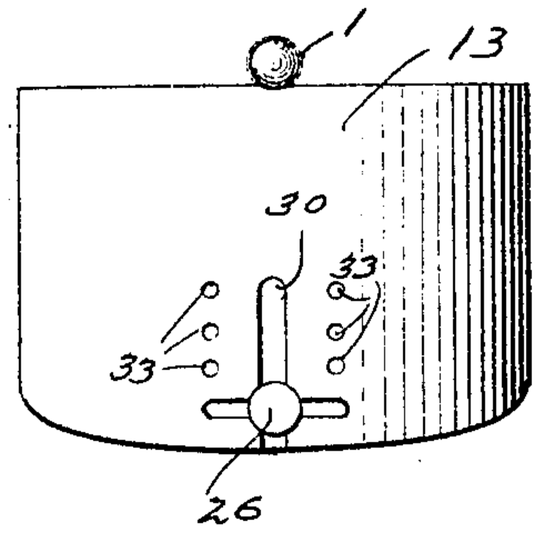


FIG. 4



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CUSPIDOR-CLEANER.

1,298,295. Specification of Letters Patent. Patented Mar. 25, 1919.

Application filed February 28, 1918. Serial No. 219,662.

To all whom it may concern:

Be it known that I, OSCAR COHEN, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Cuspidor-Cleaners, of which the following is a specification.

This invention relates to cuspidor cleaners, and more particularly to a device for permitting cuspidors to be readily cleaned and handled without the necessity of grasping the same with the hand.

One of the main objects of the invention is to provide a device of the character stated of simple construction and operation by means of which a cuspidor may be readily grasped so as to be transported. A further object is to provide a device having a handle provided with gripping elements for holding the cuspidor and a brush carried by this handle and so connected thereto so as to be movable independently thereof, means being provided for operating the brush so as to clean the inner surface of a cuspidor held by the gripping elements. A further object is to provide a brush mounted on the handle in such a manner as to permit angular adjustment of the handle of the brush to accommodate the particular cuspidor in connection with which it is used and insure proper wiping or brushing of the inner surface of the cuspidor. Further objects will appear from the detailed description.

In the drawings:

Figure 1 is a view of a device constructed in accordance with my invention as used.

Fig. 2 is a front view,

Fig. 3 is a section through the brush supporting casing,

Fig. 4 is a top plan view of the handle and the brush supporting casing carried thereby,

Fig. 5 is a fragmentary detail section through the brush supporting casing showing the means for securing the brush casing in angular adjustment.

The handle 1 is provided at its lower end with the downwardly diverging arms 2. Curved arms 3 are pivotally secured at their upper ends to the lower ends of arms 2 for movement toward and away from each other. These arms are provided at their lower ends with gripping jaws 4 movable toward and away from each other and adapted to fit snugly about the neck portion of a cuspidor when in operative position, as indicated in Fig. 1. Each arm 3 is provided, at its upper end, with a downwardly directed hook ear 5. These ears are connected by a tension coil spring 6 acting to normally hold the gripping jaws 4 in position to engage snugly about the neck of the cuspidor. Each arm 3 is provided at its intermediate portion with an outwardly directed U-lug 7 in which is pivotally secured the lower end of a link 8, the upper end of which is pivotally secured to a collar 9 slidable on handle 1. This collar is provided intermediate the links 8 with an outwardly projecting lug 10 in which is pivotally secured the lower end of an adjusting hook 11. The bill of this hook is directed inwardly and is adapted to engage into any one of a vertical series of recesses 12 in the handle 1, selectively, thus securing the collar 9 in vertical adjustment on the handle. By this means, the links 8 may be raised or lowered so as to secure the gripping jaws 4 spread apart from each other and in inoperative position, or to release the gripping jaws for engagement about the neck of a cuspidor. In using this device, the collar 9 is raised so as to spread the gripping jaws apart from each other, and after which these jaws are placed about a cuspidor and the collar 9 released, the spring 6 forcing the gripping jaws toward each other and gripping the cuspidor in the manner indicated in Fig. 1. By this means, the cuspidor is secured so as to be easily moved or transported by means of handle 1.

A substantially cylindrical casing 13 is secured on handle 1, adjacent the upper end thereof. This casing has a cupped front plate 14 which is hingedly secured thereto at its lowermost point, as at 15, and is of smaller diameter than the casing 13 so as to be rockable therein about the hinge 15. A disk 16 is supported concentrically within the rim of the front and in spaced relation therewith by means of bridge members 17 secured to the disk and to the rim, thus producing a guide slot 18 which extends entirely about disk 16. The disk is provided with a slot 19 which extends from the approximate center of the disk to the periphery thereof. This slot is adapted to snugly receive the shank 20 of an operating knob 21 to the inner end of which is secured a brush handle 22. This brush handle projects through an opening 23 provided through the peripheral wall of the cupped front 14. Coil expansion

springs 24 are mounted in casing 13 and bear against the inner face of front 14 so as to normally maintain the same in its outermost or raised position. The front is further provided with an upwardly directed tubular neck 25 in which is mounted a spring pressed bolt 26 which is normally held in its innermost position by an expansion spring 27 mounted above the stem 28 of the bolt and confined between the outer end of neck 25 and the head 29 at the inner end of stem 28. This neck 25 is operable in a slot 30 extending from the outer edge of the top portion of casing 13. Bolt 26 carries a bar 31 secured thereto and which extends transversely of slot 30 outside of casing 13 and is provided at each end with an inwardly directed finger 32. These fingers are adapted to engage into openings 33 provided in the casing 13 at each side of slot 30. By this means the front plate 14 may be secured in rocked adjustment about its hinge in casing 13 so as to vary the angle thereof. Brush rod or handle 22 is provided, at its lower end, with a suitable cleaning brush 34 which is adapted to be inserted into the cuspidor 35 and to be operated by means of the knob 21 so as to cause movement of the brush over the inner surface of the cuspidor.

In using this device, the gripping jaws 4 are spread so as to pass over the upper end of the cuspidor and the brush 34 is inserted into the cuspidor, after which the gripping jaws are released so as to fit about the neck of the cuspidor. The knob 21 is then moved downwardly in slot 19 of disk 16 into the circular slot or guide way 18. The knob is then moved about this guide slot completely about guide disk 16. During this movement of the knob, handle 22 of the brush is raised during the first half of the movement of the knob so as to cause raising of brush 34. Also, the brush rod or handle 22 will slide in the opening 23 thus serving to cause rocking of the brush during the vertical movement thereof, this resulting in moving the brush through a substantially semi-elliptical path in connection with the inner face of the cuspidor. During the second half of the movement of knob 21 through guide slot 18, the brush will be moved through a substantially semi-elliptical path in the opposite direction, the brush being moved through a substantially elliptical path during the movement of the knob about the guide disk. By this means, brush 34 is brought into engagement with a relatively great area of the inner surface of the cuspidor so as to brush or clean the same. After one-half of the interior of the cuspidor has been cleaned, the cuspidor 1 may be turned through an arc of approximately 180° so as to permit the other half to be cleaned. By adjusting the casing 14 in the manner previously described, the angle at which the brush 34 is set may be readily varied to suit the particular cuspidor in connection with which it is used. The knob 21 fits in slot 19 snugly so as to be frictionally secured therein, thus normally holding the brush in raised position when not in use so as to permit ready insertion thereof into the cuspidor. When it is desired to use the brush, the knob is moved into lowered position in the manner previously described.

It will be evident that there may be slight changes made in the construction and arrangement of the details of my invention without departing from the field and scope of the same, and I intend to include all such variations, as fall within the scope of the appended claims, in this application in which a preferred form only of my invention is disclosed.

What I claim is:

1. In a device of the class described, the combination with a handle, and means at its lower end for gripping a cuspidor; of a plate hingedly connected with the upper end of the handle so as to swing toward and from the same, means for latching the plate in adjusted positions, a second handle crossing the first and having a brush at its lower end, a knob projecting outward from the upper end of the second handle, and guides carried by the plate for the second handle and knob, whereby the latter may be moved to impart movement to the brush irrespective of the adjustment in the position of said plate.

2. In a device of the character described, the combination with a main handle provided at its lower end with means for gripping a cuspidor, a hollow casing carried by the upper end of the main handle and having a slot in its top and perforations alongside said slot, a cupped plate hinged at its lower edge to said casing and having guides, a second handle having a brush at its lower end, its body passing through one of said guides, and an operating knob on the second handle engaging the other guide; of a neck rising from said cupped plate through the slot in the casing, a spring-actuated bolt within the neck, and a bar carried by the bolt and having down-turned fingers adapted to engage said holes.

3. In a device of the character described, a handle, a supporting casing secured thereto, a front hingedly mounted in the supporting casing, means for adjusting the angle of the front to the supporting casing, said front being provided in its top with a guide slot, a knob operable in said slot, and a brush rod secured to said knob and operable through the peripheral wall of the front.

4. In a device of the character described, a handle provided at its lower end with means for gripping a cuspidor so as to releasably secure the handle thereto, a support-

ing casing secured on said handle, a front hingedly secured to the supporting casing, means for adjusting the angle of the front to the supporting casing, said front being provided with a continuous guide slot in its outer face, a knob operable in said slot, and a brush rod operable through the peripheral wall of the front and secured to said knob.

5. In a device of the character described, a handle provided at its lower end with means for detachably securing the same to a cuspidor, a supporting casing secured to said handle, an annular movable front therefor, means for adjusting the angle of the front relative to the supporting casing, a guide element supported within the front in concentric spaced relation thereto so as to provide a continuous guide slot, said casing being further provided with an opening through its peripheral wall, a knob operable in the guide slot, and a brush rod operable through the opening through the peripheral wall and having its upper end secured to the inner end of said knob.

6. In a device of the character described, a handle provided at its lower end with means for detachably securing the same to a cuspidor, a guide casing carried by said handle and provided with a guide and with an opening through its peripheral wall, a brush handle projecting into the casing through said opening, and a knob operable in the guide and secured to the brush handle so as to cause vertical and lateral movement thereof when said knob is moved within said guide.

7. In a device of the character described, a handle provided at its lower end with means for detachably securing the same to a cuspidor, a guide casing hingedly secured to said handle so as to have its angle thereto varied, means for adjusting the angle of said casing relative to the handle, said guide casing being provided in its outer face with a guide and having an opening through its peripheral wall, a brush handle projecting into the guide casing and operable through said opening, and a knob operable in the guide and secured to said handle so as to cause vertical and lateral movement thereof when said knob is moved.

8. In a device of the character described, a handle provided at its lower end with means for detachably securing the same to a cuspidor, a guide casing carried thereby and provided through its peripheral wall with an opening, a brush handle projecting through said opening into the guide casing, a disk within the front of the guide casing in concentric spaced relation therewith so as to provide a continuous guide slot about the disk, a knob operable in said guide slot and secured to the upper end of the brush handle, and bridge members secured to the front of the guide casing and to the disk and spanning the guide slot so as to permit movement of the knob through the same and serving to support the disk so as to provide an unobstructed path of travel for the handle within the casing when the knob is moved through the guide slot.

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

OSCAR COHEN.

Witnesses:
M. W. SMITH, Jr.,
WM. ZALER.