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TRAP FOR CUSPIDORS

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Fig. 1.

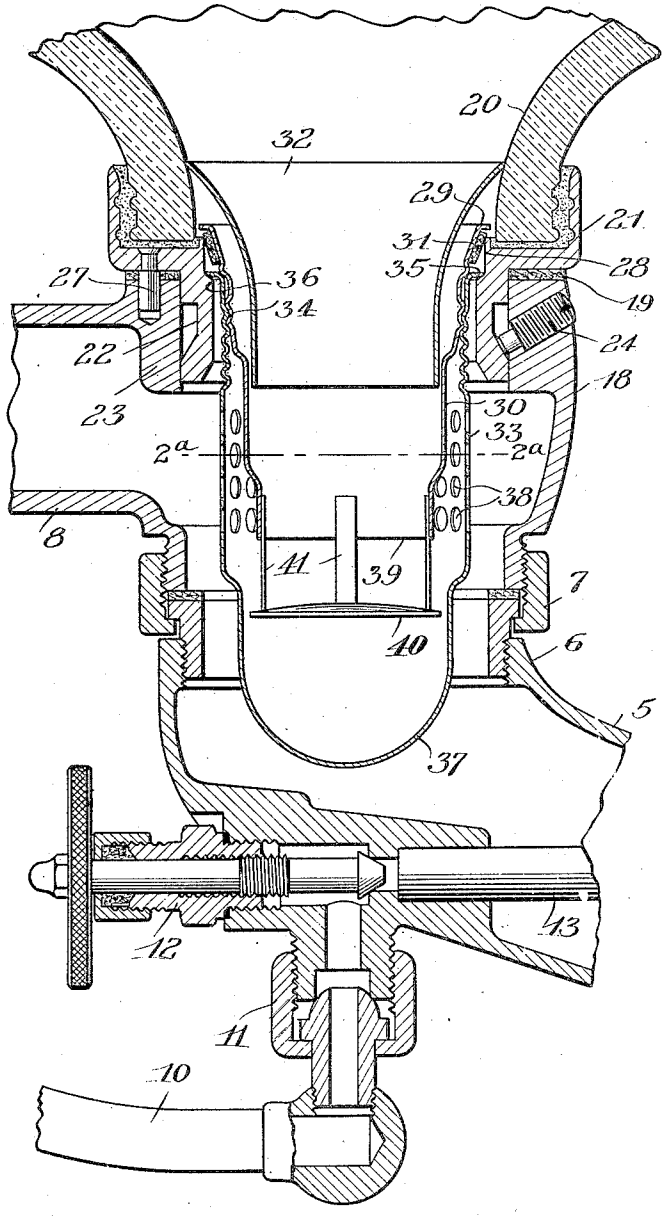
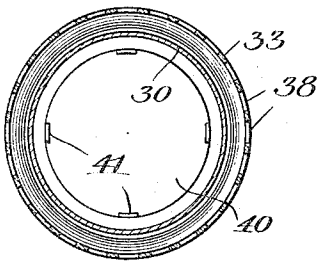


Fig. 2.



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TRAP FOR CUSPIDORS.

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This invention relates to cuspidors and, more particularly, to fountain cuspidor apparatus of the variety, for example, adapted for use adjacent a dental chair, the chief object of the invention being to provide an improved apparatus of this character having a more simple and efficient construction and one in which the parts may be readily detached and recombined to facilitate assembly and afford accessibility for cleaning and repair.

To these and other ends the invention resides in certain improvements and combinations of parts, all as will be hereinafter more fully described, the novel features being pointed out in the claims at the end of the specification.

In the drawings:

Figure 1 is a fragmentary sectional view of a dental cuspidor apparatus embodying the present invention.

Figure 2 is a sectional view on the line 2^a—2^a in Figure 1.

Similar reference numerals throughout the several views indicate the same parts.

This invention is embodied in the present instance in conjunction with a unitary dental equipment pedestal or stand, such as disclosed in the patent to Oscar H. Pieper and myself, No. 1,376,356, granted April 26, 1921, for unitary dental apparatus, comprising a main hollow column from which extends a hollow arm or support 5 carrying the cuspidor and through which the waste from the latter is discharged into the main column and through the latter to waste pipe connection at its base as well understood in the art.

The cuspidor support or arm 5 preferably has an upwardly turned circular open end 6 connected by means of a union 7 with an arm 8 which is thus mounted for rotary adjustment on the support. Arm 8 carries a valve (not shown) for controlling the water system for flushing the cuspidor bowl which is supplied through a pipe 10 pivotally connected by a union 11 with a valve 12 carried by the support and supplied with water through a pipe 13 extending through the latter.

Arm 8 comprises a hub 18, the lower end of which is connected as described by means of union 7 with the support. The upper end of the hub is formed with an upwardly opening circular seat 19 concentric with the end of the arm 5 on which the hub is mounted. The cuspidor bowl is supported on seat 19 and discharges into support 5 through the hub 18 which forms in effect a part of the latter.

The cuspidor bowl is preferably constructed of glass or porcelain, having a central waste outlet about which the bowl bottom is curved downwardly as at 20 and seated in an annular holder 21. The latter has a depending flange 22 extending downwardly through seat 19 into the support or hub 18, the outer side of the flange adjacent its bottom being inclined downwardly and outwardly as at 23. A screw 24 accessibly located in the support bears at a downward inclination against the inclined surface 23 of the flange and thus secures the bowl in its seat by means, however, enabling it to be readily inserted and removed.

It is desirable to provide for the location of the bowl on its seat with the water receiving portion in the upper part of the bowl registering properly with the usual flushing nozzle and for this purpose the bowl holder 21 carries a dowel pin 27 cooperating with a hole in the support so located as to insure the proper positioning of the bowl with regard to the nozzle. To assemble the parts the bowl holder flange 22 is inserted in the support seat and rotated until the dowel pin is engaged with its hole after which the bowl is lowered into contact with the seat and secured by turning screw 24.

There is combined with the above bowl and support construction an advantageous water seal and trap for solid particles, such as dental fillings and the like, the parts of which are also efficiently devised and conveniently detachable for cleaning. To this end the waste opening of the bowl, or, more specifically, its holder 21, is provided with a shoulder 28 on which rests the outwardly flared upper end 29 of a spout 30 of generally cylindrical shape and open at both ends. The spout is preferably provided with a yieldable gasket ring 31 of rubber or other suitable material cooperating with shoulder 28 so that the waste from the bowl is discharged through the spout. Preferably also a collector tube 32 is placed in the upper end of the spout as shown with its flared upper end detachably fitting the converging walls of the bowl opening to collect and direct the water into the spout and improve the appearance of the bowl outlet.

Cooperating with the spout 30 is a container 33 detachably connected adjacent its

upper end with the spout as by means of thread convolutions 34 formed in the walls of these parts. The upper end of the container is also preferably turned outwardly as at 35 above a second shoulder 36 on the bowl holder 21 to prevent the container from being dropped into the support. Container 33 has a closed lower end 37 and is provided with waste openings 38 in its sides above its bottom and above the lower end 39 of spout 30 so that these parts form an efficient water seal for the bowl outlet as well as a trap for receiving and retaining solid particles such as dental fillings and the like. To increase the efficiency of the construction in this respect there is preferably provided a baffle plate 40 supported by strips 41 on the lower end of the spout in horizontal position at a distance below the latter with its periphery adjacent but spaced from the sides of the container. The water descending through the spout has its downward motion arrested by this baffle which tends to deflect it laterally outward in the general direction of the waste openings 38, while any solid particles are carried to the edge of the baffle out of the main current and inevitably drop and remain in the container bottom. It is apparent from this construction that the collector tube 32 may be easily lifted from the bowl outlet and the spout and container then lifted out. The latter parts may be quickly unscrewed and detached from each other to thereby afford access to the bottom of the container and to facilitate cleaning of the parts. The invention thus provides an efficient and durable form of construction for the bowl parts and support, which is practical and economical from a manufacturing point of view and adapted for quickly and conveniently assembling and detaching the parts to facilitate cleaning and repair.

I claim as my invention:

1. The combination of a cuspidor bowl trap having a waste opening and provided thereabout with a shoulder, of a spout provided adjacent its upper end with gasket means adapted to be seated on said shoulder to support said spout in said opening and seal the latter against the escape of gas, a container having an open upper end receiving the depending end of said spout and threadedly and detachably connected with the latter at a distance from its lower end, said container having its walls formed with outlet means located above the lower end of said spout and a baffle plate supported by the lower end of said spout in spaced relation with the latter and the container bottom for deflecting the water toward said container outlet means.

2. The combination with a cuspidor bowl having a waste opening and an annular shoulder thereabout, of a spout having an outwardly flanged upper end provided with a gasket ring for contact with said shoulder to detachably hold said opening in said bowl opening and to seal the latter against the escape of sewer gas, a container having an open upper end to receive the depending end of said spout in spaced relation with the latter provided with outlet openings located above the lower end of said spout, said spout and container being constructed of sheet metal having cooperating threaded convolutions formed therein for detachably connecting the upper end of said container with the intermediate portion of said spout, a baffle plate carried by the lower end of said spout in spaced relation with the latter and with the container sides and bottom to deflect the water toward said container outlet openings, and a collector tube detachably seated in said bowl opening to collect and discharge the water into said spout.

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