A. C. CLARK.

FAUCET NOZZLE.

APPLICATION FILED NOV. 28, 1910.

1,068,482. Patented July 29, 1913.

Fig. 1.

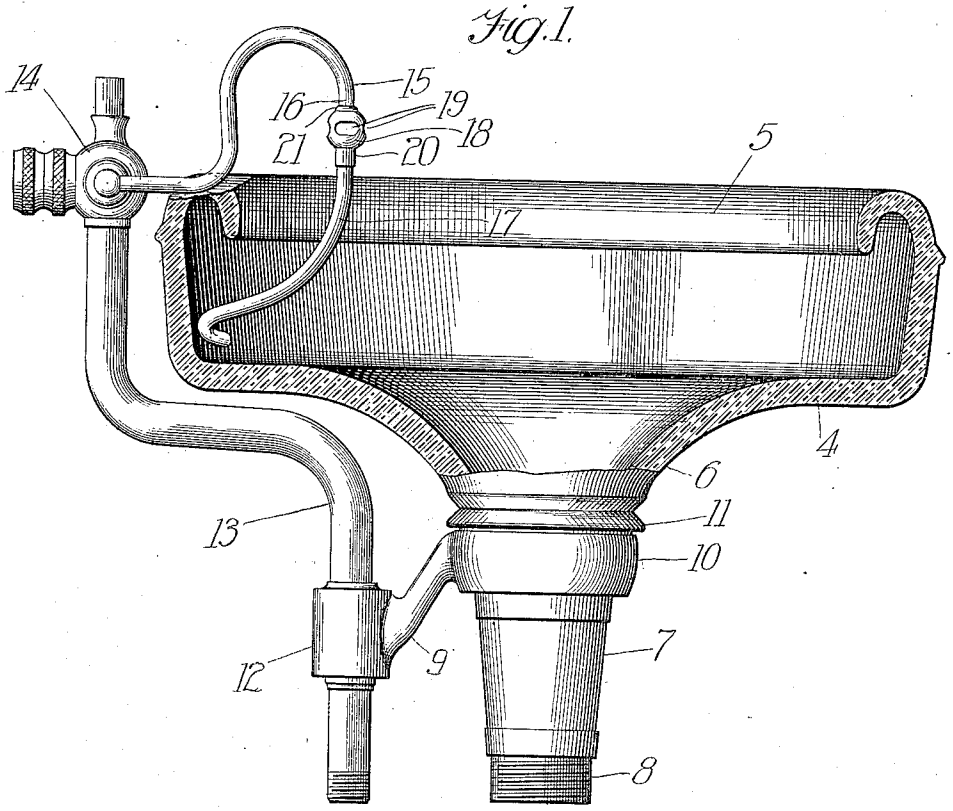


Fig. 2.

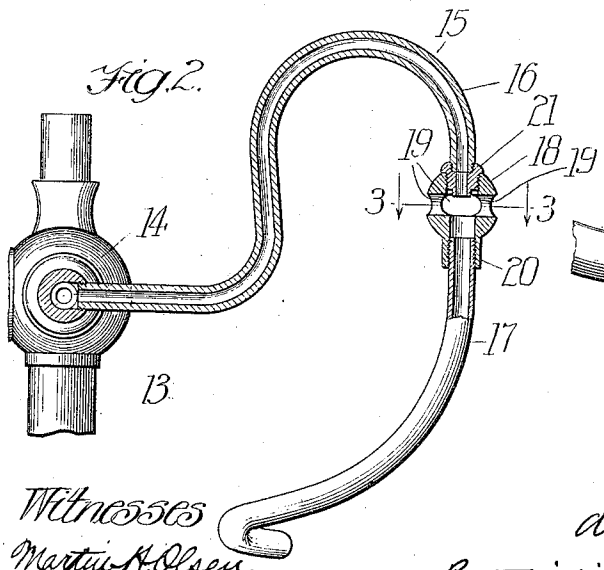
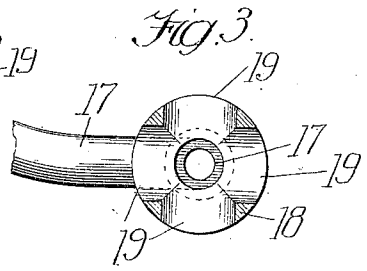


Fig. 3.



Witnesses
Martin A. Olsen.
Robert Dobberman

Inventor
Albert C. Clark
Rector Hibbin Davis & Macauley Attys.
By John S. Macauley

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ALBERT C. CLARK, OF CHICAGO, ILLINOIS, ASSIGNOR TO A. C. CLARK & COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

FAUCET-NOZZLE.

1,068,482. Specification of Letters Patent. Patented July 29, 1913.

Application filed November 28, 1910. Serial No. 594,426.

To all whom it may concern:

Be it known that I, ALBERT C. CLARK, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Faucet-Nozzles, of which the following is a specification.

My invention relates more particularly to dental cuspidors and in the accompanying drawing I have shown it as used in connection therewith, but as the following description thereof will show, my invention has a wide range of application, its use in connection with dental cuspidors being but one of many to which it is adapted.

Dental cuspidors are ordinarily provided with means for supplying a continuously running stream of water and the latter is given a swirling motion whereby it covers as nearly as possible the entire floor or bottom of the cuspidor with a film of water for the purpose of flushing the cuspidor and keeping it in a cleanly and sightly condition there being a suitable outlet in the bottom of the vessel for drainage. It has been customary heretofore to supply the water for the cuspidor by means of a faucet nozzle or jet extending over the rim thereof the lower end of the nozzle being bent to give the desired direction to the issuing jet of water. There is however always present in such instrumentalities the possibility of the cuspidor partially or completely filling with water and at the same time the pressure of water in the supply may be withdrawn due to the drawing off of water at some other point of the supply system or some other cause whereby a condition of suction or low pressure is caused to exist temporarily within the water system. When these two conditions exist simultaneously in the cuspidor and the water supply respectively the contents of the vessel are drawn into the water supply system the objections to which from a sanitary point of view are too obvious to require pointing out.

It is the object of my invention to obviate this objection to the apparatus of the prior art and with this purpose in view I have devised the construction shown in the accompanying drawings which embodies my invention in one of the many forms which it may take.

In the drawings Figure 1 is a view partially in section of a dental cuspidor showing my invention; Fig. 2 is an elevation partly in section of the nozzle and Fig. 3 is a horizontal section on the line 3—3 of Fig. 2.

The cuspidor proper 4 may be of any usual or approved construction but as shown consists in a shallow bowl of glass having an incurved lip 5 and a flaring neck 6 to which latter is attached a metallic coupling 7 provided with a thread 8 for the usual attachment to a drain pipe. The cuspidor is supported in a bracket 9 bearing at its end a ring or eye 10 which receives the neck of the cuspidor there being a shoulder 11 on the latter which engages the upper edge of the ring. The bracket 9 is formed with a sleeve 12 which surrounds the water supply pipe 13 and is supported thereon. At its upper end the supply pipe 13 carries a valve casing 14 containing valves of any satisfactory description and to this valve casing is attached the faucet nozzle 15 with which my invention is more especially concerned.

As clearly shown in Fig. 1 the nozzle extends within the cuspidor nearly to the floor thereof and at its lower end is given a bend in order that the water may receive a rotary motion within the cuspidor. As thus far described no novelty is claimed for the cuspidor or attachment but without my invention which I am about to detail the device would be open to the sanitary objections to which I have referred in the opening paragraphs of my specification. In order to obviate them, however, I provide an opening to the air from the interior of the nozzle at a point a suitable distance above the upper edge of the bowl whereby it can be under no circumstances submerged. In the specific construction shown the nozzle is formed in two sections 16, 17 connected by an intermediate casting 18 which is suitably perforated for the admission of air. As shown there are four openings 19 through the casting to the interior thereof and it is secured to the lower section 17 by a threaded joint 20. Intermediate the casting 18 and the upper section 16 is a union 21 screwed into the casting 18 and upon the section 16 and having a somewhat reduced internal diameter. The bore of the section 17 is somewhat larger in diameter than that of the section 16 and the communicating passage in the casting 18 is also con-

siderably larger than the bore of the union 21, the union and the upper end of the section 17 being coaxial. It follows that the stream of water issuing from the union 21 will be directed into the upper end of section 17 and by reason of the large internal diameter of the latter the water supply is easily carried thereby without overflow through the openings 19. It will be readily apparent that under no circumstances can water be drawn from the cuspidor into the water distributing system for the reason that if conditions in the system are such as to establish a vacuum or partial vacuum, air will be drawn through the openings 19 and no water can be drawn up through the section 17 of the nozzle no matter what may be the level of the water in the bowl.

While I have described my invention as applied to a cuspidor it will now be obvious that it is applicable to any situation in which it is desired to avoid suction of water or other fluid from a receptacle into which a nozzle dips.

What I claim is:

1. In combination with a cuspidor, a faucet nozzle extending thereinto below the upper margin thereof, having a free opening to the outer air above the level of the margin of the bowl.

2. In combination with a cuspidor a faucet having a nozzle extending into the cuspidor substantially to the floor thereof, said nozzle having openings above the level of the margin of the cuspidor bowl.

ALBERT C. CLARK.

Witnesses:
ROBERT R. BOSWORTH,
JOHN F. WAINWRIGHT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."