

No. 644,355.

Patented Feb. 27, 1900.

G. B. HAYCOCK.
FOUNTAIN CUSPIDOR.

(Application filed Apr. 2, 1898.)

(No Model.)

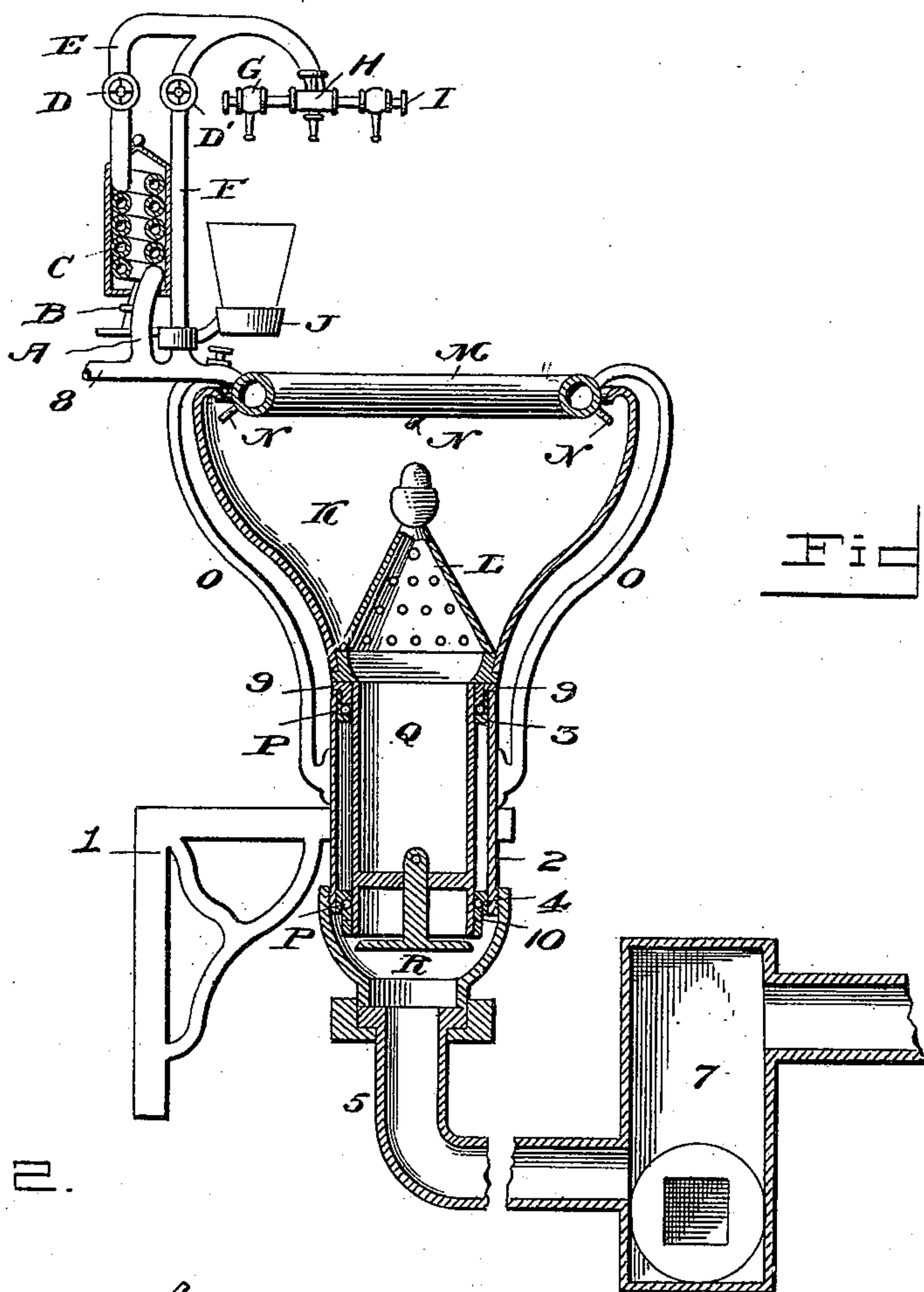
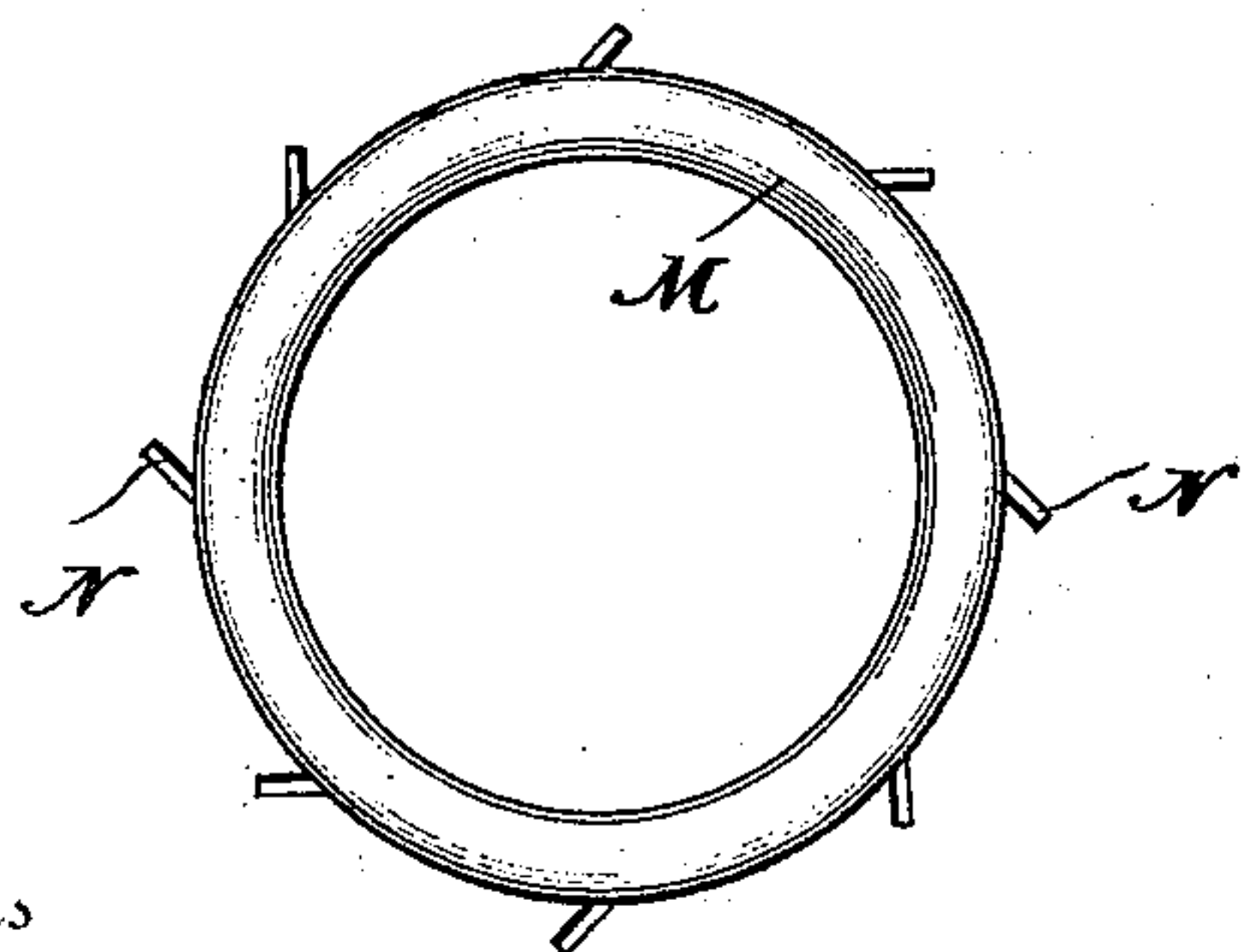


Fig. 1.

Fig. 2.



Witnesses

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GEORGE B. HAYCOCK, OF CHICAGO, ILLINOIS.

FOUNTAIN-CUSPIDOR.

SPECIFICATION forming part of Letters Patent No. 644,355, dated February 27, 1900.

Application filed April 2, 1898. Serial No. 676,190. (No model.)

To all whom it may concern:-

Be it known that I, GEORGE B. HAYCOCK, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Fountain-Cuspidors; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention has relation to revolving fountain-cuspidors more especially designed for the use of dentists; and the object is to provide a single bowl capable of performing all the functions heretofore assigned to the revolving fountain-cuspidors constructed with a double bowl.

With this object in view the invention consists in certain features of construction and combination of parts, which will be hereinafter fully described and claimed.

Figure 1 is a longitudinal vertical sectional view through the cuspidor, and Fig. 2 is a top plan view of the spraying-tube.

1 is a supporting bracket or stand secured to any suitable support, and 2 denotes a supporting-sleeve fixed to the said bracket and provided at its upper and lower ends with ball-races 3 and 4, respectively.

5 denotes a discharge-pipe attached to the lower end of the sleeve and leading to a trap 7.

O denotes curved arms fixedly secured to the sleeve 2 and supporting at their upper ends a circular spraying-tube M, having tangential spraying-nipples N.

K denotes a bowl which may be made of any suitable material, but preferably of brass or copper. This bowl is secured to a tube Q, that projects down through the sleeve, and is provided at its upper and lower ends with cones 9 and 10, respectively, for adjusting the balls P in the races 3 and 4.

L represents a conical strainer located in the bowl, and R represents a check-valve located at the lower end of the tube Q, and serves to prevent the water backing up from the trap into the bowl after it has once been discharged therefrom.

It is evident that when water is admitted to the circular spraying-tube M it will rotate the bowl, and thus evenly distribute the water

upon the entire surface thereof, thoroughly cleansing the same and preventing the accumulation of objectionable matter on the interior surface of the bowl.

Water from the city-main is supplied to the spraying-tube through the pipe 8, which has two upwardly-extending branches A and F. The branch A is formed into a hot-water coil C, which is heated by a Bunsen burner B. This coil communicates with a pipe E, that joins the upper end of the pipe F and leads to a neutral cock H, which communicates with a cold-water cock G and with a sterilizing-cock I.

D D' denote stop-cocks in the pipes E F. If it is desired to use the hot water from the coils, the cock D' is closed, the cock D opened, and the cocks G H closed. The hot water will now pass from the heating-coil C through the pipe E and the casing of the cock H to the cock I, allowing the bowl to be thoroughly cleansed, thus removing all obnoxious matter and the odor generated thereby.

If it is desired to use tepid or partially-warm water, the cocks G and I are closed and the cocks D and D' opened, thus mixing the hot and cold water before it leaves the neutral cock H. If it is desired to use cold water, the cocks D, H, and I are closed and the cock D' opened.

If desired, I may hinge to the pipe F or to any other suitable support a glass-holder J, which may be swung into and out of position to receive the water from the neutral or cold-water cocks.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the device will be readily understood without requiring further description.

It is impossible for any backflow of the waste water on account of the check-valve R. The operator is enabled at all times to get water at any desired temperature for the purpose of grinding sensitive teeth in crown and bridge work, whereas by the present method of dropping cold water on the grinding-stone it is very painful to a patient whose teeth are sensitive.

The desirability of warm water at the chair during the extraction of teeth for assistance

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in healing the gums is apparent and by my improvement may be had at no inconvenience to the dentist or patient.

With the single-bowl revolving cuspidor above described, with the overflow in the center, one is absolutely sure of an aseptic cuspidor at all times, as there is no space for waste, such as cottons and waste cements, that stick and cling to the space between the inner and outer bowl of which the cuspidors heretofore in use have been constructed. I also contemplate attaching to the heating-coil a spray which may be used for spraying the mouth during the process of grinding down teeth. I may use cold water, if desired.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a cuspidor of the character described, the combination with the supporting-sleeve provided with ball-races at its upper and lower ends, of a tube inclosed within said sleeve and provided with cones, balls interposed between said cones and ball-races, a bowl secured to the upper end of the tube, and water-nipples arranged to direct a jet of water so as to strike the interior wall of the bowl tangentially and thereby rotate it, substantially as described.

2. In a cuspidor of the character described, the combination with the supporting-sleeve provided with ball-races at its upper and lower ends, and a check-valve at its lower end, of a tube inclosed within said sleeve and provided with cones, balls interposed between said cones and ball-races, a bowl secured to the upper end of the tube, and water-nipples arranged to direct a jet of water so as to strike the interior wall of the bowl tangentially and thereby rotate it, substantially as set forth.

3. In a cuspidor of the character described, the combination with the supporting-sleeve provided with ball-races at its upper and lower ends, of a tube inclosed within said sleeve and provided with cones, balls interposed between said cones and ball-races, a bowl secured to the upper end of the tube, and water-nipples arranged to direct a jet of water so as to strike the interior wall of the bowl tangentially and thereby rotate it, and a conical strainer located in the bowl over said tube, substantially as described.

4. In a cuspidor of the character described, the combination with the supporting-sleeve, arms secured to said sleeve and projecting upwardly therefrom, a tube supported within said sleeve to rotate therein, a bowl secured to the upper end of the tube, and a circular water-pipe supported by the arms within the upper end of the bowl and having nipples to direct the streams of water against the inner surface of the bowl tangentially and thereby rotate the bowl, substantially as set forth.

5. In a cuspidor, a rotary bowl adapted and

arranged for continuous rotation and provided with a downwardly-extending tubular discharge stem or spindle, and a removable perforated cap covering the upper end of the bore of said tubular stem or spindle.

6. In a cuspidor, a rotary bowl adapted and arranged for continuous rotation, and provided with a downwardly-extending tubular discharge stem or spindle; a suitable support or standard adapted to receive the said hollow and rotary discharge stem or spindle, one or more cones secured or formed on the latter, one or more cups within the hollow portion of the said support or standard, anti-friction-balls arranged between the said cone or cones and cup or cups thus provided, and means for maintaining a jet of water for rotating the said bowl.

7. In a cuspidor, a rotary bowl adapted and arranged for continuous rotation, and provided with a downwardly-extending tubular discharge stem or spindle provided with a couple of cones; a tubular support or standard having its upper end adapted to receive the said stem or spindle and provided with a couple of cups; anti-friction-balls interposed between the cones and cups thus provided, means for maintaining a jet of water for rotating and cleansing the bowl; and an outlet or discharge opening in the said support or standard located at a point below the lower end of the said tubular and rotary discharge-stem.

8. In a cuspidor, a rotary bowl adapted and arranged for continuous rotation, and provided with a downwardly-extending tubular discharge stem or spindle, a support or standard having a socket-piece adapted to receive the said tubular and rotary discharge stem or spindle, a cup screwed into each end of the said socket-piece, a couple of cones formed or secured on the said rotary discharge stem or spindle, and anti-friction-balls interposed between the cones and cups thus provided, and means for maintaining a jet of water for rotating and cleansing the bowl, the water being discharged from the latter by way of the said rotary and hollow stem.

9. In a cuspidor, a rotary bowl adapted and arranged for continuous rotation, and provided with a single, central and downwardly-extending discharge-opening, a hollow perforated cap covering the said discharge-opening and extending upwardly into the interior of the bowl, and means for maintaining a jet of water for rotating the said bowl.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GEO. B. HAYCOCK.

Witnesses:

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WALLACE J. COVAY.