

No. 793,134.

PATENTED JUNE 27, 1905.

W. G. HUGHES.
CUSPIDOR.

APPLICATION FILED MAY 18, 1904.

2 SHEETS—SHEET 1.

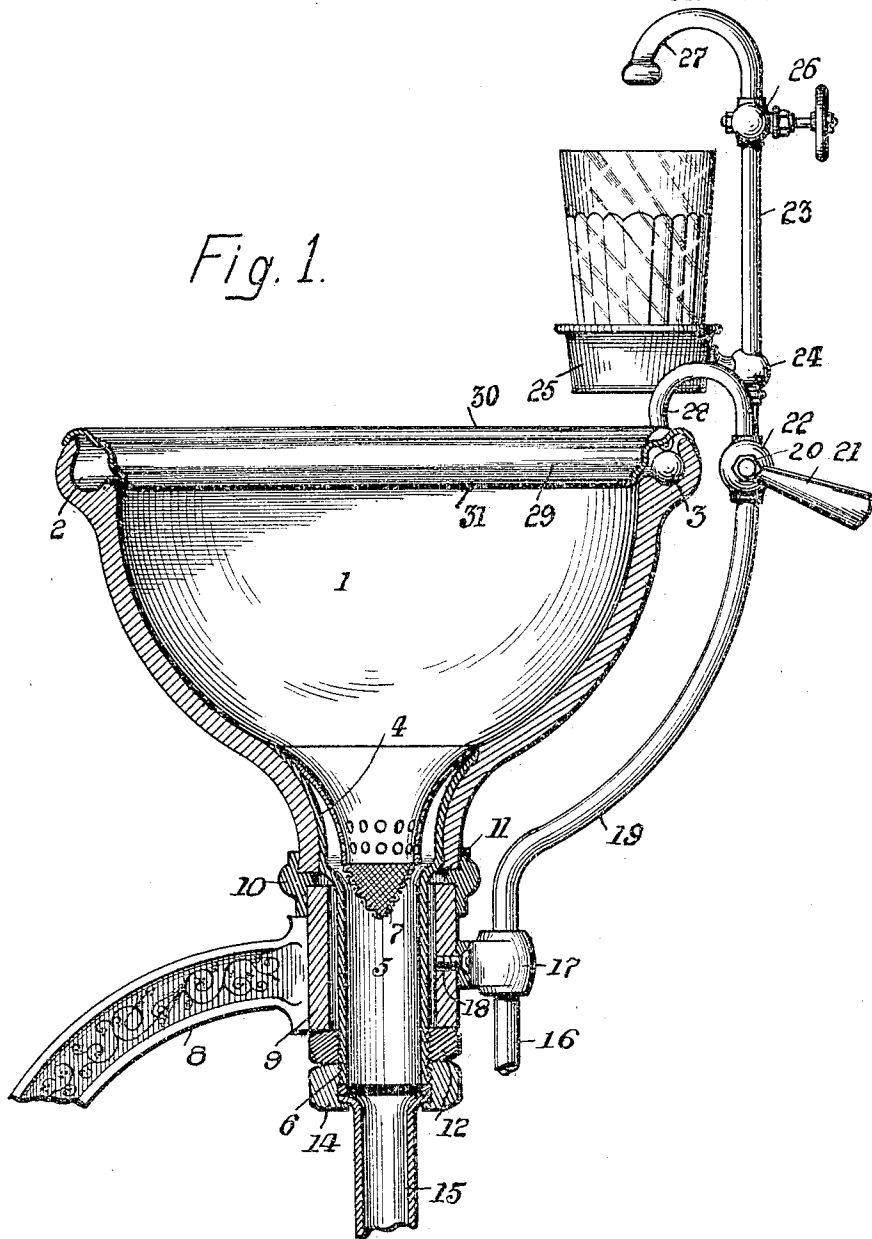


Fig. 1.

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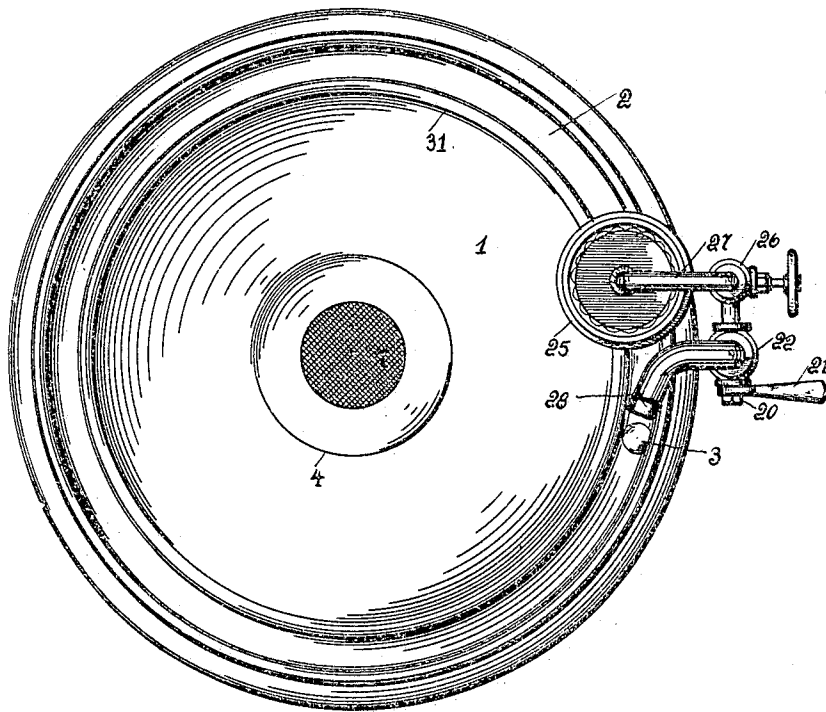


Fig. 2.

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UNITED STATES PATENT OFFICE.

WILLIAM GEORGE HUGHES, OF PITTSBURG, PENNSYLVANIA.

CUSPIDOR.

SPECIFICATION forming part of Letters Patent No. 793,134, dated June 27, 1905.

Application filed May 18, 1904. Serial No. 208,583.

To all whom it may concern:

Be it known that I, WILLIAM GEORGE HUGHES, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Cuspidors, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in fountain-cuspidors, and relates more particularly to that class known as "flushing-cuspidors" that are particularly adapted to be employed by dentists, surgeons, and physicians.

The object of the present invention is to provide a cuspidor wherein a stream of water is introduced tangentially to the radius, thereby producing a centrifugal stream that will effectually cleanse and flush the cuspidor at all times.

My invention further aims to provide a cuspidor having formed in connection therewith an annular groove or waterway in which is placed an object which will conform to the inner face of said groove in cross-section, said object performing the function of interrupting the centrifugal flow of water, thereby causing a wave in the water that will be of greater volume than can be obtained by the ordinary overflow.

With the above and other objects in view, the invention consists in the novel construction, combination, and arrangement of parts to be hereinafter more fully described and claimed.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this application, and in which—

Figure 1 represents a vertical sectional view of my improved cuspidor, showing the connections in side elevation; and Fig. 2 is a top plan view with the shield 29 removed.

In the drawings the reference-numeral 1 represents a bowl having formed near its upper face an annular groove or waterway 2. In said groove is arranged a rubber ball 3. A bell-shaped sleeve 4 is secured in the lower portion of the bowl, said sleeve having formed

integral therewith a contracted tubular portion 5, which is exteriorly screw-threaded, as shown at 6. A cone-shaped strainer 7 is suitably secured within the bell-shaped mouth 4, and a bracket 8, which may be pivotally secured or rigidly attached, carrying an integral collar 9, is secured to the bowl 1 by means of a sleeve 10, having formed therein an interior annular seat 11, and is further secured on its lower face by means of a jam-nut 12, engaging the screw-threaded portion 6 of the sleeve 5. A coupling 14 is also secured upon the screw-threaded portion of the sleeve which serves to connect thereto a flexible waste-pipe 15, communicating with the main waste-pipe. (Not shown.) A flexible supply-pipe 16 is secured in the coupling 17, which is rigidly attached to the sleeve 9 by means of a screw 18. To the other end of this coupling 17 is attached rigidly a supply-pipe 19, having secured therein a valve 20 of the ordinary construction carrying a handle 21, said valve being provided with a twin coupling 22, one branch of said twin coupling communicating with an upright supply-pipe 23, which passes through a bracket 24, upon which is rigidly secured a tray 25. In the said upright pipe 23 is also secured a regulating-valve 26, and the upper end of the supply-pipe 23 terminates in a bent-over neck portion 27. From the other side of the twin coupling 22 extends a curved pipe 28, to which is secured an annular shield 29, having an annular raised portion 30, formed therein and terminating in an angularly-disposed downwardly-extending flange 31, which serves to deflect the stream into the body of the cuspidor, said annular shield 29 also serving the purpose of preventing the splashing of the water caused by the constant rotation of the ball 3 within the race or water way. The pipe 28 is tangentially disposed to the annular race or water way, whereby the centrifugal movement of the stream is obtained within the race or water way and also over the overflow and within the body portion of the cuspidor.

The operation of my improved sanitary device is as follows: The valve 20 being opened by means of the handle 21 will permit the wa-

ter to be forced and the same directed circumferentially within the annular race or water way, which will carry the rubber ball or other suitable body around said course continuously, thereby slightly interrupting the overflow of the stream in the rear of said ball or other body and producing an increased volume of water in advance of the ball or body and further producing a wave that will effectually cleanse the cuspidor at all times.

The many advantages obtained by the use of my improved device will be readily apparent from the foregoing description, taken in connection with the accompanying drawings.

It will be noted that various changes may be made in the details of construction without departing from the general spirit of my invention. For example, the annular shield may be formed integral with the body portion of the bowl and a suitable opening and plug provided for the introduction of the ball or other body, if desired.

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

1. In a sanitary flushing device, a bowl, a circuitous waterway, a loose body arranged in said waterway, and means whereby said body is continuously rotated and moved around the waterway.

2. In a cuspidor, the combination of a bowl

having an annular groove formed therein, means for admitting water to the groove, a free ball arranged in said groove, and an annular deflecting-plate arranged over said bowl.

3. In a cuspidor, the combination of a bowl having a race formed therein, a ball arranged so as to circulate in said race, an annular deflector-plate extending over said bowl, a water-inlet arranged tangentially to said waterway, and a suitable outlet.

4. In a flushing-cuspidor, the combination of a bowl having an annular race formed therein, a ball arranged and free to circulate in said race, and a suitable support for said bowl, substantially as described.

5. In a sanitary flushing apparatus the combination of a bowl having a circular waterway around its rim, a suitable inlet connection and outlet connection for said bowl, a free ball arranged in the waterway of the bowl and adapted to rotate and also to circulate around the bowl in said waterway under the action of water flowing through the said inlet.

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

WILLIAM GEORGE HUGHES.

Witnesses:

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