

J. L. WILLIAMS, JR.
 SANITARY DRINKING FOUNTAIN.
 APPLICATION FILED SEPT. 27, 1911.

1,062,209.

Patented May 20, 1913.

Fig. 2.

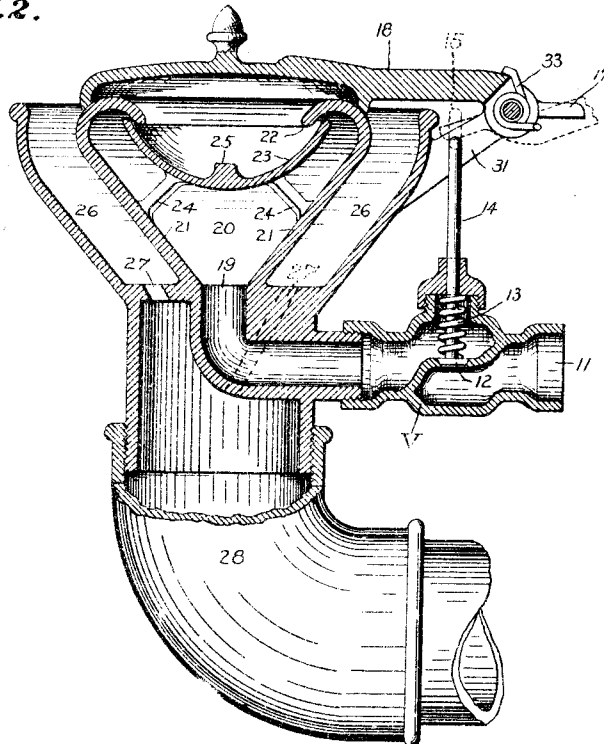


Fig. 1.

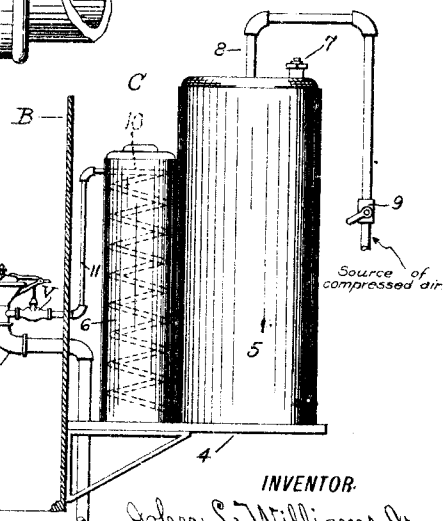
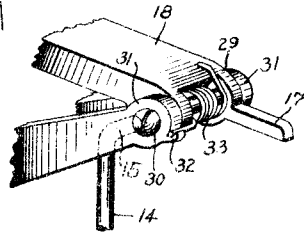


Fig. 3.



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SANITARY DRINKING-FOUNTAIN.

1.062.209.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN L. WILLIAMS, Jr., a citizen of the United States, residing at 465 North Royal street, Jackson, Tennessee, have invented a certain new and useful Improvement in Sanitary Drinking-Fountains, of which the following is a full, clear, and exact description.

My invention is an improvement in drinking fountains of the so-called "sanitary" type, in which contact between the drinker's lips and any part of the fountain is impossible and in which any water with which a user's lips may have come in contact, is automatically removed by the flow of water before subsequent use, and my invention relates more particularly to drinking fountains especially adapted to use on railway trains and similar places where it is essential that the consumption of water be reduced to a minimum.

To this end the primary objects of my invention are the provision of a system by which water may be supplied in no greater quantities than necessary and only at the time of use, and the design of a bubbling fountain which, while perfectly sanitary, shall use a minimum quantity of water.

Further objects of my invention will hereinafter appear in the specification and be pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a view of the assembled device, showing the water tank, the cooling coils and the fountain head; Fig. 2 is a view of the fountain head on approximately full scale, showing the drain pipe, valve and valve stem in elevation and the remaining parts in central, vertical cross section; and Fig. 3 is a perspective, also on approximately full scale, of the rear portion of the fountain head cover, showing the manner of mounting said cover.

As stated above, my invention is especially adapted for use on railway cars where it is, of course, inconvenient to supply the large quantities of water wasted by constantly flowing drinking fountains, and it is in such a location that I have chosen to illustrate it.

A represents the aisle of a car, B a partition between such aisle and a compartment C, and D is the drinking fountain proper located in the car aisle. In the compartment C, supported on a shelf 4, are located the water tank 5 and the ice tank 6. The water

tank 5 has a filling cap 7 and a pipe 8 leading to it from any suitable source of compressed air. Through the valve 9 the air admitted to the tank 5 may be regulated to give the proper pressure on the water in the system. The water on leaving the tank 5 is passed up through coil 10 surrounded by ice in the tank 6 and from there passes to the fountain head D through the pipe 11.

The fountain head D is shown in section in Fig. 2. Water is admitted through the valve chamber V, the port of which is controlled by the valve 12 which is normally forced into its seat by the spring 13. The valve stem 14 extends upwardly and ends in a horizontal arm 15 in the path of a lug 17 on the hinged cover 18. After entering through the valve chamber V the water passes upwardly through the induction pipe 19 into chamber 20. The chamber 20 has conical, upwardly flaring side walls 21 which end in an interiorly depending lip 22 which overhangs the inner surface of a bowl shaped member 23 supported by three or more legs 24 resting on the walls 21. Projecting from the bottom of the bowl 23 is a nib 25. The water rising through the passage between the walls of the chamber 20 and the bowl 23 is deflected downward by the lip 22 and, flowing down the bowl 23, strikes the nib 25 and boils or bubbles—thus forming what is known as a "bubbling fountain." The unconsumed excess of water passes over the exterior of the depending lip 22 into the outer bowl 26 from which it escapes through discharge openings 27 into the escape pipe 28.

In order to exclude dust and germs from the parts of the fountain while not in use, I provide a cover 18 hinged at 29 on a bolt 30 held in ears 31 projecting from the outside bowl 26. Around the bolt 30 and bearing at one end on a lug 32 formed on one ear 31 and at the other end against the cover 18 and tending to close it, is a spring 33.

The manner of operation of my device is apparent. A person desiring to drink will raise the cover 18 by means of the handle 34. When the cover is raised the lug 17 will contact with the horizontal arm 15 of the valve stem 14. Further movement of the cover will, as shown in dotted lines in Fig. 2, raise the valve 12 from its seat admitting water through the induction pipe 19 to the chamber 20 and around under the lip 22 of the bowl 23 where, striking the nib 25, it bubbles.

bles up forming a bubbling fountain from which it is easy to drink. When through drinking the user will release the cover which will be returned by the spring 33 to the position shown in full lines in Fig. 2 and the spring 13 will seat the valve 12, thus shutting off the water.

Having thus described my invention what I claim is:

- 10 1. In a fountain head, an induction pipe, an eduction pipe, a cover, a valve in said induction pipe, a stem for said valve, a horizontal arm on said stem, a lug on the cover in position to contact with said horizontal arm when the cover is raised to raise the valve stem, and a spring for returning the valve to position when said lug is out of contact with said horizontal arm.
- 20 2. In a fountain head, an induction pipe, a conical chamber into which said induction pipe discharges, a bowl supported within said chamber and a nib in the bottom of said bowl.
- 25 3. In a fountain head, an induction pipe, a conical chamber into which said induction pipe discharges, a depending lip on the upper edge of said chamber, and an imperforate bowl supported within said chamber and under said lip.
- 30 4. In a fountain head, an induction pipe, a conical chamber into which said induction pipe discharges, a depending lip on the upper edge of said chamber, a bowl supported within said chamber and under said lip, and a nib in the bottom of said bowl.
- 35 5. In a fountain head, an induction pipe, a conical chamber into which said induction pipe discharges, a depending lip on the upper edge of said chamber, a bowl supported

within said chamber and under said lip, a nib in the bottom of said bowl and an outer discharge bowl surrounding the conical chamber and spaced therefrom.

6. In a fountain head, an induction pipe, a valve in said pipe, a conical chamber into the bottom of which said induction pipe discharges, a depending lip on the upper edge of said chamber, an imperforate bowl supported within said chamber under said lip, a hinged cover and means on said cover for opening said valve when the cover is raised.

7. In a fountain head, an induction pipe, a conical chamber into which said pipe discharges, a depending lip on the upper edge of said chamber, a bowl supported within said chamber and under said lip, and an overflow bowl surrounding said chamber.

8. In a fountain head, an induction pipe, a valve in said pipe, a conical chamber into which said induction pipe discharges, a depending lip on the upper edge of said chamber, a bowl supported within said chamber under said lip, an outer discharge bowl surrounding said chamber and spaced therefrom, a hinged cover, and means on said cover for actuating said valve.

9. In a fountain head, a bowl, means for discharging water into said bowl at all points of its circumference, means at the center of the bowl for deflecting the water upward, and a discharge bowl surrounding said first mentioned first bowl.

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

JNO. L. WILLIAMS, Jr.

Witnesses:

J. HAYES WHITE,
J. M. DRAKE.