

No. 645,206.

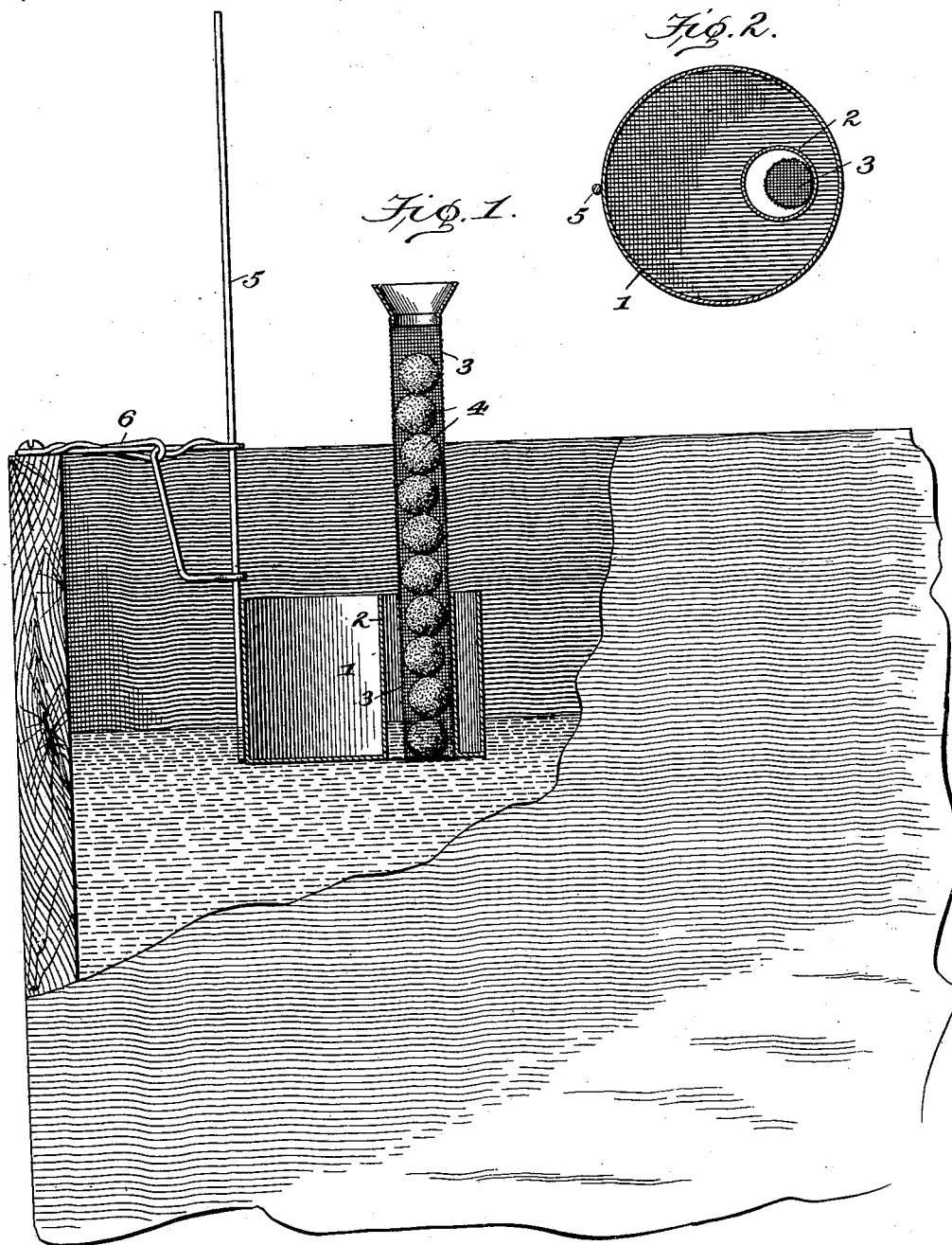
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H. F. JONES.

FLOAT ATTACHMENT FOR AUTOMATICALLY FEEDING DISINFECTANTS TO
WATER CLOSETS.

(Application filed June 19, 1899.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

HOWARD FEILD JONES, OF WILSON, NORTH CAROLINA.

FLOAT ATTACHMENT FOR AUTOMATICALLY FEEDING DISINFECTANTS TO WATER-CLOSETS.

SPECIFICATION forming part of Letters Patent No. 645,206, dated March 13, 1900.

Application filed June 19, 1899. Serial No. 721,098. (No model.)

To all whom it may concern:

Be it known that I, HOWARD FEILD JONES, a citizen of the United States, residing at Wilson, in the county of Wilson and State of North Carolina, have invented certain new and useful Improvements in Float Attachments for Automatically Feeding Disinfectants to Water-Closets, of which the following is a specification.

My invention is directed to the production of a float attachment for feeding disinfectants to the supply-tank of a water-closet; and my improvement resides in the construction of a float having an open-walled tube for containing in vertical column the disinfectant in separate balls, whereby they are fed successively and held in the water at the bottom of the tube and the feeding thereof is rendered certain, as I shall more particularly set out in the claims concluding this specification.

The accompanying drawings illustrate my float containing and feeding a disinfectant in Figure 1 in vertical section connected by a vertical guide to the wall of the supply-tank and floating on the water, and Fig. 2 is a horizontal section of the same.

In a very simple and cheap form the disinfectant-feeder can be made of a tin cup 1, with a tube 2, preferably rising centrally therefrom and open at the bottom of the cup and also at its upper end. Within this tube, and preferably on the wall thereof, is fastened a tube 3 of open or mesh walls, preferably of fine wire-gauze. Its lower end, closed at the bottom of the cup and extending above the bottom of the cup, is open to permit of being filled with the disinfectant, preferably in the form of balls 4, so that resting on the mesh bottom of their containing-tube they are supported in a column, so that the lower one is always immersed in the water. That the lower end of the open-walled tube may be immersed in the water it is smaller than the solid-walled tube and extends above it a sufficient height to contain a good supply of balls to last a certain time—say a week or several weeks. As the lowest ball on the bottom of the tube becomes dissolved the next above will feed down on the bottom of the tube until all the balls are dissolved; but the tube can be supplied from time to time, and thus always kept more or less filled.

The weight of the cup is only intended to sink it enough to immerse the bottom ball of the column, and for this purpose it can be weighted, if found necessary. A guide-rod 5, rising from the cup-wall, passes through an eyed bracket 6, secured to the tank, so as to keep the float in place and allow it to rise and fall with the inflow and outflow of the water in the tank.

I make the ball-containing tube of wire mesh, so that its lower end will be open to the water and also to show when it may be empty.

If it should be desired, the disinfectant in liquid form may be put up in capsules and fed from the open-walled tube when the sac is sufficiently dissolved to let out the disinfectant into the water in the tank.

By this cup float-feeder for the disinfectant the water in the tank is kept supplied with the disinfectant, and this water being open to the air serves to keep the air in the bathroom in sanitary condition, while the water from the tank at each flushing disinfects the bowl and the soil-pipe.

I have shown a guide on the tank-walls for retaining the float in position with freedom for rising and falling with the inflow and the outflow of the water; but such guide may be dispensed with or it may be otherwise arranged.

I claim as my improvement—

1. For disinfecting water-closets, a feeder for the disinfectant consisting of an open-walled tube, closed at its lower end, a float fixed to the lower end of the tube and means carried by the float for immersing the lower end of said tube a depth equal to the immersion of the float.

2. A float device having a tube rising from its bottom, open at the bottom and an open-walled or mesh tube closed at its lower end and fastened to the inner walls of the outer tube, as a means for containing a disinfectant in solid form, and adapted to float in the supply-tank of a water-closet to immerse the disinfectant in parts for disinfecting the water.

3. For disinfecting water-closets the herein-described float device consisting of a cup having an imperforate tube rising therein and opening at the bottom of the cup, an open-walled tube for containing the disinfectant,

- closed at the bottom, open at the top, fixed to the inner walls of the cup-tube, extending from the bottom thereof above its top, and of less diameter than the cup-tube, whereby water entering the bottom opening of the latter immerses and enters the lower end of the inner tube and thereby brings its contained disinfectant in separate and distinct bodies in direct contact with the water.
4. For disinfecting water-closets, a tube of wire mesh closed at its lower end for containing separate balls of disinfectant—one loosely upon the other in vertical column, a float through which said mesh-tube passes having an imperforate tubular holder for said mesh-tube of greater diameter than the latter and open at the bottom of the float, whereby the latter will cause the bottom of the mesh-tube to be immersed in water and insure the certain successive feed of the balls contained therein as they are dissolved.
5. For disinfecting water-closets, a cup-float having an imperforate tube rising therein and opening at the bottom of the cup, an open-walled tube for containing the disinfectant, closed at the bottom, open at its top, fixed to the inner walls of the imperforate tube, of less diameter than the latter and having a height greater than the float, in combination with means for connecting the float to the tank, whereby the feed-tube is maintained upright.
- In testimony whereof I affix my signature in presence of two witnesses.
- HOWARD FEILD JONES.
- Witnesses:
A. E. H. JOHNSON,
GUY H. JOHNSON.