J. E. COONEY.

AUTOMATIC DISINFECTOR FOR WATER CLOSETS.

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1,161,029. Patented Nov. 23, 1915.

Fig. 1.

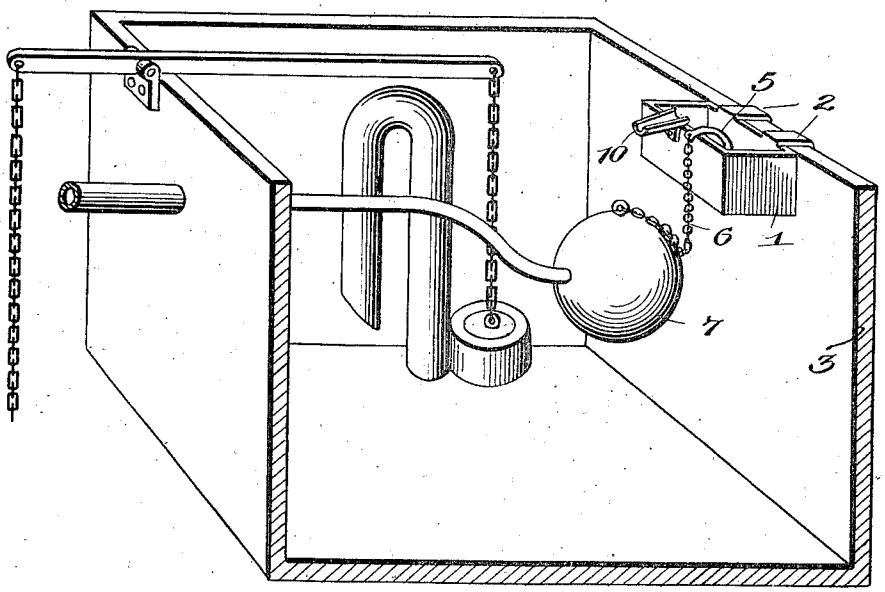
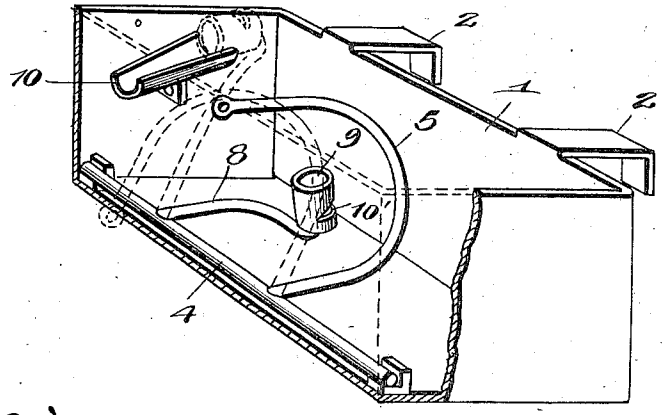


Fig. 2.



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AUTOMATIC DISINFECTOR FOR WATER-CLOSETS.

1,161,029. Specification of Letters Patent. Patented Nov. 23, 1915.

Application filed September 15, 1915. Serial No. 50,885.

To all whom it may concern:

Be it known that I, JAMES E. COONEY, a citizen of the United States, residing at Pawtucket, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Automatic Disinfectors for Water-Closets, of which the following is a specification.

This invention relates to certain new and useful improvements in automatic disinfectors for water closets, and the like, and has for its object a device which upon each operation of the flushing tank of a water closet, urinal or the like, causes a predetermined quantity of disinfectant to be ejected into the tank so as to intimately mix with the incoming water, whereby upon subsequent operation of the tank for flushing purposes the ejected water will carry the charge of disinfectant, previously supplied thereto into the bowl therewith.

In the drawings Figure 1 is a perspective view of the invention applied to a flush tank, and Fig. 2 is an enlarged view of the invention, in perspective, showing the disinfectant containing box partly broken away and in section.

In proceeding in accordance with the present invention, a box 1 is employed of a size to contain sufficient disinfectant, which box has any suitable fastening means, such as clips 2 which support same within the flush tank 3 at a point above the water level in the latter. A rock shaft 4 is mounted within box 1 and has a curved arm 5 rigidly affixed thereto, which arm projects over the top edge of the front wall of the box and is connected to a light chain 6, which latter is in turn connected to the usual float 7 of the flushing apparatus. A second arm 8 is rigidly mounted on the shaft 4, and carries a cup 9, which latter is formed with a side opening 10′ through which excess of disinfectant may escape upon up position of the cup above the level of disinfectant in box 1. Obviously, by predetermined positioning of the opening 10′ with respect to the cup bottom, the amount of disinfectant which will be ejected into the water in the tank may be regulated or governed as desired. The cup 9 is upon movement of the rock shaft 4 caused to occupy the position depicted in dotted lines in Fig. 2, in which position, the cup contents is received in a trough or spout 10, appropriately carried by the box 1, and arranged at an incline, so that the cup contents will due to the action of gravity course down the trough and enter the tank 3. Preferably the trough 10 is supported above the top edge of the box front wall, and is disposed so as to accurately aline with the cup when the latter is in position displayed in Fig. 2 of the drawings.

The operation is as follows:—When the tank is filled, the ball float 7 occupies the position of Fig. 1. When the tank is emptied, the float 7 descends in the usual manner, pulling chain 6 taut, and causing the latter to thereby exert pull on curved arm 5, which action causes the arm 5 in turn to rock shaft 4. The arm 8 with the cup 9 is thereby moved to up position, any excess of disinfectant in the cup being drained off from or through opening 10. When the cup occupies the dotted line shown in Fig. 2, then the disinfectant will flow from the cup down through 10 and enter the tank, mixing with the water in the latter.

It will thus be apparent from the foregoing that upon each operation of the flush tank, there will be a charge of disinfectant admitted to the tank, so that in the interval of time elapsing between successive flushes, the water stored in the tank may mix with the disinfectant so as to more uniformly effect mixing of the water and disinfectant, for the subsequent operation of the flush.

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

In combination with the tank and float, of a flushing tank, a disinfectant container in the tank above the water level thereof, a rock shaft in the container, a curved arm rigid on the shaft and extending above the top of the container, a chain connected to the float and to the outer end of the arm, a second arm rigid on the shaft, a cup carried by the second arm and having an opening for excess of disinfectant to permit escape

of the latter upon raising of the cup, and a trough arranged at an incline on the top edge of the front of the container and disposed so that when the cup is in up position, the contents thereof will enter the trough and be discharged by the latter into the tank.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES E. COONEY.

Witnesses:
ADA E. HAGERTY,
J. A. MILLER.