J. H. REAMER.

DISINFECTANT APPARATUS.

APPLICATION FILED MAY 8, 1914.

1,136,268.

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FIG. 1.

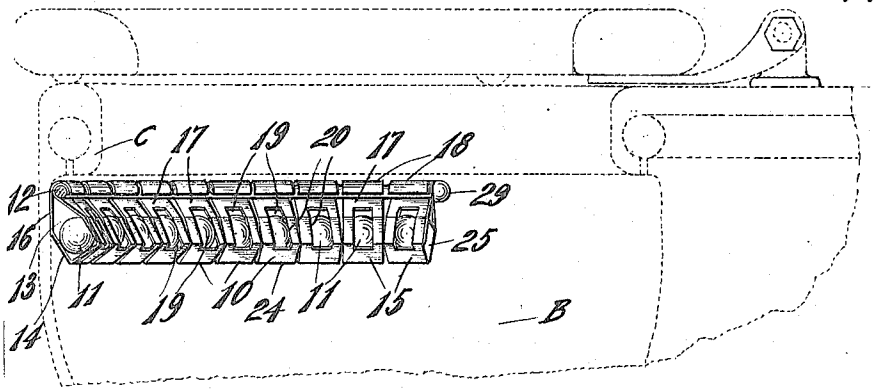


FIG. 4.

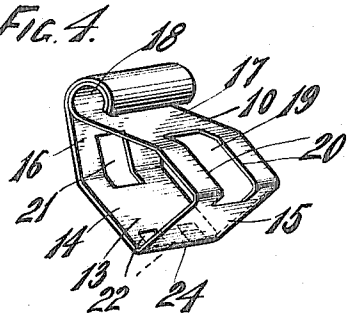


FIG. 5.

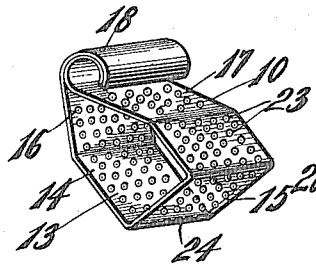


FIG. 2.

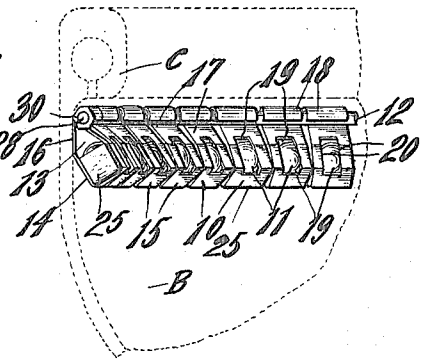
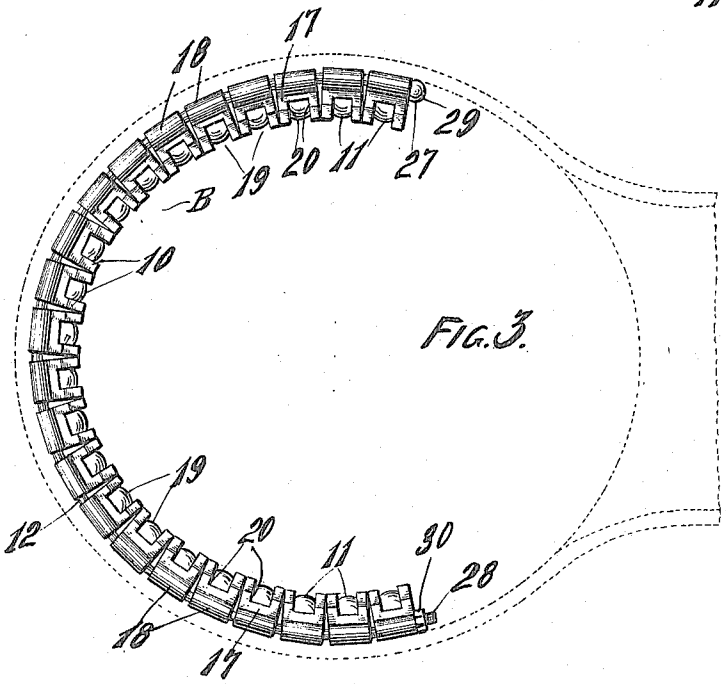


FIG. 3.



WITNESSES.

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DISINFECTANT APPARATUS.

1,136,268. Specification of Letters Patent. Patented Apr. 20, 1915.

Application filed May 8, 1914. Serial No. 837,115.

To all whom it may concern:

Be it known that I, JOHN H. REAMER, a citizen of the United States, and resident of Linton, in the county of Emmons and State of North Dakota, have invented new and useful Improvements in Disinfectant Apparatus, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

The invention relates to disinfecting apparatus and more particularly to the use of such apparatus in water closets and urinals.

The invention designs to provide a means for holding the disinfectant within the bowl of the water closet or urinal.

The invention further designs to provide a holder for disinfectant which may be readily attached to or removed from the bowl of the water closet or urinal and which is disposed entirely within the bowl.

Lastly, the invention designs to provide a new and improved form of disinfectant holder.

The invention consists in the several features hereinafter set forth and more particularly defined by claim at the conclusion hereof.

In the drawings; Figure 1 is a vertical section view of the device embodying the invention. Fig. 2 is a view similar to Fig. 1 showing the end of the holder. Fig. 3 is a plan view of the device. Fig. 4 is a detail perspective view of the individual holder. Fig. 5 is a view similar to Fig. 4 showing a modified form of the holder.

The invention is employed on a water closet of ordinary construction (shown in dotted lines) and is placed in the bowl B adjacent the rim C as shown in Fig. 1 and it may also be used on urinals.

The usual forms of disinfectant employed in connection with water closets or urinals are spherical in shape and this device comprises individual holders 10 for each of the spheres or beads 11 of disinfectant and a supporting member or holder to which each one of the holders 10 is detachably secured and which is itself adapted to be detachably secured to the bowl of the water closet or urinal.

The holders 10, preferably made of sheet metal, are bent so as to form an open ended pocket 13 having sides 14 and 15, the upper ends 16 and 17 being bent over together to form a hook 18 to detachably engage the supporting holder. A vertical slot or opening 19 is provided in the side 15 so that when the bead of disinfectant is inserted in the pocket part of it will project through the opening, and other parts will engage the edges 20 of the holder and thus securely seat the bead therein.

An opening 21 is provided adjacent the upper end of the holder so that the water from the rim used in flushing the bowl will come in contact with the disinfectant, moistening and dissolving some of it, the dissolved disinfectant being carried off through openings 22 in the lower part of the holder. In the modified form in Fig. 5 the holder is provided with a series of perforations 23 and the slot for holding the bead more securely within the holder is dispensed with.

The lower end of the pocket 13 is bent at a sharp angle as shown at 24 in Fig. 4. This provides a seat for the bead at all times for as the bead wears away under the action of the flushing water it gradually descends between the side walls of the pocket until all of it is used up.

The holders 10 are all of similar construction with the exception of the first and last which are provided with additional side flanges 25.

The supporting member consists of a spring means or flexible rod 12 whose ends 27 and 28 are threaded one end adapted to receive a cap nut 29 the other an adjustable nut 30.

In practice, the individual holders 10, carrying the disinfectant are hooked over the rod 12 the first holder having the flange 25 thereon. The other holders are placed in succession upon the rod forming a continuous channel with beads supported therein. The last holder is also provided with the flange 25 so that while there is communication between the holders intermediate the ends the flanges 25 on the first and last holders keep all the beads within the channel.

The disinfectant holders now being in position upon the supporting rod, the rod is contracted, placed within the bowl and released under which condition it engages the interior of the bowl and is secured thereto adjacent the rim of the closet or urinal. It will be noted that the means for securing the disinfectant is disposed entirely within the bowl.

The invention thus exemplifies a holder

for disinfectant, which consists of a plurality of separate disinfectant holders and means for detachably securing all of the holders together, said means being disposed entirely within the bowl.

What I claim as my invention is:

1. A disinfectant holder for water closet bowls and the like comprising a plurality of individual holders each having a pocket formed therein, said holders being arranged so that the pockets form a continuous channel and means for detachably securing said holders in position entirely within the bowl.

2. A disinfectant holder comprising a plurality of individual holders, each holder having a pocket for receiving disinfectant therein, a vertically extending slot adjacent the pocket and a hook at its upper end, and a flexible rod engaging with the hooks for securing the holders in position.

3. A disinfectant holder for water closet bowls and the like comprising a plurality of individual holders each having a pocket formed therein, said holders being arranged so that the pockets form a continuous channel, means on the holders at the end of the channel for closing the channel and means for detachably securing said holders in position entirely within the bowl.

4. A disinfectant holder comprising a plurality of individual holders, means disposed entirely within the bowl for detachably securing said holders in position, each holder comprising a piece of material bent to form an open ended pocket intermediate its length, and having a plurality of apertures adjacent the pocket and having its ends bent together to form a hook for detachably securing it to said means.

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

JOHN H. REAMER.

Witnesses:
H. C. LYNN,
JOHN R. SNYDER.