

T. R. DUNKLEY.
DISINFECTANT DISTRIBUTING DEVICE.
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1,002,974.

Patented Sept. 12, 1911.

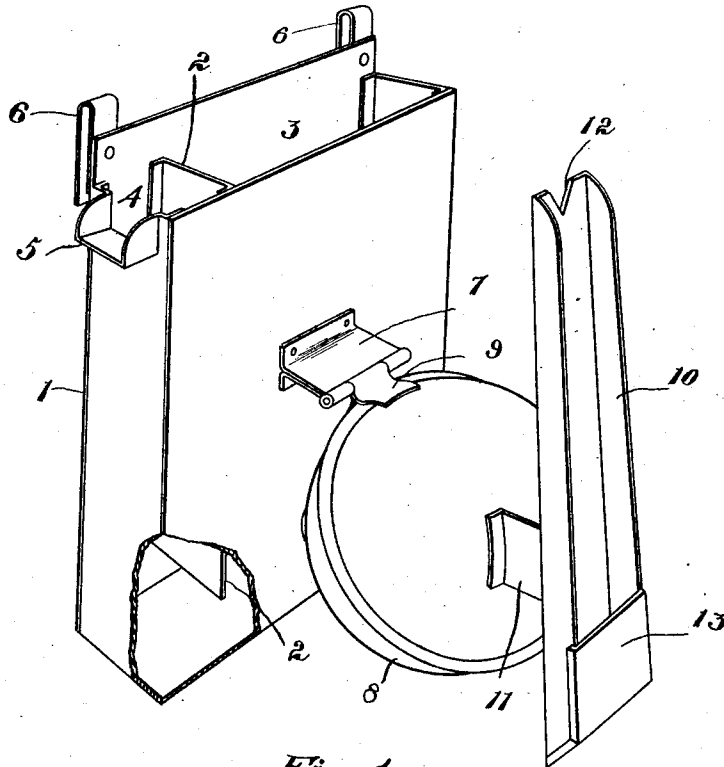


Fig. 1.

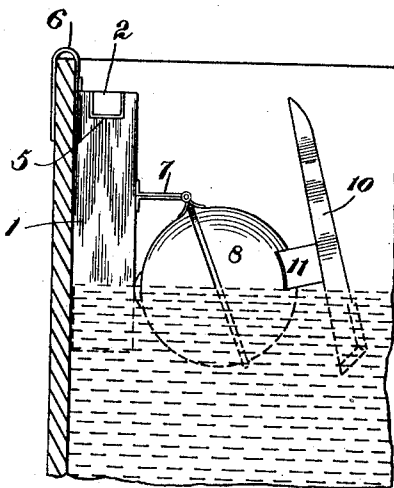


Fig. 2.

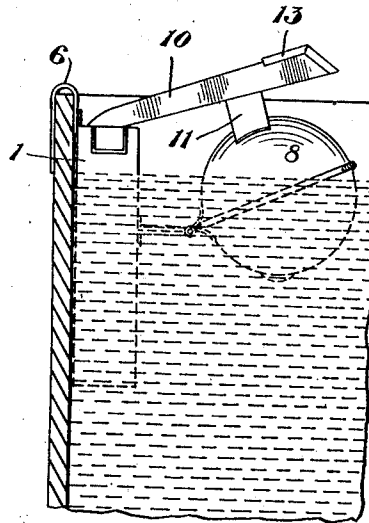


Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

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DISINFECTANT-DISTRIBUTING DEVICE.

1,002,974.

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Application filed November 17, 1909. Serial No. 528,610.

To all whom it may concern:

Be it known that I, THOMAS R. DUNKLEY, a subject of the King of Great Britain, and resident of Maumbury Way, in the town of
5 Dorchester, in the county of Dorset, in England, have invented certain new and useful Improvements in Disinfectant-Distributing Devices, of which the following is a specification.

10 The invention relates to improvements in disinfectant distributing devices, as described in the following specification and illustrated in the accompanying drawings that form part of the same.

15 The invention consists essentially in the novel construction and arrangement of parts, whereby the water in a cistern is charged with the required quantity of disinfectant by the overflow from a receptacle receiving its additional supply of water
20 from said cistern through the operation of a ladling member associated with a float.

The objects of the invention are, to destroy harmful bacteria in cistern water, to
25 distribute a suitable disinfectant in uniform quantities accordingly as the water supply is replenished, and to devise a simple and positive acting device which may be made very cheaply and will not get out of order
30 or become choked up and stop the supply of the disinfectant.

In the drawings, Figure 1 is a perspective view of my device partly broken away to disclose the interior construction of the
35 disinfectant receptacle. Fig. 2 is a vertical sectional view of a portion of a cistern showing my device attached thereto and in position with the water at a low level. Fig. 3 is a sectional view of a portion of a cistern showing my device arranged therein and in
40 its raised position, discharging a supply of water into the disinfectant receptacle.

Like numerals of reference indicate corresponding parts in each figure.

45 Referring to the drawings, 1 is the disinfectant receptacle preferably formed of thin sheet metal and having an open top.

2 is a vertical partition arranged close to one side of the receptacle 1 and extending
50 downwardly from the top to near the bottom thereof, said partition dividing said receptacle into the compartments 3 and 4 respectively.

5 is a spout secured to the outer wall of

the compartment 4 and opening slightly below the top of the receptacle 1.

6 are hooks secured to the back of the receptacle 1 and adapted to form supports for the said receptacle.

7 is a bracket rigidly secured to the front face of the receptacle 1 and projecting outwardly therefrom and forming the stationary member of a hinged joint.

8 is a float having a bracket 9 secured thereto and pivotally secured to the hinged
65 portion of the bracket 7.

10 is a trough shaped member rigidly secured to the upper side of the float 8 and supported therefrom by the brackets 11. The trough 10 is open at one end and
70 formed with a V-shaped notch 12 in the bottom side of said end. The opposite end of said trough is closed in by a plate 13 rigidly secured to the upper and outer edges of the sides and bottom edges of the trough, thus
75 forming a ladle shaped receptacle at the outer end of said trough.

In the use of this device, the compartment 3 of the receptacle 1 is filled with crystals of permanganate of potash or other
80 suitable disinfecting material and after being placed in position in the cistern the said receptacle is filled with water. The float and ladle secured thereto remain in the position shown in Figs. 1 and 2 until
85 the water rises sufficiently to lift the said float. Before lifting the float, however, the water rises above the level of the upper edge of the plate 13 forming a ladle at the end of the trough 10 and as the water continues
90 to rise the float is lifted upwardly and swinging upwardly lifts the ladle clear of the surface of the water. The open end of the trough 10 swings over the edge of the receptacle 1 before it reaches a horizontal
95 position and the float rising still higher tips the said trough upwardly at the outer end allowing the water contained therein to flow into the compartment 3. The fresh supply of water thus poured into the re-
100 ceptacle causes the level of the disinfectant charged water to rise and overflow out of the spout 5 leading from the compartment 4. The crystals or solids of the disinfectant are retained within the compart-
105 ment 3 and the water thus flows beneath the lower end of the partition 2, consequently none of the solids can be discharged acci-

dentially into the water. It will thus be seen that as the supply of water in the cistern is replenished the pivotal ladle will discharge a small quantity of water into the disinfectant receptacle and a uniform quantity of the disinfecting fluid will be distributed throughout the contents of the cistern.

A device such as described is very simple and as there are no valves to get out of order the discharge of disinfectant will always be assured.

What I claim as my invention is:—

1. In a disinfectant distributing device, the combination with a cistern, of a receptacle supported within said cistern and adapted to contain a disinfectant, a float operatively supported and adapted to rest on the water in said cistern, and a ladle member secured to said float and having a spout portion adapted to extend over said receptacle to transfer small quantities of water into said receptacle from said cistern on the rise of the level of the water therein to dilute the disinfectant contained within said receptacle and to cause the same to overflow into said cistern.

2. In a disinfectant distributing device, the combination with a cistern, of a receptacle supported within said cistern and

having its interior divided into two compartments, said compartments communicating with each other adjacent to the bottom, one of said compartments being adapted to contain a disinfectant, a float pivotally connected to said receptacle, and means associated with said float and adapted to ladle water into one of the compartments in said receptacle on the rise of the level of the water in said cistern.

3. In a disinfectant distributing device, the combination with a cistern, of a receptacle supported within said cistern and having its interior divided into two compartments communicating at the bottom, an overflow spout leading from one of said compartments, a float pivotally connected to said receptacle, and a ladling member supported from said float and adapted to ladle water into one of the compartments of said receptacle on the rise of the level of the water in the cistern.

Signed at Weymouth, in the county of Dorset, England, this 29th day of October, 1909.

THOMAS R. DUNKLEY.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."