

No. 720,918.

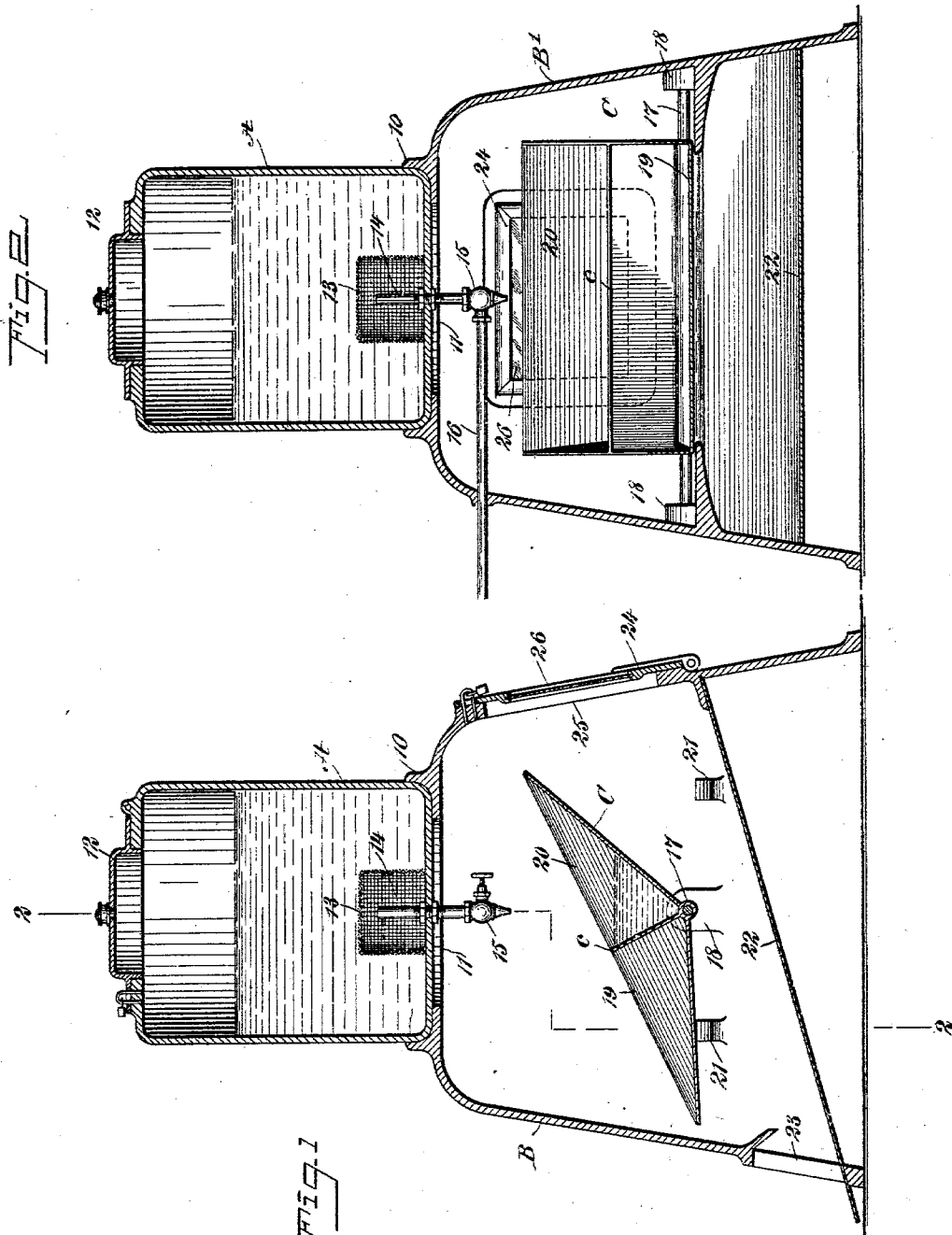
PATENTED FEB. 17, 1903.

S. HESKETH.
DISINFECTANT DISTRIBUTING DEVICE.

APPLICATION FILED MAY 21, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES:

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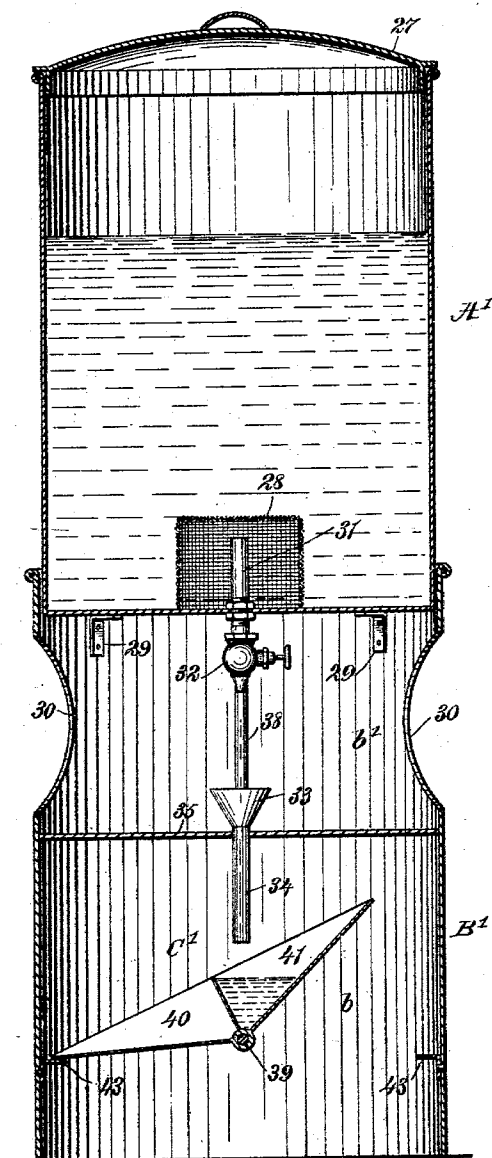
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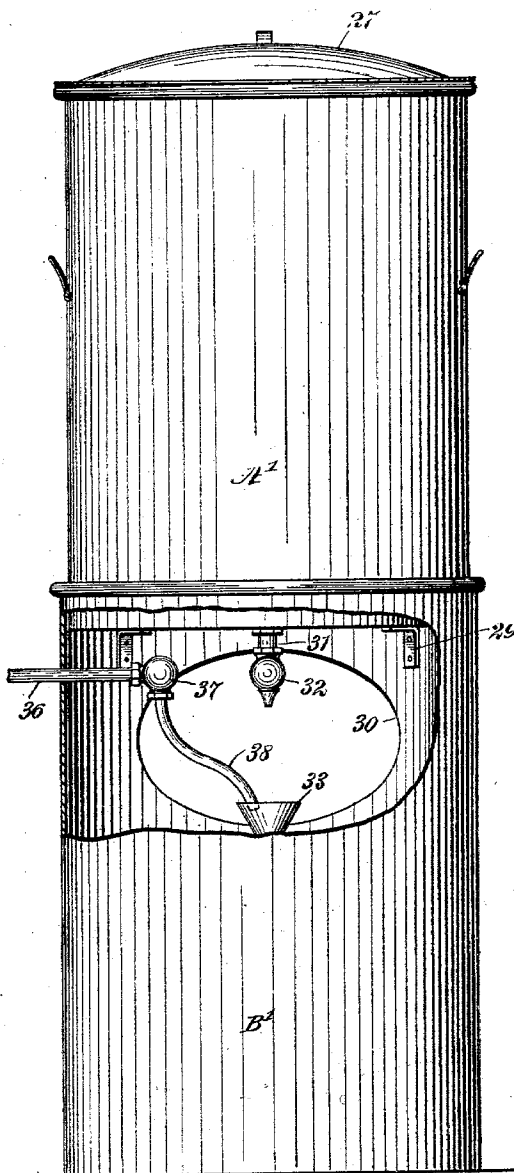
Fig 3



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Fig 4



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UNITED STATES PATENT OFFICE.

SAMUEL HESKETH, OF AUCKLAND, NEW ZEALAND.

DISINFECTANT-DISTRIBUTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 720,918, dated February 17, 1903.

Application filed May 21, 1902. Serial No. 108,361. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL HESKETH, a subject of the King of Great Britain, and a resident of Auckland, New Zealand, have invented a new and Improved Automatic Distributer, of which the following is a full, clear, and exact description.

The invention relates to an automatic sanitary disinfectant-distributing device adapted for the periodical distribution of any disinfecting material to sewers, drains, gutters, closets, sinks, street-gratings, and cesspools or wherever disinfectants can be used to advantage to promote the public health.

The purpose of the invention is to provide a device which may be portable or stationary, simple, durable, and economic and so constructed that the disinfectant material, while the supply lasts, may be constantly fed at desired strength and in desired quantity to a pivoted self-emptying receptacle, which when discharging material from one compartment will present another compartment to be filled from the source of supply, and to provide means whereby the controlling mechanism will be readily accessible and whereby particles calculated to choke the outlet or drip pipe will be prevented from entering the same.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a vertical central section through the improved device adapted as a fixture, the section being taken longitudinally through the distributing-tray. Fig. 2 is a central vertical section taken practically on the line 2-2 of Fig. 1. Fig. 3 is a vertical central section through a portable form of the device, and Fig. 4 is a side elevation of the device illustrated in Fig. 3 and partly broken away and in section.

A represents a receptacle adapted to contain a fluid disinfectant, and B represents a hollow base which supports the receptacle A. This base is provided with an upper annular flange 10, within which the bottom of the receptacle A rests, and in the top of the base

B, within the flange 10, an opening 11 of desired dimensions is made. The receptacle A is provided with a top 12, preferably hinged thereto, and when the top is closed a suitable lock is employed to hold it in its closed position. A box strainer 13 is located within the receptacle A at its bottom, and this strainer is intended to prevent any undissolved particles of disinfecting material from entering the drip-pipe 14, which is passed through the bottom of the receptacle A, centrally within the strainer 13, and extends sufficiently beyond the bottom of the receptacle A to enter the hollow base B.

At the lower end of the drip-pipe 14 a two-way valve 15 is located, and this valve receives a pipe 16, connected with any convenient source of water-supply, so that the disinfectant material may be diluted as desired before it leaves the drip-pipe 14.

A tray C is located below the valve 15 of the drip-pipe 14, and this tray is mounted to rock upon a shaft 17, which is supported at its ends in suitable bearings 18, formed at the inner side portions of the hollow base B, as is shown in Fig. 2. I desire it to be understood that the tray C may be loosely mounted on the shaft 17 or the tray may be fixed to the shaft and the shaft rocked in its bearings. The bottom of the tray C is upwardly inclined in opposite directions from its pivot-point and is divided by a central partition *c* into two compartments 19 and 20, preferably of equal size, and when the tray is in a horizontal position the partition *c* will be at one side of the valve 15 of the drip-pipe 14; but the tray C is preferably so constructed that one of its compartments will be in a lower position out of the range of the discharge-valve 15 or the drip-pipe 14, while the other compartment will occupy an upper inclined position, as is shown in Fig. 1, and will receive the disinfectant material leaving the drip-pipe 14. The tray is so pivoted as to empty first one compartment and then the other through the weight of the material in the receiving-compartment, and said compartment is prevented from moving farther downward than to the discharge position by contact with stops 21, extending out from the inner side walls of the hollow base B. The said base B is provided with an inclined bottom 22, the

inclination of the said bottom being in direction of an outlet-opening 23 in one side of the base, as is shown in Fig. 1, and this outlet-opening 23 is in communication with the drain
 5 or other article intended to receive the disinfectant. At the opposite side of the base B a door 24 is provided, which normally covers an opening 25, and this door 25 is provided with a transparent panel 26 for obvi-
 10 ous purposes. A suitable lock is provided for the said door, as is illustrated also in Fig. 1. When the door is open, ready access is gained to the valve 15 to regulate the supply of disinfectant material to the trap. As soon
 15 as a supply of liquid is permitted to drop into the tilting tray and one compartment fills and is overbalanced by the increased weight, which carries the tray beyond its center of gravity, the weighted compartment will descend and will empty its contents, bringing
 20 the opposite compartment under the source of supply, and this compartment will in turn empty through the weight of material it receives, bringing back the first-named compartment to be refilled, and so on.

In Figs. 3 and 4 I have illustrated a portable form of the device in which all the essential features of the form just described are retained. In this form of the device the receptacle A' is provided with an ordinary cover 27 and
 30 with a strainer 28, corresponding in form and location to the strainer 14 heretofore referred to, and the drip-pipe 31 extends through the bottom of the receptacle A', beyond the inner
 35 and outer faces of the bottom and within the said strainer 28; but the drip-pipe 31 at its lower end is provided with a simple valve 32. The receptacle A', which contains the disinfectant material in fluid form, is made to enter
 40 the upper open portion of a hollow base B', whose bottom is also open, and the receptacle A' may be supported in the base B' by means of brackets 29 or by means of legs, which when employed will rest upon a partition 35, lo-
 45 cated horizontally within the said base B'. The material from the drip-pipe 31 enters a funnel 33, whose shank 34 extends down through an opening in the partition 35, and this partition divides the base B' into a lower
 50 compartment b and an upper compartment b'. In this instance the disinfectant is diluted as desired from the source of water-supply conducted from a pipe 36, which enters the upper compartment b' of the base B', and the
 55 pipe 36 within the base B' has an attached valve 37. From the valve 37 a branch pipe 38 leads downward to the upper or body portion of the funnel 33. Access is gained to either valve 32 or 37 through openings 30,
 60 made in the side wall of the base B' above the partition 35. Immediately below the stem or shank 34 of the funnel 33 a tray C' is mounted to rock upon a suitable shaft 39, having bearing at its ends in the base B', and this
 65 tray C' is of the same construction as has been described with reference to the tray C, being divided into two compartments 40 and

41 by a central transverse partition 42, and the downward movement of the said tray C' is limited by engagement with stops 43, which
 70 are attached to or extend out from the inner side wall of the base B'. The action of the tray C' is identical with the action of the tray C, which has heretofore been particularly described.

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

1. A distributing device consisting of a reservoir for the material to be distributed, a
 80 valve-controlled drip-pipe leading from the reservoir, a self-emptying tray mounted to rock beneath the drip-pipe, stops limiting the downward movement of the tray, and a water-supply pipe arranged to coact with the drip-
 85 pipe, as described.

2. A distributing device consisting of a reservoir for the material to be distributed, a strainer at the bottom of the reservoir, a valve-
 90 controlled drip-pipe leading from the reservoir and having its upper end within the strainer, a self-emptying tray mounted to rock beneath the drip-pipe and having a compartment at each side of its center, means for limiting the downward movement of the
 95 tray, and means for diluting the material passing from the reservoir to the tray, substantially as specified.

3. A distributing device consisting of a reservoir for the material to be distributed, a
 100 drip-pipe extending from the reservoir, a centrally-pivoted self-emptying tray having a central partition and mounted beneath the drip-pipe, the compartments of the tray being adapted to alternately receive material
 105 from the drip-pipe, stops limiting the downward movement of the tray, and a water-supply pipe arranged to coact with the drip-pipe, substantially as described.

4. In a distributing device, the combina-
 110 tion with a reservoir and a hollow base supporting the reservoir, a box strainer located at the bottom of the reservoir, and a valve-controlled drip-pipe extending through the bottom of the reservoir within the said
 115 strainer, of a tray mounted at its central portion to rock in direction of its ends, which tray is located beneath the drip-pipe, the bottom of the tray being inclined from its center upward in opposite directions, a central
 120 partition in the tray, dividing the same into two compartments, said compartments being adapted to alternately receive material from the drip-pipe, stops limiting the downward movement of the tray, and a water-supply
 125 pipe coacting with the drip-pipe, whereby the material received in the tray may be diluted, as desired.

5. A distributing device for disinfectants, comprising a reservoir for the material to be
 130 distributed, a pipe extending from the reservoir, a tray mounted to rock beneath the pipe and receiving the material therefrom, and a water-supply pipe arranged to supply water

to dilute the material while the latter is passing from the reservoir to the tray, as set forth.

6. A distributing device for disinfectants, comprising a reservoir for the material, a hollow base supporting the reservoir, a drip-pipe in the bottom of the reservoir and extending into the hollow base, the said pipe being provided with a valve within the base, a self-emptying tray located in the base below the drip-pipe and mounted to rock, the said tray having a compartment at each side of its center, the compartments being adapted to alter-

nately receive material from the drip-pipe, and stops located in the base for limiting the downward movement of the tray, the said base being provided with an opening in its side wall, for the purpose set forth. 15

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

SAMUEL HESKETH.

Witnesses:

HENRY ROSSALL HESKETH,
ALBERT ERNEST GRINDROD.