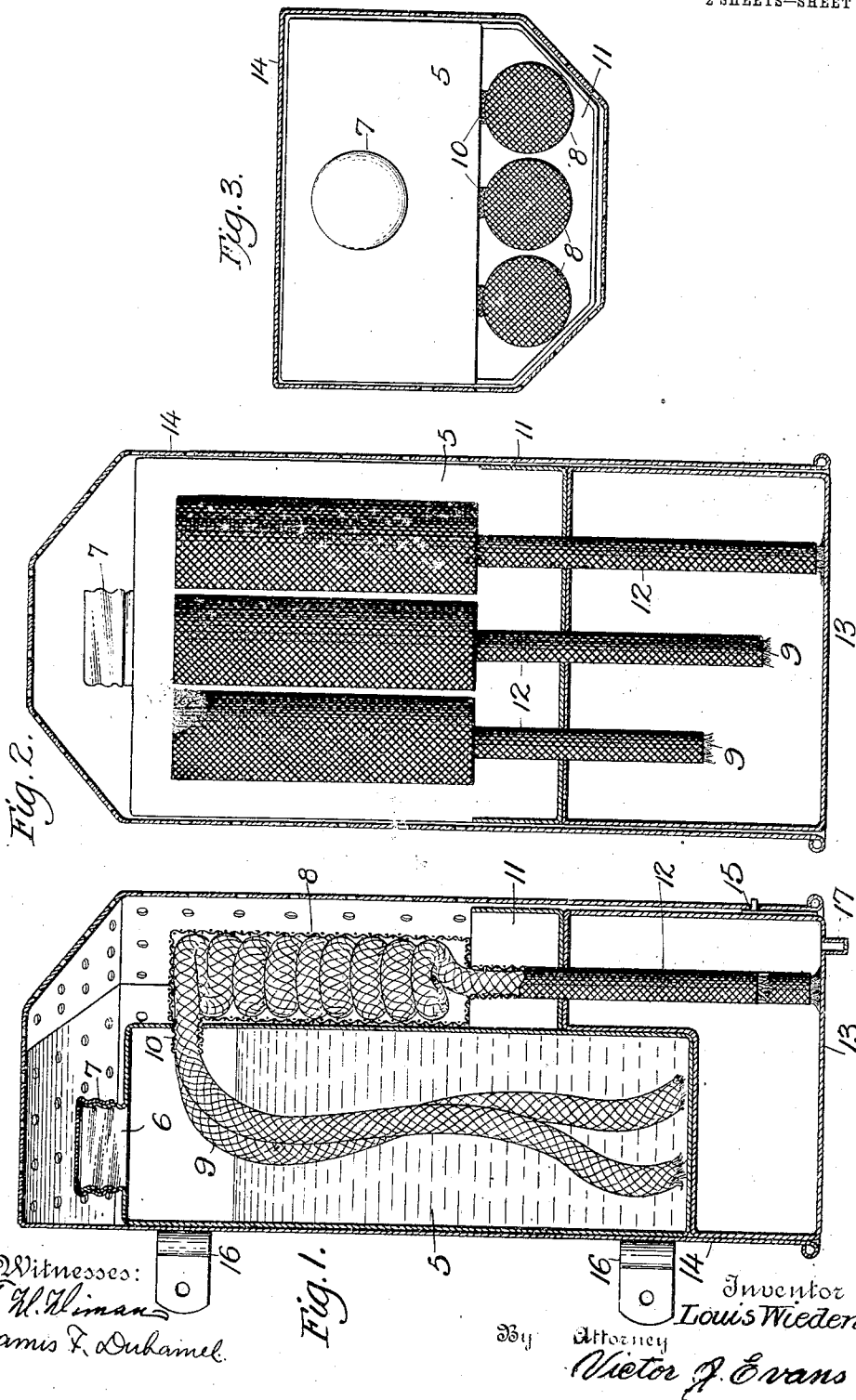


L. WIEDEN.
DISINFECTING APPARATUS.
APPLICATION FILED MAR. 12, 1909.

945,657.

Patented Jan. 4, 1910.
2 SHEETS—SHEET 1.



Witnesses:
F. H. Wiman
James F. Dubamel.

Fig. 1.

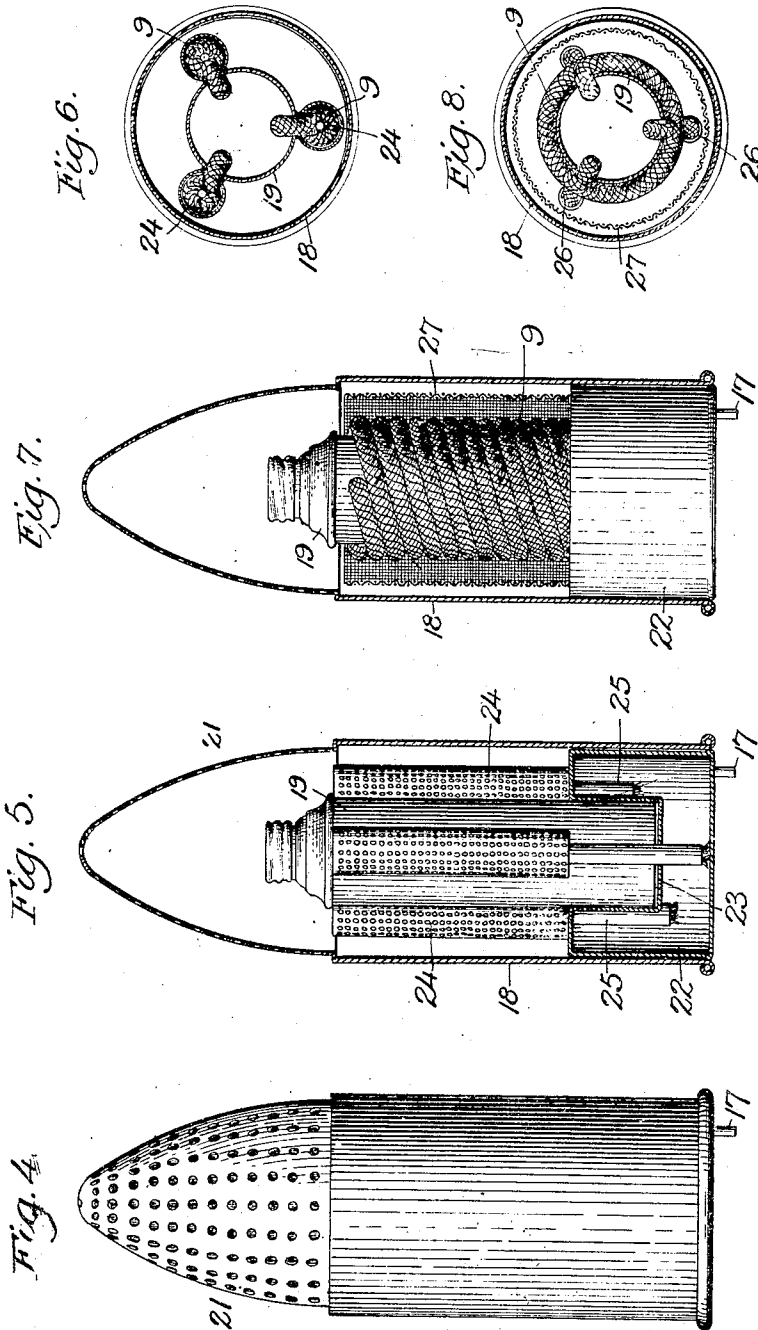
Inventor
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By Attorney
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UNITED STATES PATENT OFFICE.

LOUIS WIEDEN, OF NEW YORK, N. Y.

DISINFECTING APPARATUS.

945,657

Specification of Letters Patent.

Patented Jan. 4, 1910.

Application filed March 12, 1909. Serial No. 482,967.

To all whom it may concern:

Be it known that I, LOUIS WIEDEN, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented new and useful Improvements in Disinfecting Apparatus, of which the following is a specification.

This invention relates to disinfectors for water closets and similar places where it is necessary to not only disinfect the receptacles, drains, etc., but to also purify the atmosphere and overcome the foul odors with certain volatile preparations which are exposed and the object of this invention is to provide a device which will take up and expose the disinfecting and deodorizing substance and allow a certain amount of same to pass off into the receptacles or drains. This is accomplished by a novel arrangement of wicks inclosed in perforated cylinders and tubes as will be more fully described in the following specification, set forth in the claims and illustrated in the drawings where:

Figure 1 is a vertical sectional view of the apparatus. Fig. 2 is a lateral vertical sectional view of same. Fig. 3 is a horizontal sectional view through the casing showing the tank in plan. Fig. 4 is a view showing a modified form of case. Fig. 5 shows a modified arrangement of the wicks. Fig. 6 is a cross section through same. Fig. 7 is another modified form. Fig. 8 is a cross section of same.

The invention consists of a tank 5 to contain the disinfecting solution which is introduced through the inlet 6 having a cap 7. Secured to the front of this tank are the cylinders 8 of perforated sheet metal or wire cloth and inclosing coiled wicks 9 whose upper ends enter the tank 5 through the necessary openings 10 and drop to the bottom of the tank to absorb the disinfecting material therein. The cylinders 8 terminate at a trough 11 at the front of the tank and from their lower ends run the perforated tubes 12 of different length and carrying the outer ends of the wicks 9. These tubes enter the receptacle 13 fitted beneath the tank 5 and trough 11 and supporting same, the whole being inclosed in a perforated case 14 within which the receptacle is secured by means of the latch 15 and having at its rear side the lugs 16 by which it may be attached to the wall or other support.

The lower side of the receptacle 13 has a small vent 17 through which a limited

amount of the liquid escapes from the receptacle 13 and drops at any desired point to disinfect or deodorize such as a wash basin or urinal and the outlet is so small and the air entrance being so obstructed that the liquid is released in drops only.

In order to produce an ornamental and novel effect in the construction of the device the case may be given the shape and appearance of an explosive shell as shown in Figs. 4, 5 and 7 and then the lower end of the case 18 contains the tank 19 and the receptacle 20 while the upper part 21 representing the projectile is perforated for the escape of the disinfecting fumes. The receptacles 22 of both these forms of disinfectors are fitted in the lower end of the case and have recesses 23 in their upper ends and also perforations. The tank 19 of Fig. 5 fits in this recess and carries on its outside the perforated cylinders or tubes 24 communicating with the inside of the tank and having at their lower ends the tubes 25. When the tank is fitted into the recess 23 the tubes pass through the adjacent perforations and conduct the wicks into the receptacle after coming from the tank and passing as a coil through the cylinders 24.

The wicks 9 of the modified form of Figs. 7 and 8 begin within the tank and after leaving it are wound around same and their terminals enter the receptacle through the perforations 26. The tank and wicks are in this instance surrounded by a cylinder 27 of wirecloth. The cylindrical construction shown in the latter views permits of the rotation of the receptacle within the case and the location of the vent 17 to drop the solution at any desired point beneath the disinfector.

In operating the tank is provided with a supply of the liquid which is drawn into the wicks and down their coils which act as a siphon and discharge into the receptacle 13 or 22 until the ends of the tubes 12 or 25 are submerged when the release of the liquid is checked and the flow is practically stopped. The flow of the liquid through the vent 17 and the reduction of the height of liquid in the receptacles again starts the flow of the liquid through the wicks.

The object in making the tubes of different length is to limit the flow of liquid, as when the lower end of the wick is immersed in the liquid, the movement of the same is retarded in the downward direction and

until the lower half of the receptacle 13 is filled all of the wicks are draining the tank, but when the ends of the tubes are in the liquid the gravity drain is less.

5 While traversing the coils of the wick the liquid is evaporated through the perforations of the cylinders 8, 24 and 26 and thrown off into the atmosphere and the trough collects any superabundance of
10 liquid from the cylinders and drains it into the receptacle 13.

The construction of the device is simple and cheap and it is obvious that the parts may be modified and altered without de-
15 parting from the essential features above described.

What I claim as new and desire to secure by Letters Patent is:

20 1. In a disinfecting apparatus, the combination with a tank surrounded by a perforated casing, of wicks of different length, perforated cylinders on the outer front of the tank containing coils of the wicks, a re-

ceptacle for the overflow material, a vent in same, and perforated tubes of different
25 lengths to enter the receptacle and carry the wicks.

2. In a disinfecting apparatus, the combination with a tank, of a perforated cover about same, a receptacle fitted in the lower
30 end of the casing and supporting the tank, a latch securing the receptacle, perforated cylinders on the outside of the tank and communicating with its interior, tubes of
35 different lengths depending from the cylinders and into the receptacle, a trough below the cylinders, and wicks coiled within the cylinders and terminating within the tank and at the ends of the tubes.

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

LOUIS WIEDEN.

Witnesses:

JAMES F. DUCHAMEL,
MAE W. CLINTON.