No. 699,982. Patented May 13, 1902.

J. F. SEABURY & C. LUTZ.

DISINFECTING DEVICE FOR SINK DRAINS.

(Application filed May 31, 1901.)

(No Model.)

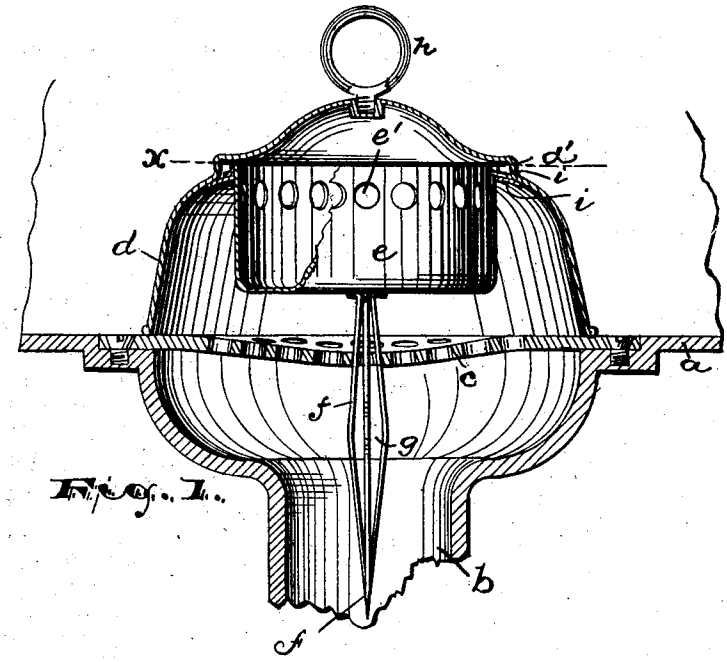


Fig. 1.

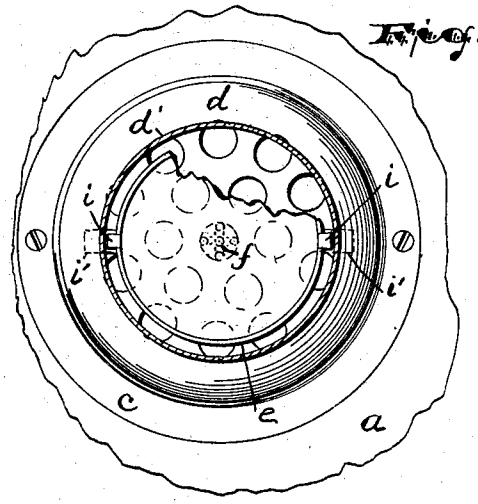


Fig. 2.

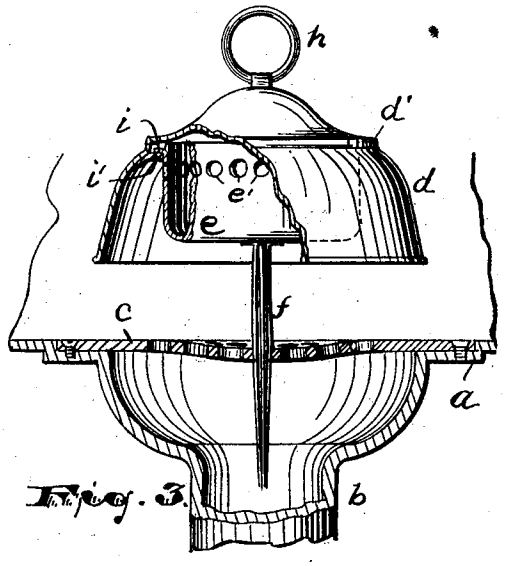


Fig. 3.

WITNESSES:

Henry Krug

Russell M. Everett

INVENTORS:

Jacob F. Seabury,

Charles Lutz,

BY

Drake & Co.

ATTORNEYS.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JACOB F. SEABURY AND CHARLES LUTZ, OF NEWARK, NEW JERSEY.

DISINFECTING DEVICE FOR SINK-DRAINS.

SPECIFICATION forming part of Letters Patent No. 699,982, dated May 13, 1902.

Application filed May 31, 1901. Serial No. 62,521. (No model.)

To all whom it may concern:

Be it known that we, JACOB FRANKLIN SEABURY and CHARLES LUTZ, citizens of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Disinfecting Devices for Sink-Drains; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The objects of this invention are to stop the upward escape of sewer-gas or disagreeable odors from sink-drains, to present to such upwardly-escaping gas a disinfectant which shall deprive the gas of its dangerous or disagreeable qualities, to confine the gas to such disinfectant and prevent its diffusion into the room, to provide such a device that will not interfere with the escape of waste water, and to secure other advantages and results, some of which may be referred to hereinafter in connection with the description of the working parts.

The invention consists in the improved disinfecting device for sink-drains and in the arrangements and combinations of parts of the same, all substantially as will be hereinafter set forth and finally embraced in the clauses of the claim.

Referring to the accompanying drawings, in which like letters of reference indicate corresponding parts in each of the several figures, Figure 1 is a central vertical section of a sink-drain outlet with our improved device applied thereto. Fig. 2 is a horizontal section of the same on line x, Fig. 1; and Fig. 3 is a perspective view, partly broken away, of the device in elevated position to permit the escape of waste water.

In said drawings, a indicates a sink of any usual construction, and b the waste-pipe leading therefrom, a perforated strainer-plate c being laid over the entrance to said waste-pipe b, as is usual.

Our improved device comprises an inverted cup or bell-shaped body portion d, formed out of sheet metal and adapted at its open lower end to cover the perforated portion of the place c and fit at its edges tightly against said plate. At a distance in from the open end of said body portion an annular recess d' is formed in the walls to receive the upper edges of an inner cup-like receptacle e, adapted to be inserted upwardly through the open end of the body portion. Said receptacle e has at the upper edge of its walls outwardly-projecting lugs or flanges i, adapted to catch upon corresponding rests or projections i' at the lower side of the recess. We have shown and prefer to use two of these supports at diametrically opposite sides of the receptacle; but obviously any desired number may be employed. The receptacle e is thus connected to the body portion by a sort of bayonet-joint connection which will permit of a ready separation when desired.

From the bottom of the receptacle e a stem f projects centrally out through the open mouth of the bell-shaped body portion d and is adapted to be thrust down through the center hole or perforation of the sink-plate c. Said stem is preferably formed of four strands of wire laid longitudinally together and soldered at their upper ends to the bottom of the receptacle, while the lower ends are soldered together to form a single point f'. Intermediate of their ends the four strands are bent or bowed apart, as at g, so that the diameter of the stem for a portion of its length is greater than the perforation through which the stem is to be thrust. The resiliency of the wires permits the stem to be pushed through, however, when the expansion of said stem will hold the device in place. Obviously two or more strands of wire may be used or the same result effected by other equivalent means known to the art.

The receptacle e is intended to be filled with a disinfectant of any suitable kind, holes e' being provided in the walls of said receptacle to provide access to the disinfectant. The device is then applied to the sink-outlet, as shown in the drawings, by means of a handle h at the upper part. At night or other times when the sink is not in use the device is pushed down tight against the strainer-plate c, as shown in Fig. 1. At other times when a free outflow of water from the sink is desired the disinfecting device is drawn upward

away from the plate, where it is supported by the spring-stem *f*, as shown in Fig. 3. Even in this position, it will be noted, any escaping gases will naturally be caught within the bell-shaped body portion of the device and subjected to the influence of the disinfectant.

Having thus described the invention, what we claim as new is—

1. A disinfecting device for sink-outlets, comprising an inverted-cup-like body portion adapted to cover the perforated strainer-plate of a sink, an inner receptacle for disinfectant separably connected to said body portion, and a central stem on said receptacle adapted to enter a perforation of the strainer-plate and support the device.

2. The herein-described disinfecting device for sink-outlets, consisting of a body portion in the form of an inverted cup provided with a handle *h*, a receptacle for disinfectant attached to the inner walls of said body portion and being perforated, and a resilient stem *f*, projecting downwardly from said receptacle to enter the sink-drain.

3. In a disinfecting device for sink-outlets, the combination of a bell-shaped body portion adapted to be held with its mouth over the sink-outlet, a perforated receptacle within said body portion and a stem comprising resilient wires spread apart or bowed between their extremities and united at their projecting extremities distant from the body portion and receptacle, substantially as set forth.

4. The combination of the body portion *d*, having the interior annular recess *d'*, a disinfectant-receptacle *e*, adapted to enter at its upper edges said recess, lugs *i*, on the receptacle and coöperating rests *i'*, on the body portion for connecting said parts, and a stem *f*, depending from the said receptacle and formed of a plurality of wires bowed apart intermediate of their ends.

5. The combination with the bell-shaped cover, of a resilient stem projecting down below the bottom edge of said cover, at, or approximately at, the axial center of said cover, said stem comprising a series of bent wires united at their projecting extremities to enter together through a small perforation of a strainer-plate, substantially as set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 28th day of May, 1901.

JACOB F. SEABURY.
CHARLES LUTZ.

Witnesses:
CHARLES H. PELL,
C. B. PITNEY.