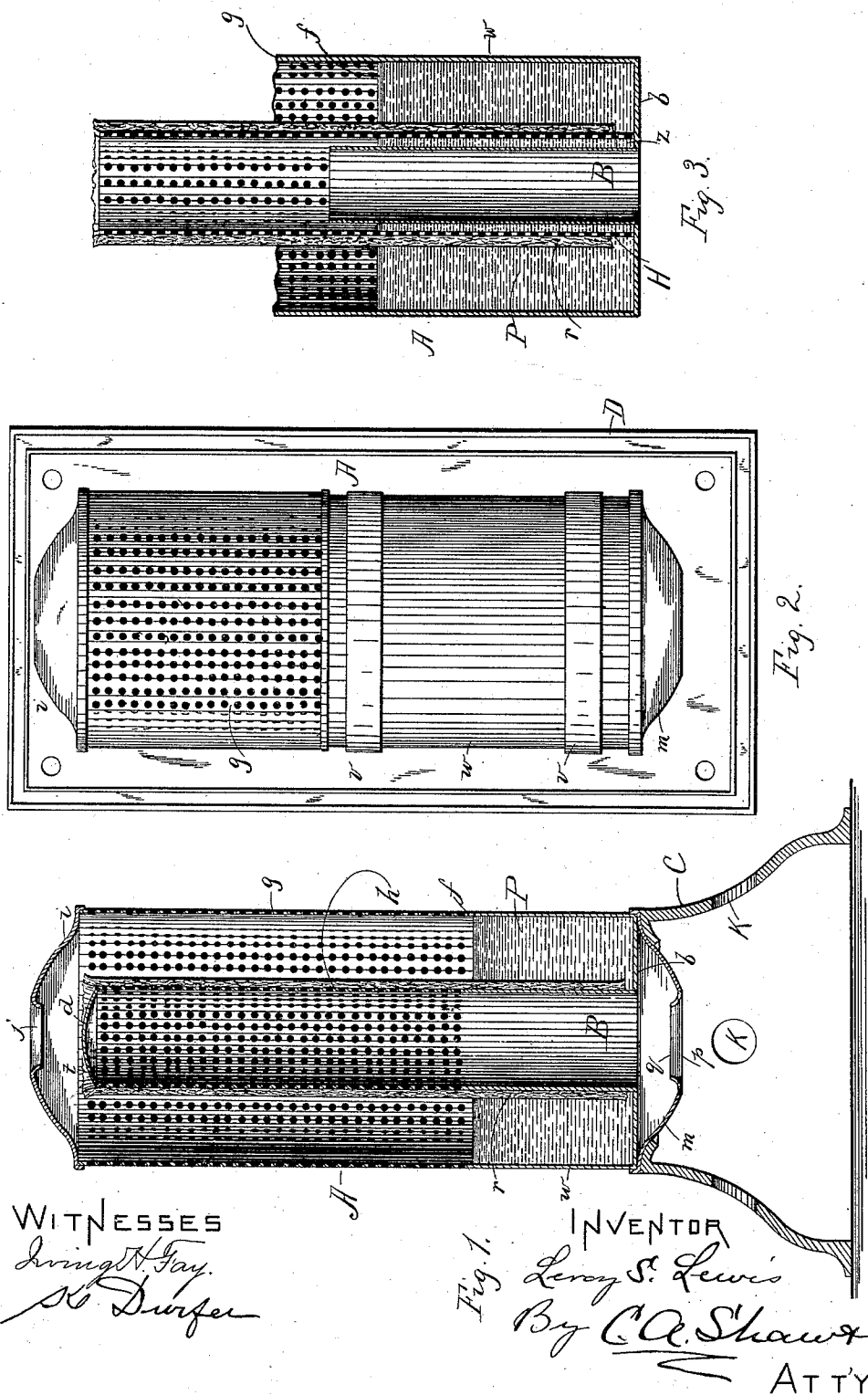


(No Model.)

L. S. LEWIS.
VAPORIZER.

No. 474,640.

Patented May 10, 1892.



WITNESSES

Livingston H. Fay.

St. Durfer

INVENTOR

Leroy S. Lewis

By C. A. Shaw & Co.

ATTY'S

UNITED STATES PATENT OFFICE.

LEROY S. LEWIS, OF EAST HARTFORD, CONNECTICUT, ASSIGNOR TO
THE SANITARY MANUFACTURING COMPANY, OF CATLETTSBURG,
KENTUCKY.

VAPORIZER.

SPECIFICATION forming part of Letters Patent No. 474,640, dated May 10, 1892.

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To all whom it may concern:

Be it known that I, LEROY S. LEWIS, of East Hartford, in the county of Hartford, State of Connecticut, have invented certain new and useful Improvements in Vaporizers for Disinfectants, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical transverse section of my improved vaporizer. Fig. 2 is an elevation showing the vaporizer provided with a supporting-plate, and Fig. 3 a vertical transverse section illustrating a modification of the improvement.

Like letters of reference indicate corresponding parts in the different figures of the drawings.

My invention relates especially to a vessel for containing and vaporizing liquid disinfectants; and it consists in certain novel features hereinafter fully set forth and claimed, the object being to produce a simpler, cheaper, and more effective device of this character than is now in ordinary use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation.

In the drawings, A represents the body of the vaporizer, which consists of a cylindrical metallic vessel provided with a bottom *b*, centrally through which a vertically-arranged draft-tube B opens. The top of the tube is closed by a convex cap *d*. At a point *f* in the walls of the vessel said vessel is foraminous or perforated at *g*, the tube B being perforated in like manner at *h*. A convex cap *i* closes the top of the vessel A, and in the apex of said cap there is an opening *j*, (see Fig. 1,) which registers with the tube-cap *d*.

The vessel A is mounted on a stand C, which may be of any suitable shape, or may be substituted by legs, the form shown in Fig. 1 being approximately cone-shaped and provided with air-openings *k*. A drip-cup *m* is secured to the bottom of the vessel A and has a cen-

tral opening *p*, which registers with the mouth of the draft-tube B, the edges of said opening being curved or turned inward, forming an annular lip *q*. Said opening is of less diameter than the mouth of the tube B, and its lip *q* forms a trough in the cap for retaining the drippings from said tube. A wick *r* encircles the tube B and is extended slightly above the tube-cap *d* at *t*. In the form shown in Fig. 2 a less portion of the body is perforated, and said body is secured by straps *v* to a supporting-plate D, which is attachable by any suitable means to a wall or other desired position.

In the modification shown in Fig. 3 the draft-tube B has solid walls, the body of the vessel being of the construction described.

A foraminous tube H is secured to the bottom *b* of the vessel around the draft-tube B, said draft terminating at *f* with the solid portion of said body. The wick *r* encircles the perforated tube H.

In the use of my improvement the liquid-disinfecting material P is poured into the mouth *j* of the body-cap *i*, and falling on the tube-cap *d* is deflected thereby and follows the wick and draft-tube into the bottom or solid portion *w* of the vessel A, as shown in Fig. 1. The wick absorbs the liquid, which is drawn by capillary attraction through its entire length. Air passing through the perforated portions of the vessel A and the tube B causes rapid evaporation of the disinfectant from the wick, which thus evaporized passes through the perforations of the body A and is distributed through the room. By means of the draft-tube B air is admitted to the inner side of the wick, greatly facilitating such evaporation. Any drippings through the perforations *h* of the draft-tube, which are found in practice to be very small, falls from said tube into the cup *m* and is retained by its lip *q*.

In the form shown in Fig. 3 the wick does not extend to the vessel-bottom *b*, permitting the liquid P to pass through the lower perforations of the tube H into the space *z* between it and the solid draft-tube B, said liquid reaching the same level on either side of the tube and wick, as shown, and greatly increasing the efficiency of the wick in absorbing the liquid.

Having thus explained my invention, what I claim is—

1. In a vaporizer for disinfectants, a body, in combination with a draft-tube opening through the bottom thereof, the upper end of said tube being closed, a cap on said body provided with a filling-opening registering with the top of said tube, and a wick encircling said tube, the upper portion of said tube and body being foraminous, substantially as and for the purpose set forth.
2. In a vaporizer for disinfectants, a stand or support, in combination with a cylindrical vessel having the upper portion of its walls perforated, a draft-tube disposed within said vessel and opening through the bottom thereof, said tube being perforated in like manner with said body, a cap closing the top of said

tube, a wick encircling said tube, and a cap closing the top of said body, said body-cap being provided with a filling-opening registering with said tube-cap, substantially as specified.

3. In a vaporizer for disinfectants, the body A, provided with the perforations *g* and cap *z*, in combination with the tube B, opening through the bottom of said body and provided with the perforations *h* and solid cap *d*, the wick *r*, disposed on said tube, and the cup *m*, provided with the opening *p*, registering with the mouth of said tube, and having the lip *q*, substantially as described.

LEROY S. LEWIS.

Witnesses:

O. M. SHAW,
K. DURFEE.