

(No Model.)

A. R. MIRANDA.
VAPORIZER.

No. 577,442.

Patented Feb. 23, 1897.

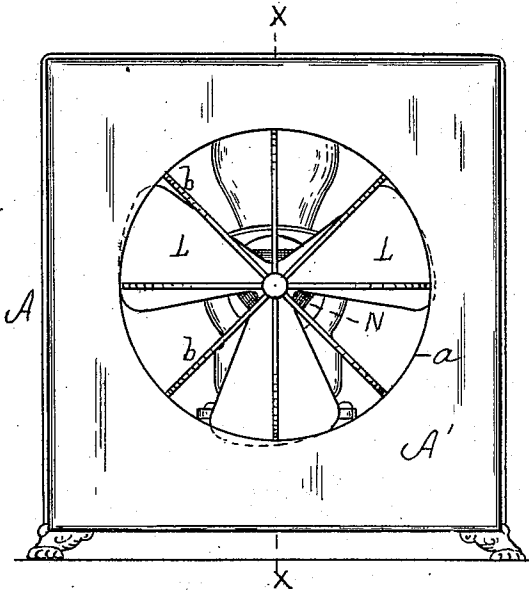


FIG. 1.

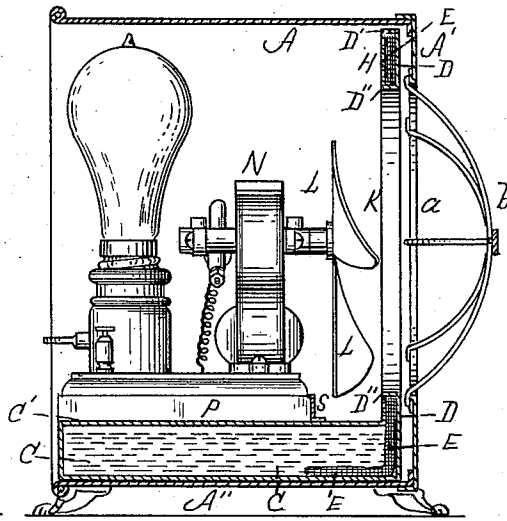


FIG. 2.

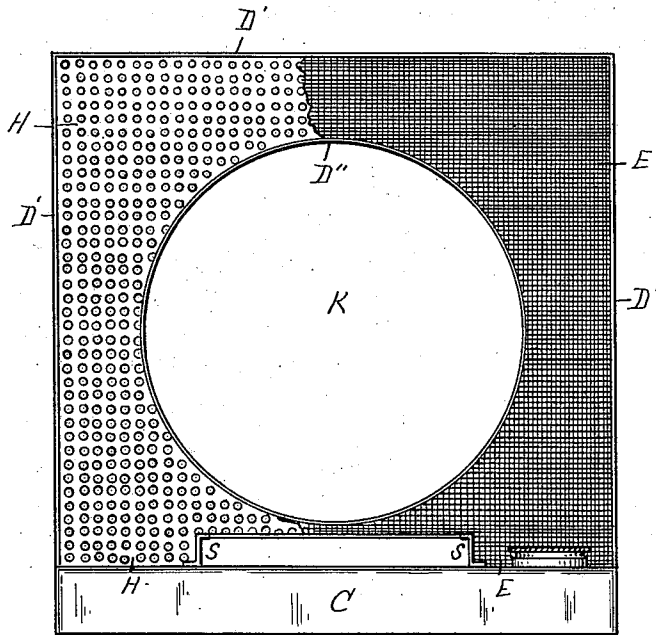


FIG. 3.

WITNESSES

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VAPORIZER.

SPECIFICATION forming part of Letters Patent No. 577,442, dated February 23, 1897.

Application filed July 1, 1896. Serial No. 597,715. (No model.)

To all whom it may concern:

Be it known that I, ABRAHAM R. MIRANDA, a citizen of the United States, residing in Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Vaporizers, of which the following is a specification.

This invention relates to that class of vaporizers in which the vapors emanating from liquid disinfectants or perfumed fluids are distributed by mechanical means.

In carrying out the invention or improvement I employ a reservoir from which a thin upright wall extends, such wall being provided with narrow rearward flanges, so that it would if in a horizontal position be of the shape of a very shallow tray. This wall or tray is backed with wicking or other absorbent material which extends therefrom down into the reservoir and absorbs the liquid therein by capillary attraction. A perforated plate holds this wicking in position. This upright wall is provided with a central opening behind which is set upon the reservoir an electrically-rotated fan. The vapors pass from the wicking through the perforated plate and are driven by the fan through the opening in the upright wall or tray into the room.

A fan operating to drive vapors through an opening into a room is not, broadly considered, new in this invention; but the improved construction below described is believed to be novel.

The nature of the invention in detail is fully described below and illustrated in the accompanying drawings, in which—

Figure 1 is a front view of my apparatus inclosed in a suitable case. Fig. 2 is a section of the case and apparatus, taken on line *x*, Fig. 1, the fan and motor being shown in elevation. Fig. 3 is a rear elevation of the apparatus removed from the case, the fan and motor being removed and a portion of the perforated plate being represented as broken out.

Similar letters of reference indicate corresponding parts.

A represents a suitable case whose front wall *A'* thereof is provided with an opening *a*,

provided with a wire guard *b*, none of which is new in this invention.

C is a reservoir of size and shape to rest upon the floor *A''* of the case. The front wall of this reservoir is extended up into a vertical plate *D*, of shape to fit behind the wall *A'* of the case, said plate being provided with flanges *D'* on its three free sides, so that it resembles a shallow tray set vertically. The upper wall *C'* of the reservoir is cut away next the plate *D*, so as to allow a wicking *E* to extend from the reservoir up behind the rear surface of the plate. Behind the wicking a perforated plate *H* is secured in place, said plate *D*, flanges *D'*, and perforated plate *H* constituting, practically, a very thin upright wick-receptacle. A circular opening *K* is formed in the plate *D*, wick *E*, and perforated plate *H*, the edge being produced by the rearwardly-bent flange *D''*, extending from the plate *D* and joining the perforated plate *H*.

A rotary fan *L* is actuated by a suitable electric motor *N*, mounted on a base *P*, which is removably secured to the reservoir *C* by a suitable slideway *S*.

In practical operation the vapors pass from the entire rear surface of the wicking through the perforations in the plate *H* and are caught by the fan *L* and drawn through the opening *K* into the room.

By means of the construction of the thin or shallow tray or receptacle *D D'*, the broad flat wick *E*, and the perforated plate *H* a very large evaporating-surface is provided in such a location that the fan can reach all the vapor and drive it through the opening into the room.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

In a vaporizer of the character described, the reservoir or tank *C*, the vertical wall or plate extending up from the front portion of the reservoir and provided with the narrow flanges *D'*; said reservoir being provided with an opening next and to the rear of said plate; flat wicking or absorbent material *H* extending from the reservoir up over the rear surface

of said plate; a perforated plate H covering the rear surface of the wicking and secured in such position; and a suitable fan and motor for operating the same placed at the rear
5 of the perforated plate; the wicking and the structure produced by the plate D, flange D' and perforated plate H being provided with a central opening, whereby the vapor from

the wicking passes through the perforated plate and is then caught and directed through the opening by the fan, substantially as described.

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Witnesses:

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