(No Model.) 3 Sheets—Sheet 1.

A. R. MIRANDA.

VAPORIZER.

No. 587,371. Patented Aug. 3, 1897.

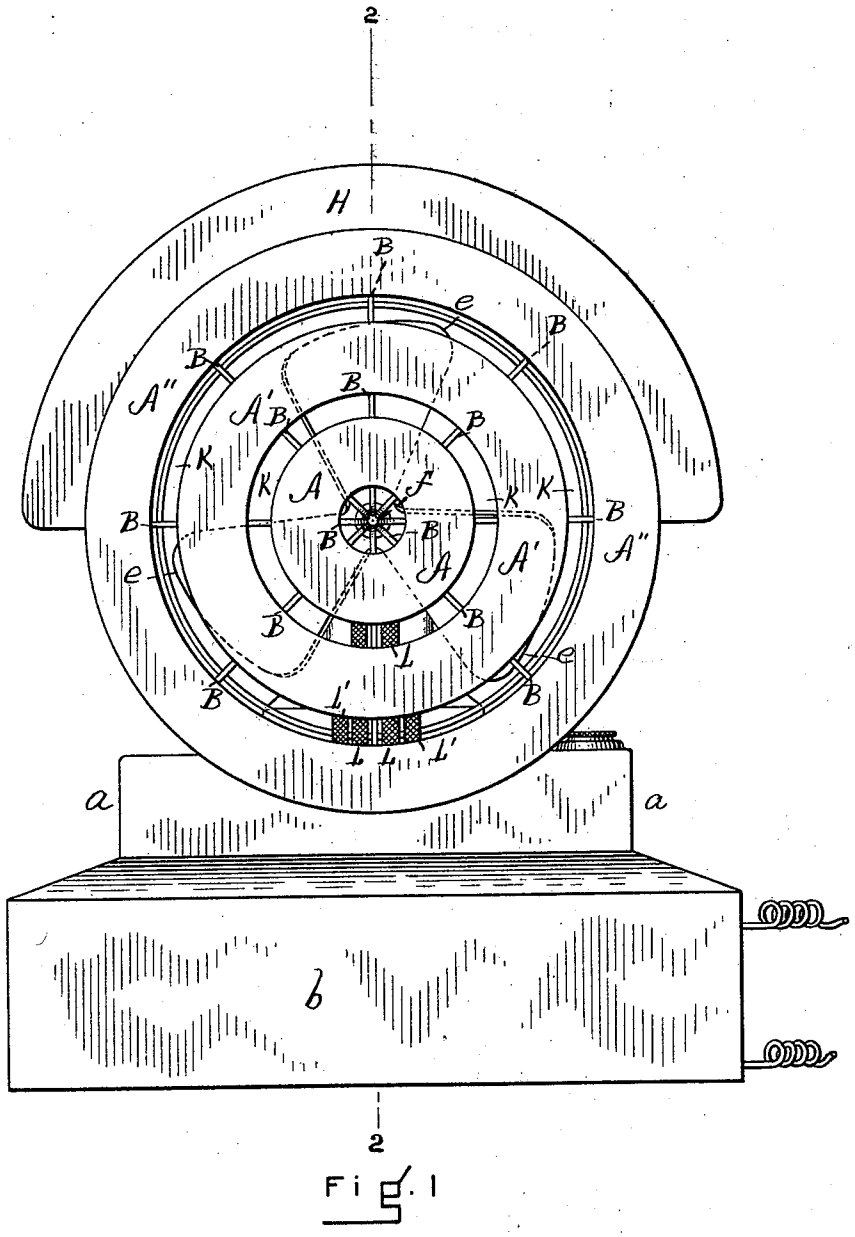

Fig. 1

WITNESSES
A. A. Bonney.
C. G. Gradydon.

INVENTOR
Abraham R. Miranda
By his Atty.
Henry W. Williams

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

(No Model.) 3 Sheets—Sheet 2.

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VAPORIZER.

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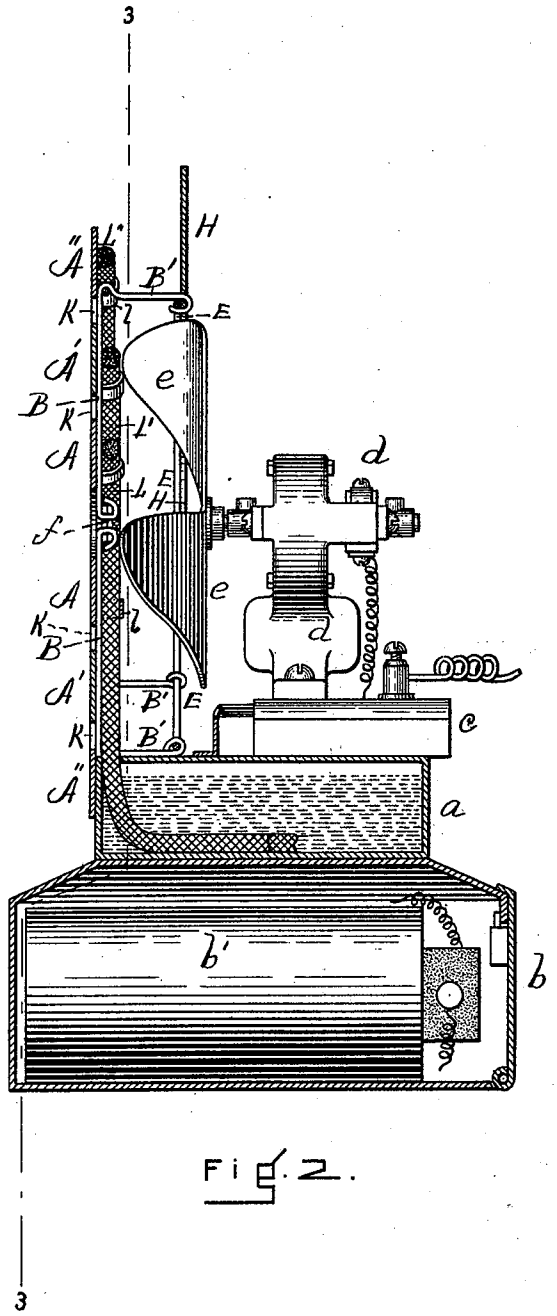

Fig. 2.

WITNESSES:
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INVENTOR:
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A. R. MIRANDA.

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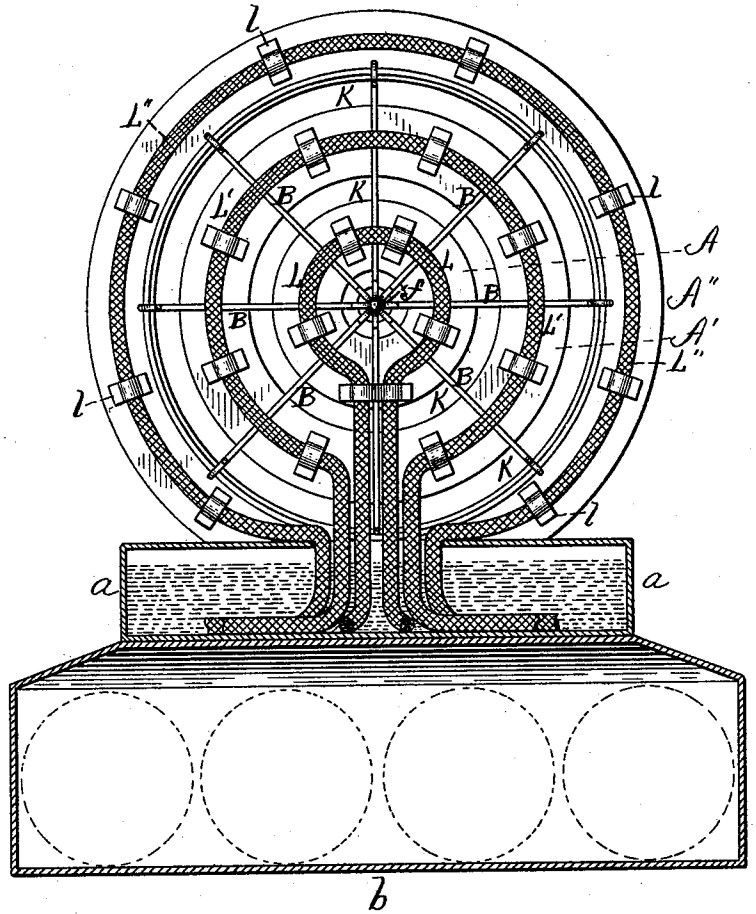

Fig. 3.

WITNESSES
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UNITED STATES PATENT OFFICE.

ABRAHAM R. MIRANDA, OF BOSTON, MASSACHUSETTS.

VAPORIZER.

SPECIFICATION forming part of Letters Patent No. 587,371, dated August 3, 1897.

Application filed March 23, 1897. Serial No. 628,834. (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 my invention I employ a reservoir from which an upright wall extends, said wall consisting of a series of concentric plates connected by a framework, thus providing concentric openings. This wall has secured to its back concentrically-arranged wicks located between the concentric openings, such wicking extending down into the reservoir and absorbing the liquid therein by capillary attraction. A fan is rotated behind the wicking, whereby the vapors are driven transversely or radially from the sides of the wicks through the concentric openings. An electric motor is provided for imparting rotary movement to the fan, although any motor of suitable size and power might be employed. The construction of the device provides considerable space for advertising purposes.

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

Figure 1 is a front elevation of my improved apparatus. Fig. 2 is a vertical section taken on line 2, Fig. 1. Fig. 3 is a substantially vertical section taken on line 3, Fig. 2, looking toward the front.

Similar letters of reference indicate corresponding parts.

a represents a reservoir mounted on a box *b*, containing batteries *b'* and supporting a base *c*, upon which an electric motor *d* rests, and *e* is a fan driven by the motor, an electric motor being probably the best style of motor for the purpose.

From the front edge or portion of the reservoir *a* a wall extends upward vertically, such wall consisting of the ring-shaped concentrically-arranged plates A A' A''. These plates, which may be more or less in number, are supported by radial wires B, connected together at *f* and secured to the rear sides of said plates A A' A''. The outer ends of these wires are bent rearward into the horizontal portions B' and are secured at their rear ends to a ring E, which is preferably of wire and rests on and is secured to the reservoir *a*. This ring supports a curved plate H, which is vertically situated at the rear of the plate A'' and extends above it, so that its front surface may be adapted to receive and display advertisements. The plates A A' A'' may be also utilized for the same purpose.

The arrangement of the plates produces concentric openings K, and between these openings the wicks L L' L'' are secured by clamps or loops *l* to the rear sides of the plates, said wicks being arranged concentrically and extending down into the reservoir *a*. As the fan *e* rotates it blows the vapor from the wicks through the concentric openings K into the room and in the direction toward which the device faces. Owing to the separated and concentric arrangement of the wicks and the relative positions of the openings K, the sides of the wicks are well exposed to the draft made by the fans, and the vapor from each wick passes from its sides directly through the nearest of the concentric openings L L' L'', and its full effect is utilized.

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

1. In a vaporizer of the character described, a reservoir or tank; a vertical wall extending up from the front portion thereof, and consisting of ring-shaped plates arranged concentrically and thus being separated by concentric openings; wicking extending up from the reservoir and arranged substantially concentrically on and secured to the rear side of said rings or plates; a fan placed at the rear of said plates and wicking; and a motor suitably mounted to operate said fan, substantially as described.

2. In a vaporizer of the character described, a reservoir or tank; the vertical wall extending up from said reservoir and consisting of the concentric ring-shaped plates A A' A''; the radial wires or braces B secured to and connecting said plates; the semicircular plate H arranged at the rear of said concentric

plates and supported by a frame resting on the reservoir; connecting-wires extending from the concentric plates to the support of the semicircular plate H; wicking extending up from the reservoir and arranged concentrically on the rear side of said concentric plates; and a fan and motor operating the same placed at the rear of said plates and wicking, substantially as set forth.

ABRAHAM R. MIRANDA.

Witnesses:
HENRY W. WILLIAMS,
A. N. BONNEY.