

(No Model.)

A. H. CARPENTER.
VAPORIZER.

No. 487,247.

Patented Dec. 6, 1892.

Fig 1.

Fig 2.

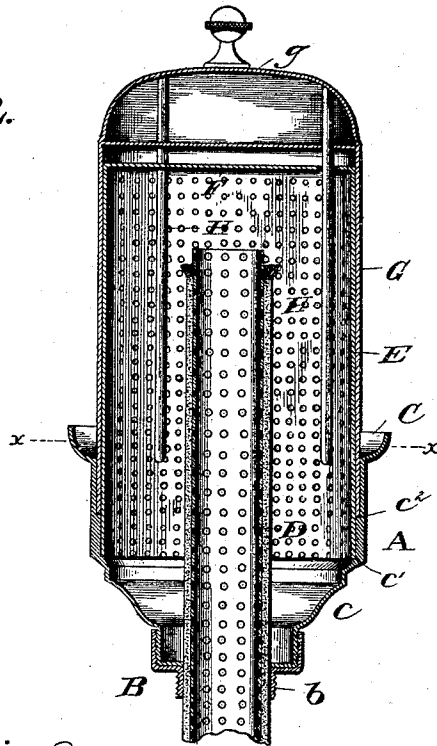


Fig 3.

Fig 4.

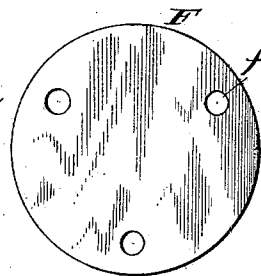
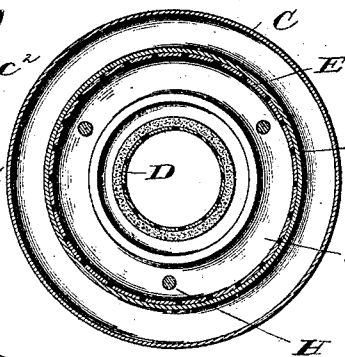
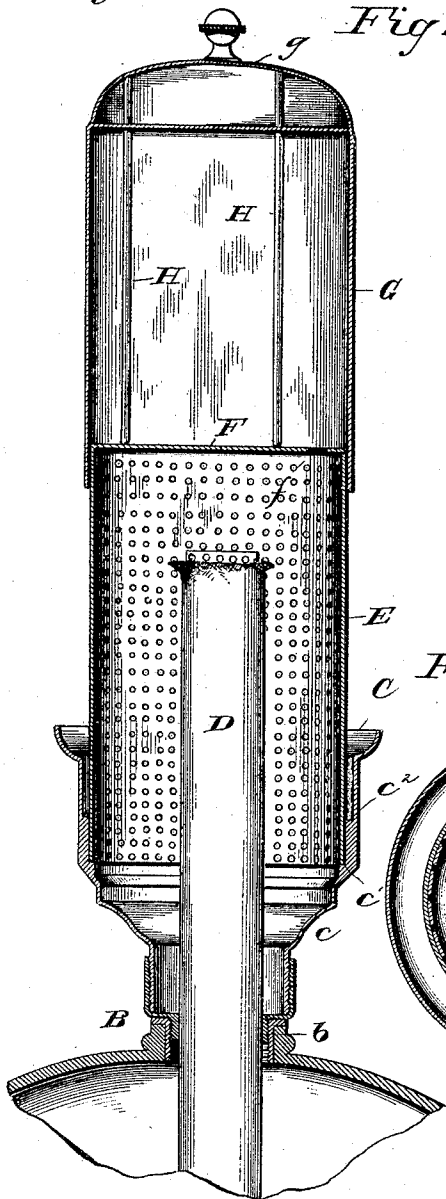
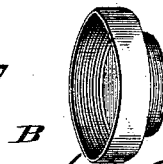


Fig 5.



Witnesses

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UNITED STATES PATENT OFFICE.

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VAPORIZER.

SPECIFICATION forming part of Letters Patent No. 487,247, dated December 6, 1892.

Application filed December 28, 1891. Serial No. 416,338. (No model.)

To all whom it may concern:

Be it known that I, ALFONSO H. CARPENTER, a citizen of the United States, residing at Springfield, in the county of Windsor and State of Vermont, have invented certain new and useful Improvements in Disinfectant-Exhalers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a device for effecting the exhalation or diffusion of disinfectants; and it has for its object to provide a device of this character which is adapted for attachment to an ordinary lamp-bowl, which can be rendered inoperative at will, and in which all the various kinds of liquid disinfectants and of varying strength can be employed.

A further object of the invention is to provide a simple and improved device for the purpose mentioned which will possess advantages in point of inexpensiveness, durability, cleanliness, and general efficiency.

In the drawings, Figure 1 is a vertical longitudinal sectional view of a device embodying my invention and illustrating the same in use. Fig. 2 is a similar view showing the device closed. Fig. 3 is a transverse sectional view. Fig. 4 is a top or plan view of the interior cylinder. Fig. 5 is a detail perspective view of the detachable collar.

Corresponding parts in the figures are denoted by the same letters of reference.

Referring to the drawings, A designates a cup, preferably constructed of metal and of cylindrical form. Centrally at the base of the cup A is provided a contracted tubular flange B, screw-threaded upon its exterior, as at b, and preferably of a size adapted to fit within the standard-size neck of lamp-bowls. From the base of the cup the latter is extended vertically upward, as at c, said extension being provided with an interior annular shoulder c' at its lower end, and is further offset near its upper end to form a second interior annular shoulder c'', the purpose of which will appear farther on. From the upper free edge of the vertical extension projects a flaring mouth C. A foraminated wick-tube D is provided, which

projects through the tubular flange B and is of such a diameter that when a wick is placed upon the wick-tube the whole fits closely within said flange.

E designates a foraminated cylinder of such a diameter as to fit snugly within the vertical walls of the cup A, and is adapted to be supported in such position by the shoulder c'. The cylinder E is provided with a top plate F, having radially-arranged apertures f, preferably three in number and in a vertical plane without the wick-tube.

For inclosing the parts and for the exclusion of dust a cylindrical imperforate cover G is provided. The cover G is constructed, preferably, of metal, with a top g of any suitable or ornamental shape. The interior diameter of the cover G is slightly greater than the exterior diameter of the cylinder E and when in closed position surrounds the latter and rests at its lower edge upon the shoulder c''. In practice the cover is designed to be elevated and retained in such elevated position without removal. To effect this end, vertical rods H are secured to the top g of the cover and at the interior thereof and passing through a plate g', secured within the cover, said rods normally coinciding with the apertures f in the plate F. Thus to support the cover in elevated position the same is raised until the rods H clear the plate F, when the cover is partially turned to permit the rods to rest upon the top of said plate. The rods terminate a short distance above the lower end of the cover, whereby when the latter is in elevated position its lower end still surrounds the upper end of the cylinder E, thus preventing accidental displacement of the cover.

The operation and advantages of my invention will be readily understood by those skilled in the art to which it appertains.

My invention is especially designed for purpose of convenience to be used in connection with a common lamp-bowl; but it will of course be obvious that any other suitable or preferred construction of receptacle may be employed.

In operation the disinfectant is placed in the bowl or receptacle, the wick-tube supplied with a wick, and the device then attached. When the cover is in elevated position, the

disinfectant is diffused or exhaled into the atmosphere, and when dissemination is no longer desired the cover is lowered, thus preventing escape of the disinfectant and excluding dust from the interior parts. Any condensation of the disinfectant upon the walls of the various parts is conveyed to the cup A and thence back to the wick through the wick-tube.

To adapt the device for application to lamp-bowls having necks of smaller size than what is known as "standard size," a collar H is provided, which is internally screw-threaded to fit the threaded flange B and is also provided with a downwardly-projecting annular flange h, having external threads, the latter flange in this event serving as the medium for attaching the device to a lamp-bowl.

I claim as my invention—

1. As an improved article of manufacture, a disinfectant-exhaler comprising a base formed in its mouth with two annular shoulders, the lower one being of less diameter than the upper, a foraminated cylinder adapted to fit within the mouth of the base and be supported by said lower annular shoulder, an imperforate cover normally disposed over the foraminated cylinder and supported by said upper annular shoulder, and means for retaining the cover in elevated position, substantially as and for the purpose set forth.

2. As an improved article of manufacture, a disinfectant-exhaler consisting of a cup provided with an annular attaching-flange depending from the base thereof and with an upwardly-flaring mouth, a foraminated wick-

tube passing through said flange and adapted for carrying a wick upon its exterior, a removable foraminated cylinder surrounding the exterior portion of the wick-tube and closed at its upper end by a plate, said plate having radially-arranged apertures, and an imperforate cover inclosing said cylinder and provided with interior depending rods normally coinciding with the aperture, said rods terminating above the lower end of the cover, substantially as set forth.

3. In a disinfectant-exhaler, the combination, with a receptacle provided with an interiorly-threaded neck or mouth, of a cup provided with an exteriorly-threaded attaching-flange depending therefrom and with an upwardly-flaring mouth, a foraminated wick-tube passing through said flange and adapted for carrying a wick upon its exterior, a foraminated cylinder fitting within said cup and inclosing the exterior portion of the wick-tube, said cylinder being closed at its upper end by a plate having radially-arranged apertures provided in a vertical plane without the wick-tube, and an imperforate cover inclosing said cylinder and provided with interior depending rods normally coinciding with the apertures, substantially as and for the purpose set forth.

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

ALFONSO H. CARPENTER.

Witnesses:

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