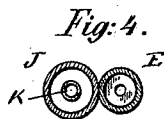
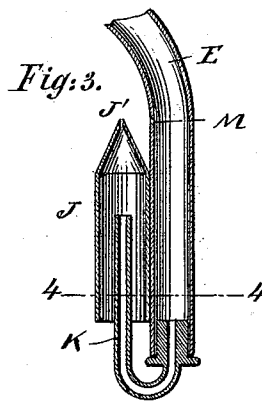
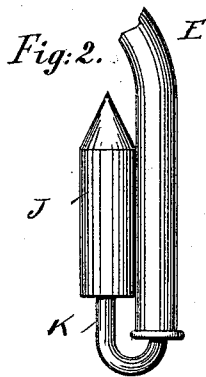
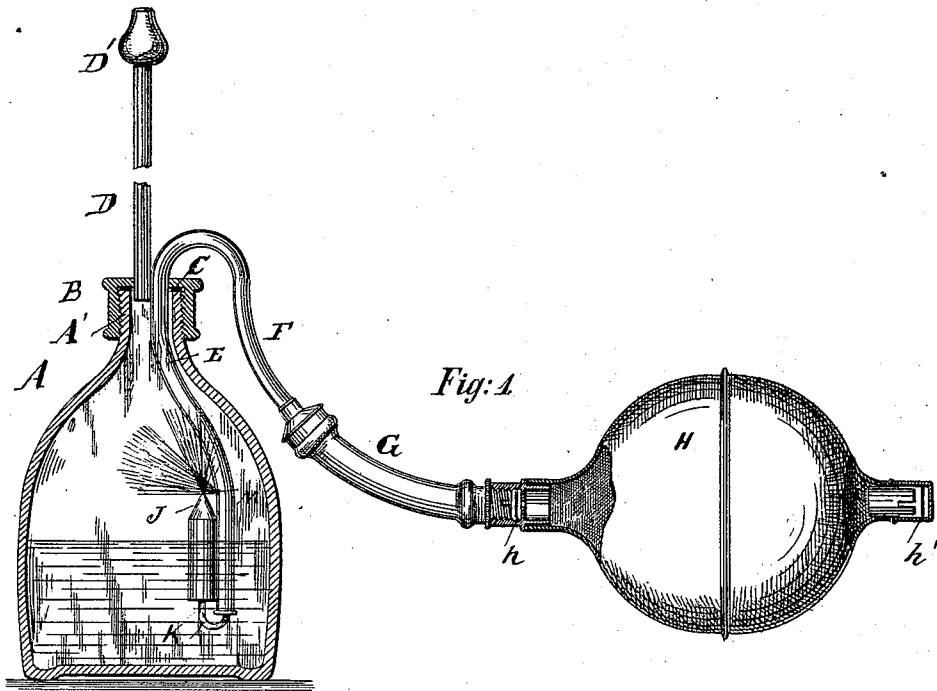


(No Model.)

C. L. MOREHOUSE.
ATOMIZER.

No. 485,396.

Patented Nov. 1, 1892.



WITNESSES:

Charles Schroeder.
Charles Bles

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UNITED STATES PATENT OFFICE.

CHARLES L. MOREHOUSE, OF BROOKLYN, ASSIGNOR TO McKESSON &
ROBBINS, OF NEW YORK, N. Y.

ATOMIZER.

SPECIFICATION forming part of Letters Patent No. 485,396, dated November 1, 1892.

Application filed February 12, 1892. Serial No. 421,349. (No model.)

To all whom it may concern:

Be it known that I, CHARLES L. MOREHOUSE, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Vaporizers, of which the following is a specification.

The object of my invention is to provide a new and improved vaporizer for vaporizing oils or medical preparations and spraying them into the nostrils, throat, and lungs.

The invention consists in the combination, with an air-forcing tube having a side aperture, of a vessel at the side of the tube and an ejector-tube projecting from the air-forcing tube into said vessel, which vessel has a top aperture adjacent to the side aperture of the air-forcing tube.

The invention also consists in the construction and combination of parts and details, which will be fully described hereinafter, and finally pointed out in the claim.

In the accompanying drawings, Figure 1 is a side view of my improved vaporizer, parts being in section and others broken out. Fig. 2 is a detail side view of the vaporizing mechanism. Fig. 3 is a vertical longitudinal sectional view of the same. Fig. 4 is a horizontal sectional view on the line 44 of Fig. 3.

Similar letters of reference indicate corresponding parts.

The bottle A is provided with the screw-neck A', on which the screw-cap B is screwed, said cap having a washer or packing-ring C placed upon the top edge of the neck A'. From the cap B a tube D projects upward and is preferably provided with a nozzle D'. The lower end of the tube D opens into the bottle, as shown. A tube E projects downward from the cap B and has its upper end connected with a curved tube F, projecting from the top of the cap, and the said tube F is connected by a flexible tube G with a rubber air-compressing bulb H, having the usual valves *h h'*.

At or near the lower end of the tube E a cylindrical vessel or piece J is fastened to the side of the tube E and is provided with a conical top having a pin-aperture J' at its apex. The lower end of the cylindrical piece J is open. An approximately-U-shaped ejector-tube K has its shorter leg secured in the lower end of the tube E and its longer leg projects upward in the cylindrical piece J. The tube E has a side aperture M adjacent to the pin-hole J' in the top of the piece J.

The operation is as follows: When the air is compressed by compressing the bulb H, it passes through the tube E and is emitted as an air-jet through the aperture M across the top of the piece J and also passes through the ejector-tube K, where it serves to raise the liquid in the piece J and to throw a jet of the liquid through the pin-hole in the top of the piece J. This jet is struck by the air-jet issuing from the aperture M, whereby the liquid is subdivided into the most-minute particles—that is, completely vaporized—and the vapor thus formed is forced out of the bottle A through the tube D by the pressure created within the bottle by operating the vaporizer.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

In a vaporizer, the combination, with an air-forcing tube having a side aperture, of an ejector-tube connected with said air-forcing tube and a vessel into which said ejector-tube projects, which vessel has a pin-aperture in its top end adjacent to the side aperture of the air-forcing tube, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

CHARLES L. MOREHOUSE.

Witnesses:

OSCAR F. GUNZ,
CHARLES SCHROEDER.