

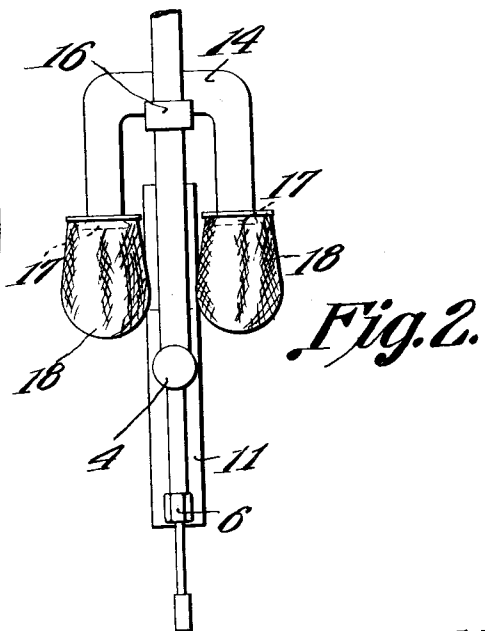
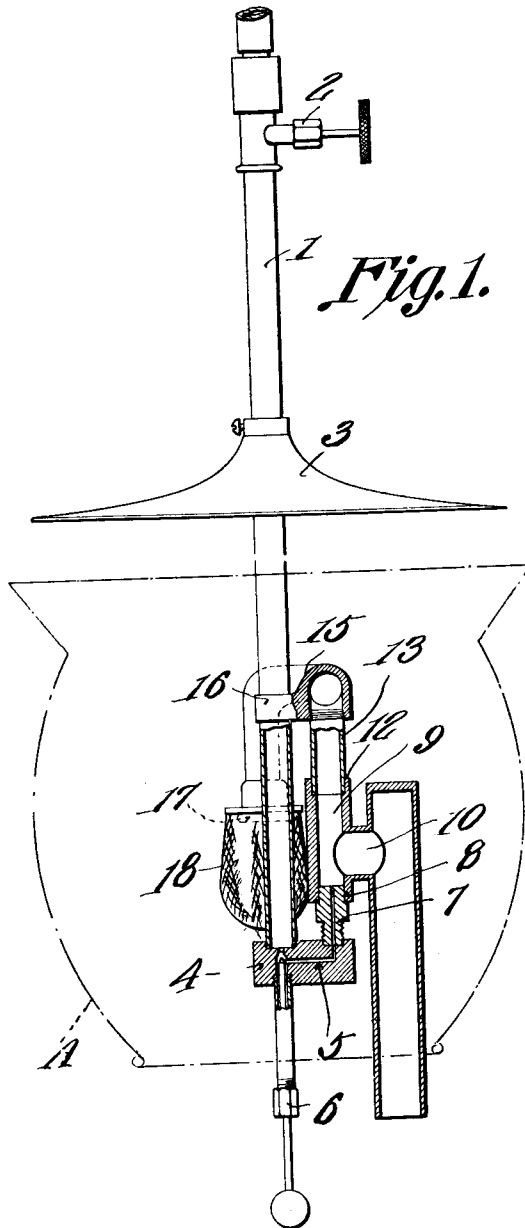
H. C. ALBRECHT & J. P. MCGEE.

VAPOR LAMP.

APPLICATION FILED FEB. 8, 1911.

1,035,673.

Patented Aug. 13, 1912.



Witnesses

J. H. Goulet
L. H. Wilson

Henry C. Albrecht
James P. McGee
Inventors

by *C. A. Snow & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

HENRY C. ALBRECHT, OF TERRE HAUTE, INDIANA, AND JAMES P. MCGEE, OF PARIS, ILLINOIS.

VAPOR-LAMP.

1,035,673.

Specification of Letters Patent.

Patented Aug. 13, 1912.

Application filed February 8, 1911. Serial No. 607,274.

To all whom it may concern:

Be it known that we, HENRY C. ALBRECHT and JAMES P. MCGEE, citizens of the United States, residing, respectively, at Terre Haute and Paris, in the counties of Vigo and Edgar, States of Indiana and Illinois, have invented a new and useful Vapor-Lamp, of which the following is a specification.

This invention relates to vapor lamps of that type utilizing gasoline for fuel, the principal object of the invention being to provide means whereby air is supplied to the lamp from below or outside of the globe, when one is used, so that the flow of air will in no wise be retarded.

A further object is to provide a lamp having its parts so arranged and constructed as to support the burners and mantles close to the lower end of the generating tube, thus permitting this tube to keep hot even though the light should be turned down, and enabling the light to be turned on again without the necessity of regenerating the lamp. Moreover air currents will not cool the generating tube to such an extent as to affect the operation of the lamp.

A further object is to so construct the air intake as to permit it to be readily moved to give access to the lamp tip.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings, the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a view partly in elevation and partly in section of a lamp constructed in accordance with the present invention. Fig. 2 is an elevation of the burner and adjacent parts.

Referring to the figures by characters of reference 1 designates an elongated generating or vaporizing tube adapted to be connected, at its upper end, to a suitable tank, not shown, and there being a valve 2 where- by the passage of fuel into the tube may be

controlled. A substantially conical deflector 3 is adjustably supported upon the tube for the purpose of deflecting heat against said tube. The lower end of the tube is secured within a valve casing 4 having an angular passage 5 therein and opening at one end into the lower end of the vaporizing tube, there being a needle valve 6 for controlling the passage of vapor from the tube 1 and into the passage 5. The other end of the passage 5 opens into a tip 7 detachably secured on the valve casing at one side of the tube 1, the upper end of the tip being reduced annularly, as indicated at 8 so as to project into and support a mixing tube 9. This mixing tube has a tubular extension 10 projecting laterally therefrom and opening into the upper end portion of an air inlet tube 11 which hangs downwardly below the valve casing 4 and is open at its lower end while its upper end is closed. The upper end of the mixing tube 9 is counter-bored, as indicated at 12, to receive a nipple 13 extending downwardly from the middle portion of an inverted substantially U-shaped burner 14 the intermediate portion of which is offset, as shown at 15, and has an ear 16 extending therefrom and slidably mounted on the tube 1.

The terminals of the burner are enlarged, as indicated at 17, so as to engage and support mantles 18 of the usual type. As shown in Fig. 2, these mantles are located adjacent opposite portions of the lower end of the tube 1 so that, as long as combustion is taking place within these mantles, the lower end portion of the tube 1 will be maintained hot and the contents of the tube will continue to vaporize.

In Fig. 1 the globe has been indicated by dotted lines at A and it will be seen that when this globe is in proper position, the air inlet tube 11 projects below it, as does also the stem of the valve 6.

It will be noted that when the fuel in the lower portion of the tube 1 has once been vaporized, the valve 6 can be opened and the vapor will pass through the passage 5 and nipple 7 into the mixing tube 9 where it will commingle with the air supplied to said tube from the tube 11. The combustible mixture thus formed will pass through the nipple 13 to the upper portion of the burner 14 and thence downwardly into the mantles 18 where it will be ignited. The

heat generated in this manner will be sufficient to continue the vaporization of the contents of the tube and as the tube extends downwardly between the mantles it will be
 5 apparent that air currents will not retard the formation of vapor within the tube as said tube will be practically entirely protected by the mantles and the mixing tube. Moreover as these mantles are supported
 10 close to the tube it will be seen that the light can be turned down until almost extinguished and the heat then generated will be sufficient to continue to vaporize the fuel.

Should it be desired to remove the tip
 15 7, the burner 14 is slid upwardly on the tube 1 thus lifting the nipple 13 out of the counter-bore 12. The mixing tube 9 can then be lifted off the tip, and the air tube 11 and the mixing tube entirely removed. The tip
 20 can then be easily detached and cleaned or another one substituted therefor.

What is claimed is:—

A vapor lamp including a vaporizing tube, a burner supported above the lower
 25 end thereof, means for supporting mantles

from the burner, said tube extending between the mantles, a valve casing at the lower end of the tube, a mixing tube connecting said casing and the burner and extending partly between the mantles and close
 30 to the vaporizing tube, and an air inlet tube opening, between its ends, into the mixing tube and being parallel therewith, said mixing tube being interposed between the air
 35 inlet tube and the vaporizing tube and being shielded by said tubes and the mantles from the action of air currents.

In testimony that we claim the foregoing as our own, we have hereto affixed our signatures in the presence of two witnesses.

HENRY C. ALBRECHT.

JAMES P. MCGEE.

Witnesses as to the signature of Henry C. Albrecht:

HENRY C. MILLER,

A. J. STEEN.

Witnesses as to the signature of James P. McGee:

J. L. WEATHERBY,

GEO. HARGIS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."