

W. C. COLEMAN.
LAMP.

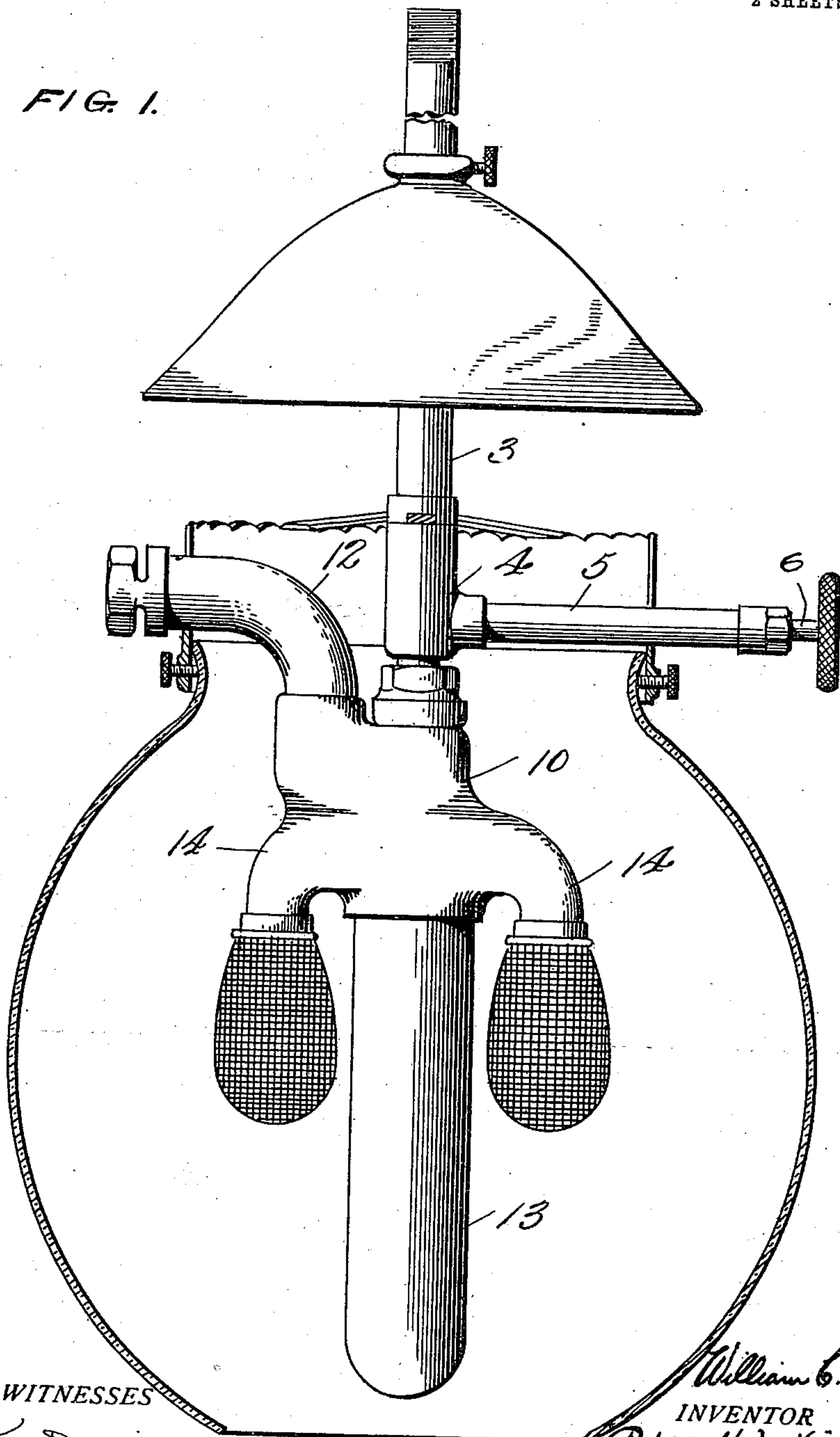
APPLICATION FILED AUG. 21, 1909.

989,765.

Patented Apr. 18, 1911.

2 SHEETS—SHEET 1.

FIG. 1.



WITNESSES

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E. G. Mc. Carthy

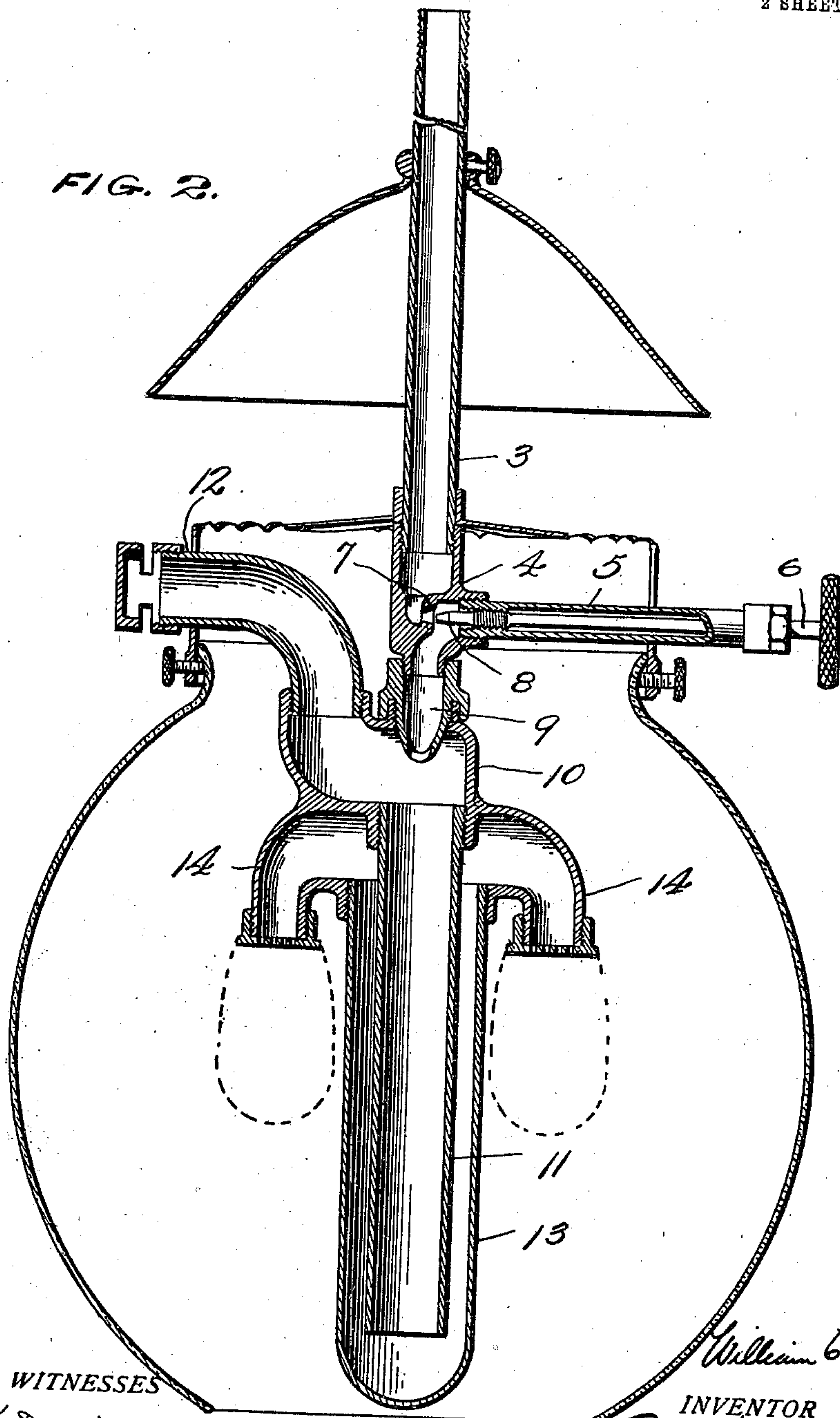
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UNITED STATES PATENT OFFICE.

WILLIAM C. COLEMAN, OF WICHITA, KANSAS.

LAMP.

989,765.

Specification of Letters Patent.

Patented Apr. 18, 1911.

Application filed August 21, 1909. Serial No. 514,067.

To all whom it may concern:

Be it known that I, WILLIAM C. COLEMAN, a citizen of the United States, residing at Wichita, in the county of Sedgwick and State of Kansas, have invented certain new and useful Improvements in Lamps, of which the following is a specification.

The present invention relates to lamps for burning a gaseous mixture of hydrocarbon, alcohol, or similar fluid and air.

The object is to provide a very simple structure that will be compactly housed within the ordinary mantle-containing globe.

The preferred form of construction is shown in the accompanying drawings, wherein—

Figure 1 is a side elevation of the same, with the globe and globe support illustrated in section. Fig. 2 is a vertical sectional view therethrough.

Similar reference numerals designate corresponding parts in all the figures of the drawings.

In this invention, as disclosed, a vertical downwardly extending vaporizing tube 3 is provided, to the lower end of which is connected a valve casing 4 that is disposed in line therewith, and has an outstanding tubular portion 5, from which projects the rotary valve stem 6. The valve seat 7 is arranged horizontally in the casing, and a combined cut-off and regulating valve 8 co-operates with the seat, and is carried by the stem 6.

Depending from the valve casing, and suitably secured thereto in line with the vaporizing tube 3, is a vapor feeding nozzle 9 that is detachably located in the enlarged head 10 of a combined air and vapor-conducting pipe 11 disposed vertically in line with the vaporizing tube 3. The head 10 of this pipe 11 has an offset air inlet elbow 12. The pipe 11 is completely surrounded by a mixing chamber 13 supported from the head 10, and having at its upper end opposite outstanding and depending mantle supports 14.

With this structure, the liquid fuel introduced into the upper end of the vaporizing tube 3 is delivered downwardly and vaporized in said tube. Passing the valve 8, it is discharged through the nozzle 9 down-

wardly into the pipe 11, which also carries air with it into the mixing chamber. The mixture is returned upwardly through said chamber to the mantle supports 14, and is burned as it is discharged into the mantles.

From the foregoing, it is thought that the construction, operation and many advantages of the herein described invention will be apparent to those skilled in the art, without further description, and it will be understood that various changes in the size, shape, proportion and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

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

1. In a lamp, the combination with a vertical downwardly extending vaporizing tube, of a combined cutoff valve and gas regulator at the lower end of the tube, a depending feeding nozzle carried by the lower end of the valve in substantial alignment with the vaporizing tube, air mixing means suspended from and inclosing the nozzle, and a mantle support carried by the upper portion of the mixing means and located at one side of the same.

2. In a lamp, the combination with a vertical downwardly extending vaporizing tube, of a combined cutoff valve and gas regulator at the lower end of the tube, a depending feeding nozzle carried by the lower end of the valve in substantial alignment with the vaporizing tube, a mixing chamber body located below and in alignment with the vaporizing tube, mantle supports carried by the upper end of the body, and a combined air and vapor conducting tube depending within the body and having an inlet at its upper end, said tube also having the nozzle delivering into said upper end.

3. In a lamp, the combination with a vertical downwardly extending vaporizing tube, of a combined cutoff and vapor regulating valve carried by its lower end, a depending vapor feeding nozzle suspended from the lower end of the valve in line with the vaporizing tube, a vertical combined vapor and air conducting pipe disposed in line with the vaporizing tube and nozzle and

having the latter extending into its upper
end, said pipe having an offset air inlet,
a mixing chamber surrounding the tube, and
offset depending mantle supports extending
5 outwardly from the upper end of the mix-
ing chamber and disposed on different sides
of the same.

In testimony whereof I affix my signa-
ture in presence of two witnesses.

WILLIAM C. COLEMAN.

Witnesses:

CHAS. T. WELLS,

LOWELL I. McCONNELL.

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