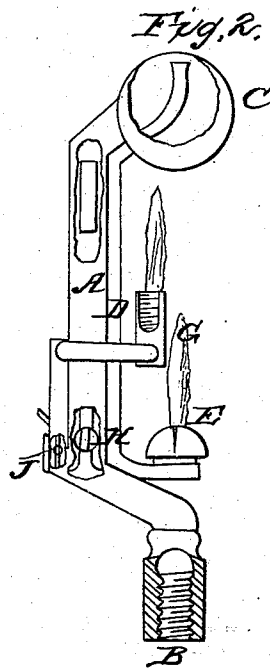
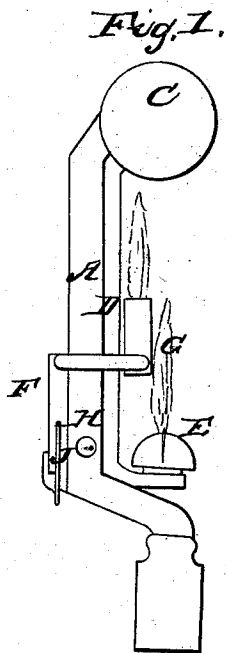


C. F. ALLEN.

Vapor Lamp.

No. 22,774.

Patented Feb. 1, 1859.



Witnesses:
John H. Redstone

Inventor:
Charles F. Allen

UNITED STATES PATENT OFFICE.

CHARLES F. ALLEN, OF INDIANAPOLIS, INDIANA.

BURNER FOR VAPOR-LAMPS.

Specification of Letters Patent No. 22,774, dated February 1, 1859.

To all whom it may concern:

Be it known that I, CHARLES F. ALLEN, of Indianapolis, in the county of Marion and State of Indiana, have invented a new and useful Improvement in Vapor-Lamps, known as "Allen's Self-Generating Gas-Burners;" and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings and the letters of reference marked thereon.

Figure 1 is a perspective and Fig. 2 a sectional view showing the construction and operation of the same.

A is a tube designed to be attached to the supply pipe by the screw B and leading to the retort C. The tube A is filled with metallic filings or other substance which will allow the fluid to pass gradually through and prevent a rigid flow. D is a tube leading to the burner E from the retort C the tube F is a tube leading from the tube A (which supplies it from an opening below the valve H) to the lighter G which is a small metallic cup containing a roll of gauze wire. H and J are valves for checking and regulating the flow of fluid in the tubes A and F.

The following is the operation of the same. The fluid being admitted in the tube F by operating the valve J flows through the same into the lighter G, when the fluid rising to the top of the roll of gauze wire is ignited with a match. The flame rising

from the same heats the retort C the fluid is immediately admitted to the retort C through the tube A and entering the retort slowly it is immediately vaporized and rising passes down the tube D to the burner E and is forced out through the slot or opening in the same and coming in contact with the blaze of the lighter G ignites giving a blaze similar to a common gas light. The flow of the fluid is then immediately stopped in the tube F by operating the valve J. The heat arising from the blaze emitted from the burner E keeps the retort C hot while the same is supplied from the tube A generating the heated vapor which supplies the burner E.

The advantages and extent of this invention or improvement may be seen in the fact that the same may be lighted with a match and without using the swab and alcohol used by other vapor lamps, besides the advantage of having an immediate or instantaneous light which is equal to the common candle or fluid lamp.

What I claim and desire to secure by Letters Patent is—

The combination and arrangement of the tube F, and lighter G, when constructed and arranged substantially as and for the purposes set forth.

CHARLES F. ALLEN.

Witnesses:

JOHN H. REDSTONE,
L. R. BROWNELL.