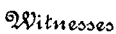


946,712.

Patented Jan. 18, 1910.



Witnesses
E. Stewart
M. Schmidt

Laurence L. Aydt. ^{Inventor}

By *C. Snow & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

LAURENCE L. AYDT, OF DAHLGREN, ILLINOIS.

VAPOR-BURNING LAMP.

946,712.

Specification of Letters Patent.

Patented Jan. 18, 1910.

Application filed March 29, 1909. Serial No. 486,411.

To all whom it may concern:

Be it known that I, LAURENCE L. AYDT, a citizen of the United States, residing at Dahlgren, in the county of Hamilton and State of Illinois, have invented a new and useful Vapor-Burning Lamp, of which the following is a specification.

This invention relates to vapor-burning lamps of the inverted mantle type, and its object is to provide a novel and improved arrangement of vaporizing tube in which the fuel will be quickly vaporized, said tube being located close to the mantle in order that the heat therefrom may be utilized for the vaporization of the fuel.

The invention also has for its object to provide a lamp of compact form, and one which is devoid of complicated parts, and with these objects in view, it consists in a novel construction and arrangement of parts to be hereinafter described and claimed, reference being had to the drawing hereto annexed in which—

Figure 1 is an elevation of the lamp partly in section. Fig. 2 is a vertical sectional view thereof. Fig. 3 is a section on the line 3—3 of Fig. 2. Fig. 4 is a section on the line 4—4 of Fig. 2.

Referring more particularly to the drawings, 5 denotes a shade support which may be of ordinary or preferred construction, and which also serves to support the other parts of the lamp. The shade is indicated at 6, and is held by the support in any suitable manner.

At 7 is indicated the mixing tube. This tube consists of two right-angularly disposed portions 8 and 9 respectively, the former being the inlet end, and the latter the outlet end. This mixing tube is carried by the support 5, it being secured thereto in any suitable manner. The portion 9 of the pipe depends from the support, and carries an inverted mantle 10, the lower end of said portion of the mixing pipe being fitted with a ring or other suitable support for the mantle.

At 11 is indicated the vaporizing tube, said tube being connected at one end to a fuel supply, and at the other end discharging into the portion 8 of the mixing tube. The vaporizing tube is of small diameter, and

said tube is also carried by the support 5. The tube extends downwardly from the support 5 along one side of the mantle, and then beneath said mantle in a curve, and upwardly along the opposite side of the mantle to the portion 8 of the mixing tube. The discharge end of the vaporizing tube has a lateral bend 12 which is in axial alinement with the portion 8 of the mixing tube.

The support 5 is a crossbar having downturned flanges 5^a at its ends, which flanges are engageable with the top of the shade. Set screws 5^b passing through the flanges into engagement with the shade, fasten the latter to the crossbar.

The mixing tube 7 and the vaporizing tube 11 are mounted in openings in the crossbar, they being fastened therein in any suitable manner. The mantle is carried by a ring 10^a formed at the outer ends of a pair of arms 10^b extending from a collar 10^c which is mounted on the depending portion 9 of the mixing tube, and held in place thereon by a set screw, or other suitable means 10^d.

In operation, the gasoline or other fuel flows through the pipe 11 down one side of the mantle, beneath the same, and up along the other side of the mixing pipe, where the vapor is mixed with the air passing through said pipe, and is discharged into the mantle where it burns. By placing the vaporizing tube 11 close to the mantle, the fuel is quickly vaporized, and to start the lamp all that it is necessary to do is to apply a lighted match to that portion of the vaporizing tube which extends beneath the mantle.

By the structure herein described a lamp is had which is simple and compact in form, devoid of complicated parts, and in which a perfect mixture of vapor and air is had, together with a steady flow to the burner. The mixing tube is provided with an eye which serves as a support for the lamp.

What is claimed is:

In a vapor-burning lamp, a cross bar, a mixing tube carried thereby, and having means for attachment of a suspension device, said mixing tube comprising angularly disposed portions, one of which depends from the cross bar, an inverted mantle carried by said depending portion of the mixing tube

and a vaporizing tube discharging into the
other portion of the mixing tube, said vapo-
rizing tube comprising two branches which
are secured to the cross bar, and extend
5 downwardly therefrom along opposite sides
of the mantle, and connected beneath the
lower end thereof by a bend.

In testimony that I claim the foregoing as
my own, I have hereto affixed my signature
in the presence of two witnesses.

LAURENCE L. AYDT.

Witnesses:

AL. STURMAN,
J. M. LOGAN.