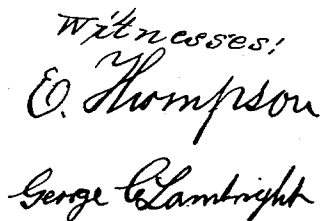


Generator for Vapor Lamps.

Patented May 8, 1860.



Inventor:
Elias D. Baldwin

By his Atty. Phil. T. Everett

UNITED STATES PATENT OFFICE.

SILAS D. BALDWIN, OF MILWAUKEE, WISCONSIN.

GENERATOR FOR VAPOR-LAMPS.

Specification of Letters Patent No. 28,143, dated May 8, 1860.

To all whom it may concern:

Be it known that I, SILAS D. BALDWIN, of the city of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and useful Improvement in Generators for Vapor-Lamps; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and to the letters and marks thereon.

Generally the generator of vapor lamps, or that part or piece of the lamp which conducts heat from the flame to the generating chamber after the flame has become established, has consisted of one or more metallic studs, or projections, or coils attached to bars or some other means which connected them to the feeding tube and the generating chamber of the lamp, which studs or projections are by the side of the flame and consequently have only a portion of their surfaces exposed to the flames. When thus arranged or placed there is always great difficulty in obtaining a sufficient degree of heat to generate a full quantity of vapor; and this difficulty exists even when additional generators are used. In some cases where a sufficient number of generators have been used to generate the required quantity of vapor another material objection has come up and which arises from the want of the provision that will allow of the ready increase or diminution of the surfaces of the projections exposed to the heat thus increasing or diminishing the quantity or amount of the vapor generated and the amount and brilliancy of the flame.

Now my invention looks to the remedying of the evils here named, and it consists in so placing a solid generator that it shall rest upon, or nearly upon the top of the burner centrally and at right angles to the slit thereof, so that the flame will cover it broad surfaces, and in so attaching or affixing the generator to the tube or generating chamber that it may be adjusted and more or less of its surfaces exposed to the flame as the amount of vapor needed may demand.

The drawings forming part of this specification show how I carry out my invention.

Of these drawings Figure 1, is a perspective view of the base of the conducting tube, with the means for attaching it to the lamp, the tube, the burner, and the generator;

Fig. 2, being a vertical section of the same; Fig. 3 a view of the several parts thereof; Fig. 4 a perspective view of a generator with the burner under its central portion; Fig. 5, a front view showing the line of the flame, and Fig. 6 a view of the perforated tube for the wick.

In each of these figures where the same letters are used they indicate the same parts.

The generator is marked (A); its point of attachment to the thimble or collar (B); the perforated tube for the wick (C); the non-conducting packing around the tube (D); the clamping nut (E); the conducting tube and vaporizing chamber (F); and the burner (G).

It will be perceived that my improvement is shown as applied to the vapor lamp in which the fluid passes to the vaporizing chamber by capillary attraction, and that the various parts shown by the drawings are common to many lamps of that class. I shall, therefore, dwell in description only upon such parts here shown as constitute my invention, or as are so closely connected to it as to be necessarily referred to, to understand my invention.

It will be noticed that in all the figures showing the generator and the burner the generator is placed over the burner and at right angles to its slit and that, consequently, it is in the best position for obtaining the greatest amount of heat from the flame. The burner in Figs. 1, 2 and 3 is shown placed at one side of the tube, which is a position better adapted to the hinged generator, shown by these figures, than if placed centrally in the end of the tube, as it readily allows of the greater or less exposure of the surfaces of the generator as the generator is turned upon its hinge toward or from the burner. In Fig 4, the burner is placed centrally in the end of the tube, thus being well arranged for the generator there shown and which may be moved up or down upon its collar, thus being nearer to or more remote from the greatest point of heat of the flame, and thus being susceptible of use for generating a greater or less quantity of vapor as may be required to feed the flame. In both cases the generator is so attached to the collar as to be adjustable to the burner and to be placed at right angles to the slit thereof.

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

An improvement in the generators of vapor lamps, is placing the generator at
5 right angles to the slit of the burner and so attaching it to the end of the tube or generating chamber as to allow of its being closer upon or farther from the top of the

burner and to be susceptible of being used as herein set forth.

This specification signed at Milwaukee
this the twenty-fifth day of February 1860.

SILAS D. BALDWIN.

Witnesses:

WM. T. GRAY,
T. P. SHAW.