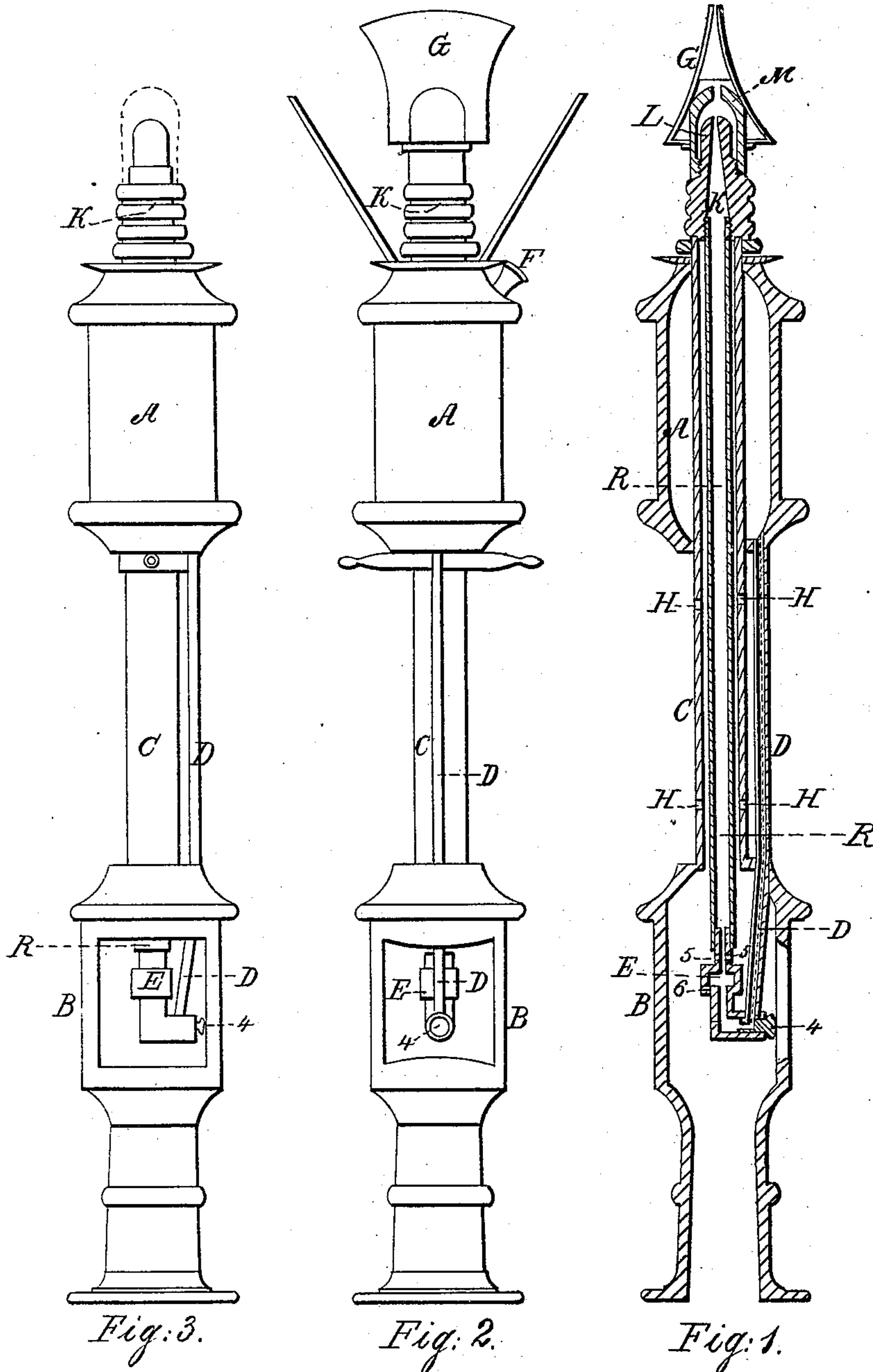


B. D. EVANS.

Street Lamp.

No. 90,830.

Patented June 1, 1869.



Witnesses;
Wm Burdell
R. L. Shieley

Inventor;
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United States Patent Office.

BENJAMIN D. EVANS, OF COLUMBUS, OHIO.

Letters Patent No. 90,830, dated June 1, 1869.

IMPROVEMENT IN COMBINED VAPOR-BURNER AND LAMP-POST.

The Schedule referred to in these Letters Patent and making part of the same.

Be it known that I, BENJAMIN D. EVANS, of the city of Columbus, in the State of Ohio, have invented a new and improved Combined Vapor-Generator and Burner; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

The nature of my invention and improvement, for which I desire to procure Letters Patent, consists in constructing a vapor-generator, burner, and lamp-post combined, and consists of the reservoir A, two pipes C and D, generator E, generating-box B, a burner, with its several parts, K, M, and G, and stop-cock, Figure 6, thereby forming a vapor-generator, burner, and lamp-post combined as set forth in Figures I, II, III of the drawings hereto annexed, the construction and operation of which are described as follows:

The reservoir A, into which the plug-tap F is inserted, through which the fluid or gasoline is poured into the reservoir.

The pipe D connects the reservoir A with the generator E, within the generating-box B, for the purpose of conveying the gasoline, or fluid from the reservoir to the generator.

The stop-cock, Fig. 4, is to regulate the flow of the fluid in its passage from the reservoir A to the generator, where it is rapidly volatilized by the action of the heat applied thereto, by touching a lighted match to the small perforated jet, at Figure 6, in the generating-chamber, which is so made as to allow a small amount of fluid to pass to the outside of the generator, for the purpose of ignition, to heat the generating-chamber, so that the fluid may be volatilized into gas, which then passes from the generating-chamber E, through the small orifice in the chimney of the generator, to the fig. 3, in the pipe R.

The small holes represented at Figures 5-5, in the chimney of the generator, are for the purpose of admitting a current of oxygen to pass into and combine with the gas, or vapor in its passage upward through the pipe R to the burner K.

After the match is touched to the fluid at fig. 6, the door of the generating-box B is to be closed, to confine the heat, so that no noise will be made in the operation of volatilization, and only a small orifice is made in the side of the generating-box B, to keep the fire burning.

The perforated holes H H are made to admit a portion of cold air to pass into and circulate around the pipe R, between it and the pipe C, to keep the pipe cool, so that the gas, or vapor may more readily pass to the burner.

The burner K consists of a double cylinder, K and M, and a spreader, G. The first is a hollow socket, K, in which there is a small perforated jet, at the letter L, through which the vapor passes, to the space within the cap M, and around the cylinder K, where it is kept hot by the flame from the burner, or spreader G, thereby preventing it from becoming condensed. The upper part of the burner, G, is to spread the flame.

The following is a synopsis of my claim:

1. I claim the arrangement of the generator E, with its chimney inside the generating-box B, with the jet at fig. 6, all constructed as hereinbefore set forth, as and for the purposes described.
2. I claim the attachment of the pipe R with the chimney, passing up through the outer pipe C, to the burner K, whereby the gas is conveyed to the burner, substantially as shown and described.
3. I claim the combination of the burner K, the pipe R, the generator E, pipe D, reservoir A, the outer pipe C, and generator-box B, by which a lamp and lamp-post are constructed and formed, all constructed and arranged as set forth in the foregoing specification, and in Figs. I, II, III of the drawings hereto attached.

B. D. EVANS.

Witnesses:

WM. BURDELL,
J. T. HOLMES.