

H. LENOX.
Lighting Device.

No. 102,284.

Patented April 26, 1870.

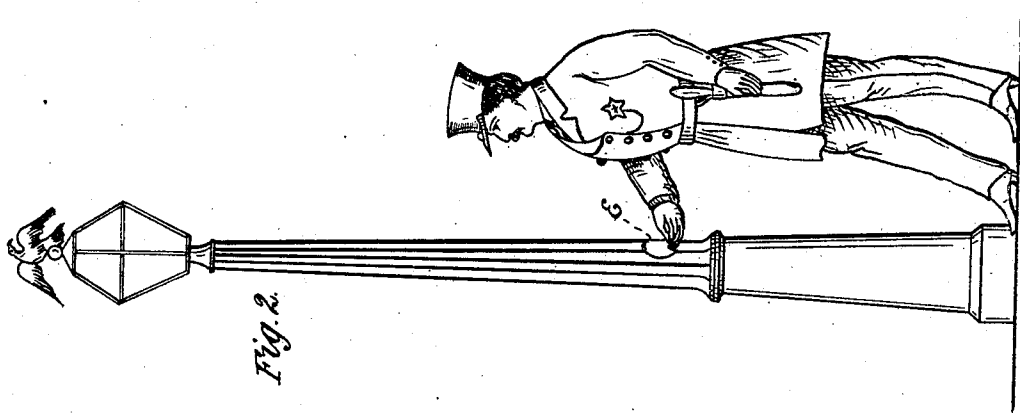


Fig. 2.

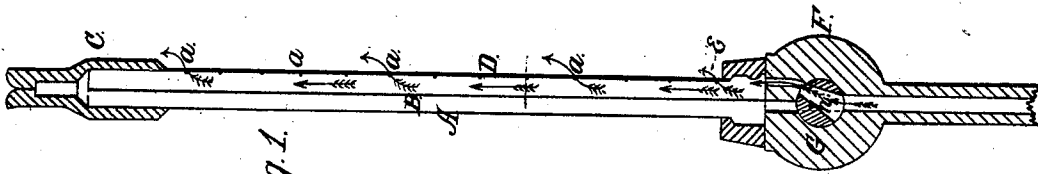


Fig. 1.

Witnesses,
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HIRAM LENOX, OF TRENTON, NEW JERSEY.

Letters Patent No. 102,284, dated April 26, 1870.

IMPROVEMENT IN THE MODE OF LIGHTING STREET LAMPS.

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

To all whom it may concern :

Be it known that I, HIRAM LENOX, of Trenton, in the county of Mercer and State of New Jersey, have invented a new and useful Improvement in the Mode of Lighting Street-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 making a part of these specifications, in which—

Figure 1 represents a longitudinal bisection of the main gas-pipe, showing my device.

Figure 2 is an external view.

My invention consists of a compartment within the gas-pipe of a lamp-post, one side of which has small apertures at sufficient distance to allow the flame to communicate from the lower to the upper until it reaches the burner within the lantern, and operated by means of a detachable key carried by the lamp-lighter, which obviates the necessity of carrying a ladder, the match being applied through a small opening or door in the post immediately above the cock.

To enable others to make use of my invention, I will proceed to describe the same.

A, in fig. 1, shows the main gas-tube or pipe within a lamp-post, on the top of which is the burner shielded by the lantern.

The line B is a thin partition, formed either when the tube is cast, or may be inserted afterward, and extends from the cylinder of the cock to the lower part of the jet C, thus dividing the volume of gas, so that, when the cock below, which is situated at any required distance from the pavement, is partially turned, the gas flows into tube D, ignited at E, and the apertures *a a a a*, allowing the gas to communicate with the oxygen supplied at the opening E, afford abundant draught for the flame to instantly run from one opening to the other until it reaches the burner.

The course of the gas is shown by the curved arrows in the line D.

The cock is provided with but one cavity through

the cylindrical portion, which cavity gradually tapers from the lower to the upper circumference of the cylinder, as shown at *h*, in order to admit the full pressure or head of gas in either tube, without diminution. Above the cylinder there are two openings, the one leading into the igniting-tube, and the other for the tube which leads directly to the burner, so that, when the gas is shut off from the igniting-tube, no particle can in any manner enter it, but the full head and pressure from the retort is thrown into the burner.

The door E may be hinged in any manner, and provided with a spring lock, which may be opened by the same key which turns the cock, thus preventing interference by those who might seem disposed to molest the cock.

It will be readily seen that by this arrangement the flame will instantaneously run up to any height required, and the cock, placed at any distance from the pavement, can be readily attached, at a very trifling expense, to any lamp-post now in use, and the lamp lighted with far greater facility than the ordinary method.

I am aware that separate perforated flash-pipes, or double pipes for lighting gas-lamps are not new, hence I do not claim such broadly, but—

Having thus fully described my invention,

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

The arrangement of the gas-tube A with partition B and perforations *a*, and the cock F with upwardly tapering perforations *h*, when constructed to admit the full head of gas to the perforated subdivision, as and for the purposes shown and described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HIRAM LENOX.

Witnesses:

J. V. D. JOLINE,
H. S. HUTCHINSON.