A. M. LAEVEISON.

Gas Burner.

No. 97,652. Patented Dec. 7, 1869.

Fig. 1

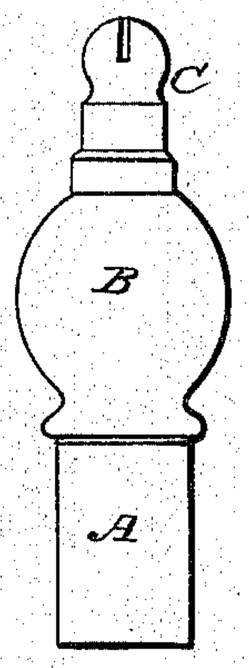

Fig. 2

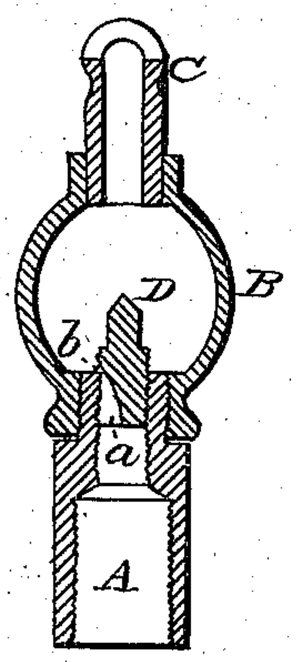

Fig. 3

Witnesses
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A. M. LAEVEISON, OF QUINCY, ILLINOIS.

Letters Patent No. 97,652, *dated December* 7, 1869.

IMPROVEMENT IN GAS-BURNERS.

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, A. M. LAEVEISON, of Quincy, in the county of Adams, and State of Illinois, have invented a new and useful Improved Gas-Burner; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of my improved gas-burner;

Figure 2 is a vertical section of the same; and

Figure 3, a detached view of the regulating-screw.

Similar letters of reference indicate corresponding parts in the several figures of the drawings.

My invention has for its object to produce a greater combustion of the particles of carbon contained in gas, made from coal, by distributing the same by expansion within the burner before it comes in contact with the oxygen of the air, and to regulate the flow of gas through the burner, so that a greater or lesser quantity shall be consumed, as desired.

In consists in the combination of a slotted regulating screw, with a burner having an expanding-chamber, as will be hereinafter more fully described.

In the accompanying drawings—

A is the base or shank, by which the burner is attached to the gas-bracket or other fixture. To its upper end is attached, by a screw-connection, the metallic expanding-chamber B, which, in this example of my invention, is formed in the shape of a bulb.

C is the lava tip, affixed in any suitable manner to the upper end of the expanding-chamber B.

D is a screw, adapted to fit within the upper end of the shank A, and enclosed by the expanding-chamber B, as shown.

This screw is provided upon one side with a slot or recesss, *a*, by which communication is formed between the interior of the shank and expanding-chamber.

By adjusting the screw, the passage formed by the slot *a* is increased or diminished, and, consequently, increases or diminishes the supply of gas to the expanding-chamber. This is evident from the fact that the opening *b*, at the upper end of the slot, is made larger or smaller, accordingly as the screw is operated.

By means of the screw, the pressure of the gas to the flame can be so reduced as to supply only such an amount as will be entirely consumed, thus producing much economy in the use of gas.

When it becomes necessary or desirable to adjust the screw, the expanding-chamber B must be unscrewed or removed to permit access thereto. This is particularly advantageous, as it prevents the screw being tampered with, by servants and others, to increase the flame of the gas.

My improved burner not only regulates the supply of gas to the flame, but, by causing the expansion of such supply, as previously mentioned, produces much greater illumination, with less consumption than has heretofore been possible with ordinary burners. It is simple in construction, easily operated, and not liable to become clogged by use.

Having thus described my invention,

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

The slotted regulating-screw D, in combination with a gas-burner having an expanding-chamber, substantially as herein shown and described, for the purpose specified.

A. M. LAEVEISON.

Witnesses:

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