

H.B. Myer, Gas Burner.

No. 83876.

Patented Nov. 10. 1868.

Fig. 1.

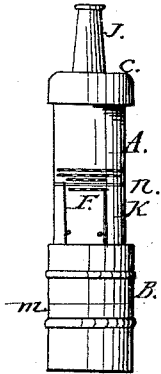


Fig. 2.

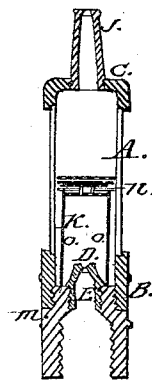


Fig. 3.

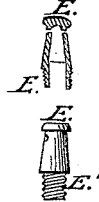


Fig. 4.

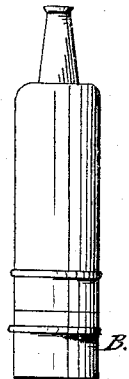


Fig. 5.

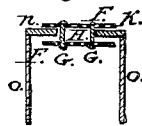


Fig. 6.

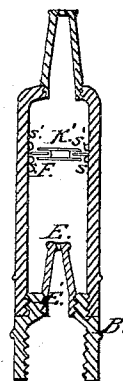
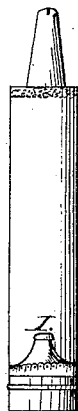


Fig. 7.



Witnesses:

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HENRY B. MYER, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 83,876, dated November 10, 1868.

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, HENRY B. MYER, of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Gas-Burners; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, in which—

Figure 1 is a perspective view of my improved gas-burner as composed partly of metal and partly of glass.

Figure 2, a sectional view of the same.

Figure 3 represents a perspective and a sectional view of a lower tip or burner detached, the same being intended to be inserted at pleasure in place of one like D in fig. 2, E, in fig. 6, or I, in fig. 7.

Figure 4, a perspective view of a metal burner.

Figure 5, an enlarged sectional view of the inside table or stand.

Figure 6, a sectional view of the burner represented in fig. 4, showing the internal valve employed.

Figure 7, a perspective view of a burner, the body of which is of glass, the upper and lower tips being either of lava or metal, attached to the glass body by cement, or in any substantial manner.

My improvements consist, first, of a gas-burner composed wholly or partly of glass; second, of an internal valve; and third, of a lower tip with side apertures, as hereinafter described.

In figs. 1 and 2, A is a glass tube forming the body of the burner. It is attached at one end to the metallic base B, and at the other end to the metallic crown C.

J is an adjustable tip, of metal or lava, let into the crown C, or screwed into said crown, as shown in fig. 2.

The base, B, is made separable at *m*, to facilitate access to the enclosed parts of the burner.

K, figs. 1, 2 and 5, is a valve of peculiar construction. It consists of a circular metallic plate, *n*, forming a table, made a very little less in diameter than the bore of the tube A, so as to be free to slide up and down therein.

The table *n* is attached to legs *o*, which are of about the length shown in fig. 2. The legs *o* may, however, be made longer or shorter, without materially impairing the efficiency of the valve.

The table *n* is provided with a central aperture, H, which is covered or obstructed with gauze disks, or disks of perforated metal, F, placed above and below the plate *n*, as shown in fig. 5, and joined by fine wires G, on which the disks are free to move vertically.

The wires G are fastened sufficiently by simply bending over their ends.

When the lower tip D is in place, as shown in fig. 2, the gas passes through the end aperture or apertures therein, (it or they being of about one-half or two-thirds the capacity of the exit-aperture or apertures in the upper tip J.) The lower tip D is, however, provided with one or more side apertures E', and when it is desired to increase the flow of gas through the lower tip D, this tip is loosened in its socket, by partly unscrewing it, when the gas at once escapes through the side aperture or apertures E'. These side apertures are seen in figs. 2, 3, and 6. The gas, escaping thus through the lower tip D, fig. 2, passes through the lower gauze disk F, the aperture H, and the upper gauze disk F', and thence passes out through the upper tip at the point of consumption.

When the gauze disks described are not sufficient, in consequence of the strong head of gas, to prevent "blowing," I introduce additional gauze or perforated disks, sufficient in number to prevent the blowing. These additional disks rest on the top of the upper disk E, as shown in fig. 2. They are got into place by unscrewing the base of the burner, and withdrawing the valve K, while they (the additional disks) are being introduced.

Figs. 4 and 6 represent a gas-burner with a metallic body, instead of the glass body marked A in figs. 1 and 2.

In fig. 6, the valve K' is a modification of the valve K of figs. 1, 2, and 5. This valve K' is similar to the valve K, omitting the legs *o*. If desired, the valve K' may be employed instead of the valve K. I think it preferable to locate the valve K' in about the relative position it occupies in fig. 6.

When the valve is constructed in the form marked K', fig. 7, I secure it in the body of the burner, at the desired place of location, by first inserting an open or cut ring *s'*, then introducing the valve, and finally inserting another open ring *s*. This mode answers well, but any other desired mode may be employed.

Having thus described my invention,

I claim, and desire to secure by Letters Patent—

The combination of the upper tip J, metallic crown C, glass body A, valve K or K', a lower tip with side aperture or apertures E' therein, and base, B, all constructed substantially as shown and described.

HENRY B. MYER.

Witnesses:

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