

E. R. Walker.

Argand-Burner.

N^o 72244

Patented Dec. 17, 1867

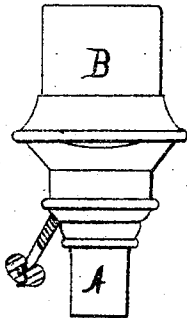


Fig. 1.

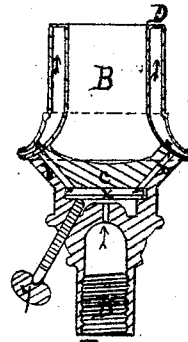


Fig. 2.

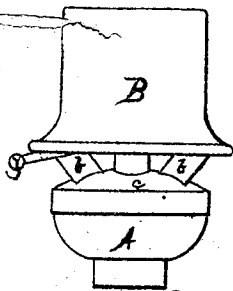


Fig. 3.

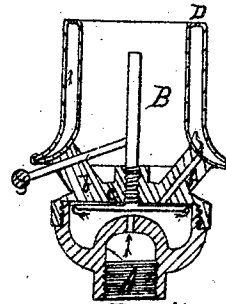


Fig. 4.

Witnesses.

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EDWIN R. WALKER, OF NEW YORK, N. Y., ASSIGNOR TO ELLIOTT P. GLEASON.

Letters Patent No. 72,244, dated December 17, 1867.

IMPROVEMENT IN ARGAND-BURNER.

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, EDWIN R. WALKER, of the city, county, and State of New York, (assignor to Elliott P. Gleason,) have invented, made, and applied to use certain new and useful Improvements in the Construction of Argand-Burners; and I do declare the following to be a full, clear, and correct description of my invention, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, in which—

Figure 1 is a front view of my improved burner.

Figure 2, a sectional view of the same.

Figures 3 and 4 are front and sectional views of a modification of my invention.

In the drawings, like parts of the invention are indicated by the same letters of reference.

The nature of my invention consists in certain improvements, as more fully hereinafter set forth, in the construction of argand-burners.

The object of the present invention is to so construct an argand-burner that when in operation it shall be free from the hissing or singing noise which usually attends the passage of the gas to the burner, particularly when the pressure of the gas is high, and, further, to regulate the flow or supply of gas to the burner; and these results are accomplished in the present instance by the use or employment of a disk, of metal or any suitable material, placed directly over the inlet in the lower section for introducing the gas to be burned, so constructed that it can be raised or depressed by means of a regulating-screw bearing upon the under side of the disk, or in any convenient manner.

To enable those skilled in the arts to make and use my invention, I will proceed to describe the same, speaking first of its construction.

A is the lower or bottom section of the burner, and B the upper or top section of the same. The lower portion or section of the burner is provided with the inlet for introducing the gas, and has cast upon its interior, a slight distance above the inlet, a series of ribs or projections to receive the disk or plate of metal *z*. The upper portion of the burner has attached to it the arms *b* and collar *c*, which collar is provided with openings upon its under side, communicating with the arms *b*. The collar has upon its interior a screw-thread, corresponding to a screw-thread cut upon the neck of the lower section of the burner, so that when the upper and lower sections of the burner are put together, the collar upon the upper portion is screwed over the neck upon the lower portion or section. Inserted through an opening in the side of the lower section of the burner is a regulating-screw, *y*, provided with a thumb-piece, so that it may be easily turned from the outside. The forward end of this screw bears upon the under side of the disk or plate of metal, and raises or lowers the same as it is turned by means of the thumb-piece upon its opposite end. D shows the argand-burner, constructed in the usual manner.

The gas to be supplied to the flame enters the chamber formed by the upper and lower sections through the inlet. As it passes through the inlet, it strikes against the under side of the disk or plate, which distributes it, and deadens the hissing or singing noise that usually attends the passage of the gas. Thence, the gas, distributed by the disk or plate of metal, passes through the openings in the bottom of the collar, through the arms, and to the flame. The supply of gas to the flame may be governed by means of the regulating-screw, raising or depressing the disk. When the disk is raised, the supply is increased; and when the same is lowered, the supply is decreased.

In figs. 3 and 4 of the drawings, a modification of my invention is represented, in which the disk or plate of metal is attached to the under side of a spindle, having a screw-thread cut upon it, and inserted in the centre of the collar of the upper portion of the burner, so that the disk or plate of metal shall be directly over the inlet in the lower section of the burner. To this spindle I attach a lever, so that the disk, attached, as shown, to the spindle, may be elevated or depressed as desired. When elevated, the supply of gas is increased; when depressed, diminished.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—
The combination of a disk or plate of metal with a regulating-screw, for the purposes fully described.

EDWIN R. WALKER.

Witnesses:

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