

(No Model.)

J. H. DIAMOND.
GAS TIP OR NOZZLE.

No. 576,259.

Patented Feb. 2, 1897.

FIG 1

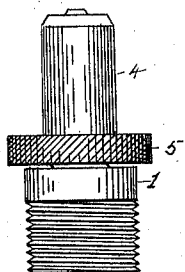


FIG 2

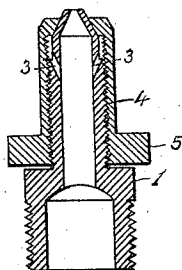


FIG 3

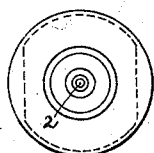


FIG 5

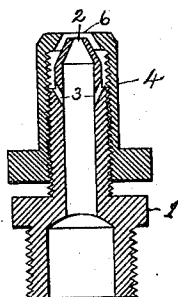


FIG 4

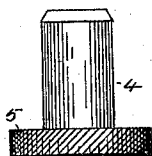
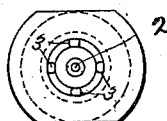


FIG 6



WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES H. DIAMOND, OF ALLEGHENY, PENNSYLVANIA, ASSIGNOR TO MARY
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GAS TIP OR NOZZLE.

SPECIFICATION forming part of Letters Patent No. 576,259, dated February 2, 1897.

Application filed July 10, 1895. Serial No. 555,591. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. DIAMOND, a citizen of the United States, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Gas Tips or Nozzles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 indicates an elevation of my improved gas-regulating tip or nozzle. Fig. 2 is a vertical section of the same. Fig. 3 is a plan view of the same. Fig. 4 is an elevation of the adjustable thimble. Fig. 5 is a vertical section showing thimble adjusted to open the side ports at the base of the nipple. Fig. 6 is a plan, the adjustable thimble being removed.

My invention relates to tips or nozzles for gas-burners; and it consists of the novel construction and arrangement of parts herein-after described, reference being had to the accompanying drawings, forming part hereof.

Referring to said drawings, 1 is a gas nozzle or tip adapted to be connected with a gas-supply, (not shown,) the lower portion of the same being externally screw-threaded to admit of this. The upper portion of said nozzle or tip is considerably smaller in cross-section than the lower portion and terminates in a conical-shaped point. Said nozzle is hollow and provided with a small opening 2 in the extreme point thereof, also upwardly-inclined openings 3 3 formed in said nozzle a slight distance below the cone-shaped point thereof. Said openings 3 3 are adapted to be controlled, that is, opened and closed, by an adjustable thimble 4, which is internally screw-threaded and adapted to move freely on the upper portion of said nozzle, the lower end of said thimble being provided with a flange 5, the outer periphery of which is serrated to

enable the same to be readily screwed and unscrewed on said nozzle. In the upper end of said thimble is formed an opening 6, in which the cone-shaped point of the nozzle projects.

It will be observed that the openings 3 3 are opened and closed by the movement of the thimble upon the upper portion of the nozzle, so that in the event of a low pressure of gas a larger quantity of gas may be admitted through said openings 3 3, and thence through the opening 6, whereby the gas admitted through the opening 2 in the end of the nozzle may be augmented or increased.

In the event of higher pressure the openings 3 3 may be closed entirely by screwing or tightening the thimble upon the nozzle until the cone-shaped point of the nozzle is brought into contact with the correspondingly-beveled sides of the opening in the top of the thimble.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

In a gas-nozzle substantially as described, the combination of a nozzle the lower end of which is larger in cross-section than the upper, and externally screw-threaded, to admit of its being connected with a gas-supply pipe; the upper end of said nozzle terminating in a cone-shaped point, having an orifice therein and provided with a number of inclined openings in the sides thereof near the base of said cone-shaped point; and a thimble freely movable upon the upper end of said nozzle, and having an opening in the top thereof, the sides of which are correspondingly beveled with the cone-shaped point of said nozzle, substantially as described.

In testimony that I claim the foregoing I hereunto affix my signature this 13th day of May, A. D. 1895.

JAMES H. DIAMOND. [L. s.]

In presence of—

JAS. J. McATEE,
C. A. WILLIAMS.