

A. BARBARIN.

GAS-BURNER.

No. 174,464.

Patented March 7, 1876.

Fig. 1.

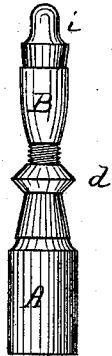
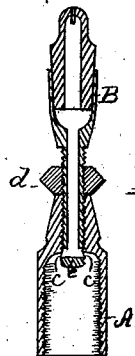


Fig. 2.



WITNESSES.

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ARTHUR BARBARIN, OF NEW ORLEANS, LOUISIANA.

## IMPROVEMENT IN GAS-BURNERS.

Specification forming part of Letters Patent No. **174,464**, dated March 7, 1876; application filed November 2, 1875.

### *To all whom it may concern:*

Be it known that I, ARTHUR BARBARIN, a resident of the city of New Orleans and State of Louisiana, have invented a certain new and useful Improvement in Scotch-Tip Gas-Burners; and I do hereby declare the following to be a full, clear, and correct description of the same, reference being had to the annexed drawing, making a part of this specification.

My invention consists of an improvement upon the well-known Scotch-tip gas-burner, by means of which the quantity of gas supplying a rated tip may be instantly adjusted to suit the same with the greatest nicety; but my improvement will be better understood by referring to the annexed drawing, forming a part of this specification.

Figure 1 represents the burner when complete for operation; and Fig. 2, a sectional view of the same.

The same letters of reference denote the same parts.

A, Fig. 2, is the ordinary base or pillar of the old Scotch-tip gas burner, the upper end of which, being also threaded, is more contracted than its lower threaded end. B is the ordinary socket-stem of the same; but, in this improvement, it is longer than usual, and provided with an open upper end to receive the lava or other tip, and, instead of being open at its lower end, the same is closed, and provided with a couple of perforations, *c c*, a little above the said closed end, facing each other, and communicating directly with the interior of the threaded socket-stem.

To operate this device, as in the case of the old Scotch-tip gas-burner, the socket-threaded stem is screwed into the upper end of the base A. The lava or other tip, *i*, being placed into the socket-stem, as shown upon the drawing, the lower end of the base A is screwed upon the gas-chandelier or bracket. On gas being turned on, the same is ignited, and, by screwing or unscrewing the socket-stem, the perfo-

rations *c c* are more or less encircled, and, consequently, opened or closed, by the threads of the upper end of the base, so that if a rated tip requires a larger volume of gas to fill its flame than another, by screwing the socket-stem down the perforations *c c* are made to descend below the lower threads of the upper end of the base A. This, then, admits the holes in a wider portion of the base, and allows the gas to enter the stem in a larger quantity, and, as these perforations face each other, the two jets of gas, on entering the holes under pressure, impinge against each other, and, consequently, deaden their pressure very near the point of consumption.

To still further retard the pressure, small pieces of wool or other fibrous or porous material may be inserted within the channel of the stem for that purpose.

As will readily be perceived, the object of the check-nut *d* is to steady the socket-stem in proper position, and prevent leakage of gas between the base and stem.

It is evident that, when desirable, permanent, instead of movable, lava tips may be secured within the socket-stem.

In constructing this burner, the threaded socket-stem should be made to operate into the base with as much friction as practicable, to prevent leakage of gas during the regulation of the flame.

After having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

As an improvement upon the old Scotch-tip burner, and, in combination with the base A, the threaded socket-stem B, with closed lower end *e*, perforations *c c*, and check-nut *d*, the whole being arranged to operate as herein set forth.

ARTHUR BARBARIN.

Witnesses:

H. N. JENKINS,  
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