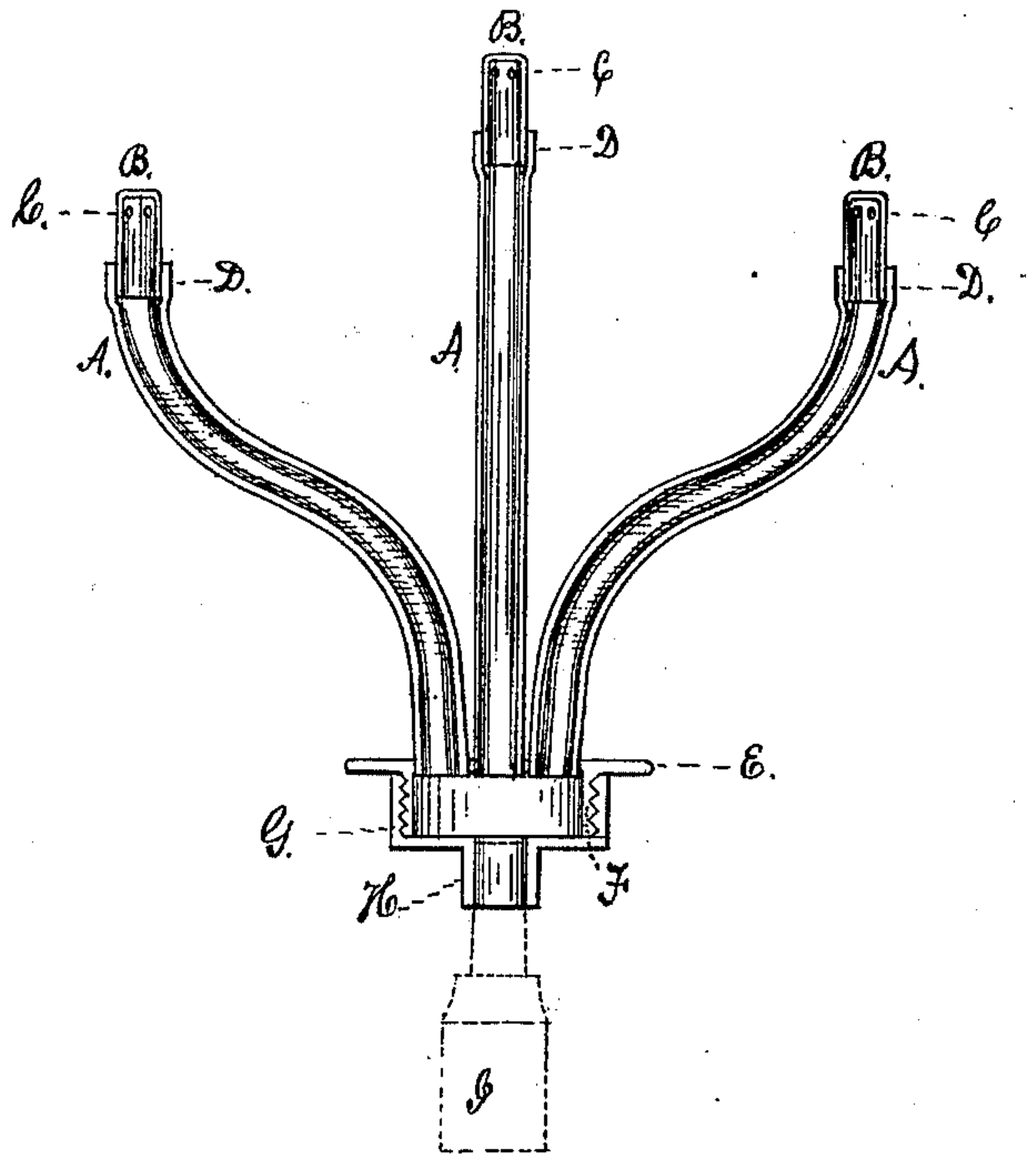
R. NUTTING.

Gas Burner.

No. 112,172. Patented Feb. 28, 1871.




Witnesses.

Edm. F. Brown.

James L. Norris

Inventor.

Rufus Nutting

# United States Patent Office.

RUFUS NUTTING, OF RANDOLPH, VERMONT.

Letters Patent No. 112,172, dated February 28, 1871.

## IMPROVEMENT IN CHANDELIER GAS-BURNER.

The Schedule referred to in these Letters Patent and making part of the same.

I, RUFUS NUTTING, of Randolph, in the county of Orange and State of Vermont, have invented certain Improvements in Chandelier Gas-Burners, of which the following is a specification.

*Nature and Objects of the Invention.*

The nature of my invention consists in construction of an attachment for ordinary gas-burners, having one or more chambers, with jet-holes at or near their upper end, and all being connected at their lower end with another chamber in which is a socket of such size as will just fit, gas-tight, the top of ordinary gas-burners, the object of which device is to retain the gas until it is somewhat heated before being ignited at the jet-holes, and thus be more perfectly consumed and give more light, and also be divided into a large number of flames and produce a softer, mellower, and easier light to the eye by striking upon a much larger surface of the retina than when the same amount of light is concentrated, and falls upon a single point of the retina, and also affords a pleasing variety of forms or figures of light.

*Description of the Drawing.*

The drawing represents a vertical transverse section of my device with three chambers, A A A, each having a burner-tip, B B B, with jet-holes C, and resting in or held by the sockets D D D, the three chambers being attached to and extending through the base E, having a flange, F, in which is cut the male screw that fits the female screw in the chamber G, containing the socket H, which fits any ordinary gas-burner, as represented by the dotted lines I.

*General Description.*

The several parts A, B, D, E, and F may be made of sheet-brass or other material precisely like the same parts described in my application for patent issued June 7, 1870, upon lamp gas-burner, or in any more approved form or manner.

The chamber G and socket H may be drawn or dropped out of a single piece of metal in the ordinary way of doing such work, and connected with the base E in the ordinary method of connecting lamp-burners and collars, or other convenient way, and the socket H connected with the gas-pipe by being put upon the gas-burner, or the gas-burner may be removed and the socket adjusted to the end of the gas-pipe.

The object of having the burner-tips B made separately from the chambers A is that in case they, by use, get burned out so as to be inoperative, they may be readily removed, and at a trifling cost new ones put in their place.

The operation of my device consists in simply putting the socket H upon the ordinary gas-tip, where it is retained by friction, gas-tight, letting on gas and applying a flame to the jet-holes, which produce a number of flames corresponding to the number of holes in the burner-tips B.

The number of chambers A may be more or less, according to taste. The size of the base E and chamber G, and the amount and pressure of gas at command, which also indicates whether the jet-holes should be more or less in number, and larger or smaller in size.

What I claim as new and my invention is—

1. The combination of the lower chamber G and socket H with the base E and upper chambers A A A.

2. The combination of the whole device, including the socket, lower chamber, base, upper chambers, and their sockets, and the burner-tips with an ordinary gas-burner, or directly with the end of the gas-pipe, substantially as and for the purposes herein described.

RUFUS NUTTING.

Witnesses:

JAMES S. GRINNELL,

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