

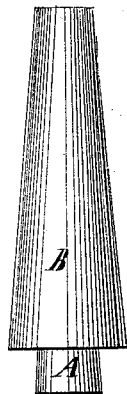
S. G. DARE.

Gas Stove.

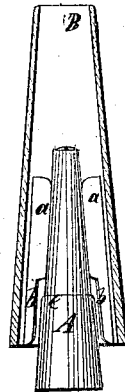
No. 108,888.

Patented Nov. 1, 1870.

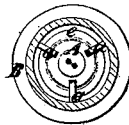
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses

*Fred. Haynes*

*R. H. Abbott*

*Samuel G. Dare*

# UNITED STATES PATENT OFFICE.

SAMUEL G. DARE, OF NEW YORK, N. Y.

## IMPROVEMENT IN GAS-HEATERS.

Specification forming part of Letters Patent No. 108,888, dated November 1, 1870.

*To all whom it may concern:*

Be it known that I, SAMUEL G. DARE, of the city, county, and State of New York, have invented a new and Improved Heating Attachment for Gas-Burners; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to an attachment which may be applied to and removed from an ordinary gas-burner, such as is used for illuminating purposes, and which, when so applied, induces up the sides of and above such burner a copious supply of air, which mixes with the gas issuing from the burner, and so causes the gas to burn with an intense heat.

It consists in a conical metal tube provided internally with ribs or projections of such form that their edges will fit to the exterior of an ordinary burner and hold the tube thereon concentric therewith, and with its upper end standing some distance above the top of the burner.

In the accompanying drawings, which illustrate my invention, Figure 1 is a side view of the heater, showing it applied to a gas-burner. Fig. 2 is a central longitudinal section of the same, and Fig. 3 is a transverse section taken at the line *xx* in Figs. 1 and 2.

Similar letters of reference indicate corresponding parts in the several figures.

A is an ordinary gas-burner, and B is the heating attachment or heater, which constitutes my invention. This heater consists of a conical tube, which is entirely open at the ends and provided internally with a series of not less than three ribs, *a a*, which extend longitudinally and project radially on its interior some distance from the larger end thereof. These ribs serve to support and center the

heater on the burner, with its upper end some distance above the top of the burner, and the tube, when so supported and centered, forms around the burner a channel or series of channels through which air may pass upward to and above the top of the burner.

To permit the attachment of the heater to a burner having the portion *e*, containing the screw-thread by which it is attached to the fixture, materially larger than the portion above, these ribs *a a* are recessed for some distance from the lower and larger end of the heater, so that it may be supported by the recessed portions of the ribs resting on the corresponding upper portion of the burner, as shown in Fig. 2.

The heater is attached to the burner by simply dropping it thereon, when, by the tapering form of the edges of its ribs and of the burner, its weight will tend to center and secure it. When this heater is so applied to a gas-burner of the fish-tail, bat's-wing, or other common kind, it induces a copious upward flow of air between it and the exterior of the burner, and this air mixes with the gas issuing from the burner, and the mixture of air and gas is ignited at the mouth or upper end of the heater, where it burns with a very intense heat.

This heater is much simpler and cheaper than those ordinarily used for attachment to common gas-burners, and is easily and conveniently attached.

What I claim as my invention, and desire to secure by Letters Patent, is—

The heater or heating attachment to gas-burners, consisting of a conical tube with internal ribs or projections, substantially as herein described.

SAMUEL G. DARE.

Witnesses:

FRED. HAYNES,  
R. E. RABEAU.