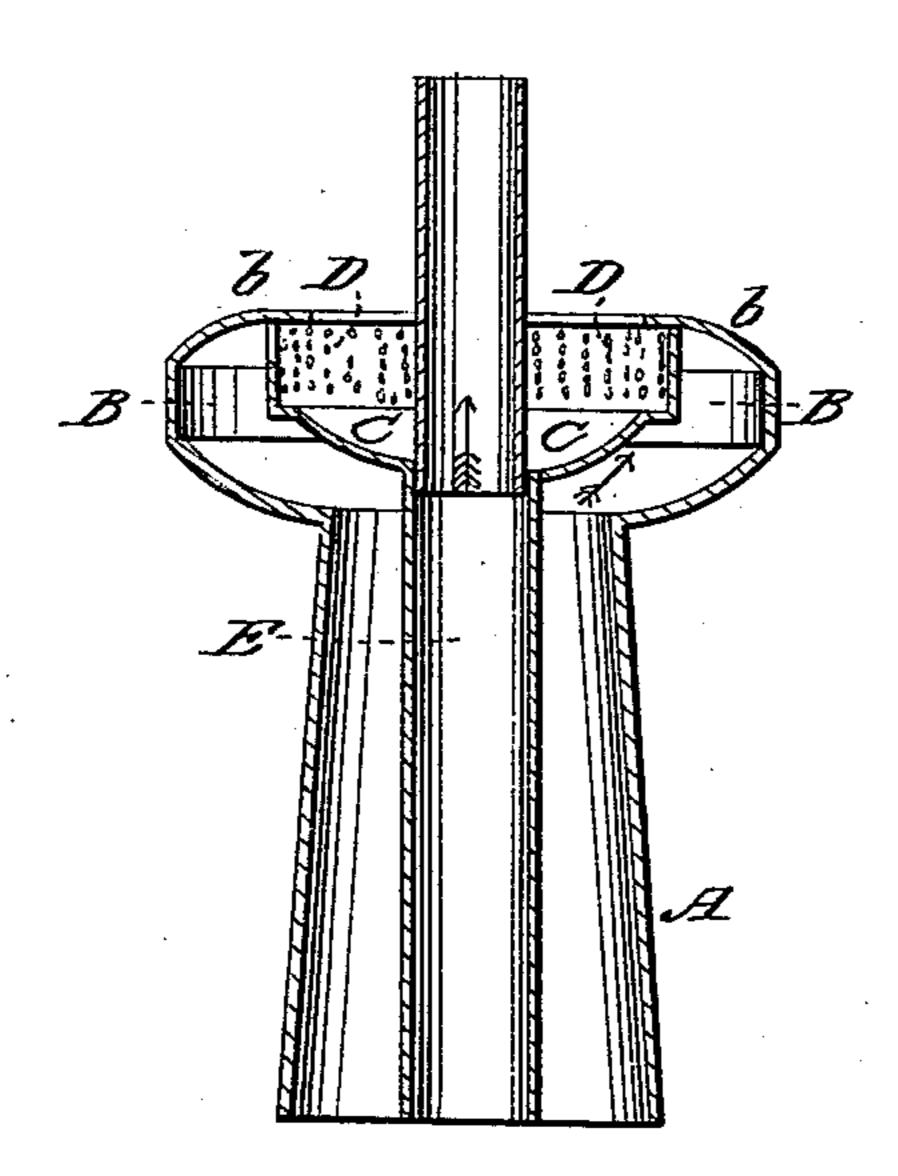
## H. Y. LAZEAR.

Gas Stove.

No. 64,544.

Patented May 7, 1867.



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Witnesses: Theo Gusek J. A. Servue.

Inventor: Lazear

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N. PETERS. PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

# Anited States Patent Pffice.

## HIRAM Y. LAZEAR, OF NEW YORK, N. Y.

Letters Patent No. 64,544, dated May 7, 1867.

### GAS-BURNER FOR HEATING PURPOSES.

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, HIRAM Y. LAZEAR, of the city, county, and State of New York, have invented a new and improved Gas-Burner and Heater; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to certain improvements in the construction of gas-burners for cooking and heating purposes, so that the flame can be thrown towards one common centre, thereby intensifying the heat; which construction also allows of the introduction of an air-tube for heating purposes, the flame surrounding the said tube and heating the air which passes through the same.

My invention consists in the combination of a perforated or wire cylinder, which is so arranged in a burner that the gas enters the cylinder from the outside and burns on the inside of the same. The flame is thus all confined within the cylinder, and is further intensified by the introduction of oxygen, which is brought to it from a passage below, with an air-tube within this wire cylinder, whereby the air rising in the tube is easily heated by the flame which surrounds the tube.

In the annexed drawing my invention is illustrated, the figure being a vertical central section of the same. A is a supporting tube, upon which is arranged an annular trough, B, which is made of cast iron or any other suitable material. Within this dish or trough is arranged another dish C, which is held in place by means of a screw or in any other suitable manner. A perforated sheet metal or wire cylinder, D, is arranged vertically between the rim of the dish C and the inner circumference of an annular horizontal plate, b, which plate is arranged on trough B, or is a part of the trough B, as shown in the drawing. The gas enters through the tube A and through the perforated cylinder into the centre of the burner. By arranging a tube, E, through the centre of the whole burner, and extending above the same, as shown in the drawing, the flame would come pletely surround said tube, and would consequently heat the air which circulates through or passes up in said tube. The gas is conveyed to the tube A by an ordinary pipe, and unites with the oxygen during its passage to the top of the burner.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—
The combination of the supporting tube A, trough B, dish C, and perforated cylinder D with the central air-tube, operating as described for the purpose specified.

H. Y. LAZEAR.

Witnesses:

WM. F. McNamara, ALEX. F. ROBERTS.