

CLARK & SAVAGE.  
Burner for Gas Stoves.

No. 54,114.

Patented April 24, 1866.

Fig: 2.

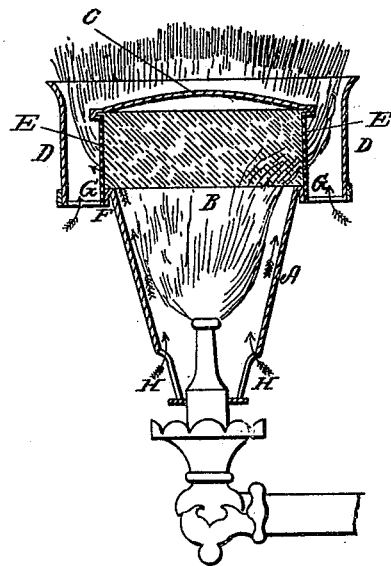
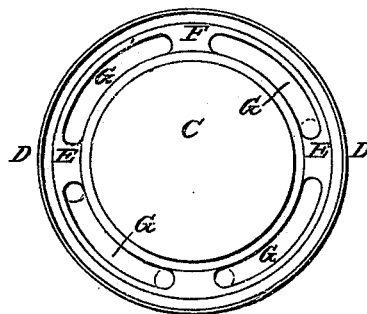


Fig: 1.



Witnesses:

Inventors:

*J. W. B. Covington* *R. R. Clark & S. I. Savage.*  
*Alex. F. Roberts.* *Per Munroe attys.*

# UNITED STATES PATENT OFFICE.

I. R. CLARK, OF NEW YORK, AND S. T. SAVAGE, OF ALBANY, N. Y.

## IMPROVEMENT IN BURNERS FOR GAS-STOVES.

Specification forming part of Letters Patent No. 54,114, dated April 24, 1866.

*To all whom it may concern:*

Be it known that we, ISAIAH R. CLARK, of the city, county, and State of New York, and SILAS T. SAVAGE, of Albany, in the county of Albany and State of New York, have invented a new and Improved Burner for Gas-Stoves; and we 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 part of this specification.

This invention relates to a new and improved burner for gas-stoves; and it consists in a novel construction of the burner, as will be hereinafter described, whereby a large flame is produced properly and fully supplied with oxygen and a large amount of heat generated with a moderate consumption of gas.

In the accompany plate of drawings our improvements are illustrated, Figure 1 being a plan or top view of the gas-stove burner, and Fig. 2 a central vertical section with it applied to an ordinary gas-burner.

A represents a tube of inverted conical form, the upper or large end, B, of which is made perforated for a portion of its length and capped or closed with a flat circular or disk-shaped imperforate deflector-plate, C. Around the perforated portion B of the tube A is placed a cylindrical box, D, of a little larger diameter than the portion of the cone A which it incloses or incases, leaving or forming a chamber, E, between the two, the upper end of which box D extends a short distance above the top of the cone-deflector, its lower end being secured by an annular ring-plate, E, to the cone, which ring has a series of openings or apertures, G G, in it entirely around the cone. The lower end of the inverted conical-shaped tube A has a se-

ries of openings, H, around its mouth, and is, by such end, placed upon any of the ordinary but suitable gas-burners or supply-pipes, as represented in red in the drawings, from which the gas as it escapes passes upward through the inverted conical-shaped tube, mingling with the air contained in it and also that passing through the openings of its lower end and thence out through the perforations of its upper portion, entering the surrounding chamber E, where, being ignited, another supply of air is mingled with the flame through the openings G G, and the flame escapes in a large body from the burner around the edges of the deflector-plate C.

By this means it is obvious a flame of great capacity is obtained and one bountifully and fully supplied with air, thus producing a perfect combustion of the gaseous vapor before escaping from the burner or heater, and also great heat with but a moderate supply of gas.

What we claim as new, and desire to secure by Letters Patent, is—

The inverted conical-shaped tube A, perforated upon its side at its upper portion and capped or closed with a deflector-plate, C, in combination with the cylindrical box D, surrounding its perforated portion and resting upon a flange, F, provided with apertures or openings G, when arranged and applied together substantially as and for the purpose described.

The above specification of our invention signed by us this 27th day of January, 1866.

I. R. CLARK.  
S. T. SAVAGE.

Witnesses:

M. M. LIVINGSTON,  
ALEX. F. ROBERTS..