

T. H. BRYMER.
Burner for Gas Stoves.

No. 53,404.

Patented March 27, 1866.

Fig. 1.

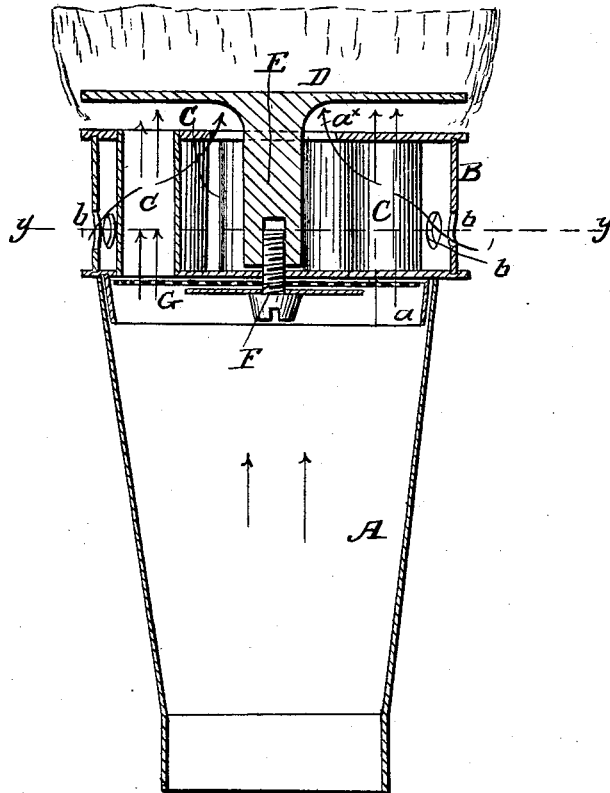
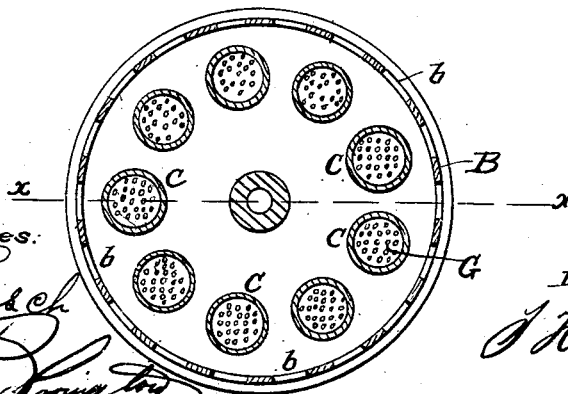


Fig. 2.



Witnesses:

Thos Litch
J. H. Brymer

Inventor:

J. H. Brymer

UNITED STATES PATENT OFFICE.

T. H. BRYMER, OF NEW YORK, N. Y.

BURNER FOR GAS-STOVES.

Specification forming part of Letters Patent No. 53,404, dated March 27, 1866.

To all whom it may concern:

Be it known that I, T. H. BRYMER, of the city, county, and State of New York, have invented a new and Improved Burner for Gas-Stoves; 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 part of this specification, in which—

Figure 1 is a vertical central section of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a horizontal section of the same, taken in the line *y y*, Fig. 1.

Similar letters of reference indicate like parts.

This invention relates to a new and improved burner for gas-stoves; and it consists in a novel arrangement of tubes and an air-chamber in connection with a button or deflector and a perforated disk, whereby a large flame is produced, properly supplied with oxygen, and a large amount of heat generated with a moderate consumption of gas.

A represents a tube, of inverted conical form, and having a cylindrical box, B, fitted on its upper end, said box having an annular flange, *a*, at its lower part, to fit into the top of the tube A. (See Fig. 1.) The tube A may be constructed of thin sheet metal and the box B of heavier sheet metal.

The box B has a series of vertical tubes, C, fitted in it, said tubes extending through the top and bottom of the box, and the latter perforated with holes *b* all around. The tubes C are arranged in the form of a circle, as shown in Fig. 2, with spaces between them, to allow the air to pass into the center of the box around the tubes, as indicated by the blue arrows in Fig. 1.

D represents a circular button or deflector, which is provided with a central pendent stem, E, the latter passing through a circular open-

ing, *a**, in the top of the box B and secured in position by a screw, F, which passes up through the center of the bottom of the box into the lower end of stem E, as shown in Fig. 1. This screw F also secures a circular perforated plate or disk, G, to the bottom of box B. The button or deflector D is a short distance above the box B, as shown clearly in Fig. 1.

The gas from one or more jets passes up the tube A and mingles with air, which also passes into the lower part or end of said tube. The mingled air and gas pass through the perforated plate or disk G and through the tubes C into the space between the top of the box B and the under side of the button or deflector D, where the air which passes into the box B through the perforations *b* mingles with the air and gas in said space around the upper end of the stem E, the opening *a** being sufficiently large to admit of this.

The gas is consumed at the outer edge of the space between the top of box B and the button or deflector D, and a flame of great capacity is obtained and one bountifully supplied with air. The perforated plate or disk G renders the supply of gas and air to the flame uniform, sudden puffs and gusts being avoided and a steady flame thereby obtained.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The box B, perforated at its side, as shown at *b*, and provided with the vertical tubes C, in combination with the button or deflector D, air-opening *a** in the top of box B, and the tube A, with or without the perforated disk G, all arranged substantially as and for the purpose herein set forth.

T. H. BRYMER.

Witnesses:

M. M. LIVINGSTON,

ALEX. F. ROBERTS.