J. A. FRY.

GAS BURNER.

APPLICATION FILED AUG. 31, 1916

1,224,157. Patented May 1, 1917.

Fig. 1.

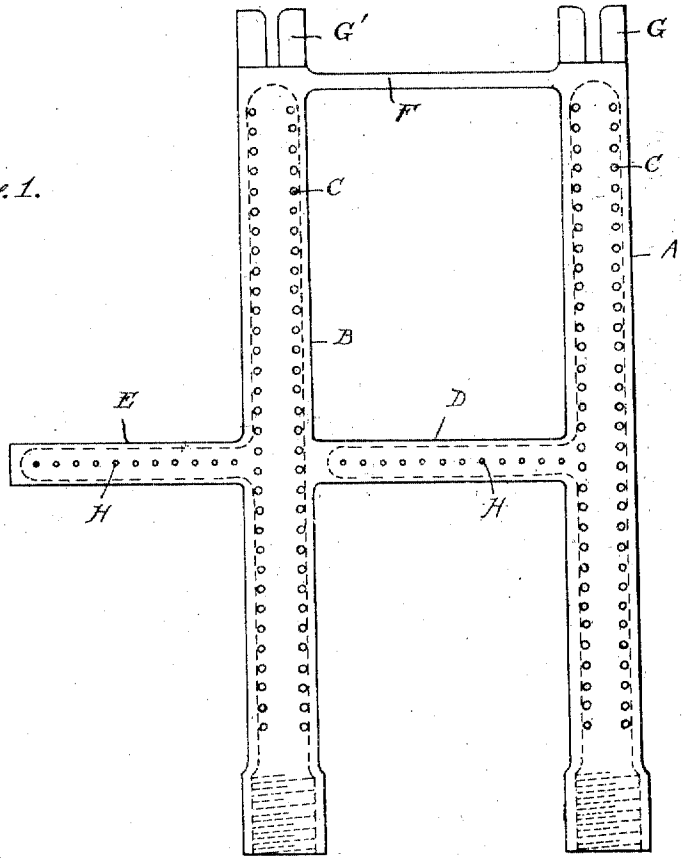
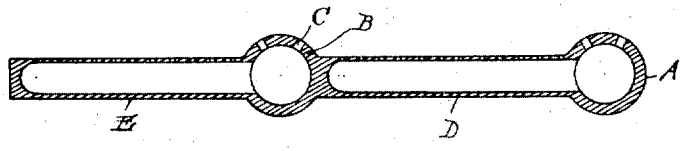


Fig. 2.



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GAS-BURNER.

1,224,157. Specification of Letters Patent. Patented May 1, 1917.

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To all whom it may concern:

Be it known that I, JOHN A. FRY, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Gas-Burners, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to gas burners designed for use in gas stove ovens and of the type in which there are a plurality of separately controlled sections. It is the object of the invention to provide a unit construction in which all sections may be formed integral and in which provision is also made for automatically lighting one section from another. Still further, it is an object to provide for the lighting of one of the burner sections from a point in advance thereof and for utilizing this latter for also lighting the other section, as hereinafter set forth.

In the drawings:

Figure 1 is a plan view of the burner;

Fig. 2 is a cross-section thereof.

A and B are parallelly-arranged tubes forming the separately-controlled sections of the burner, these being provided with suitable burner jet apertures C, as indicated. D is an integral connection between the sections A and B, which also is tubular, communicating at one end with the section A but being stopped off from communication with the section B. E is a tube in alinement with the connection D, extending forward from the section B, being also in interior communication with said section and stopped off at its forward end. F is a brace-bar extending between the sections A and B at the inner ends thereof. G and G′ are slotted lugs at the inner end of the sections A and B for engagement with mechanical support.

The construction as described is one which may be readily formed from an integral casting with the tubes D and E respectively in communication with the sections A and B, as has been described. These tubes are also provided with a series of jet apertures H, which are in sufficiently close proximity to cause a travel of flame from one to the other, so as to form a lighter. It will be noted, however, that there is no internal communication between the tubes D and E or between the sections A and B. Thus either section may be independently controlled by its corresponding gas valve (not shown).

In use, whenever it is desired to light the forward section B, by turning on the gas it will be caused to flow into the tube E, so that it may be ignited from the forward end of said tube, the flame carrying back to and lighting the section B. If it is also desired to light the rear section A, by turning on the gas it will flow through said section and tube D into proximity to the lighted section B so that the flame will travel from the latter to the former. Should it be desired to use the rear burner alone, the lighting is effected by first turning on the forward section B and lighting from the same the rear section, after which the forward section may be turned off.

The advantage of the construction is, first, its simplicity and low cost of manufacture; and second, the fact that the lighting is automatically effected for either section without the provision of any separate valves or without the possibility of any escape of gas when only one section is lighted.

What I claim as my invention is:—

1. In a gas burner, two spaced and separately-controlled sections, a connection extending transversely between said sections communicating with one thereof only, and a lighter tube communicating with the other section, said sections, connection, and lighter tube having jet apertures, the jet apertures of the lighter tube coacting with those of the sections with which said tube communicates to transmit a flame to the jet apertures of the other section across said connection.

2. In a gas burner, comprising two internally discontinuous sections, a brace member integrally connecting said sections at corresponding extremities thereof, a branch extending transversely between said sections communicating with one thereof only, and a lighter tube extending forwardly from the other section.

3. In a gas burner, two substantially parallel sections for respectively mounting at the front and back of an oven, a transverse connection between said sections having a passage communicating with the rear section and terminating adjacent the forward section, and a lighter tube alined with said connection communicating with the forward section and extending forwardly therefrom,

said sections, connection and lighter tube being formed with a series of jet apertures.

4. In a gas burner, two substantially parallel sections for respectively mounting at the front and back of an oven, a transverse connection between said sections having a passage communicating with one section and terminating adjacent the other section, and a lighter tube alined with said connection communicating with the forward section and extending forwardly therefrom, said sections, connection and lighter tube being formed with a series of jet apertures.

5. In a gas burner, two substantially parallel sections for respectively mounting at the front and back of an oven, a transverse connection between said sections having a passage obstructed intermediate the burners to cut off communication between the same, and a lighter tube alined with said connection communicating with the forward section and extending forwardly therefrom, said sections, connection, and lighter tube being formed with a series of jet apertures whereby a flame may be transmitted from said lighter tube to the forward burner and to the rear burner across said connection.

In testimony whereof I affix my signature in the presence of two witnesses.

JOHN A. FRY.

Witnesses:
W. S. WOODWARD,
FRANK G. WELBON.