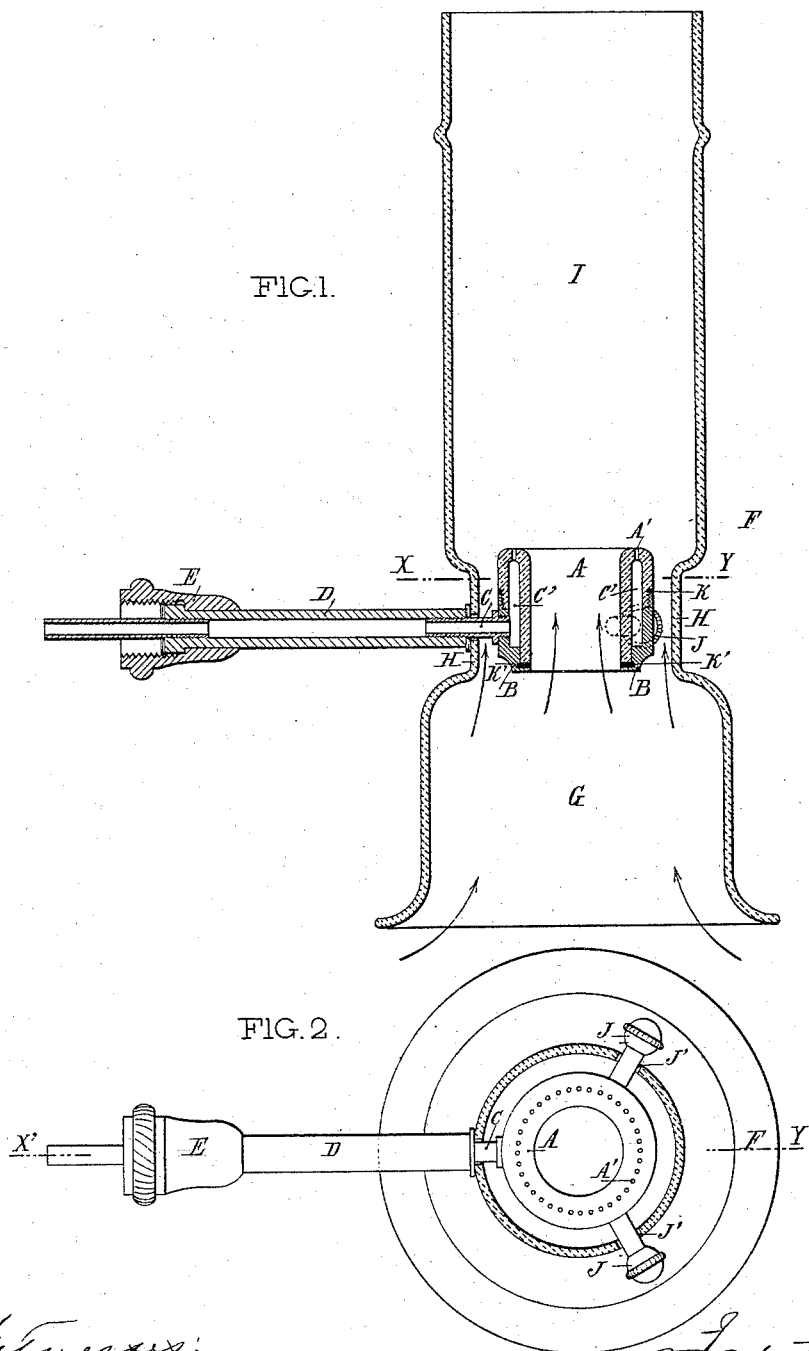


(No Model.)

P. GARY.  
GAS BURNER.

No. 489,802.

Patented Jan. 10, 1893.



Witnesses:

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# UNITED STATES PATENT OFFICE.

PROSPER GARY, OF TOULOUSE, FRANCE.

## GAS-BURNER.

**SPECIFICATION** forming part of Letters Patent No. 489,802, dated January 10, 1893.

Application filed August 10, 1892. Serial No. 442,706. (No model.) Patented in France April 2, 1892, No. 220,568.

*To all whom it may concern:*

Be it known that I, PROSPER GARY, a citizen of the Republic of France, residing at Toulouse, France, have invented certain new and useful Improvements in Gas-Burners, (for which I have obtained a patent in France, No. 220,568, dated April 2, 1892,) of which the following is a full, clear, and exact specification.

This invention has for its object to provide a new and improved gas burner, and it consists in the features of construction and the combination or arrangement of devices hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1, is a vertical central sectional view of a gas burner constructed in accordance with my invention, and Fig. 2, is a plan view partly in section on the line X—Y Fig. 1.

In order to enable those skilled in the art to make and use my invention I will now describe the same in detail, referring to the drawings where the letter F indicates a glass chimney formed with a contracted or narrow portion H and an expanded or widened lower portion G. The burner A is annular and is located centrally with relation to the contracted or narrow portion H of the glass or chimney. This burner is provided with a series of holes A' in its upper side for the egress and combustion of the gas and the burner comprises inner and outer walls separated to form a reservoir or chamber C' for receiving the gas which flows through a tube C attached to a holder B and extending through a lateral orifice in the contracted portion H so as to connect with the gas supply tube D. The burner is located within the holder B, and the tube C leading from the holder forms a regulator according to its interior diameter and is itself joined by the branch pipe D to the boss E which serves for fixing it to the gas-supply pipe. The connection of the burner A to the holder B is completed by the cement or plaster joints K K' which prevent all es-

cape of gas except through the orifices A' of the burner A. Thus arranged, the burner A is fixed at a convenient height in the vertical center of the glass chimney F, in the narrow part H thereof; the lower part G is widened and forms the aspirator and draws in the air, while the upper part I forms a chimney properly speaking for the flame.

The burner A is supported in the glass F, by two rods J passing through two holes J', J' in the said glass F and screwed into the walls of the holder B, and by the tube C which passes through a hole formed in the glass F for this purpose. The gas-burner thus constructed is joined to the gas-supply pipe by the branch D and the boss E and is so placed as to leave clear or unobstructed as far as practicable the lower enlarged part G of the glass F which forms the aspirator and inducts the air necessary for combustion. The air following the direction of the arrows shown in the portion G becomes heated by contact with the glass F and with the whole of the burner A and is split up, passing the one part through the center of the burner A and the other part around the same in such a manner as to feed the flame in a regular and perfect manner both inside and outside. A good flame is thus obtained without flickering, without flaring, and without smoke.

What I claim is:—

The combination with a glass F, having a contracted portion H and a widened portion G, of a holder B located centrally in the contracted part of the glass, a burner A secured within the holder and having the chamber C' and holes A', the branch pipe D, and the tube C extending from the holder through a lateral orifice in the contracted part of the glass and connected with the branch pipe, substantially as described.

PROSPER GARY.

Witnesses:

SHILLIGE,

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