

F. MINNICK.
GAS BURNER.
APPLICATION FILED JUNE 8, 1912.

1,064,517.

Patented June 10, 1913.

Fig. 1.

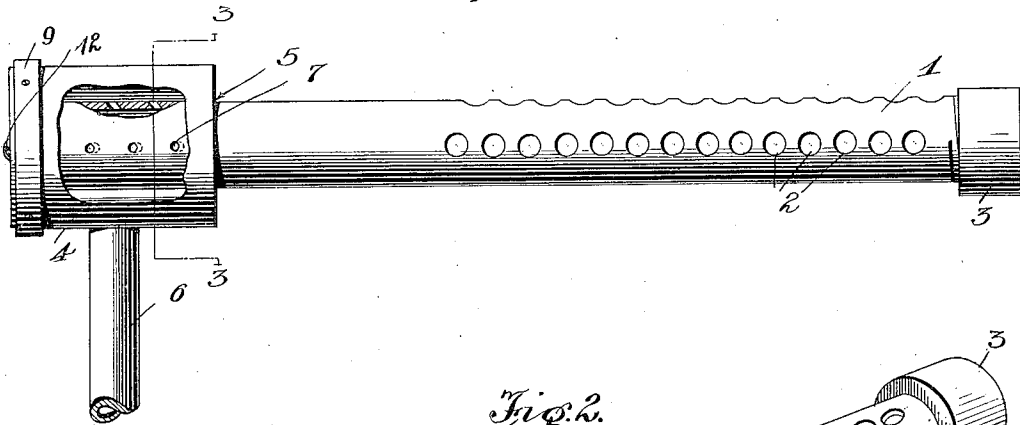


Fig. 2.

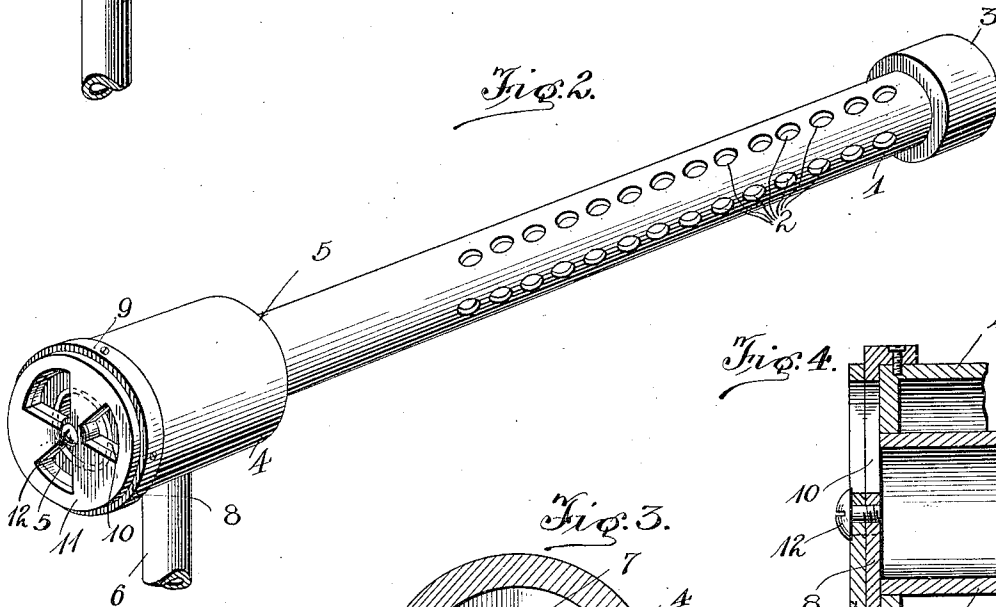


Fig. 3.

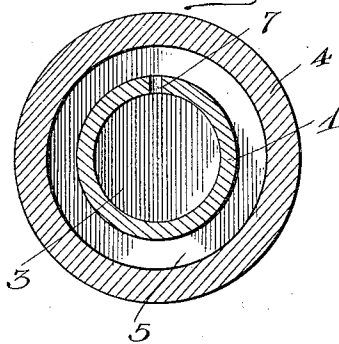
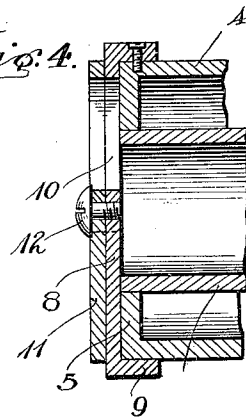


Fig. 4.



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FRANK MINNICK, OF HAMILTON, OHIO.

GAS-BURNER.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRANK MINNICK, a citizen of the United States, residing at Hamilton, in the county of Butler and State of Ohio, have invented new and useful Improvements in Gas-Burners, of which the following is a specification.

This invention relates to gas burners and the principal object of the invention is to provide a simple and efficient device of this character by which a maximum amount of heat may be obtained with a minimum use of fuel.

A further object of the invention is the provision of a burner having a plurality of gas inlet openings so that the gas is injected thereinto in miniature jets, which serve to draw into the burner a quantity of air.

Further objects of this invention will appear as the following specific description is read in connection with the accompanying drawing, which forms a part of this application, and in which:—

Figure 1 is a side elevation with parts broken away. Fig. 2 is a perspective view of a burner. Fig. 3 is a transverse section on the line 3—3 of Fig. 1. Fig. 4 is a detail longitudinal section of one end of the burner.

Referring more particularly to the drawing, 1 represents the burner tube which is provided in its sides and top with a plurality of openings 2. The outer end of the burner is closed by a cap 3, while the inner end is open, as shown. The inner end of the burner is surrounded by a casing 4 which is separated from the burner intermediate its ends and is provided with inwardly extending flanges 5, at its ends to tightly fit the burner tube 1. Leading into said casing from the under side thereof is an inlet pipe 6 which may be connected to any suitable gas supply. The portion of the tube which is covered by the casing is

provided with a plurality of gas inlet ports 7 in its sides and top, said ports extending diagonally through the sides so as to cause the gas to be projected toward the closed end of the tube in miniature jets which act to suck the air into the open end of the tube, as will be readily understood. While the straight tube 1 has been shown, it will be of course understood that this may have any form desired.

The open end of the burner tube is closed by a cap 9 having an annular flange to overlie the casing 4 and being secured thereto by the screws, as shown. This cap 9 is provided with a plurality of openings 10 which are adapted to register with similar openings formed in an adjusting plate 11 rotatably mounted upon the cap by means of a screw which passes through the plate 11 and is threaded into the cap 9.

What is claimed is:—

A gas burner comprising a tube having staggered outlet openings in its sides and top, a cap for closing one end of the tube, a casing surrounding the open end of the tube and separated therefrom, means carried by the casing for controlling the air into the open end of the tube, flanges carried by the casing for engaging the tube and for forming a gas tight connection between the casing and the tube, and a gas inlet pipe leading into the bottom of the casing, said tube having a plurality of apertures in its sides and top, said apertures extending diagonally through the walls of the tube and adapted to project the gas passing therethrough toward the closed end of the tube and to suck air into the open end of the tube.

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

FRANK MINNICK.

Witnesses:

J. B. CONNAUGHTON,
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