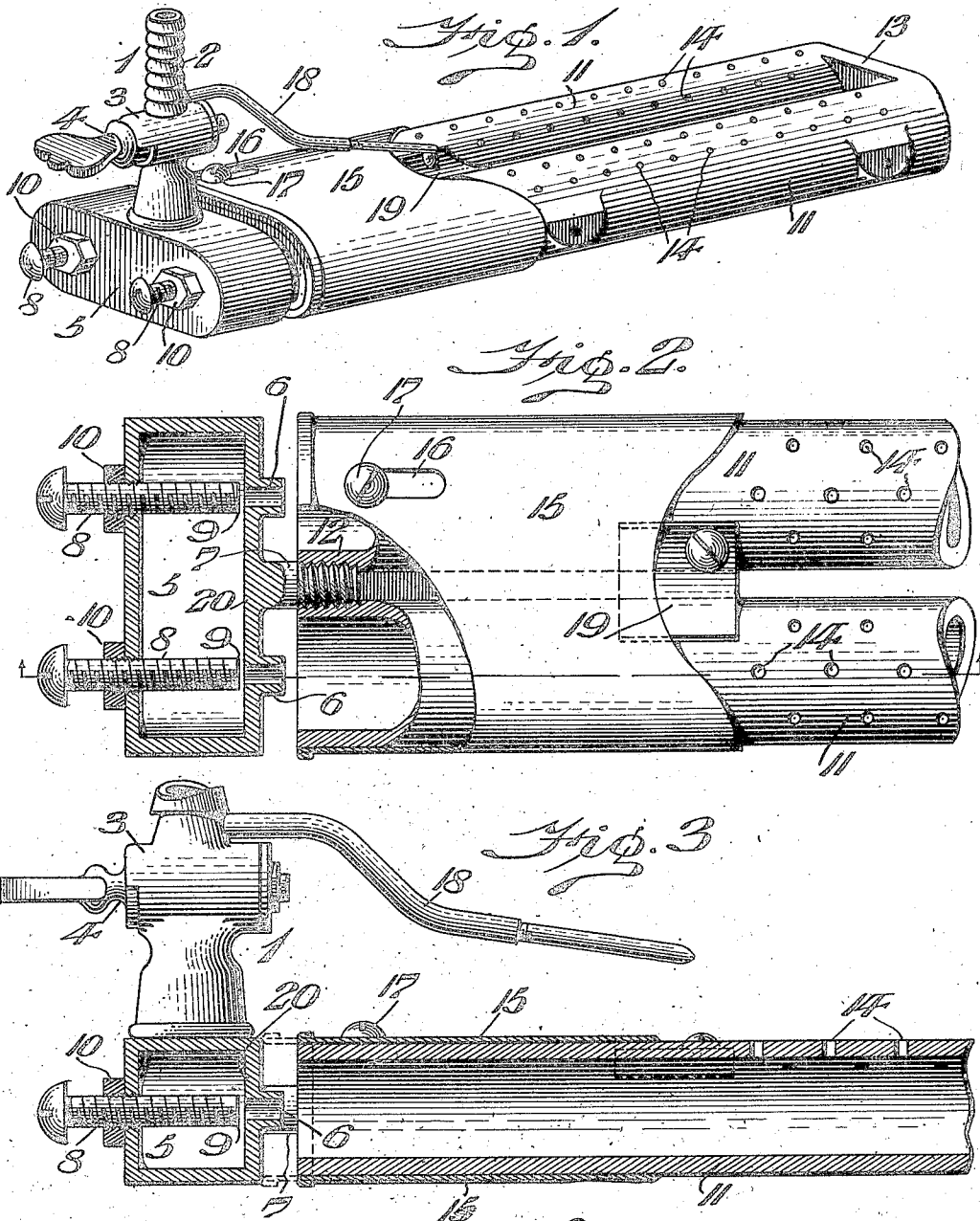


G. B. COBB, JR.
GAS BURNER.

APPLICATION FILED SEPT. 13, 1913.

1,103,566.

Patented July 14, 1914.



WITNESSES

H. G. Dietrich
P. J. Nagler

BY

George B. Cobb, Jr.
Dietrich & Fairbank

INVENTOR

ATTORNEYS

UNITED STATES PATENT OFFICE.

GEORGE B. COBB, JR., OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO VESTA MANUFACTURING CO., OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF NEW JERSEY.

GAS-BURNER.

1,103,566:

Specification of Letters Patent.

Patented July 14, 1914.

Application filed September 13, 1913. Serial No. 739,593.

To all whom it may concern:

Be it known that I, GEORGE B. COBB, JR., a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Gas-Burner, of which the following is a specification.

My invention consists of an improved gas burner comprising a plurality of parallel perforated tubes having means for regulating the gas and air supply.

It further consists of such a burner provided with a pilot light and with means for preventing air-draft between the tubes from blowing out such pilot light.

It further consists of other novel features of construction all as will be hereinafter fully set forth.

The annexed drawings and the following description set forth in detail one mechanical form embodying the invention, such detail construction being but one of various mechanical forms in which the principle of the invention may be used.

In said annexed drawings Figure 1 represents a perspective view of my improved gas-burner. Fig. 2 represents a top plan view of the burner with parts in horizontal section and broken away. Fig. 3 represents a longitudinal section through one of the burner tubes.

Similar numerals of reference indicate corresponding parts in the figure.

Referring to the drawings, the reference numeral 1 indicates a connection having a nipple, 2, or similar attaching means to the gas supply, and formed with a seat, 3, for a cock, 4, of the usual or any preferred form. The connection is secured upon the upper side of a chamber, 5, formed with jet-nipples, 6, in its inner wall. This chamber, which may be termed a manifold chamber, is illustrated as having two nipples, and has a flat inner wall, 20, from which projects a screw-threaded stud, 7. Regulating valves, 8, formed by screws having flat inner ends, 9, are threaded through the outer wall of the manifold chamber and have lock-nuts, 10, upon them to bear against the outer face of said wall, and the flat ends of said valves may seat against the flat inner face of the inner wall of the chamber and the inner ends of the jet-nipples to control the flow of gas through them. A pair of burner

tubes, 11, have webs, 12 and 13, at their inner and outer ends to connect them. The inner web has a screw-threaded opening which screws upon the threaded stud of the chamber to secure the tubes to the same with their inner ends a distance from the wall of the chamber and axially registering with the jet-nipples. The upper sides of the outer portions of the burner-tubes have jet-openings, 14, for the inflammable mixture formed in the tubes. A sleeve, 15, is slidable upon the inner, imperforate portions of the tubes to more or less close the space between the latter and the chamber. Said sleeve is formed with a longitudinal slot, 16, through which passes a screw, 17, into one of the tubes to limit the longitudinal play of the sleeve. A pilot burner-tube, 18, extends from the connection and over the damper-sleeve to the perforated portions of the burner-tubes, and a plate, 19, is secured beneath the end of the pilot tube and between the burner-tubes to protect the pilot-flame against draft coming up through the space between said tubes and liable to blow out such flame.

The gas-supply can be regulated by the screw-valves, and the air-supply by sliding the sleeve, which can be secured in its adjusted position by means of the screw. The pilot-jet will always burn, ready to light the jets of the burners.

Other modes of applying the principle of my invention may be employed for the mode herein explained. Change may therefore be made as regards the mechanism thus disclosed, provided the principles of construction set forth respectively, in the following claims are employed.

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

1. A gas-burner, comprising a chamber having a gas inlet and a jet nipple in one wall of the same, a burner tube arranged to register with said nipple and at a distance from said wall and formed with jet-openings in its outer portion, and an air-controlling sleeve longitudinally slidable upon the imperforate inner portion of said tube to more or less cover the space between the inner end of the tube and the chamber and to be covered by the latter when in its extreme closing position.

2. A gas-burner, comprising a chamber formed with a gas inlet and a flat inner wall having a plurality of gas-jet nipples in said wall, a plurality of burner-tubes supported to have their inner ends register with said nipples and at a distance from said wall and having the upper sides of their outer portions formed with jet-openings, and an air-controlling sleeve longitudinally slidable upon the imperforate inner portions of said burner-tubes to more or less cover the space between the inner ends of the latter and the inner wall of the chamber.

3. A gas-burner, comprising a chamber having a flat inner wall formed with a pair of jet-nipples and a screw-threaded stud between said nipples, a pair of burner tubes connected by webs at their ends and having the inner web formed with a threaded opening screwed upon said stud and said tubes formed with jet-openings in the upper sides of their outer portions, and a sleeve slidable upon the inner imperforate portions of said tubes to more or less cover the space be-

tween the inner ends of the latter and the wall of the chamber.

4. A gas-burner, comprising a chamber having a flat inner wall formed with a pair of jet-nipples and a screw-threaded stud between said nipples, a connection into said chamber, a pair of burner-tubes connected by webs at their ends and having the inner web formed with a threaded opening screwed upon said stud and said tubes formed with jet-openings in the upper sides of their outer portions, a sleeve slidable upon the inner imperforate portions of said tubes to more or less cover the space between the inner ends of the latter and the wall of the chamber, a pilot-jet-tube extending from said connection to a point beyond said sleeve, and a plate secured between the burner-tubes at a point beneath the jet-opening of said pilot-tube.

GEORGE B. COBB, Jr.

Witnesses:

C. D. McVAY,
WM. SECHER,