

C. H. GARTRELL.
Gas-Regulators.

No. 149,648.

Patented April 14, 1874.

Fig. 1

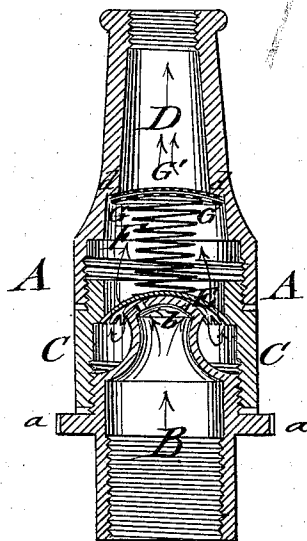


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

CHARLES H. GARTRELL, OF PADUCAH, KENTUCKY.

IMPROVEMENT IN GAS-REGULATORS.

Specification forming part of Letters Patent No. **149,648**, dated April 14, 1874; application filed September 27, 1873.

To all whom it may concern:

Be it known that I, CHARLES H. GARTRELL, of Paducah, in the county of McCracken and State of Kentucky, have invented a new and Improved Gas Burner and Regulator, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical central section of my improved gas burner and regulator, and Fig. 2 a top view of the serrated cap for spreading the gas.

Similar letters of reference indicate corresponding parts.

The object of my invention is to produce an improved gas burner and regulator, which feeds the gas steadily and equally to the flame, and economizes its consumption. My invention consists in forming the burner of different chambers, to which the admission of the gas is regulated, and the flow steadied by means of a distributing cap-piece, which spreads the gas and supplies it to the flame.

In the drawing, A represents the gas burner and regulator, which is composed of three parts—the lower entrance-cone B, the intermediate part C, and the part D. The parts B C D are made of metal or other suitable material, and connected by closely-fitting screw-joints, so that no gas can escape in the passage through the burner. The intermediate cylindrical part C is screwed on the base-cone B, resting on a projecting rim, *a*, of the same. The base part B is screwed or otherwise connected to the gas-pipe, in the usual manner. The upper conical part D is arranged for any

desired tip or burner, to which the gas is evenly supplied by passing through the chambers formed by the lower parts B C. The rounded-off top of the base-cone B is provided with two holes, *b*, placed eccentrically to the highest point of the cone, which holes are made of different sizes, according as a definite quantity of gas per hour is to be consumed by the burner. The top of the base-cone B supports a concave serrated cap, E, on which the gas impinges on issuing from the holes *b*. A reverse pressure of the gas is thereby produced, which checks the upward flow of the gas, and spreads the same around the cap E, passing it up through the notches of the serrated circumference, as indicated in Fig. 1. A spiral spring is loosely placed on cap E, and supports the sieves G G, through which the gas passes, and is steadily and evenly fed to the flame, and more fully and economically consumed.

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

The gas burner and regulator A, composed of base-cone B, which carries the distributing-cap E, with a serrated edge, and spring F as a support for sieves, all connected and retained in position by intermediate part C and top part D, substantially as and for the purposes described.

CHARLES H. GARTRELL.

Witnesses:

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