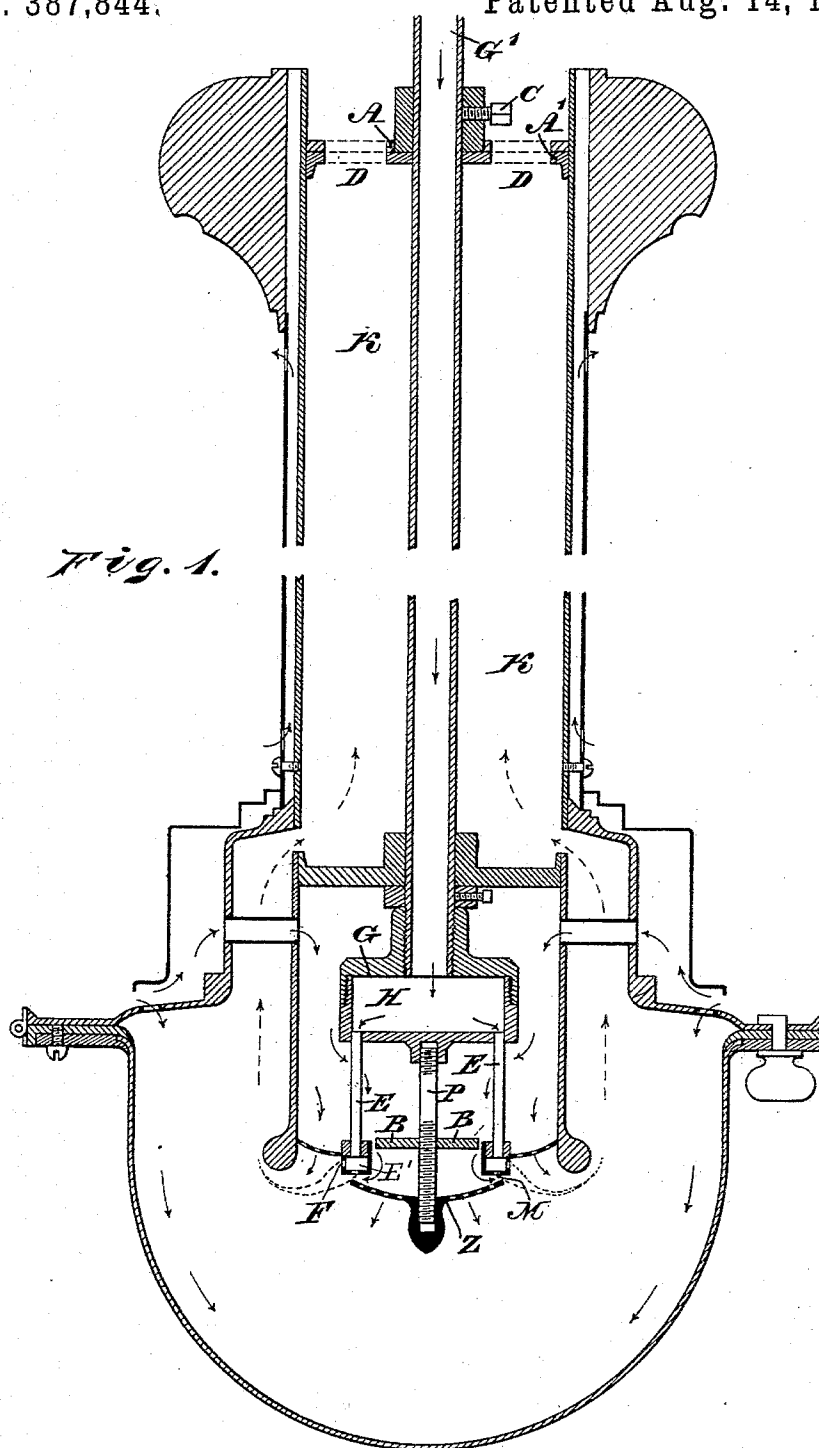


J. W. BAKER.*
REGENERATIVE GAS BURNER.

No. 387,844.

Patented Aug. 14, 1888.



WITNESSES:

James F. Kelly.
L. Douville

INVENTOR.

John W. Baker.
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(No Model.)

2 Sheets—Sheet 2.

J. W. BAKER.

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Fig. 2.

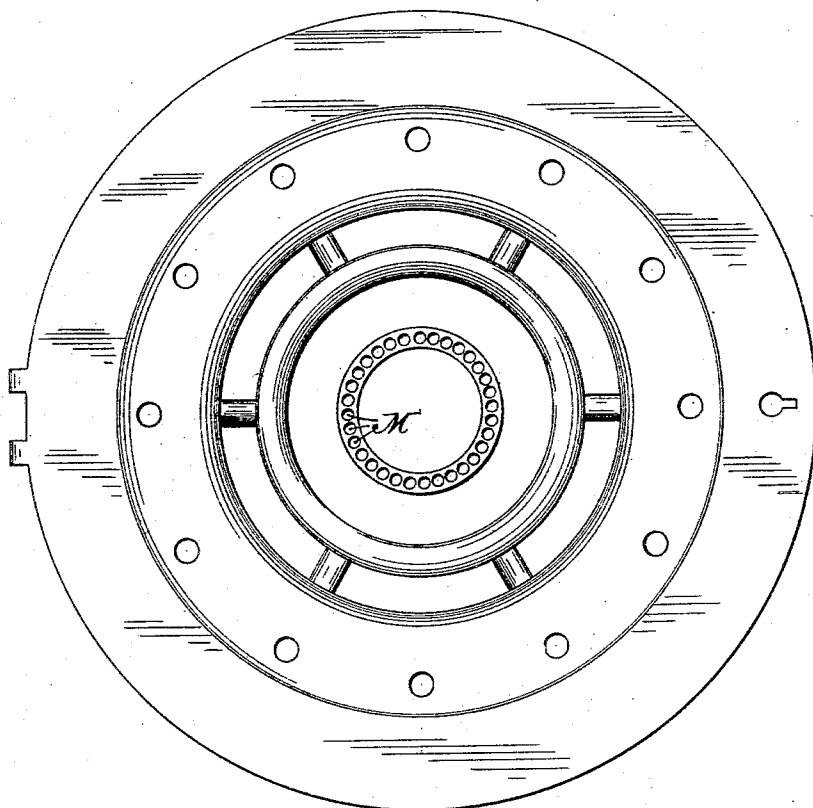


Fig. 3.

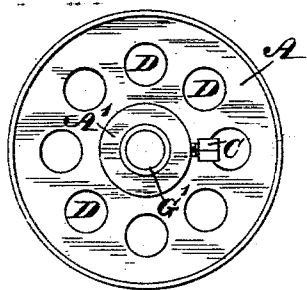


Fig. 4.

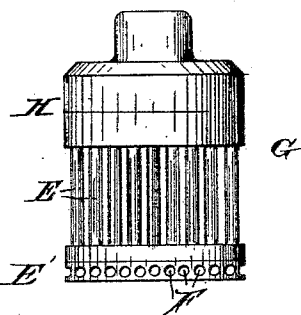
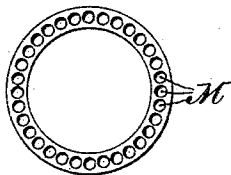


Fig. 5.



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UNITED STATES PATENT OFFICE.

JOHN W. BAKER, OF PHILADELPHIA, PENNSYLVANIA.

REGENERATIVE GAS-BURNER.

SPECIFICATION forming part of Letters Patent No. 387,844, dated August 14, 1888.

Application filed August 24, 1887. Serial No. 247,715. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. BAKER, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Regenerative Gas-Burners, which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to improvements in regenerative gas-burners; and it consists in the combination and arrangement of parts, as hereinafter set forth and claimed.

Figure 1 is a vertical section of a well-known form of regenerative gas-lamp with my improvements annexed. Fig. 2 is a plan view of the lamp. Fig. 3 is a detail view showing the air-register. Figs. 4 and 5 are detail views showing the gas-ports.

Similar letters of reference indicate corresponding parts in the several figures.

It is not necessary to describe the general construction of the lamp, as it is old and well known, so I will simply describe my improvements and their functions.

Referring to the drawings, A A' is a registering-damper having registering-holes D D, adapted to regulate the outflow of the products of combustion in the exit-pipe or chimney K. This damper is located in the top of the chimney, and is secured, as shown, by a screw, C, to the gas pipe G'.

G is the burner, having gas-conveying tubes E E running from the chamber H, attached to the gas-pipe G', to the base of the lamp. To the lower ends of these tubes is secured an annular chamber, E', which is provided with a series of peripheral openings, F, and a series of base-openings, M. These holes F and M are

arranged at an angle to each other—preferably a right angle—and so that as the gas is forced out the draft, as shown by the arrows, forces the two jets together and makes a single flame.

B B is an adjustable spreader or button attached to the base of the gas-chamber H by a screw, P, and having a perforated spreader-cup, Z. By means of the screw P and button B the size of the opening between the said button and inner walls of the chamber E' is adjusted so that the interior draft is regulated, and by means of the spreader-cup Z the direction and amount of flame from the port M is controlled.

The arrows show the direction of the drafts in the lamps, and the direction of the combined flame is seen at the exit of the ports E M.

The operation of the device is obvious and needs no further explanation.

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

1. In a regenerative gas-lamp, a gas-chamber with tubes leading therefrom into an annular chamber, the latter having peripheral and base openings, and an adjustable perforated spreader-cup, said parts being combined substantially as and for the purpose set forth.

2. The gas-chamber H, the tubes E, leading therefrom, the chamber E', having base-openings M and peripheral openings F, the spreader-cup Z, the button B, and the adjusting-screw P, said parts being combined and arranged substantially as and for the purpose set forth.

JOHN W. BAKER.

Witnesses:

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