(No Model.)

J. W. BAKER.

GAS LAMP.

No. 385,785. Patented July 10, 1888.

Fig. 1.

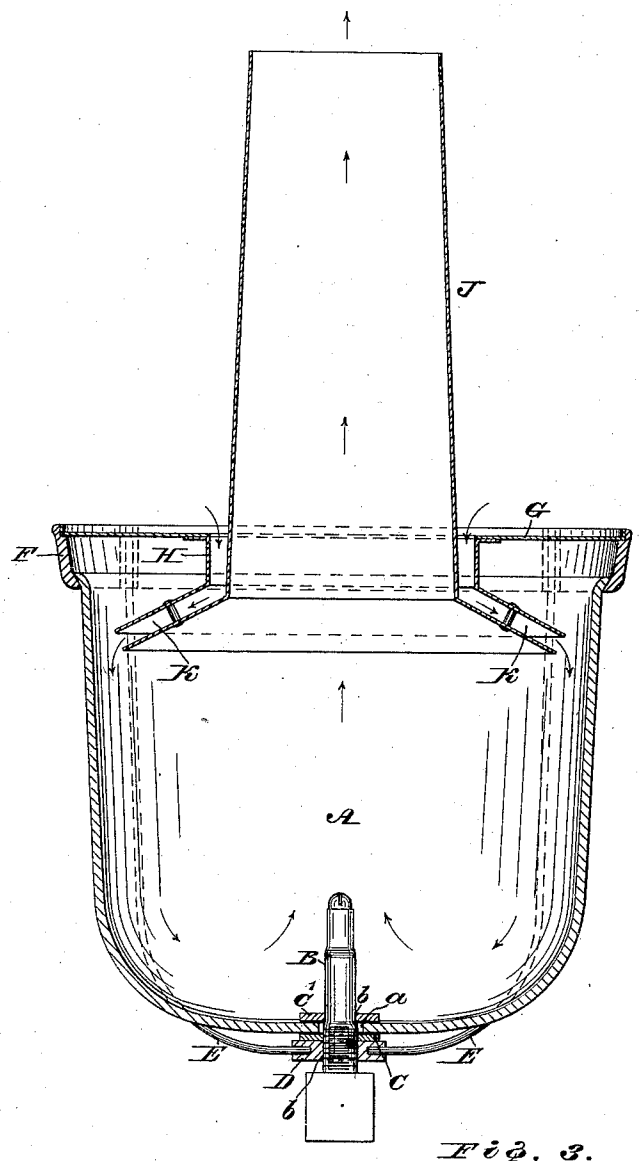


Fig. 2.

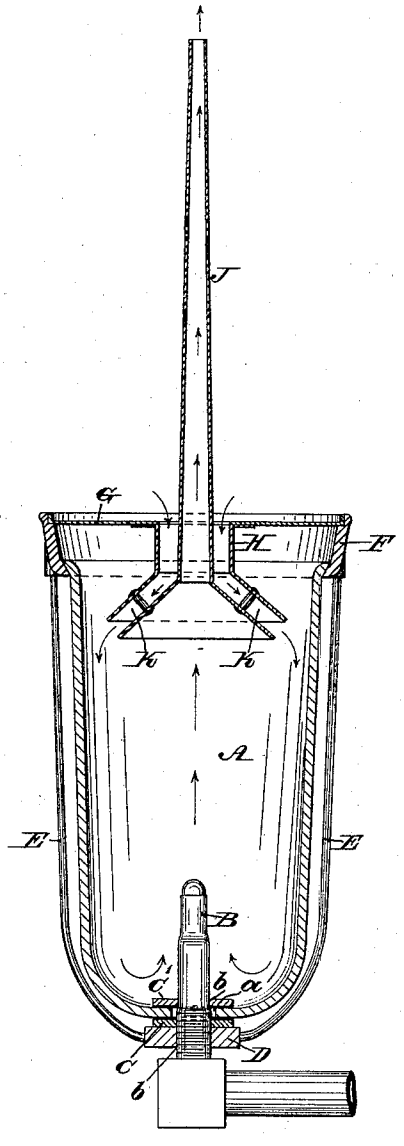
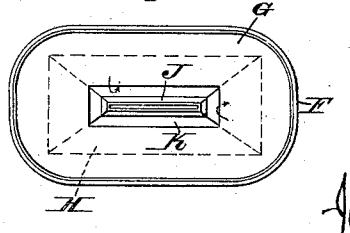


Fig. 3.



WITNESSES.

Jas. F. Kelly.

L. Douville.

INVENTOR:

John W. Baker.

BY John A. Wiedersheim

ATTORNEY.

UNITED STATES PATENT OFFICE.

JOHN W. BAKER, OF PHILADELPHIA, PENNSYLVANIA.

GAS-LAMP.

SPECIFICATION forming part of Letters Patent No. 385,785, dated July 10, 1888.

Application filed April 7, 1887. Serial No. 233,970. (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 Gas Lamps, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figures 1 and 2 represent vertical sections of a gas-lamp embodying my invention. Fig. 3 represents a top or plan view on a reduced scale.

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

My invention relates to improvements in globes and fixtures for gas-burners; and it consists in providing the globe with means, as hereinafter set forth and claimed, whereby the burner is supplied with heated air, the light being greatly increased thereby.

Referring to the drawings, A represents a glass globe, which has in its bottom an opening, *a*, which is slightly larger than the diameter of the burner B, the latter being of well-known form, excepting that a portion of the exterior thereof is screw-threaded.

C represents a washer on the under side of the bottom of the globe, the same being fitted on the burner and closing the opening *a*.

D represents a collar, which is located below the washer C, and adapted to be fitted to the burner, the opening of said collar being threaded, whereby the collar may be screwed to the burner. Rising from the collar, and secured thereto, are arms E, which support a ring, F, located at the top of the globe. Resting freely on the ring F is an annular plate, G, from the center of which depends a pipe or deflector, H, the lower portion whereof is flaring. Within the pipe H is a flue, J, whose lower portion is flaring, said flue and pipe being connected by rivets or other means, and separated a certain distance, so as to leave between them the passage K, which is open at top and bottom.

A washer, C', of mica or other material, is fitted on the burner, so as to loosely cover the opening *a* of the globe from above; but this is not an essential feature.

The operation is as follows: The lamp is fitted to the burner and supported thereon and the plate G removed, whereby access is had to the burner, and gas issuing from the latter is ignited, the plate G then being returned to position. The products of combustion are directed into the flue J and heat the same. Fresh air enters the passage K and is heated therein, in which condition it is discharged into the globe and caused to descend the side of the same, and, reaching the bottom, is fed to the burner, the effect of which is a flame or light of great brilliancy. As the globe is not in direct contact with the burner, owing to the size of the opening *a*, as has been stated, it is prevented from being broken by the heat of the burner.

The passage K and flue J may be packed with gauze for regulating the draft, &c.

The globe may be said to be of the form of an inverted bell, so that the crown is below, the opening *a* being in said crown.

I am aware that it is not new to construct a globe for a gas-burner provided with a chimney having air-passages alongside of the same leading into the globe, whereby heated air is supplied to the flame, and such I do not claim; but I am not aware of the particular construction herein set forth, wherein a flat disk suspended independently of the globe has a central opening with depending collar, the latter having a flaring lower portion and sustaining a flue secured thereto at its lower flaring portion, thereby forming an air-passage opening into the globe toward the walls thereof and without being in line of the flame.

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

1. In a gas-burner, the combination of the threaded burner with the threaded collar D, the upwardly-projecting arms E, rising from said collar, the ring F, supported by said arms, the globe A, suspended from said ring, the annular plate G, resting on said ring, the pipe or deflector H, depending from said ring and having a flaring lower rim, and the flue J, passing through said annular plate, and with a flaring lower rim supported by the deflector H and forming the passage K, substantially as and for the purpose set forth.

2. In a gas-burner, the combination of the burner with a collar, the upwardly-extending

arms connected with said collar, the ring supported by said arms, and a top closing plate sustained on said ring, the globe suspended from said ring and having in its base an opening of greater diameter than the burner, a washer closing said opening, a central depending deflector secured to said ring, and a flue passing through said deflector having a lower flaring portion, said flaring portion forming together a lateral passage, substantially as described.

J. W. BAKER.

Witnesses:
JOHN A. WIEDERSHEIM,
JAS. F. KELLY.