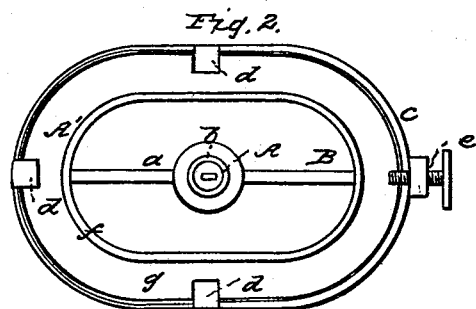
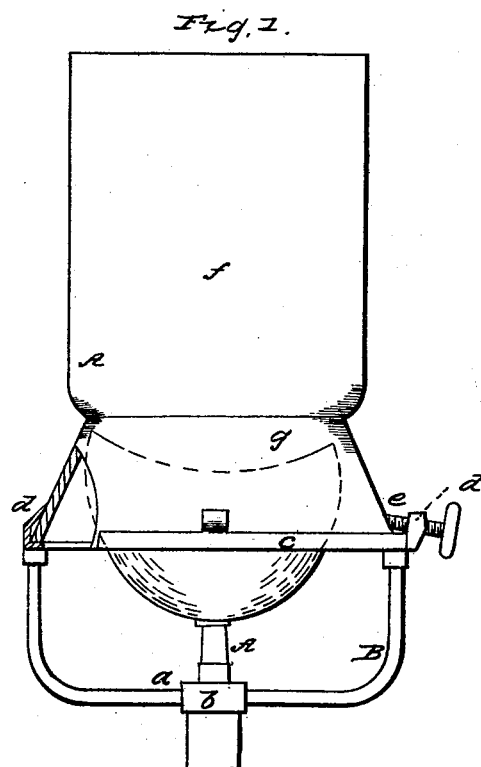


J. STRATTON.  
Gas Burner Chimney.

No. 49,010.

Patented July 25, 1865.



Witnesses:

Wm. M. Livingston  
Geo. Tusch  
J. M. Corington

Inventor:

James Stratton

# UNITED STATES PATENT OFFICE.

JAMES STRATTON, OF BROOKLYN, NEW YORK.

## IMPROVED GAS-BURNER CHIMNEY.

Specification forming part of Letters Patent No. 49,010, dated July 25, 1865.

*To all whom it may concern:*

Be it known that I, JAMES STRATTON, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Chimney for Gas-Burners; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an elevation or an external view of my invention applied to a gas-burner; Fig. 2, a plan or top view of the same.

Similar letters of reference indicate like parts.

This invention consists in having a glass chimney constructed or made in such a form and applied to the burner in such a manner as to cause the flame or jet to burn steadily, or without that flickering which invariably attends the flat flames or jets produced by the ordinary "bat-wing" or "fish-tail" burners, and which is very detrimental to the eyes.

A represents a gas-burner of the kind which produces a flat flame, and B is a chimney-support applied to the burner, said support being composed of a bow-shaped bar, *a*, provided at its center with a socket, *b*, which fits over the burner, the bar *a* extending upward at each side, and having an oval or elliptical rim, *c*, attached to its upper ends, and provided with lips *d*, which project over the lower edge of the chimney C, the latter being secured on the rim *c* by said lips *d* and a set-screw, *e*.

The chimney A' is of glass, and its body or main portion *f* is of oval or elliptical form in its transverse section, and of such dimensions as to correspond with the size of the flame or jet issuing from the burner A, the portion *f* being about at an equal distance from the top of the flame or jet all around. The lower part, *g*, of the chimney is of flaring form, gradually

expanding from its junction with *f* to its lower end, said part *g*, in its transverse section, corresponding in form to *f*. This flaring part *g* of the chimney covers about one-half of the flame or jet, the upper part of the same, the lower part or half being exposed, as shown in Fig. 1. The upper part, *f*, of the chimney is of equal diameter throughout its entire length, and it may be rather larger in diameter than the upper part, *g*, as shown in Fig. 1; but I do not deem this essential. By having the chimney A' thus constructed and applied to the gas-burner A, so that it will have the position relatively with the flame or jet as described, the latter is made to burn steadily or without that flickering which usually attends them. The lower part of the flame or jet being exposed to the air, and the part *g* projecting out from it at about an equal distance all around, admits of a free access of air to the flame or jet, while the part *f* produces a requisite draft up through the chimney. The unsteadiness or flickering of the flame or jet is principally at the upper part, and the covering of said part by the lower conical part, *g*, of the chimney, in connection with the draft produced, produces the result stated.

I claim as new and desire to secure by Letters Patent—

A glass chimney for gas-burners, composed of an upper part, *f*, of oval or elliptical form in its transverse or horizontal section, and of equal diameter throughout, and a lower conical or flaring part, *g*, also of oval or elliptical form in its transverse section, and applied to the burner so as to have a relative position with the flame or jet, substantially as and for the purpose specified.

JAMES STRATTON.

Witnesses:

M. M. LIVINGSTON,  
C. L. TOPLIFF.