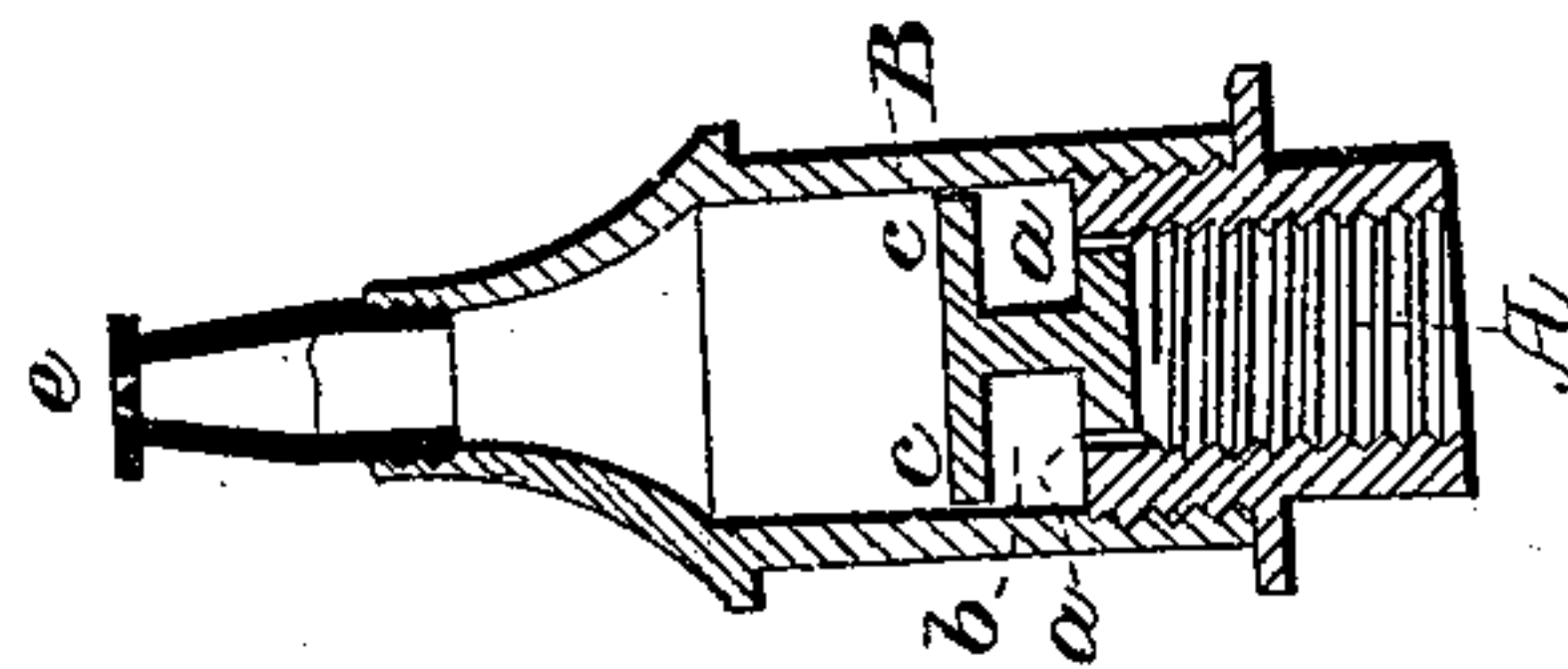


W. TALLMAN.

Gas Burner.

No. 19,959.

Patented April 13, 1858.



# UNITED STATES PATENT OFFICE.

WM. TALLMAN, OF CINCINNATI, OHIO.

## GAS-BURNER.

Specification of Letters Patent No. 19,959, dated April 13, 1858.

*To all whom it may concern:*

Be it known that I, WILLIAM TALLMAN, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Improvement in Gas-Burners; and I hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, making part of this specification.

10 My invention consists in an improved arrangement for equalizing the delivery of gas from the jet orifices.

The accompanying drawings represent an axial section of a gas burner with my improvement.

15 A, is the base of the burner by which it is attached to the pipe in the customary manner. The gas passes upward through holes *a* into the lower chamber *b*, against the walls of which it is deflected by an impermeforate disk C, fixed concentrically within the said chamber and of such size that a slight chink *c*, intervenes all around between the disk and the walls of the chamber, through  
20 which chink the gas passes in the form of a hollow film or sack uniting again above.

The width of the passage *c*, is (for clearness of representation) exaggerated in the drawings and model, its proper capacity  
30 being somewhat less than that of the two apertures *e*, at the tip of the burner, so as to limit the pressure at the tip.

The following advantages in this arrangement will be readily observed: 1st, the large surface presented by the sides of the annular passage *c*, causes so great an increase of resistance on any increase of pressure as to make it a very effectual method of limiting the pressure at the tip. 2nd, the contact of the gas with the heated walls *d*, during its flow through the passage *c*, preheats it in a very effective manner. 3rd, the apparatus is of simple and economical construction and admits of easy cleaning, the sides of the contracted passage *c*, being separated on the removal of the cap B.

I am aware that disks have been employed within gas burners to act on the principle of valves, but

I claim as new and of my invention herein:

The construction and arrangement substantially as described, of the disk C, fixed concentrically within the burner so as to leave around it a contracted annular passage *c*, for the purpose explained.

In testimony of which invention I hereunto set my hand.

WILLIAM TALLMAN.

Attest:

GEO. H. KNIGHT,  
AND J. HUSTON.