

W. Webb.

Lamp Burner.

N<sup>o</sup> 42,262.

Patented Apr. 5, 1864.

Fig: 1

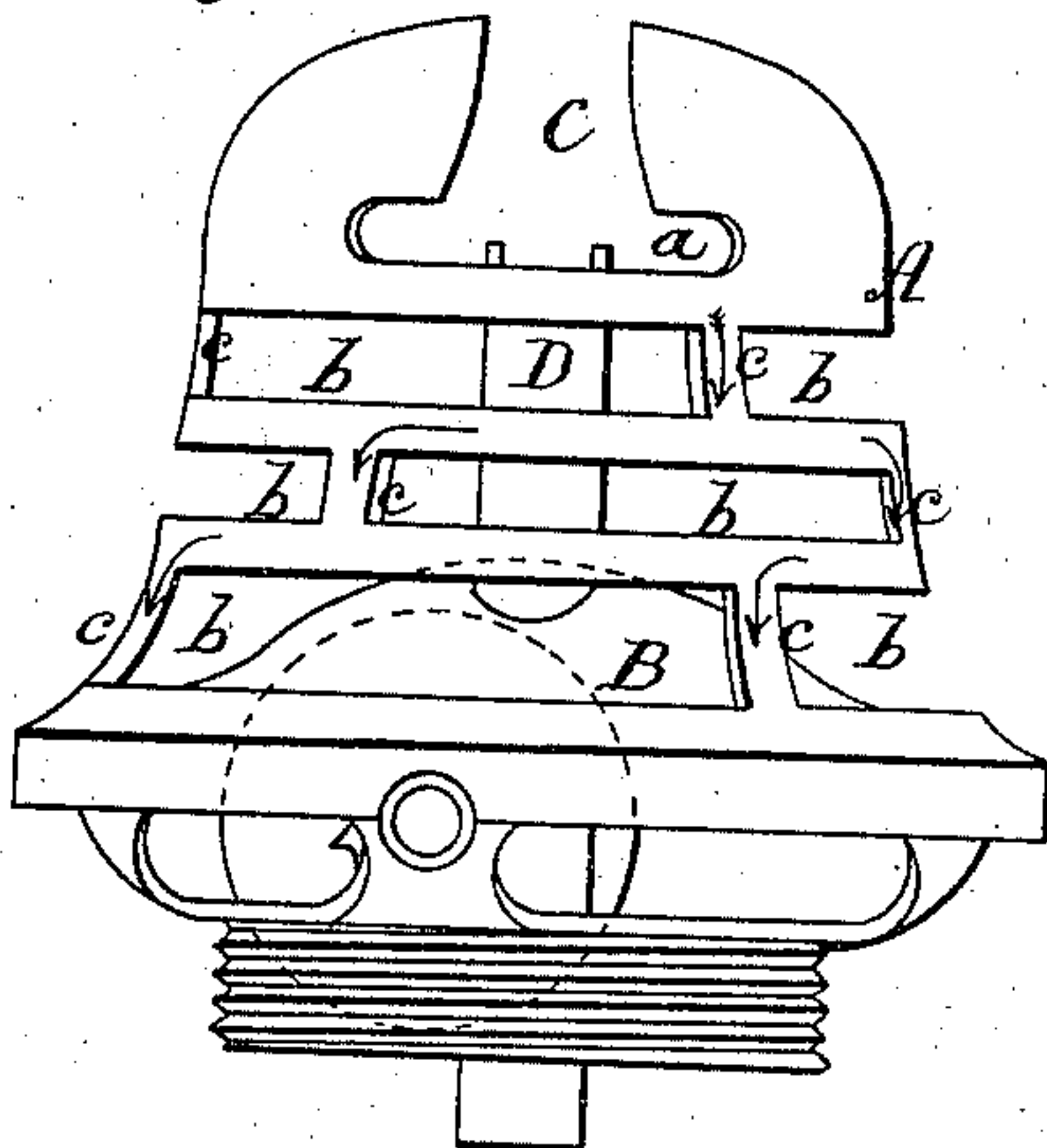
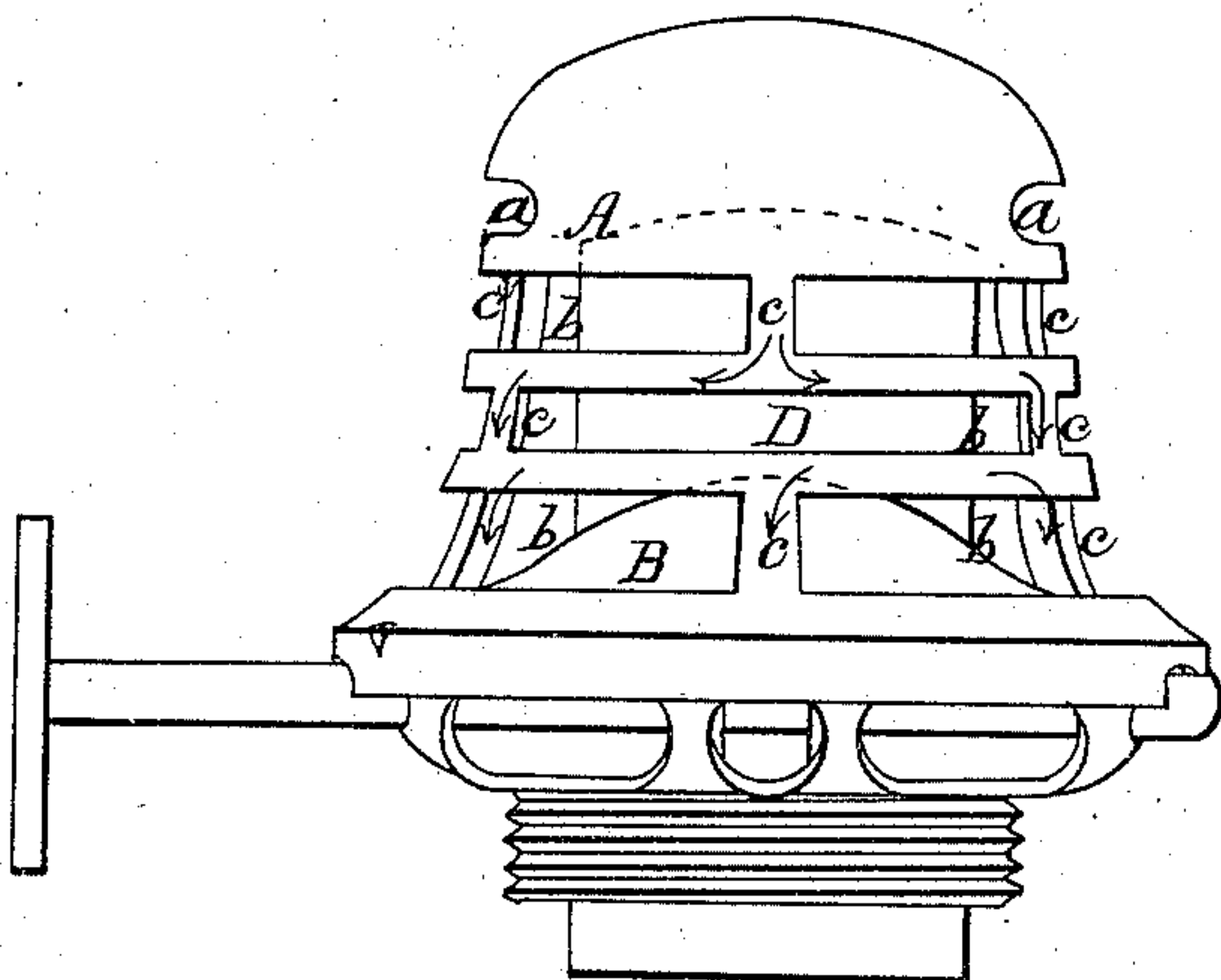


Fig: 2.



Witnesses;

J. W. Coombs  
J. H. Rice

Inventor;

Wm Webb  
per  
Munn & Co  
attorneys

# UNITED STATES PATENT OFFICE.

WILLIAM WEBB, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE  
SCOVILLE MANUFACTURING COMPANY, OF SAME PLACE.

## IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. 42,262, dated April 5, 1864.

*To all whom it may concern:*

Be it known that I, WILLIAM WEBB, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new and useful improvement in lamp-burners for burning coal-oil and other similar hydro-carbons; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figures 1 and 2 are side views of my invention.

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

This invention consists in a certain improved combination of deflector, air-passages, and shield, by which thorough combustion is effected and the flame protected from sudden drafts in any direction which would endanger its extinction.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a cone or deflector, the top of which may be of the usual external shape or form, and fitted on a perforated base, B, of conical or convex form, above which, within the lower part of the deflector A, is a shield, B', which serves to protect the flame from currents of air when the burner is suddenly or quickly moved downward. C represents the slot in the top of the cone or deflector, which extends down at opposite sides of the cone and gradually enlarges toward its lower ends. The lower ends of the slot C terminate in horizontal slots *a a*, one of which is shown in Fig. 1. These slots *a a* project at equal distances from each side of the lower ends of the slot C, and said slots *a* are about on a level with the upper end of the wick-tube D. By this arrangement the breadth and brilliancy of the flame are very materially increased, in consequence of a large supply of oxygen being admitted to it at its base at the upper end of the

wick-tube. The cone or deflector below the ends of the slot C is perforated with rectangular openings *b*. These openings leave the lower part of the cone in skeleton form, so that there is but a small amount of metal to conduct the heat down to the lower part of the burner, and the connections *c* between said openings are arranged in zigzag form, so as to cause a very circuitous route for the heat to be conducted down to the lower part of the burner, as indicated by the arrows. By this means the oil in the lamp will be prevented from volatilizing too rapidly, and the flame will not be supplied with an excess of vapor, but only in amount commensurate with the supply of oxygen; hence a brilliant illuminating-flame is the result, without smoke or odor.

The construction of the deflector A and openings *b b* and their arrangement in relation to the wick-tube D are such as to protect the flame from any horizontal or downward draft, which would endanger its extinction, while the shield B' protects it from an upward draft, such as would occur in suddenly lowering the burner, as in carrying a lamp downstairs or signaling with a lantern. In this case the large capacity of the openings *b* insures an adequate supply of air to the flame, so that it will not be extinguished by the air being carried away from it by the external current.

I do not claim, broadly, the enlargement of the slot at its base; but,

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

The combination of the deflector A, perforated base B, and imperforate shield B', constructed and applied as herein shown and described, and for the purposes specified.

WM. WEBB.

Witnesses:

C. P. Goss,

F. I. KINGSBURY.