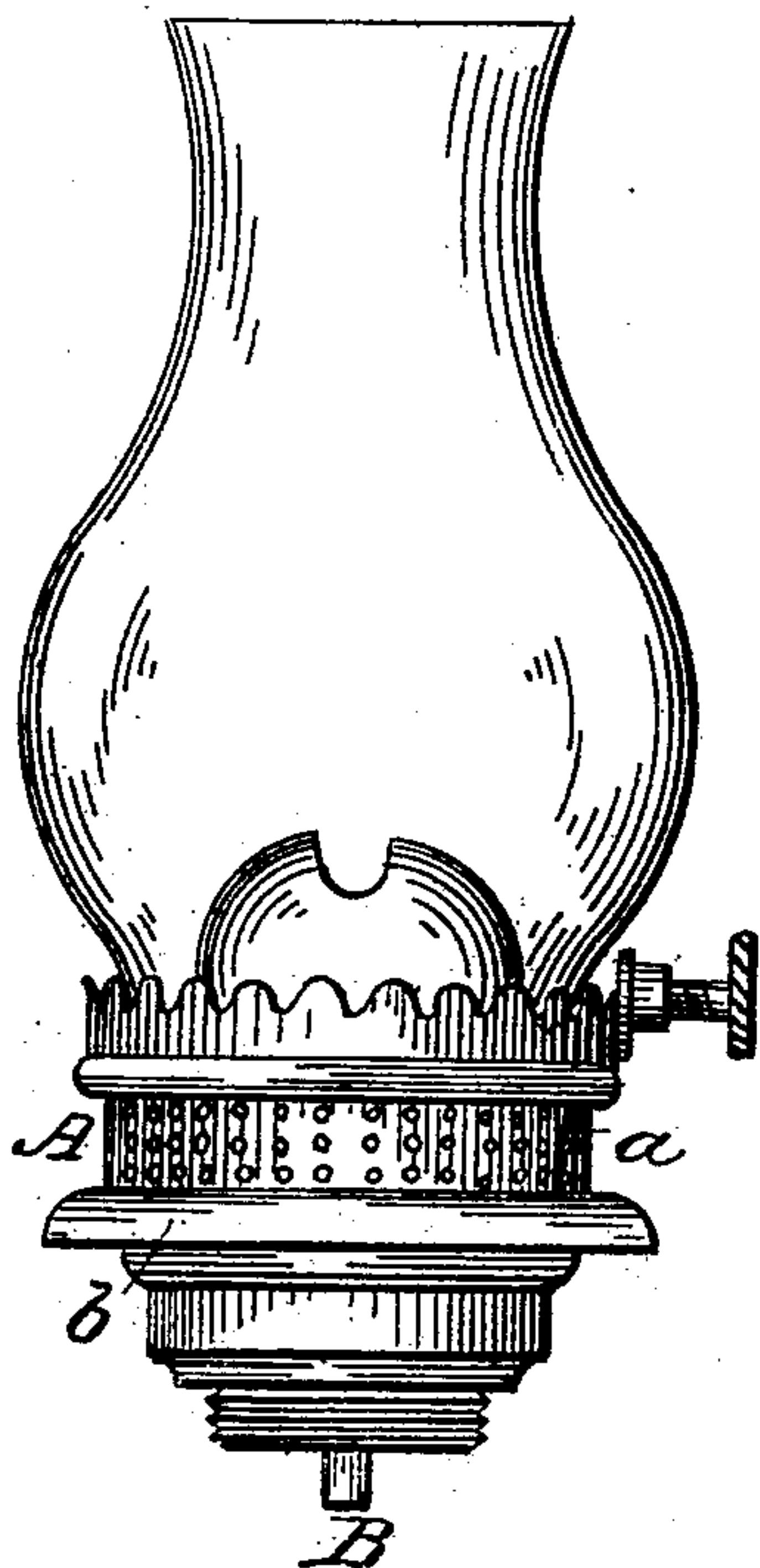


J. S. HULL.  
Lamp Burner.

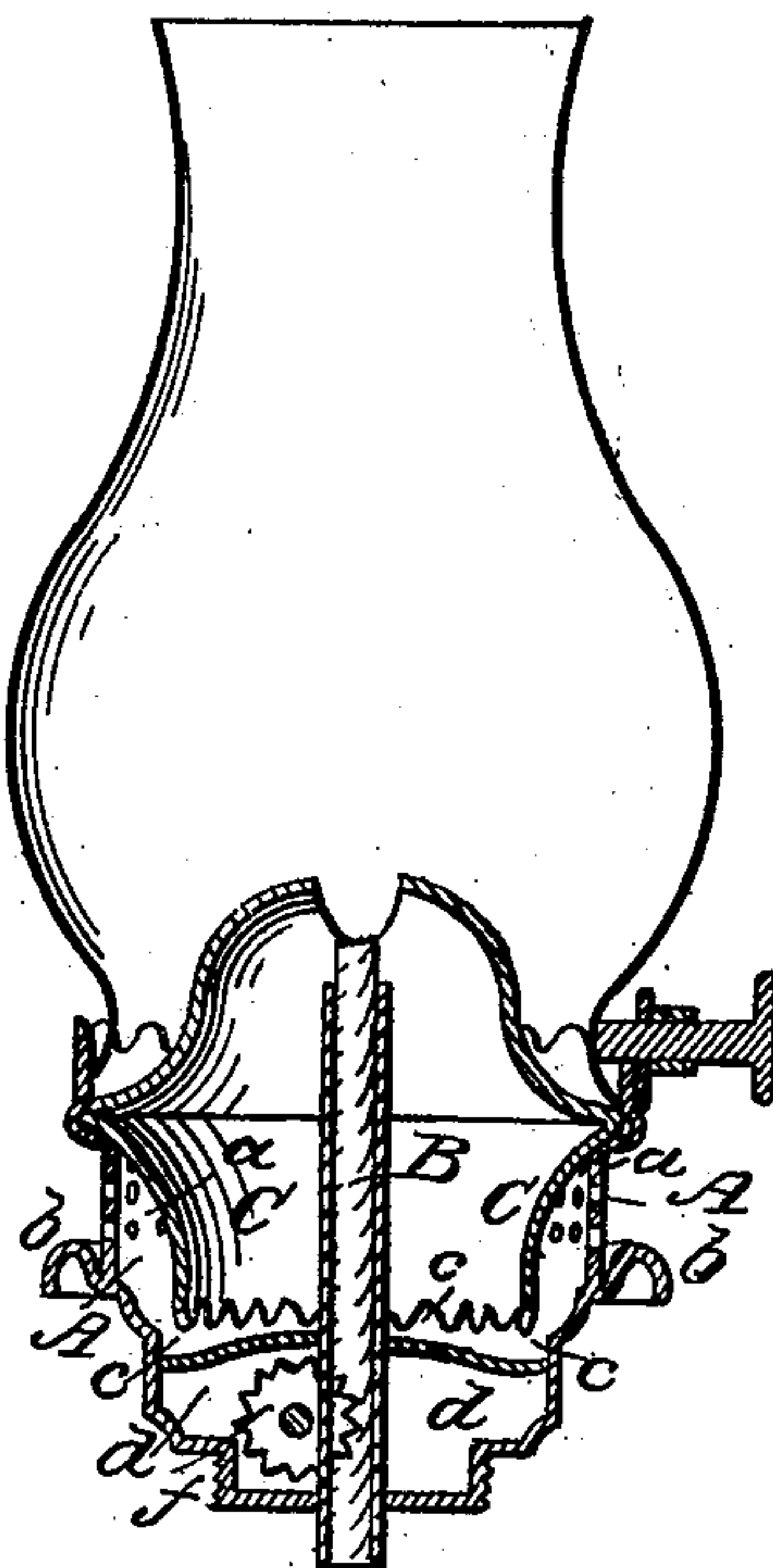
No. 39,399.

Patented Aug. 4, 1863.

*Fig. 1,*



*Fig. 2,*



*Witnesses:*

*J. S. Brown*  
*A. B. Smith*

*Inventor.*

*John S. Hull*

# UNITED STATES PATENT OFFICE.

JOHN S. HULL, OF CINCINNATI, OHIO.

## IMPROVEMENT IN LAMP-BURNERS.

Specification forming part of Letters Patent No. 39,399, dated August 4, 1863.

*To all whom it may concern:*

Be it known that I, JOHN S. HULL, of Cincinnati, and State of Ohio, have invented a new and useful Improvement in Coal-Oil-Lamp Burners; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

Figure 1 is a side view of a coal-oil-lamp burner provided with my improvement; Fig. 2, a central vertical section thereof.

Like letters designate corresponding parts in both figures.

The parts of the burner not herein especially described may be of any ordinary construction consistent with the improvement applied.

Around the outer case, A, of the burner, about midway of its height, is an annular cup or concave ring, b, intended for the purpose of arresting the currents of air descending around the burner, and direct the air in larger and more constant quantities into the burner through small perforations a a in the case A, just above this concave ring.

Inside of the case A is introduced an annular partition, C, Fig. 2, somewhat of an inverted, cone-bell, or equivalent form, as represented, the upper broader edge fitting closely inside of the burner-case A, just below the chimney, and the lower edge being of considerably less diameter, so as to leave a considerable space between it and the outer case. The partition extends downward past the perforations a a of the case A, and more or less below them, but not down to the bottom of the burner, in order that a free space may be allowed for the draft-air to flow inward around the lower edge of the partition, and thence upward in the middle of the burner. A transverse partition, d, some distance below the lower edge of the cone-partition C, may be employed to cover the wick-wheels, &c.

The use of this cone-partition C, in connection with the small perforations a a, is not only to lengthen the passage of the draft to the burner, but, by gradually enlarging and concentrating the draft from different sides to equalize the motion and pressure on all sides, and finally to direct an even current all round up the middle of the burner. I find that this device makes a less sensitive light than many more complicated burners, and the draft, not being confined and hindered by too many tortuous passages, is freer and more copious, and produces a full and clear light.

To give an improved and still surer effect to the equalizing power of this inside partition, I notch or scallop its lower edge, as at c c, Fig. 2, whereby the draft as it turns inward around the partition is broken up into many small and equal currents, in a manner analogous to the action of perforations.

A burner provided with this improvement requires only a short chimney, as indicated in the drawings, to produce as large and brilliant a light as a large chimney will produce in ordinary lamps. Hence it is peculiarly suitable for portable lamps.

The construction of this burner is exceedingly simple and cheap.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The inner cone-partition, C, arranged in the inside of a lamp-burner, in combination with the perforations a a of the outer case, substantially as and for the purpose herein specified.

2. The notches or scallops c c in the lower edge of the partition C, for the purpose designated.

JOHN S. HULL.

Witnesses:

J. S. BROWN,

EDM. F. BROWN.