

J. RIDGE.
Coal Oil Lamp.

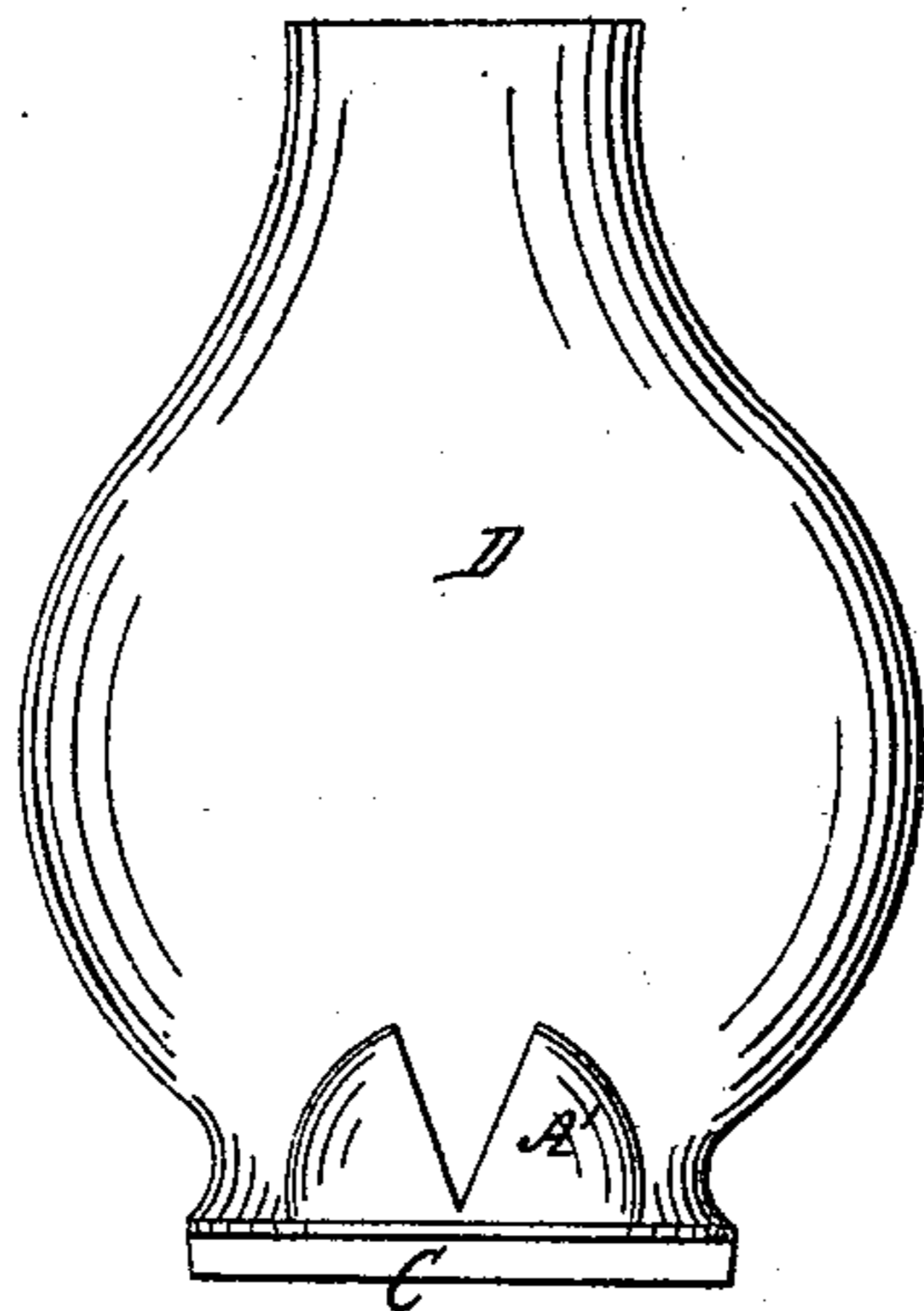
No. 41,093.

Patented Jan. 5, 1864.

Fig. 1.



Fig. 2.



Witnesses:

L. J. Harwell,
C. A. Stafford

Inventor:

Joseph Ridge
by His atty J. F. Dennis

UNITED STATES PATENT OFFICE.

JOSEPH RIDGE, OF RICHMOND, INDIANA.

IMPROVEMENT IN COAL-OIL LAMPS.

Specification forming part of Letters Patent No. **41,093**, dated January 5, 1864.

To all whom it may concern:

Be it known that I, JOSEPH RIDGE, of the city of Richmond, Indiana, have invented a new and useful Improvement in Coal-Oil Lamps; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My improvement consists in providing coal-oil lamps with a hemispherical cone or deflector, which is constructed with a comparatively larger orifice or slot than has been heretofore in use, in connection with a peculiarly-formed chimney, which, from the peculiar formation of the cone, can be relatively very much shorter than has previously been practicable.

In the drawings, which form a part of this application, the principle of my invention is shown in the correlative proportion of the slot and chimney as deduced from my experiments, which show that the length of chimney can be reduced measurably in proportion to the enlargement of the slot as constructed in my improved cone, and also that the slot can only be enlarged by reducing the length of the chimney.

My cone or deflector for the size of lamp shown is one and one-tenth inches in diameter, of hemispherical shape, made of any suitable material, provided with a slot or orifice equal in size and similar in shape to a longitudinal section thereof, embracing sixty degrees of its circumference, the radial lines of which reach the center at the base of the cone.

In the drawings, which accompany this and

form a part of this application, Figure 1 represents my cone or deflector. Fig. 2 represents the cone with short chimney attached.

In Fig. 1, A' is the hemispherical cone, and A A represent the circumference thereof. B B are the sectional sides of the slot in radial lines from the center base of the hemisphere to its circumference. This cone or deflector is attached to the rim or cap of the lamp by the band C or any other suitable means.

In Fig. 2, D is the short chimney as attached to the hemispherical cone A' and shows the great comparative reduction attained by the combination with the enlarged slot, when constructed as described.

The concavity of the inner surface of the cone, as modified by the peculiar shape of the slot, has a tendency to direct the currents of air which feed the flame so that they strike the plane of the wick-tube at nearly right angles and impinge therein in the most favorable manner to produce and secure the fullest and most complete combustion with the least velocity of draft.

Having thus fully described my said improvement, what I claim, and desire to secure by Letters Patent, is—

The hemispherical cone or deflector A', with its longitudinal sectional slot, as constructed and described, in combination with the short chimney D, in the manner and for the purposes as set forth and described.

JOSEPH RIDGE.

Witnesses:

H. L. JONES,

JAS. M. BLANCHARD.