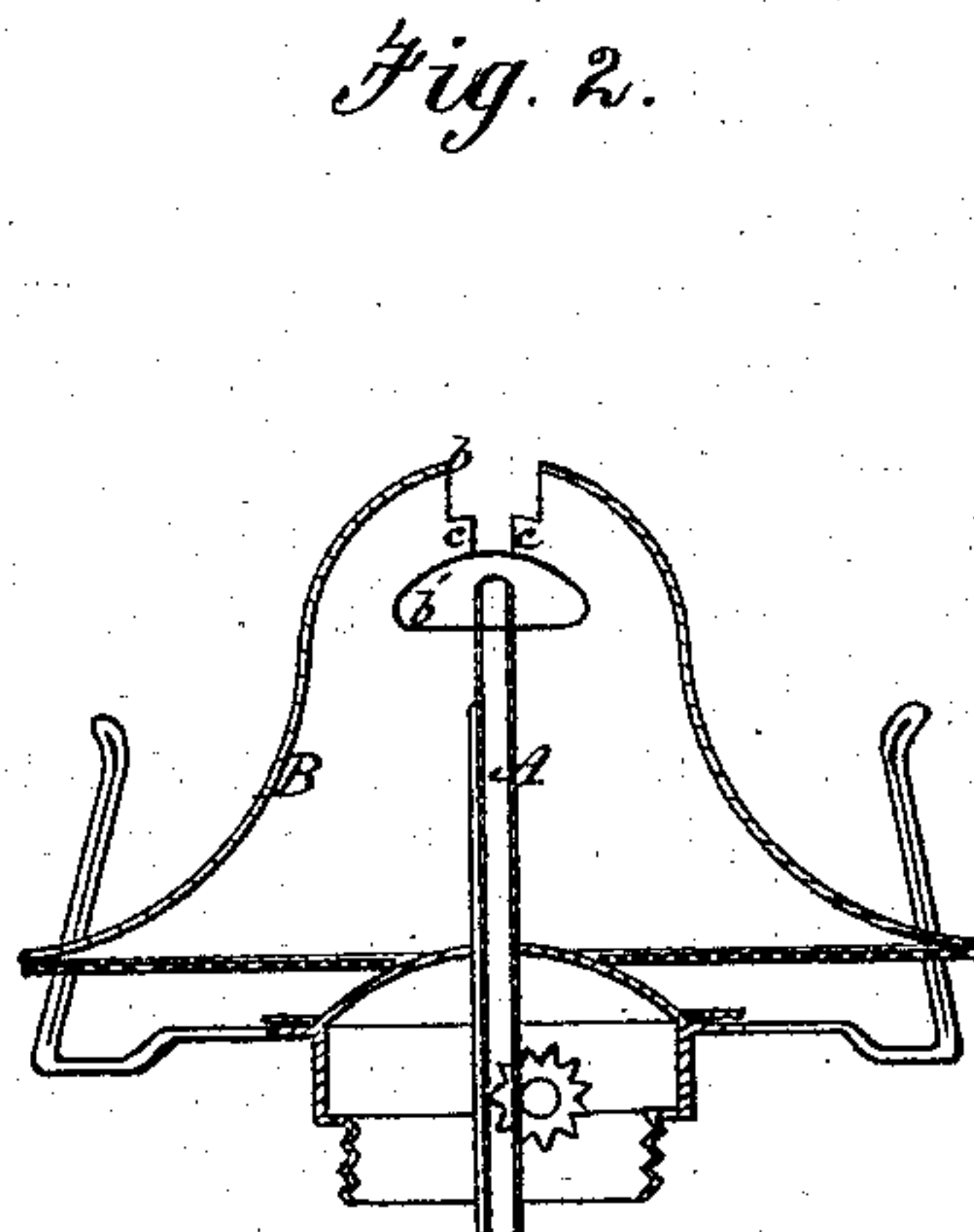
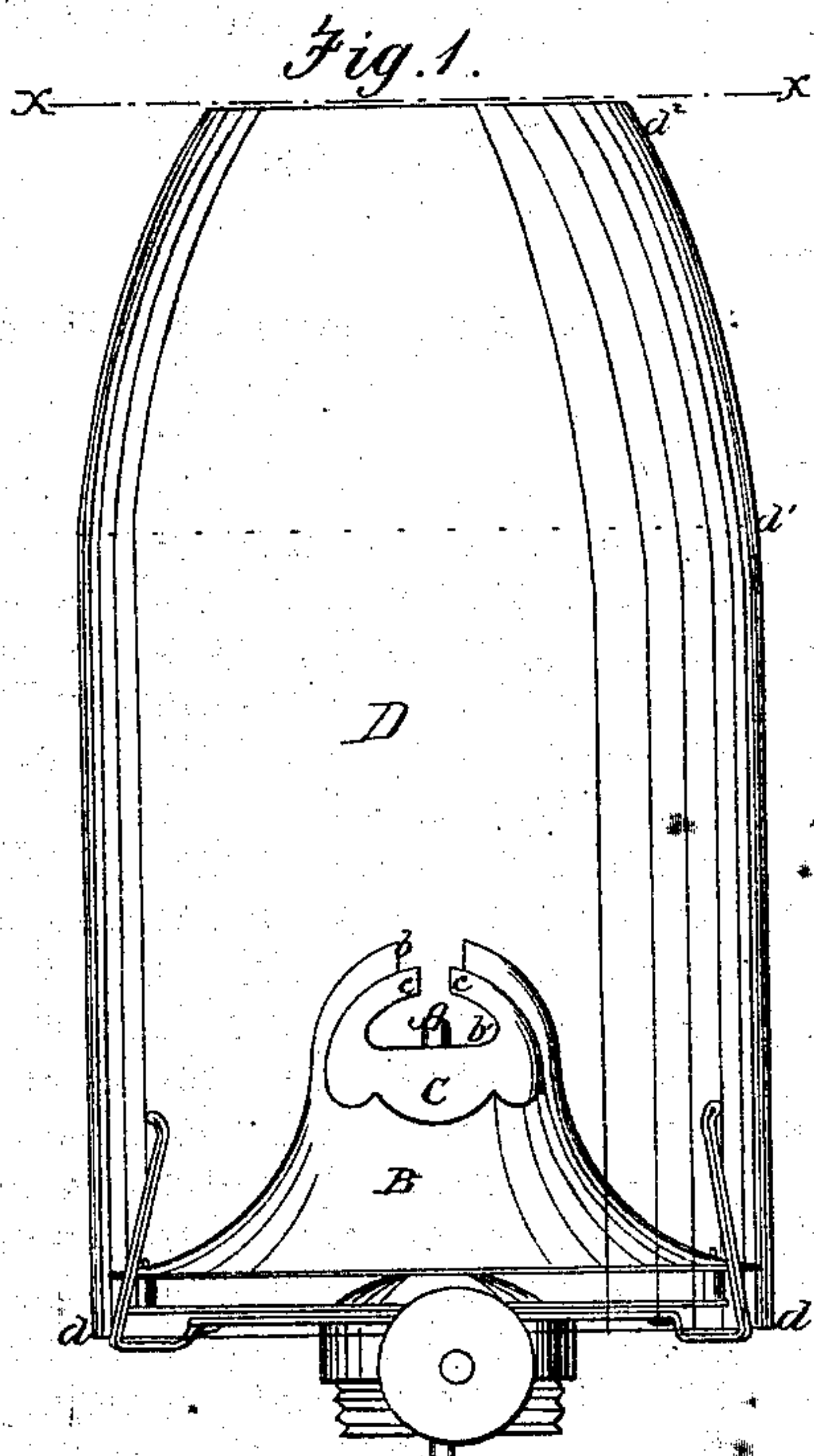


A. C. VAUGHAN.

Lamp-Burner.

No. 159,482.

Patented Feb. 2, 1875



WITNESSES:

W. W. Hollingsworth
John C. Kemou

INVENTOR:

A. C. Vaughan

BY

Wm. V. B.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

AARON C. VAUGHAN, OF RAINSBURG, PENNSYLVANIA.

IMPROVEMENT IN LAMP-BURNERS.

Specification forming part of Letters Patent No. 159,482, dated February 2, 1875; application filed December 28, 1874.

To all whom it may concern:

Be it known that I, AARON C. VAUGHAN, of Rainsburg, in the county of Bedford and State of Pennsylvania, have invented a new and Improved Lamp-Burner; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is a front elevation; Fig. 2, a vertical section.

The invention relates to means whereby a stronger light may be obtained without increasing the consumption of oil, the same being accomplished by a more perfect supply of the true proportion of the oxygen or combustion supporter, so that waste in only partially-combusted carbon will be greatly diminished.

A represents the wick-tube, and B the deflector. The latter has not only the cross-slot *b* corresponding to the breadth of wick, but also ovoid air-holes *b' b'*—one on each side. The top of the wick-tube A extends up to about one-half the height of the lateral air-holes *b b'*, and between the flame-hole *b* and the side holes *b'* I locate, on each side, a piece, C, which has two opposite-projecting blunt ends, *c c*, extending in from the edge of the slot toward the flame.

By careful experiments I discover that this

produces a wonderful effect in enlarging the flame with a given supply of wick, and in augmenting its brilliancy along the outer edge.

I make the glass chimney D short, enlarged transversely, and of the same diameter from the bottom *d* to the curved line *d¹*, which is about the height of flame. From the line *d¹* the glass rapidly converges toward the outlet, making the truncated cone *d²*. This glass will not crack or fracture under the influence of heat, makes a much more gradual and satisfactory draft, and permits the hot products of combustion an immediate escape.

Besides enlarging and increasing the brilliancy of the flame around its outer edge, the pieces C C, with their projecting ends *c c*, enable the carbonized particles to be more perfectly consumed, thus shortening the flame and rendering unnecessary the usual length of glass.

Having thus described my invention, what I claim as new is—

The deflector B, having top slot *b*, ovoid side holes *b'*, and pieces C, having the opposite blunt projecting ends *c c*, combined as and for the purpose described.

AARON C. VAUGHAN.

Witnesses:

WILLIAM R. VAUGHAN,
JOHN A. GUMP.