

W. S. BLAISDELL & C. K. YOUNG.

Lamp-Chimneys.

No. 146,862.

Patented Jan. 27, 1874.

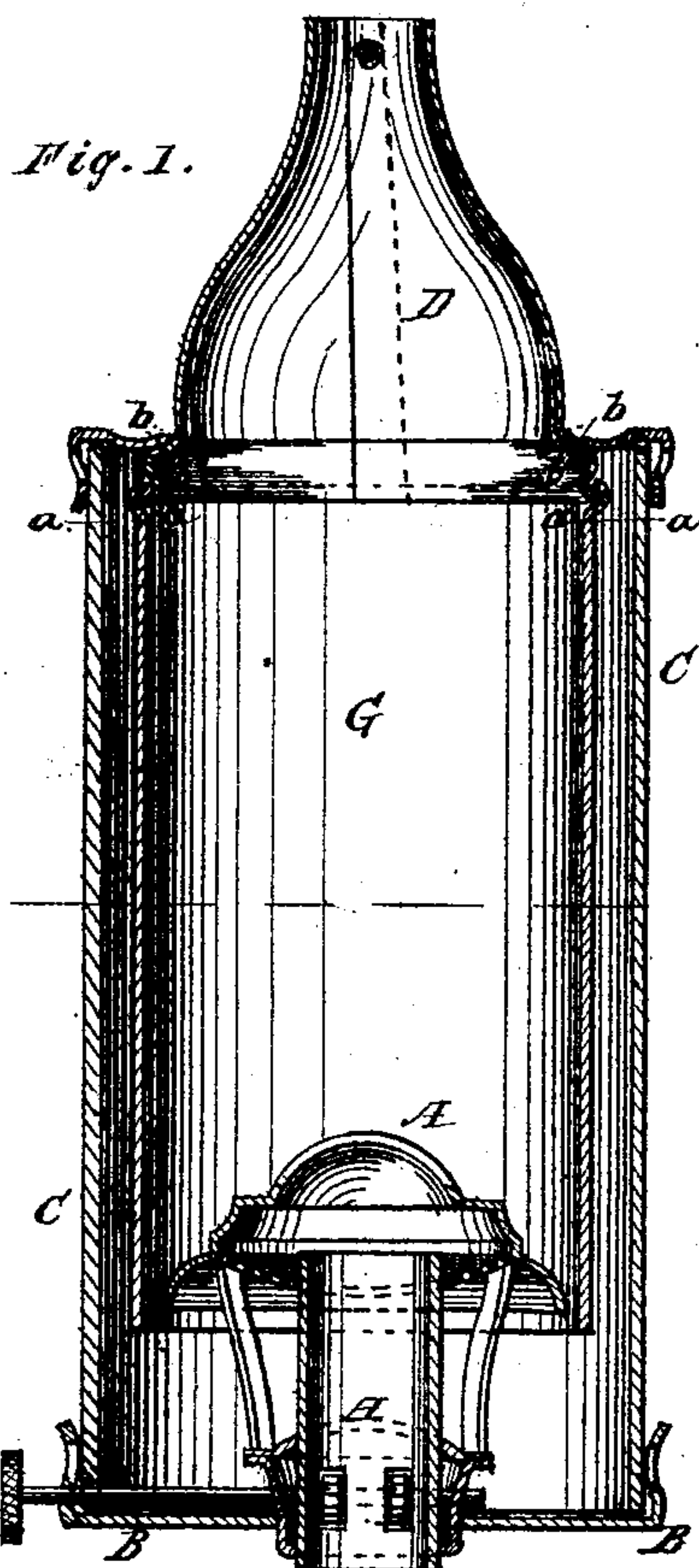


Fig. 2.

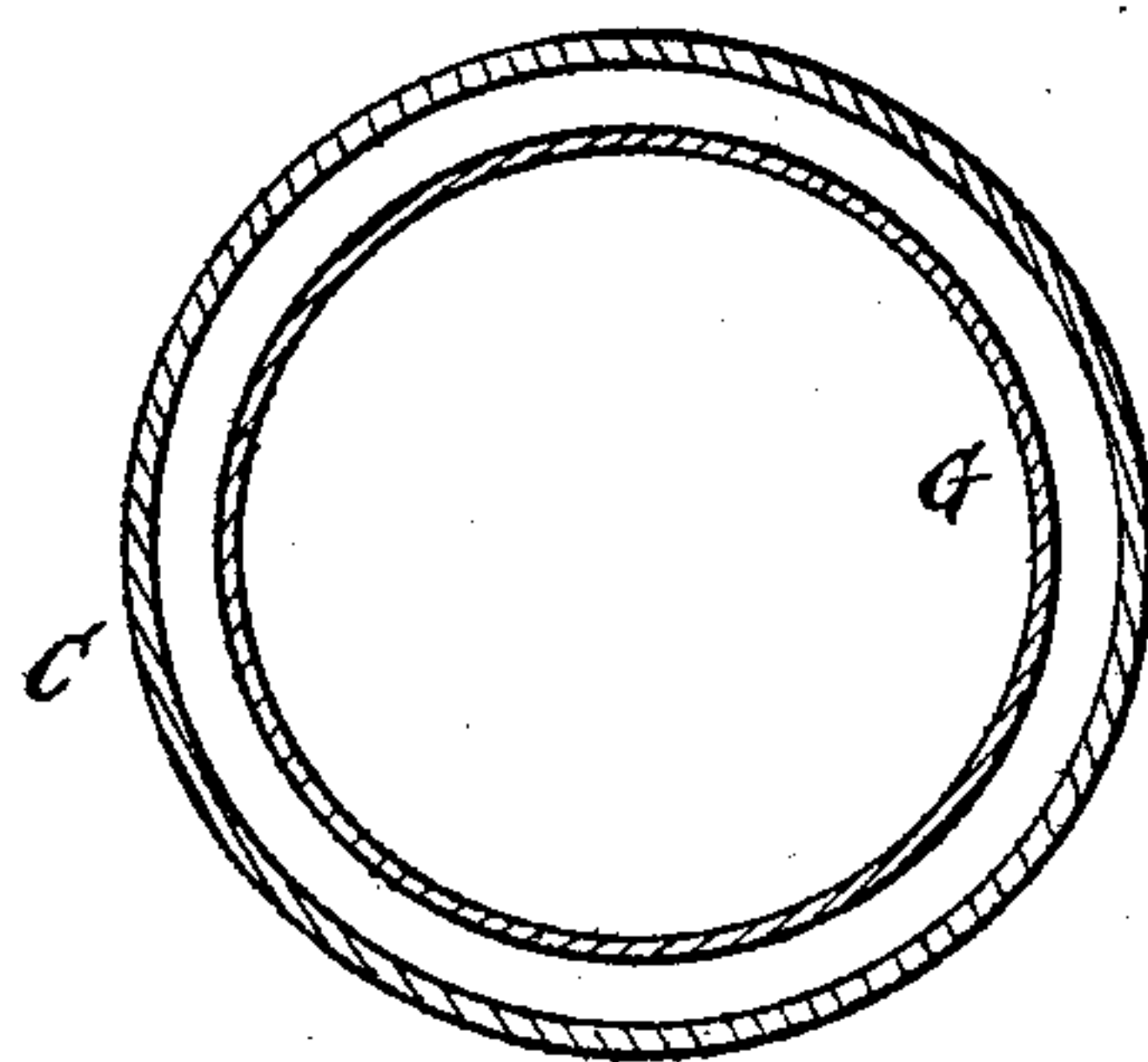


Fig. 3.



WITNESSES.

P. C. Dutrick.

F. Kuseff.

INVENTORS.

Wm S. Blaisdell

Chas K. Young

per. *J. H. Alexander*
ATTORNEY.

UNITED STATES PATENT OFFICE.

WILLIAM S. BLAISDELL AND CHARLES K. YOUNG, OF FACTORY POINT, VT.

IMPROVEMENT IN LAMP-CHIMNEYS.

Specification forming part of Letters Patent No. **146,862**, dated January 27, 1874; application filed January 6, 1874.

To all whom it may concern:

Be it known that we, WILLIAM S. BLAISDELL and CHARLES K. YOUNG, both of Factory Point, in the county of Bennington and State of Vermont, have invented certain new and useful Improvements in Lamps; and we 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, which form a part of this specification.

This invention relates particularly to that class of lamps which have an interior and an exterior chimney, or a chimney with a surrounding case; and the nature of our invention consists in the construction and arrangement of the entire lamp-top, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a vertical section; Fig. 2, a plan through the line *xx*; and Fig. 3 is an enlarged view, showing how the chimney and cap are connected and held together.

A represents the burner provided with a projecting platform, B, upon which the outer case C stands, and is retained by any suitable device for that purpose. D represents the chimney-top resting upon the upper end of the case C, and from this top the inner chimney G is suspended.

The main feature of our invention is this suspended chimney, so related that neither drafts of air, drops of water, or differential expansion and contraction of the joining substances, can in any way operate to break it.

At the upper end of the chimney is made a bur or turn-down, *a*, about three-sixteenths of an inch, and to correspond with this there is a bur, *b*, formed outwardly around the lower

edge of the top D. This top may be made either of glass or metal, and is to be open on one side, the edges overlapping, so that it can be sprung with its bur *b* into the bur *a* of the chimney. The bur *b* being about one-eighth of an inch wide, there will be about one-sixteenth of an inch allowed for expansion and contraction.

This makes the chimney perfectly free at both extremities, so that heat cannot affect it.

The top D is extended upward, as shown, so as to lengthen the upward draft and give it some advantage over the downward draft, thereby obviating any struggling action of the flame, and also acting to separate the two drafts. The outer case C is thus used to protect and support the chimney G.

The case as well as chimney may be made either of glass or mica.

By the arrangement of the chimney and case at different heights we get a singular effect not otherwise obtained, and that is, increased combustion, increased size of flame without any decrease in quality of light. Another advantage obtained by this arrangement is, its non-liability to extinguishment. A strong wind will not blow out the lamp.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The combination of a closed base-burner and protecting transparent case, with an independent cap, D, and suspended chimney G, substantially as and for the purpose set forth.

In testimony that we claim the foregoing as our own we affix our signatures in presence of two witnesses.

WILLIAM S. BLAISDELL.
CHAS. K. YOUNG.

Witnesses:

RICHARD W. DEAN,
JAMES C. DEAN.