

(No Model.)

C. V. BEST.  
VAPOR BURNER.

No. 283,956.

Patented Aug. 28, 1883.

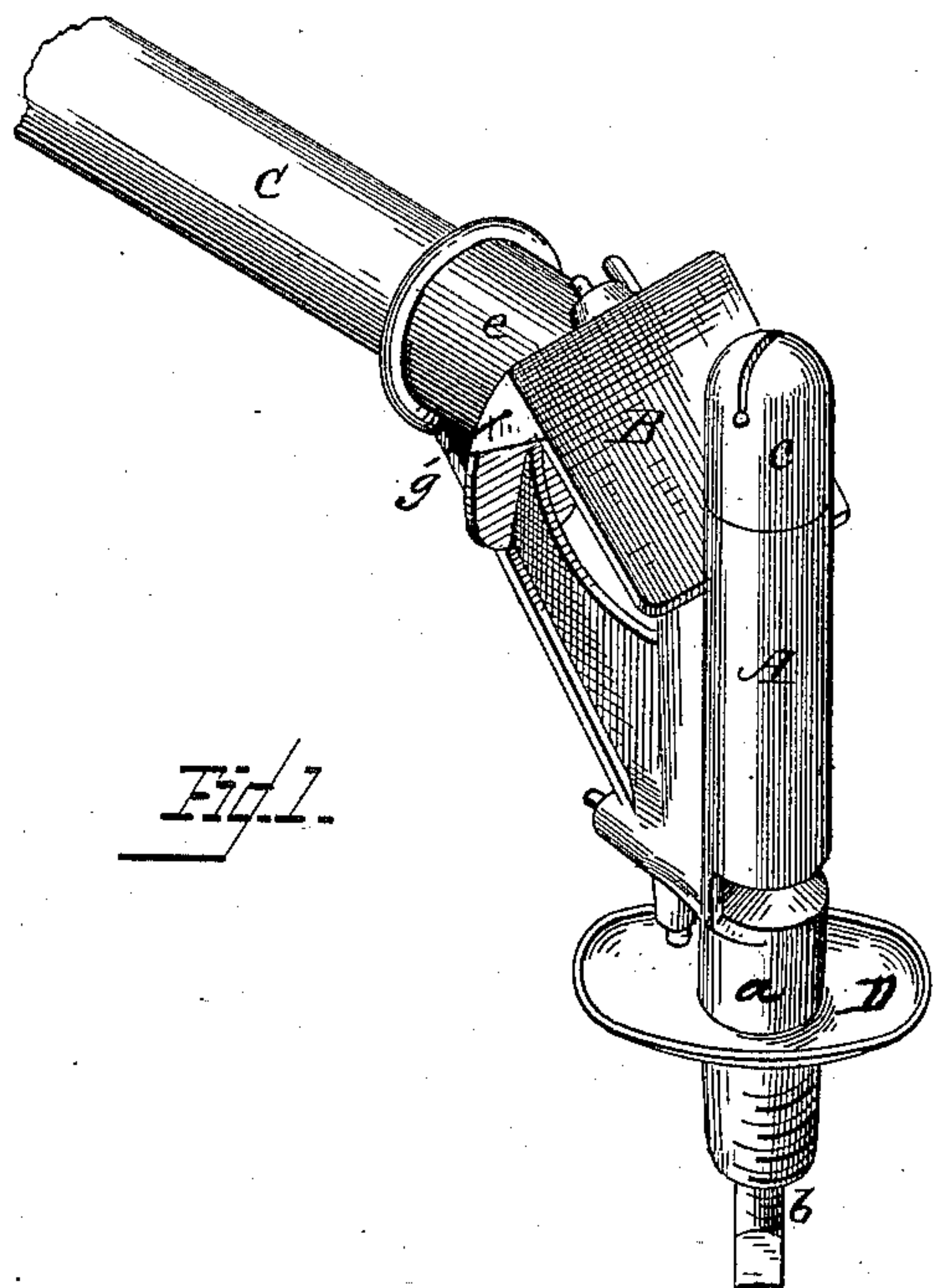


Fig. 1.

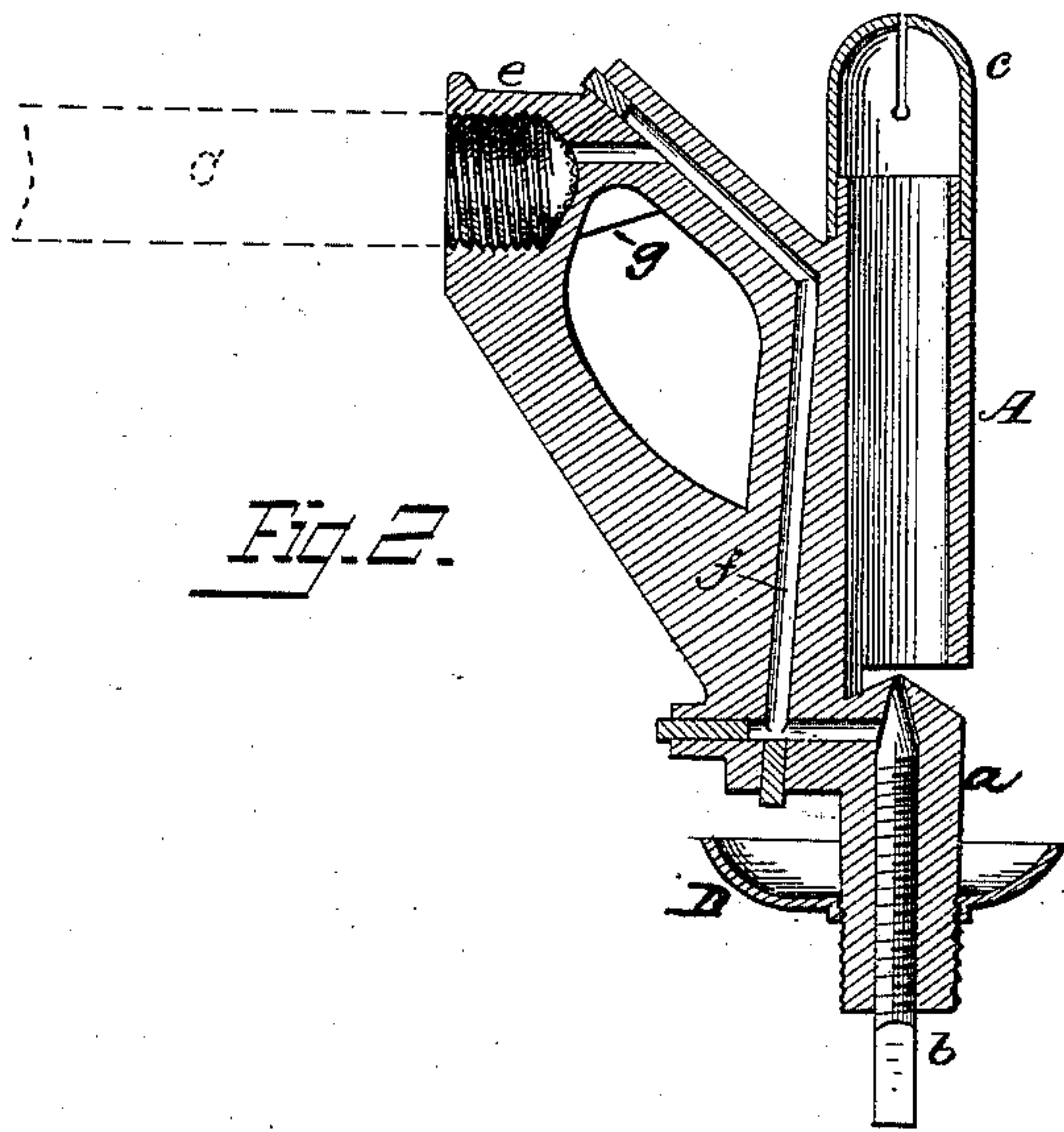


Fig. 2.

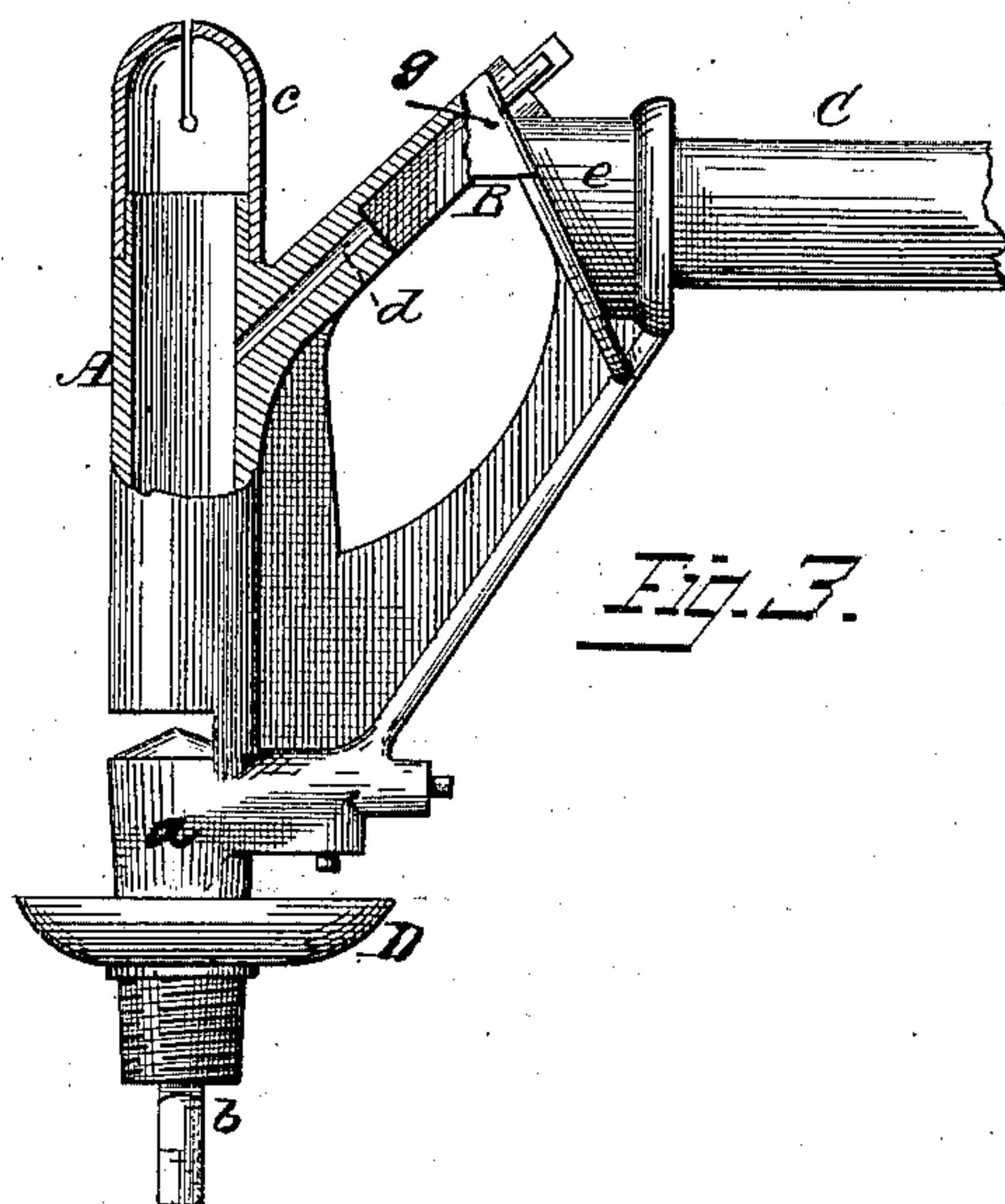


Fig. 3.

WITNESSES

*F. L. Curande*  
*W. E. Oliphant.*

INVENTOR

*Clearmont V. Best.*  
*per Cha. H. Fowler*  
Attorney



# UNITED STATES PATENT OFFICE.

CLEARMONT V. BEST, OF CANTON, OHIO.

## VAPOR-BURNER.

SPECIFICATION forming part of Letters Patent No. 283,956, dated August 28, 1883.

Application filed May 28, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, CLEARMONT V. BEST, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Vapor-Burners; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and the letters and figures of reference marked thereon.

Figure 1 of the drawings is a perspective view of a vapor-burner constructed in accordance with my invention; Fig. 2, a sectional view of the same; and Fig. 3, an elevation of the reverse side of Fig. 2, partly in section.

The present invention has relation to certain new and useful improvements in vapor-burners; and the object thereof is to provide a sub-jet in connection with an angular heating-plate, whereby a more perfect vaporization is obtained, with a greater intensity of heat, thus rendering the burner more effective in its purpose and the flame of increased brilliancy, thereby producing a burner of superior illuminating power with economy of the gasoline or other burning-fluid. These objects I attain by the construction of the burner shown in the drawings, and hereinafter described, and specifically pointed out in the claims.

In the accompanying drawings, A represents the burner-tube, which constitutes the mixing-chamber, and on a line directly under the lower end of said tube is an extension, *a*, provided with a central screw-threaded hole into which is inserted the usual needle-point, *b*, the tube at its upper end having fitted thereon the burner-tip *c*. The tube A, near its top, communicates with an inclined passage, *d*, extending outward at an acute angle to the burner-tube and in a direction toward the inclined or angular heating-plate B, thus forming a sub-jet near the top of the tube or mixing-chamber, which impinges against the heating-plate directly back of the chamber *e*, thereby pro-

ducing increased heat, the jet extending over the entire inner surface of the plate. The chamber *e* may be provided with a piece of wire-gauze, and also supplied with cotton wicking, the chamber having interior screw-threads for connecting thereto the screw-threaded end of a supply-pipe, C. The heating-jet as it issues from the passage *d* is carried above the mixing-chamber or tube A to about the level of the burner-tip *c* in an angular direction, and then is deflected back far enough so as not to interfere with the illuminating-jet from the heat of the sub-jet. A passage, *f*, extends under the heating-plate B, thence downwardly along the mixing-chamber or tube A, and afterward horizontally to the needle-point *b*. The extension *a* at its lower end is screw-threaded for attaching thereto the usual plate or cup, D. The heating-plate B has corner side extensions, *g*, to confine the flame or heating-jet and prevent it from coming above the angular heating-plate at the corners.

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

1. The combination, with the angular heating-plate B, of the inclined passage *d*, communicating with the mixing-chamber, near the upper end, to form a sub-jet, substantially as and for the purpose set forth.

2. The angular heating-plate B, provided with corner side extensions, *g*, substantially as and for the purpose specified.

3. The angular heating-plate B and inclined passage *d*, in combination with the passage *f*, having its upper portion extending along the under side of said angular heating-plate, substantially as shown and described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

CLEARMONT V. BEST.

Witnesses:

AUSTIN LYNCH,  
EDWARD J. SCHAUER.