

S. B. H. VANCE.
ARGAND GAS BURNER.

No. 183,236.

Patented Oct. 10, 1876.

Fig. 1

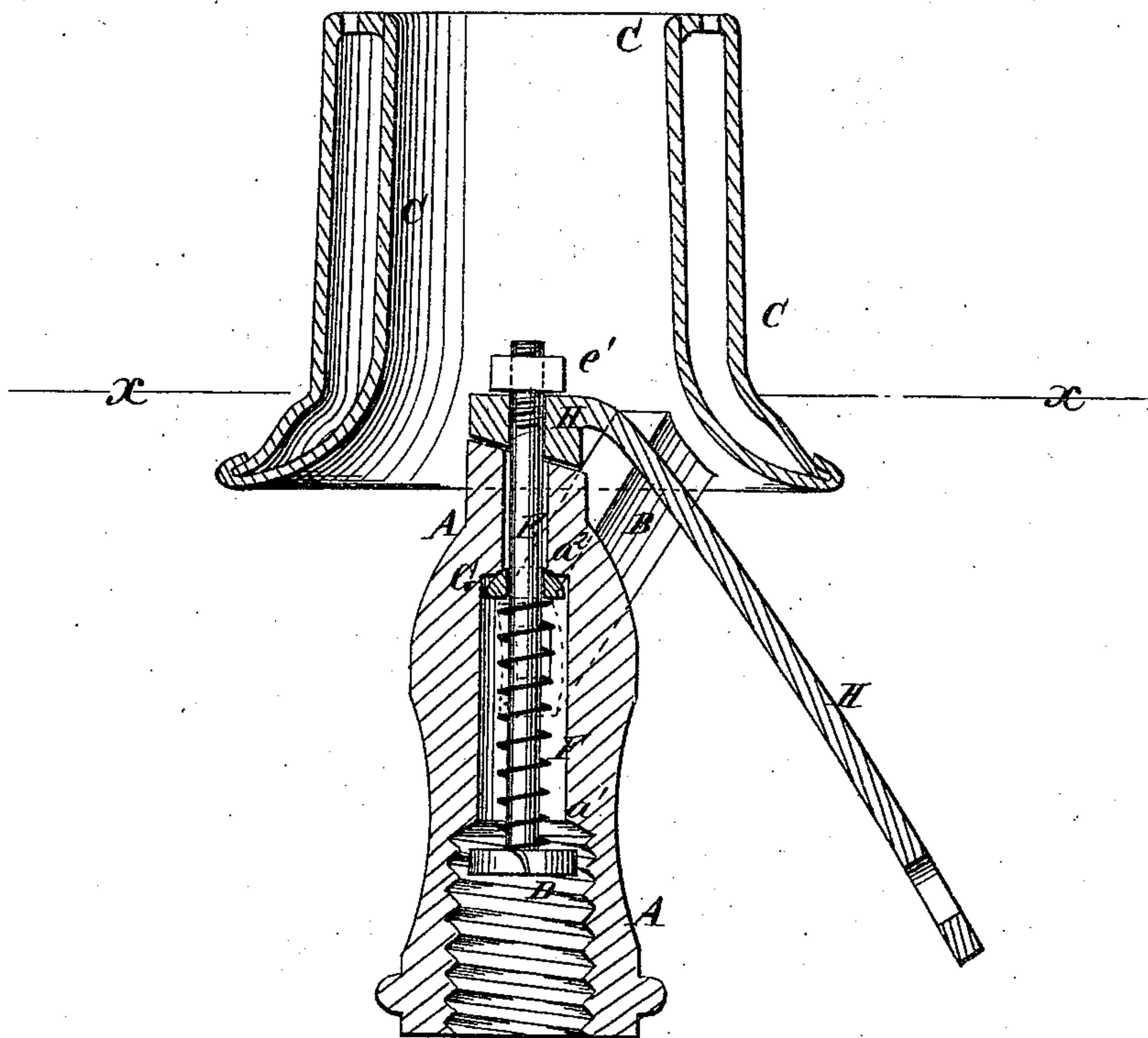
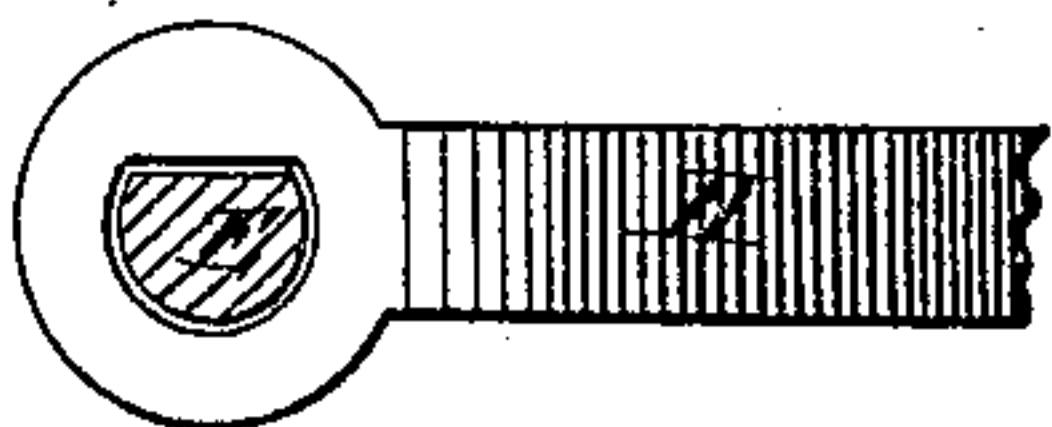


Fig. 2



WITNESSES:

A. W. Hargraves
John Goethals

INVENTOR:

S. B. H. Vance

BY

Wm. H. Vance

ATTORNEYS.

UNITED STATES PATENT OFFICE.

SAMUEL B. H. VANCE, OF NEW YORK, N. Y., ASSIGNOR TO MITCHELL,
VANCE & CO., OF SAME PLACE.

IMPROVEMENT IN ARGAND GAS-BURNERS.

Specification forming part of Letters Patent No. 183,236, dated October 10, 1876; application filed
September 22, 1876.

To all whom it may concern:

Be it known that I, SAMUEL B. H. VANCE, of the city, county, and State of New York, have invented a new and useful Improvement in Argand Gas-Burner, of which the following is a specification:

Figure 1 is a longitudinal section of an Argand gas-burner to which my improvement has been applied. Fig. 2 is a detail cross-section of the valve-stem, taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish improved Argand gas-burners which shall be so constructed as to prevent the hissing noise of the gas, and to enable the flow of gas, and, consequently, the amount of light, to be regulated as desired.

The invention consists in the combination of the valve and valve-stem, provided with the spring and collar, with the base of an Argand gas-burner provided with the two shoulders, and having its upper end beveled or inclined, and with the lever having the lower side of its upper end beveled or inclined, as hereinafter fully described.

A represents the base of the burner, which is screwed upon the gas-pipe, and from the upper part of which two branches, B, lead to the ring-chamber C, which forms the upper part of the burner, and through a circle of holes in the top of which the gas escapes, and is burned. The base A has a hole drilled in it from its lower end to the point a^1 . A smaller drill is then used to continue the hole to the point a^2 , and the hole is continued with a still smaller drill to the upper end of said base, so that two shoulders, $a^1 a^2$, will be formed in the interior of the base. Holes are then drilled through the branches or arms B, which enter the cavity of the base A a little below the upper shoulder a^2 .

D is a valve, which has its seat upon the lower shoulder a^1 , and the stem E of which

passes up through and projects above the upper end of the base A. Upon the stem E is placed a spiral spring, F, the lower end of which rests upon the valve D. The upper end of the spring F rests against a collar, G, placed upon the upper part of the stem E, and which rests against the upper shoulder a^2 . The spring F should be strong enough to hold the valve D down or open against the pressure of the gas.

The projecting upper end of the valve-stem E is flattened upon one side to fit into a similarly-formed hole in the upper end of the lever H, so that the stem E may be turned by turning the said lever H to prevent the nut e' , screwed upon the end of the said stem, from being screwed off by the movements of the said lever. The under side of the upper end of the lever H and the upper end of the base A are beveled or inclined, so that by turning the said lever H the valve D may be drawn up into its seat, to prevent the gas from passing through the burner, or adjusted to allow any desired amount of gas to pass through. A nick is formed in the edge of the valve D to allow enough gas to pass through to keep the flame alive, so that a full light may be obtained by simply turning the lever H to force down the valve D.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of the valve and valve-stem D E, provided with the spring F and collar G, with the base A of an Argand gas-burner, provided with the shoulders $a^1 a^2$, and having its upper end beveled or inclined, and with the lever H, having the lower side of its upper end beveled or inclined, substantially as herein shown and described.

SAMUEL B. H. VANCE.

Witnesses:

JAMES T. GRAHAM,
C. SEDGWICK.