(No Model.)

J. C. KELLY.

GAS BURNER.

No. 271,641. Patented Feb. 6, 1883.

Fig. 1.

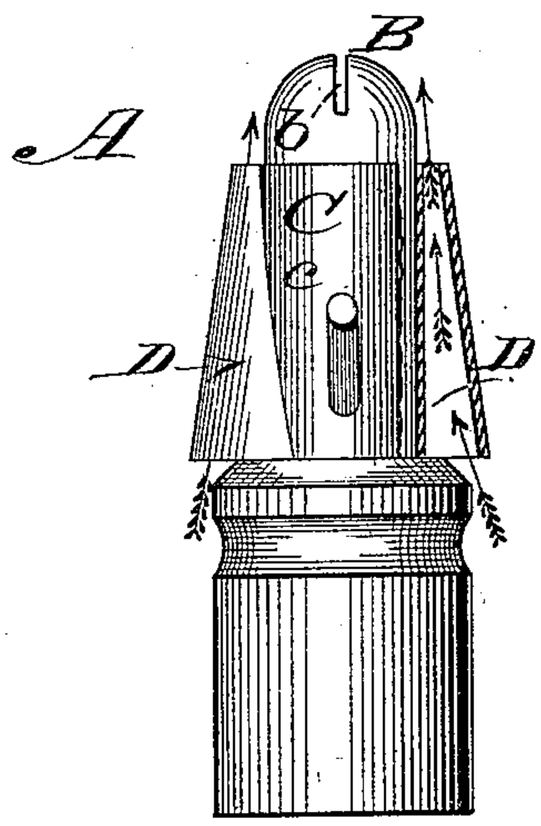


Fig. 2.

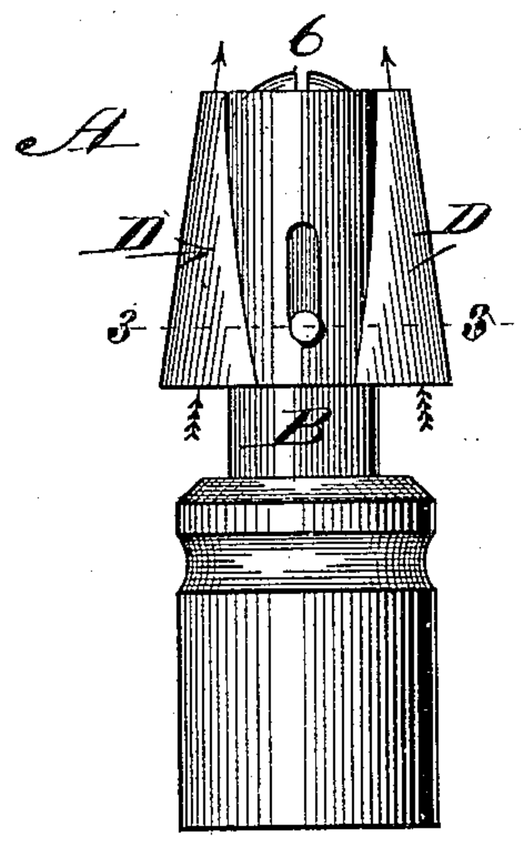
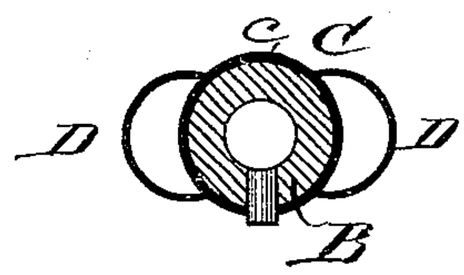


Fig. 3.



Attest.

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UNITED STATES PATENT OFFICE.

JOHN C. KELLY, OF ST. LOUIS, MISSOURI.

GAS-BURNER.

SPECIFICATION forming part of Letters Patent No. 271,641, dated February 6, 1883.

Application filed December 26, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. KELLY, of St. Louis, Missouri, have made a new and useful Improvement in Gas-Burners, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a side elevation of a burner having the improvement partly in section; Fig. 2, a side elevation, the shield being raised; and Fig. 3, a section on the line 3 3 of Fig. 2.

The same letters denote the same parts.

The present invention is an improved mode of constructing the shield surrounding the burner-tube.

A represents a gas-burner having the improvement. Aside from the improvement, the burner is of the usual construction.

B represents the burner-tube.

C represents the shield upon the burner-tube, and adapted to be raised and lowered thereon, as shown in Figs. 1 and 2.

In place of making the shield simply in the form of a cylinder, as heretofore has been the practice, it is provided with air-passages D D, one, two, or more of the passages being employed. Two of these air-passages are preferably used, and they are arranged upon opposite sides of the cylindrical portion *c* of the shield, and at right angles to the direction of the slit *b* in the burner-tube. The passages D D are also preferably made tapering, as shown.

In operation the shield is slipped upward upon the burner-tube, as shown in Fig. 2. The cylindrical portion *c* of the shield acts to close the flame and turn its heat inward upon itself, and the passages D D serve to promote the flow of air to the flame, and thereby to enhance its brilliancy. The air becomes heated in passing through the passages D D, which is an additional advantage, and the effect of the shield, as described, is to cause a more perfect combustion of the gas. This not only increases the brilliancy of the flame, but prevents the escape of unconsumed gas into the room.

I claim—

1. In combination with the gas-burner tube B, the shield C, consisting of the cylindrical portion *c* and the passages D D, substantially as and for the purpose described.

2. A gas-burner shield, the same consisting of the cylindrical portion *c* and the side air-tubes, D D, substantially as described.

JOHN C. KELLY.

Witnesses:
C. D. MOODY,
CHARLES PICKLES.