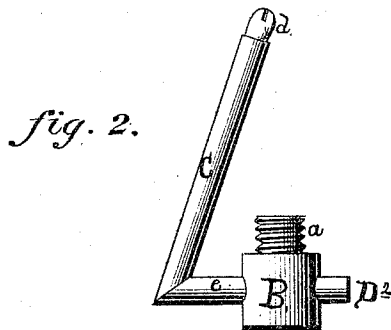
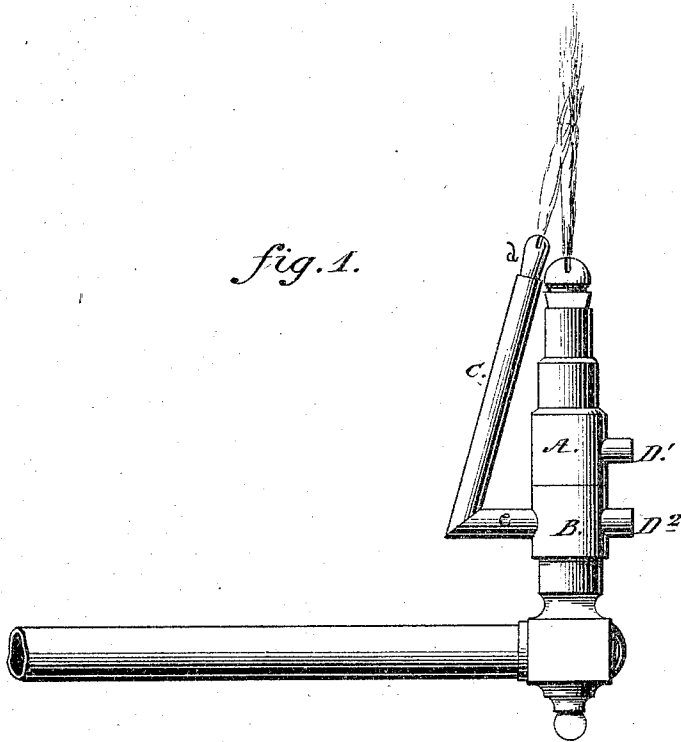


J. RIGBY.
Gas-Burners.

No. 139,919.

Patented June 17, 1873.



Attest;
J. B. Fowler
J. J. Johnson

Inventor;
James Rigley

UNITED STATES PATENT OFFICE.

JAMES RIGBY, OF CINCINNATI, OHIO, ASSIGNOR OF TWO-THIRDS OF HIS RIGHT TO JOHN F. JOHNSON, AND GEORGE RHORER, OF SAME PLACE.

IMPROVEMENT IN GAS-BURNERS.

Specification forming part of Letters Patent No. 139,919, dated June 17, 1873; application filed March 14, 1873.

To all whom it may concern:

Be it known that I, JAMES RIGBY, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Gas-Burners; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

The invention relates to that class of gas-burners in which a supplemental or branch burner is used with the ordinary burner, and consists in the combination and construction of the burner as hereinafter more fully described and pointed out by the claim.

In the drawing, Figure 1 represents an elevation of my improved gas-burner. Fig. 2 represents the auxiliary burner detached.

To enable others skilled in the art to make and use my invention, I will now proceed to describe fully its construction and operation.

A is an ordinary gas-burner arranged in a vertical position and attached to the hollow pillar B, which is constructed so as to be adjustable to the pipe supplying the gas to be used. C is a small pipe or branch burner furnished with an adjustable tip *d*, by means of which the small flame may be suitably arranged to combine with the larger one, in such a manner as to produce the best result in illumination, and may be attached to pillar B as shown in the drawing, or directly to the vertical burner A. In either case, the top of the small branch-burner C should be near to and

elevated a little above the top of the vertical burner A, and so adjusted that when in use the flame from the small branch-burner C will enter the flame from the vertical burner A at an acute angle, and at a point about half an inch above the base of the flame, and directly within the dark zone contained in its center, by which arrangement the most perfect combustion is induced, and greatest illuminating power secured. The branch-burner C is attached to the pillar B, said pillar being provided at the top with male screw *a* to fit a corresponding female screw-thread in the burner A. The arm *e* of the burner C extends outward from pillar B, and then to, or near to, the top of the burner A, at an acute angle as shown. D¹ D² are small solid nipple attached to base of vertical burner A and pillar B, to facilitate their attachment and detachment by the use of a wrench made for that purpose.

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

A branch-burner C B, constructed to be attached to an ordinary vertical gas-burner and used in connection therewith, substantially as and for the purpose specified.

This specification signed and witnessed this 8th day of March, 1873.

JAMES RIGBY.

Witnesses:

J. B. FORAKER,
J. F. JOHNSON.