(No Model.)

J. F. BARKER.

LABORATORY BURNER, SPECIALLY USEFUL WITH GASOLINE GAS.

No. 423,896. Patented Mar. 25, 1890.

Fig. 1

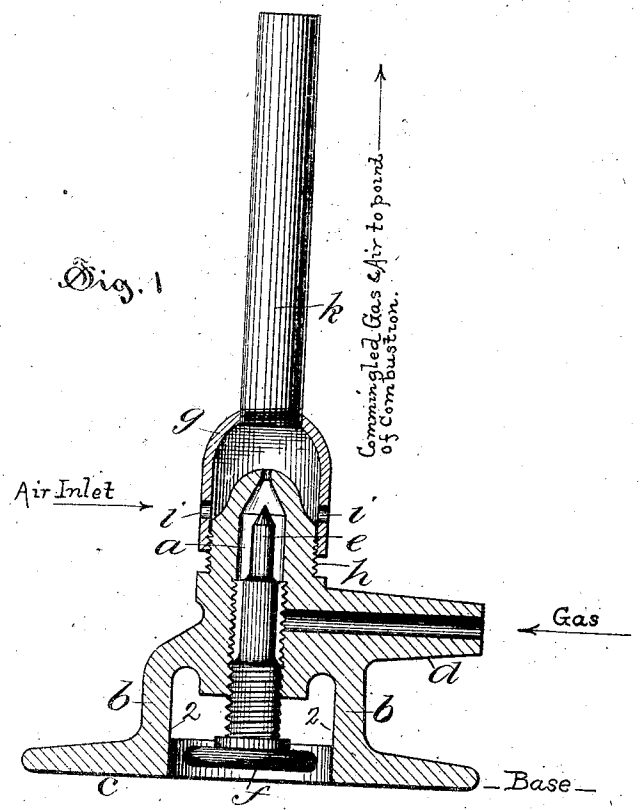
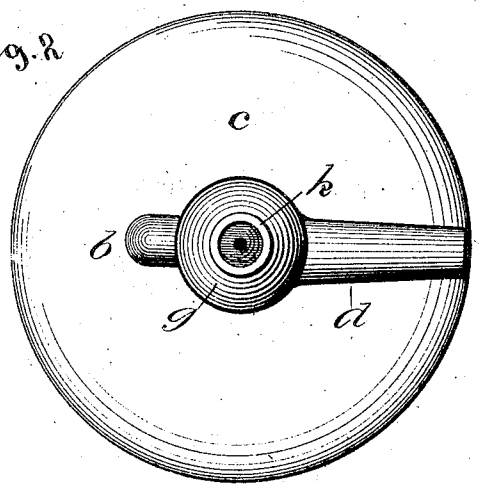


Fig. 2



Witnesses:
A. P. Williams.
G. G. Haddock

Inventor,
John F. Barker
By Simonds & Burdett
Attys

UNITED STATES PATENT OFFICE.

JOHN F. BARKER, OF SPRINGFIELD, MASSACHUSETTS.

LABORATORY BURNER, SPECIALLY USEFUL WITH GASOLINE GAS.

SPECIFICATION forming part of Letters Patent No. 423,896, dated March 25, 1890.

Application filed April 23, 1888. Renewed January 29, 1890. Serial No. 338,438. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. BARKER, of Springfield, in the county of Hampden and State of Massachusetts, have invented a new and useful Improvement in Laboratory Burners, Specially Useful with Gasoline Gas, of which the following is a description, reference being had to the accompanying drawings, wherein—

Figure 1 is a view in central vertical section of a device embodying my said improvement. Fig. 2 is a plan view of the same device.

The letter *a* denotes the valve-chamber, which is supported by the legs *b b* upon the base *c*. At the top of this valve-chamber there is a needle-valve. The gas, under suitable pressure, finds access to the valve-chamber through the side tube *d*.

The letter *e* denotes the needle of the needle-valve, which is threaded, and the thread takes into a corresponding female thread in the bottom of the valve-chamber, so that the needle projects through the bottom of the valve-chamber, and below the same is provided with a wheel or handle *f*.

The letter *g* denotes a hood surrounding the outside of the needle-valve. It is interiorly screw-threaded, and this thread takes into the thread *h* on the exterior of the valve-chamber. The letters *i* denote perforations in the walls of this hood for admitting air to and around the needle-valve. When the hood *g* is screwed entirely down, the perforations *i* are entirely closed. By screwing the hood upward they are gradually and finally fully opened. The hood *g* is contracted or dome-shaped at the top. From the apex a tube *k* takes the mingled gas and air to the point of combustion. The stand of the valve-chamber is formed with an opening in the base, which extends up into the stand, forming a chamber, as at 2, to afford room for the movements of the threaded needle and its hand-wheel, substantially as shown.

I claim as my improvement—

The combination of the base *c*, formed with a valve-chamber *a*, having a jet-orifice and an induction-pipe, and formed with an opening and chamber 2 in its base, and the threaded needle *e*, having a hand-wheel *f*, arranged within the valve-chamber, with the hand-wheel in the chamber at the base of the stand, substantially as described.

JOHN F. BARKER.

Witnesses:
GEO. COSTER,
FRED COSTER.

It is hereby certified that in Letters Patent No. 423,896, granted March 25, 1890, upon the application of John F. Barker, of Springfield, Massachusetts, for an improvement in "Laboratory Burners, Specially Useful with Gasoline Gas," an error appears in the printed specification requiring the following correction, viz: In line 51, a comma should be inserted after the reference-letter "*f*"; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 6th day of February, A. D. 1894.

[SEAL.]

JNO. M. REYNOLDS,
Assistant Secretary of the Interior.

Countersigned:

JOHN S. SEYMOUR,
Commissioner of Patents.

Correction in Letters Patent No. 423,896.

orrection in Letters Patent No. 423,896.

It is hereby certified that in Letters Patent No. 423,896, granted March 25, 1890, upon the application of John F. Barker, of Springfield, Massachusetts, for an improvement in "Laboratory Burners, Specially Useful with Gasoline Gas," an error appears in the printed specification requiring the following correction, viz: In line 51, a comma should be inserted after the reference-letter "*f*"; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 6th day of February, A. D. 1894.

[SEAL.]

JNO. M. REYNOLDS,
Assistant Secretary of the Interior.

Countersigned:

JOHN S. SEYMOUR,
Commissioner of Patents.