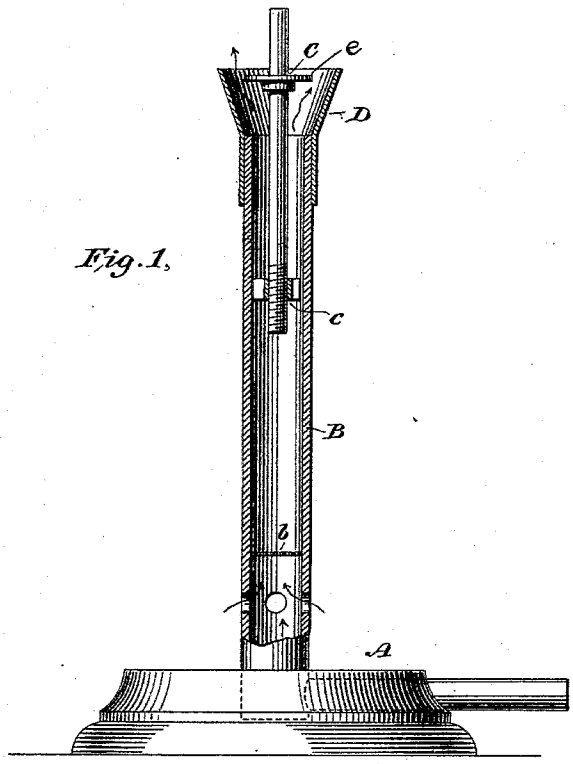
(No Model.)

L. PAGET.

BUNSEN GAS BURNER.

No. 425,246. Patented Apr. 8, 1890.

Fig. 1.



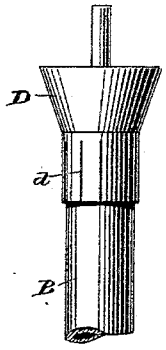
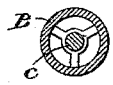


Fig. 2.

Fig. 3



Witnesses
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Annie Dunnell

Inventor
Leonard Paget
By his Attorney
Chas J. Kintner

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

LEONARD PAGET, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO CHARLES J. KINTNER, OF SAME PLACE.

BUNSEN GAS-BURNER.

SPECIFICATION forming part of Letters Patent No. 425,246, dated April 8, 1890.

Application filed June 20, 1889. Serial No. 315,018. (No model.)

To all whom it may concern:

Be it known that I, LEONARD PAGET, a citizen of the United States, residing at New York, in the county of New York and State of New York, have made a new and useful Invention in Gas-Burners, of which the following specification, taken in connection with the accompanying drawings, constitutes a full, clear, and exact description.

My invention relates particularly to improvements in gas-burners of that type known as the "Bunsen" burner, or such as are designed to produce intense heat; and my object is to devise an improved form of this type of burner in which the shape or contour of the flame may be regulated to suit the requirements for which it is designed to use the burner. I accomplish this object by the apparatus hereinafter described, but particularly pointed out in the claims which follow this specification.

Referring to the drawings, Figure 1 is a vertical sectional view of a Bunsen burner with my improvement attached. Fig. 2 is a side elevation of the burner, showing the improvement; and Fig. 3 is a cross-sectional view taken through the body of the burner.

A is the base, of well-known form, carrying the burner B, provided with usual air-inlet holes and a gas-distributer *b*, said burner being connected by a pipe to the supply of gas in the usual manner. The device thus far described is of well-known construction.

C is a vertical rod, preferably screw-threaded at its lower end and held in position by a nut, which is secured to the inner walls of the burner B, as clearly shown in Figs. 1 and 3, the body of said nut having sufficient bearing to hold the rod C in a central vertical position. Two or more of such nuts located at some distance apart may be used, if preferred, in order to give vertical alignment and rigid support to the upright rod C.

e is a "baffler" or button, either rigidly attached to the rod C or adapted to a slide thereon, as preferred. If the lower end of the rod C is not screw-threaded, as shown, but is held fixedly in position, this baffler or button is then adapted to slide vertically upon said rod.

D is a funnel-shaped collar slitted at its lower end by slits *d*, so as to be adjustable up and down upon the exterior surface of the burner B.

The arrows at the top of Fig. 1 of the drawings indicate the direction of the flow of the gas between the funnel-shaped collar and the baffler or button *e*. By this arrangement of the adjustable collar and baffler the direction of the flame at the top of the burner is changed as desired, so that it may assume various contours. By adjusting the relative positions of these two parts I can, if desired, produce a cylindrical flame having considerable length and intense surface heat, thereby destroying the central core of the flame now found to exist in an ordinary Bunsen burner, and which, therefore, for many applications, as in incandescent gas-lighting, is useless, the heating of such central core being wasted. The contour of the flame may be so changed by this combination of adjustable elements as to influence its position to suit the varying requirements.

I do not limit myself to any special form or shape of the adjustable parts herein shown and described, as I believe myself to be entitled, broadly, to a burner of the type referred to, in which a baffler or button *e* is adjustable vertically, or to a burner which is provided with an adjustable flame-deflecting collar, or to a combination of the two.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a gas-burner of the Bunsen type, the combination of a baffler or button supported above the center of the burner with a vertically-adjustable deflecting-collar located at the top of the burner, substantially as described.

2. In a gas-burner of the Bunsen type, the combination of a vertically-adjustable baffler or button with a vertically-adjustable deflecting-collar located at the top of the burner, substantially as described.

3. In a gas-burner of the Bunsen type, the combination of a rod secured adjustably to the interior of the burner and carrying a baffler or button at its upper end with an adjustable collar or deflector located at the top of the burner, substantially as described.

4. In a gas-burner of the Bunsen type, the

combination of an adjustable baffler or button located above the center of the burner with a funnel-shaped deflecting-collar located at the top of the burner, substantially as described.

5. In a burner of the Bunsen type, the combination of a baffler or deflecting-button adjustably secured near or above the top of the burner with an adjustable funnel-shaped deflecting-collar located at the top of the burner, substantially as described.

6. In a gas-burner of the Bunsen type, the combination of a baffler or deflecting-button adjustably secured to the interior walls of the burner with a funnel-shaped deflecting-collar having a cylindrical bearing-surface about the upper end of the burner, which cylindrical surface is slitted, whereby it is rendered adjustable, substantially as described.

LEONARD PAGET.

Witnesses:
ANNIE DUNNELL,
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