

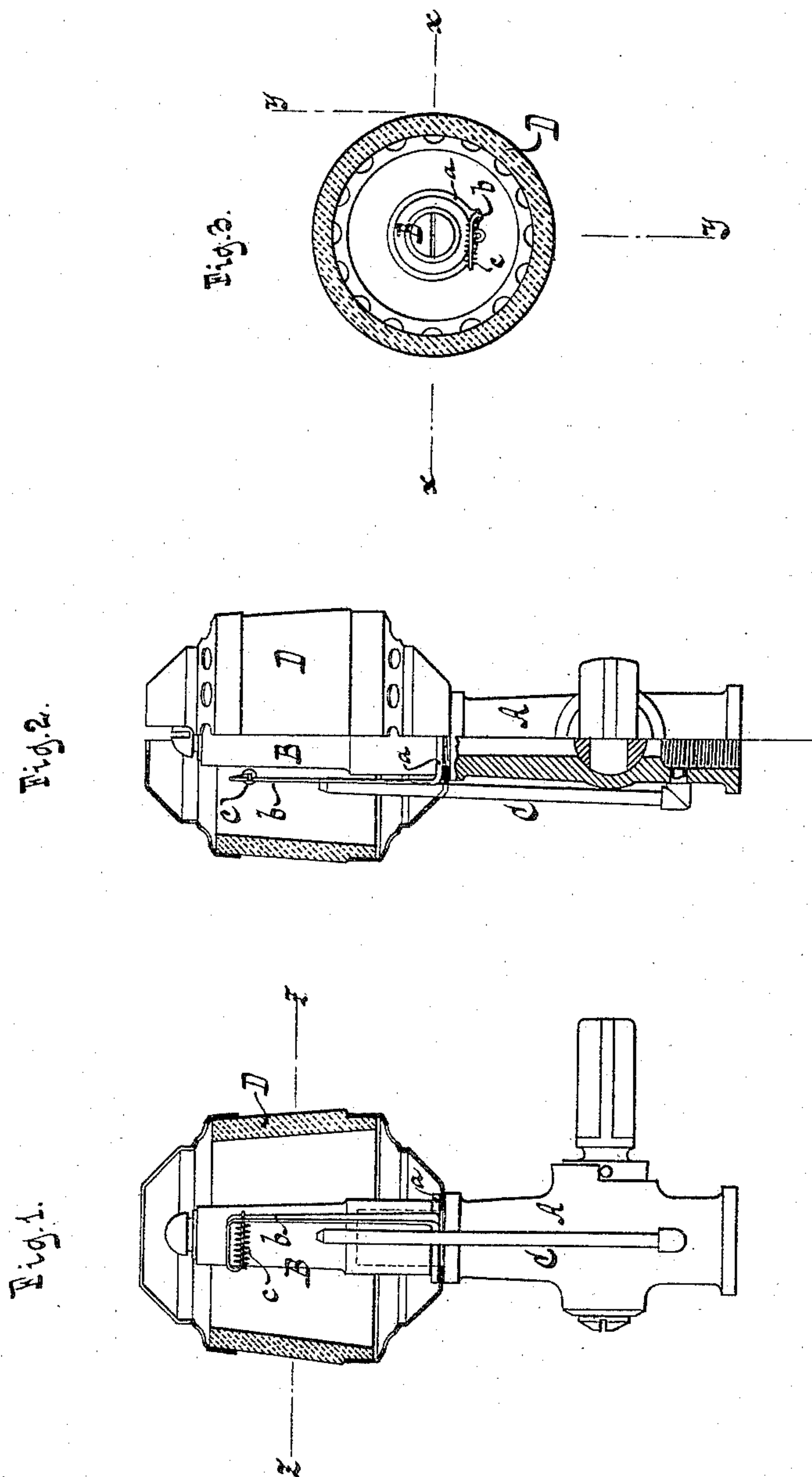
(No Model.)

W. B. COLE.

GAS BURNER.

No. 328,839.

Patented Oct. 20, 1885.



WITNESSES:

*Otto Hufeland*  
*William Miller*

INVENTOR

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BY

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# UNITED STATES PATENT OFFICE.

WINANT B. COLE, OF BROOKLYN, NEW YORK.

## GAS-BURNER.

SPECIFICATION forming part of Letters Patent No. 328,839, dated October 20, 1885.

Application filed January 8, 1885. Serial No. 152,336. (No model.)

*To all whom it may concern:*

Be it known that I, WINANT B. COLE, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Gas-Burners, of which the following is a specification.

This invention has for its object to provide a novel gas-burner; and it consists in the combination of devices hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 represents a vertical section in the plane  $xx$ , Fig. 3. Fig. 2 is a sectional side view, the plane of section being indicated by the line  $yy$ , Fig. 3. Fig. 3 is a horizontal section in the plane  $zz$ , Fig. 1.

Similar letters indicate corresponding parts.

In the drawings, the letter A designates a gas-cock, the shell of which connects at one end with a gas-pipe, while its other end supports the gas burner B. Between the gas-burner and the shoulder of the shell is placed a washer,  $a$ , from which rises a standard,  $b$ , to which is secured the platina coil  $c$ . Beneath this platina coil is situated a gas-jet, C, which communicates with the gasway beneath the plug of the gas-cock. The burner-tip rises a short distance above the platina coil.

By means of the washer  $a$  and standard  $b$  the platina coil can be readily adjusted in the required position directly above the gas-jet C, and when once adjusted said coil is not liable to be thrown out of position, while at the same time the washer, together with the standard and coil, can be readily removed, if it is desirable to introduce a fresh coil, or for any other purpose.

In order to shut off the gas-jet, a second cock must be inserted into the gas-pipe beneath said jet.

The burner B is inclosed into an illuminating air chamber, D, formed by a jacket, F, of glass or other transparent material, and by a cap, E, fitted upon this jacket. This cap rises slightly above the burner-tip, and is provided with an opening for the gas-flame. If the gas issuing from the burner-tip is ignited, the air in the chamber D is heated and the illuminating power of the flame is increased. At the same time the gas which issues from the jet C is also ignited and the platina coil is heated to a white heat. If,

now, the supply of gas to the burner is shut off by closing the gas-cock A, the flame of the jet continues to burn, and by the incandescent platina coil sufficient light is produced to enable a person to read in close proximity to the burner. At the same time, as soon as the gas-cock A is again opened, the gas issuing from the burner B is at once ignited, and all attempts to blow out the flame are futile, so that persons unacquainted with the properties of illuminating-gas are not liable to become suffocated by the escape of gas from the burner.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a gas-burner, of a gas-jet pipe communicating with the gasway and terminating at its upper end below the burner-tip, a washer movably supported below the burner, a standard rising from the washer, and a platina coil supported by the upper end of the standard between the gas-jet pipe and the burner-tip, substantially as described.

2. The combination of the detachable gas-burner, a gas-jet pipe communicating with the gasway, a washer movably supported below the burner and removable when the latter is detached, a standard rising from the washer beside the burner, and a platina coil supported by the upper end of the standard between the gas-jet pipe and the burner, substantially as described.

3. The combination of the gas-cock A, having its shell provided at its upper end with a shoulder, a gas-burner, a gas-jet pipe, C, communicating with the gasway below the gas-cock, a washer,  $a$ , removably held between the burner and the shoulder on the shell, a standard,  $b$ , rising from and removable with the washer, a platina coil,  $c$ , supported by the standard between the upper end of the jet-pipe and the burner-tip, and the illuminating-chamber D, supported at its lower end by the shell of the gas-cock, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

WINANT B. COLE. [L. S.]

Witnesses:

W. HAUFF,  
W. MILLER.