

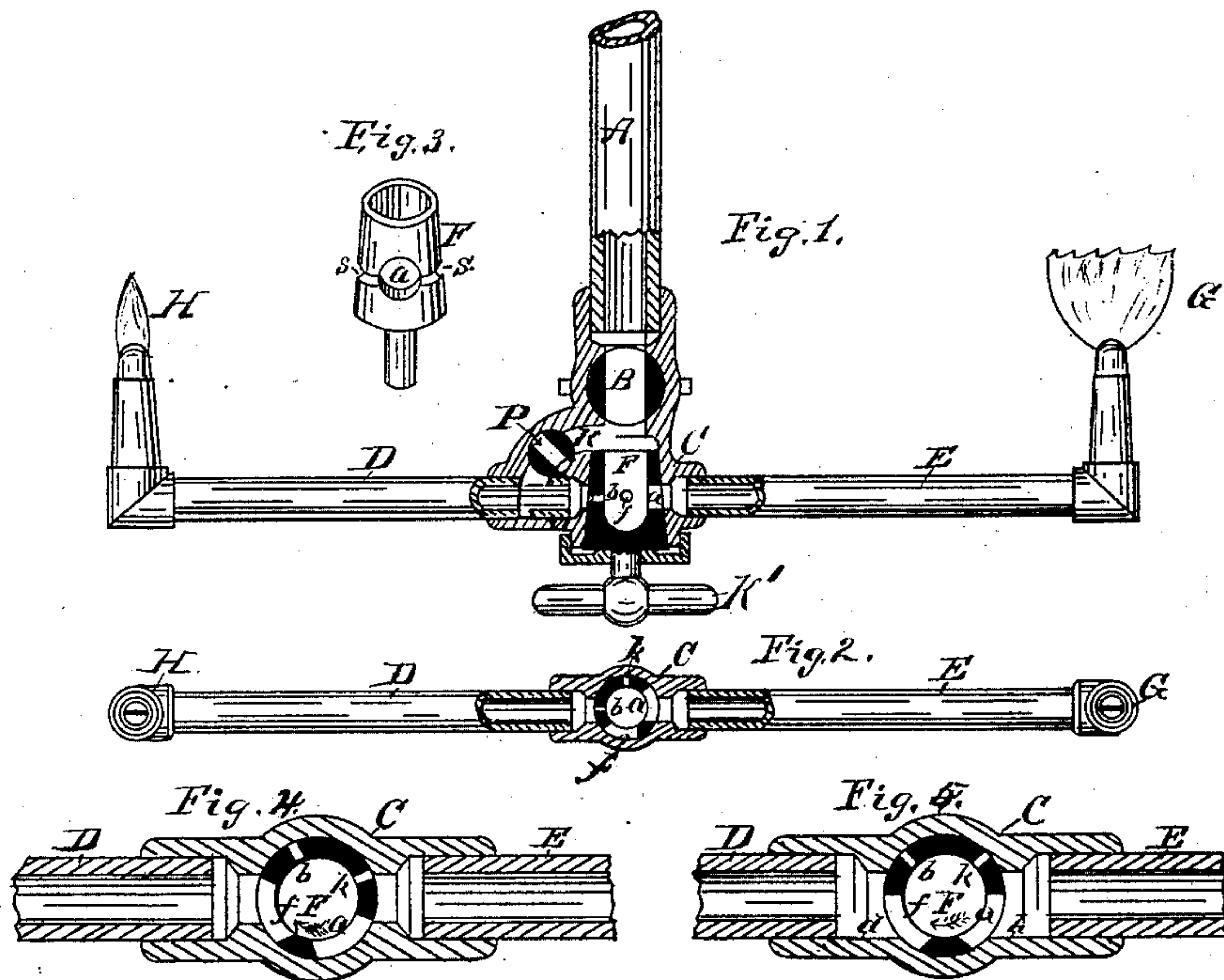
(No Model.)

J. L. KUYL & E. D. CUNDELL.

GAS REGULATOR.

No. 353,227.

Patented Nov. 23, 1886.



WITNESSES:

*Alfred Weber*  
*Christian Weber*

INVENTOR

*John L. Kuyl*  
*Edward D. Cundell*  
BY *Benj. A. Dore*  
ATTORNEY

# UNITED STATES PATENT OFFICE.

JOHN L. KUYL AND EDWARD D. CUNDELL, OF PATERSON, NEW JERSEY.

## GAS-REGULATOR.

SPECIFICATION forming part of Letters Patent No. 353,227, dated November 23, 1886.

Application filed March 8, 1886. Serial No. 194,648. (No model.)

*To all whom it may concern:*

Be it known that we, JOHN L. KUYL and EDWARD D. CUNDELL, a subject of the King of Holland and a citizen of the United States, and residents of Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Gas-Regulators, of which the following is a specification.

Our invention consists in the construction of the gas-cock for regulating the flow of gas in a two, three, or four branch light.

Our object is to save the unnecessary waste of gas by so constructing the regulating-cock that only one burner can have the full pressure or full light at one time, while the other will receive just sufficient gas to keep it ignited and ready for use at a moment's notice, which will be hereinafter more fully explained, reference being had to the accompanying drawings, in which—

Figure 1 represents an elevation of a two-branch light, part in section. Fig. 2 represents a plan view of Fig. 1 in section. Fig. 3 represents the plug of the cock detached; Figs. 4 and 5, enlarged views of Fig. 2 in section.

A represents main gas-pipe, to which is secured the stop-cock B and the regulating-cock C, the said cock C being provided to receive the branches D and E. In the cock C the tapering hollow plug F is fitted, and the said plug F is provided with the port or opening *a*, which is of a suitable size to supply the burner G with sufficient gas to give a full light.

On the opposite side of the plug F is the small port *b*, through which the gas flows of sufficient quantity to keep only a small flame burning at H. The plug F is also provided with corresponding openings or ports, *f* and *k*, at right angles with the ports *a* and *b*.

When a full light is desired at H, the plug F is rotated a quarter of a turn by the handle K' in direction of arrow, when the large port *f* will correspond with the opening of branch D, whence a full light will be produced at H. While changing the ports, as above described, the flow of gas is prevented from being entirely shut off from the branch E and extinguishing the light by the port *k* being partly

open when the port *a* is closed, as shown in Fig. 4.

The ports *b f k* may be dispensed with, if desired, the port *a* allowing a full flow of gas to the burner G, and the other burner, H, being supplied with gas by an annular groove, *s*, around the circumference of the plug F, when it is desired to use a full light at both burners G and H.

The case C is constructed with a passage, K, through the side between the stop-cock B and plug F, which is controlled by the stop-cock P, which may be sealed, so as not to be tampered with by the operator. The same may be accomplished by having the body of the cock C cut away, as shown at *d* and *h* in Fig. 5, which allows of a full flow of gas both ways by the setting of the plug F, as shown in Fig. 4.

The flow of gas is shut off entirely by the stop-cock B, when desired.

The special object of this invention is the saving of gas in large factories, where they usually have two or more burners over each machine, and all burning full, and operated by independent stop-cock for each burner, and as one light in either part of the machine is sufficient for the operator to perform his duties, the others are going to waste unless the operator is thoughtful enough to turn down the light when not using it, whereas by this device only one light can be burning full at the same time, thereby forcing the operator to be economical with the use of gas.

What we claim, and desire to secure by Letters Patent, is—

A gas-regulator consisting of the case C, provided with tapering hollow plug F, having therein one or more ports, *a b f k*, the branch K, and plug P, substantially as and for the purpose specified.

Signed at Paterson, in the county of Passaic and State of New Jersey, this 27th day of February, A. D. 1886.

JOHN L. KUYL.

EDWARD D. CUNDELL.

Witnesses:

ALFRED WEBER,

CHRISTIAN WEBER.