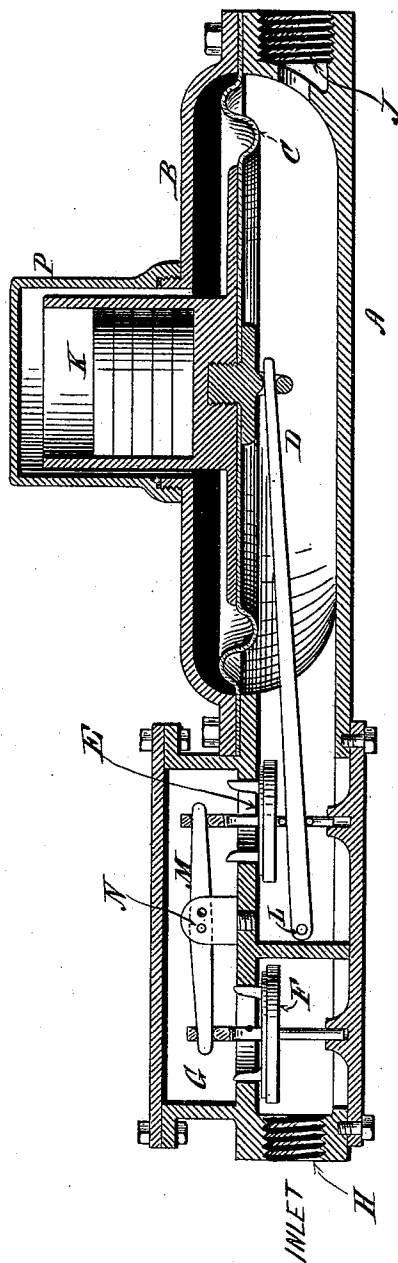


(No Model.)

T. J. KIELEY.
GAS REGULATOR AND CUT-OFF.

No. 361,765

Patented Apr. 26, 1887.



Witnesses:
Leo. H. Miatt
Anthony Gref

T. J. Kieley,
Inventor
By Foster & Freeman,
Attys.

UNITED STATES PATENT OFFICE.

TIMOTHY J. KIELEY, OF NEW YORK, N. Y.

GAS REGULATOR AND CUT-OFF.

SPECIFICATION forming part of Letters Patent No. 361,765, dated April 26, 1887.

Application filed February 17, 1887. Serial No. 227,923. (No model.)

To all whom it may concern:

Be it known that I, TIMOTHY J. KIELEY, of the city, county, and State of New York, have invented a new and useful Improvement in Gas Regulators and Cut-Offs, of which the following is a full, true, and complete description, reference being had to the accompanying drawing.

This invention relates to an improvement in apparatus by which a gas-supply can be regulated and at the same time under certain circumstances absolutely cut off.

My apparatus will be readily understood from the accompanying drawing, in which similar letters refer to similar parts.

The gas-valve-controlling mechanism is a diaphragm, C, held between the metal plates A and B. This diaphragm is depressed by weights K; or a spring may be used. The flange beneath the diaphragm engages with the lever D, pivoted at L. This lever controls the gas-valve E by pins or other suitable connections, as clearly shown. The upper part of the stem of the valve E communicates with the arm M, pivoted at N, the other end of which controls the valve-stem of the cut-off valve F, as shown. This cut-off valve F is preferably made larger in diameter than the valve E. As will be seen when the valve E is open the valve F is closed, and vice versa. Gas enters by the inlet H and escapes by the outlet J.

The operation can be readily understood.

Under ordinary conditions the valve F is open, and its greater diameter when open prevents wire-drawing of the gas there. The regulation is done by the valve E. When the gas-pressure in the chamber below the diaphragm increases above the load of the diaphragm, the gas-valve E tends to close. In the case of a total cessation of the gas-supply the diaphragm C will drop, closing the valve E, which will not reopen on the recommencement of the gas-supply. Under these circumstances the cap P must be unscrewed and the diaphragm raised, thereby opening the valve F before the apparatus will begin to operate.

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

1. The combination, in a gas-regulator, of diaphragm C, lever D, regulating-valve E, vibrating beam M, and valve F, substantially as described.

2. The combination, in a gas-regulator, of diaphragm C, lever D, regulating-valve E, vibrating beam M, and valve F, the valve F being greater in diameter than valve E, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

TIMOTHY J. KIELEY.

Witnesses:

ANTHONY GREF,
H. COUTANT.