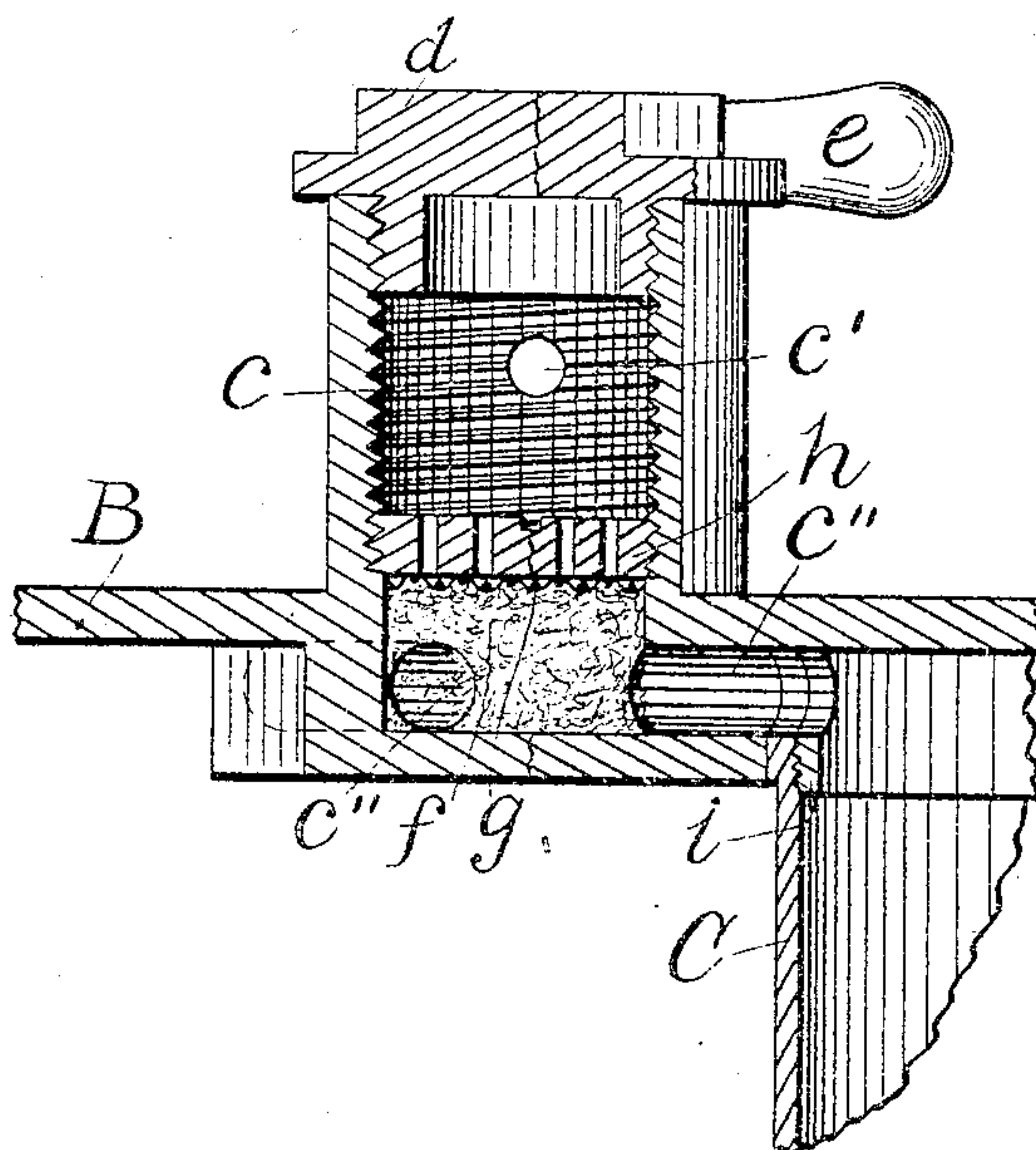


No. 803,617.

PATENTED NOV. 7, 1905.

F. M. MOORE.
ACETYLENE GAS APPARATUS.
APPLICATION FILED MAY 20, 1904.



Witnesses.
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ACETYLENE-GAS APPARATUS.

No. 803,617.

Specification of Letters Patent.

Patented Nov. 7, 1905.

Application filed May 20, 1904. Serial No. 208,871.

To all whom it may concern:

Be it known that I, FRANK M. MOORE, a citizen of the United States of America, residing at Westfield, in the county of Hampden and Commonwealth of Massachusetts, have invented a new and useful Acetylene-Gas Apparatus, of which the following is a specification.

My invention relates to improvements in acetylene-gas apparatus, and more particularly to means for regulating or governing the flow of gas from the generator or generators into the eduction-chamber, as hereinafter set forth; and the objects of my invention are, first, to afford simple but practicable and efficient means for controlling the flow of gas from generator to eduction-chamber and at the same time for straining the gas, and, second, to provide means for this purpose which is adjustable, whereby the amount of gas permitted to enter the eduction-chamber may be increased or decreased. I attain these objects by the means illustrated in the accompanying drawing, which is a sectional view of so much of an acetylene-gas apparatus embodying my invention as is required for such embodiment.

B represents a part of the cover for a water tank or reservoir, and C a portion of a generator - casing having its upper end screwed onto a flange *i* on the inside or bottom of said cover. In the cover B and rising above it is an eduction-chamber *c*, closed at the top with a screw-cap *d*. One or more passages *c'* for the outflow of the generated gas are made in the side walls of the chamber *c*, communicating with which are valve-cocks from which pipes or tubes lead to the burners, neither the valve-cocks, tubes, nor burners being shown, although the lever or handle of a valve-cock appears at *e*. The chamber *c* extends below as well as above the cover B and opens below into a generator or generators, as many passages *c''* being provided for this purpose as there are generators. The generator-casing C opens laterally into one of the passages *c''*, holes in line with the corresponding passage *c''* being made in the casing and flange *i*.

The gas is strained as it passes through the chamber *c* by means of a mass of asbestos filling *f* or filling of other suitable material in the bottom of said chamber, and a strainer *g* on top of said filling, both being held in place by a perforated screw-plug *h*, screwed into

the chamber above said strainer. Upon removing the screw-cap *d* and the screw-plug *h* access is had to the very bottom of the chamber *c*, and the filling *f* may then be rearranged or removed to be replaced with a fresh quantity.

The asbestos or its equivalent in the eduction-chamber *c* not only strains the gas, but, what is of equal if not greater importance, serves to regulate or govern the flow of gas from the generator or generators into said eduction-chamber owing to its more or less compact nature. By turning the screw-plug *h* down or up the filling of asbestos or other material in the eduction-chamber is rendered more or less compact, so that the amount of gas permitted to enter said eduction-chamber is decreased or increased accordingly. This is a very valuable feature of my invention. The asbestos or other filling and the screw-plug, either with or without the strainer *g*, may be termed the "governor."

In practice the gas generated in the casing C passes therefrom to the eduction-chamber *c*, through the connecting-passage *c''* and is strained and has its flow governed by the filling *f*, strainer *g*, and screw-plug *h*, the latter having been so adjusted as to secure the desired amount of pressure on said filling or the degree of compactness of the same necessary to properly regulate the flow of gas into the eduction-chamber. The escape of gas from the eduction-chamber is controlled by the valve-cock handle *e*.

From the foregoing, taken in connection with the accompanying drawing, it will be seen that this apparatus is particularly valuable for the purpose for which it is intended and excels particularly in points of safety, economy, compactness, &c.

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

1. The combination, with an acetylene-gas apparatus, of an eduction-chamber having a gas-outlet and internally-screw-threaded walls, a perforated plug screw-threaded to engage the screw-threaded walls of said eduction-chamber and adapted to be adjusted therein, and a filling of asbestos or similar material between the inlet-opening to the eduction-chamber and said plug, the latter being located between the outlet-opening from the eduction-chamber and said filling and arranged to compress such filling.

2. The combination, with an acetylene-gas

apparatus, of an eduction-chamber, a filling
of asbestos or similar material in said edu-
tion-chamber, a perforated screw-plug ar-
ranged to confine such filling therein, and a
5 strainer between the filling and such screw-
plug.

In testimony whereof I have signed my

name to this specification in the presence of
two subscribing witnesses.

FRANK M. MOORE.

Witnesses:

ALLEN WEBSTER,
F. A. CUTTER.