

H. T. FISCHER.

VALVE.

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950,383.

Patented Feb. 22, 1910.

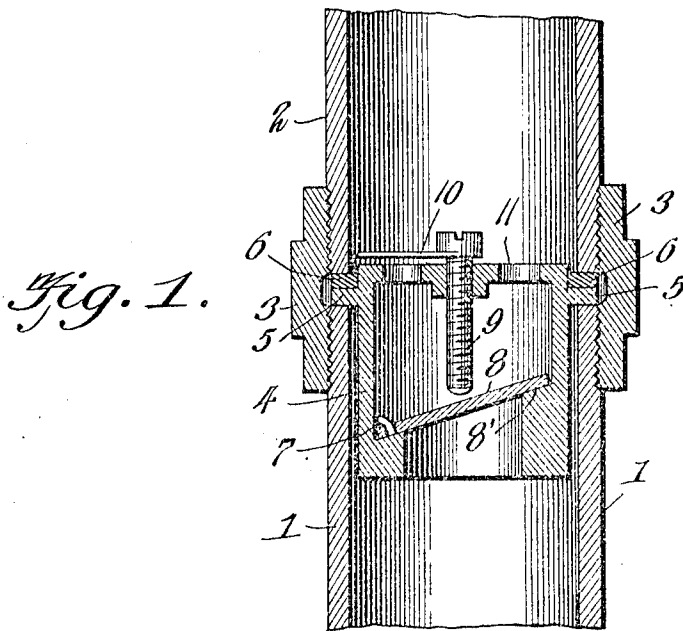


Fig. 2.

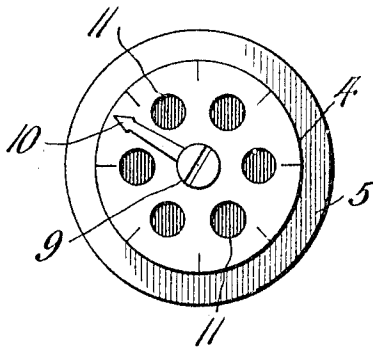
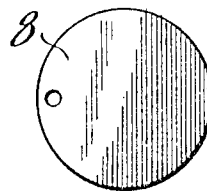


Fig. 3.



Witnesses

Frederick H. Heinrichs
Frank B. Keffman

Henry T. Fischer ^{Inventor}

By *Victor J. Evans*
Attorney

UNITED STATES PATENT OFFICE.

HENRY T. FISCHER, OF ST. LOUIS, MISSOURI.

VALVE.

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To all whom it may concern:

Be it known that I, HENRY T. FISCHER, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented new and useful Improvements in Valves, of which the following is a specification.

This invention relates to new and useful improvements in gas regulators of that type wherein the admission of gas to the house service pipes from the main through the meter will be just sufficient to supply the demand and also eliminate any possibility of working the meter through the medium of the back pressure.

The main object of my invention is the provision of a gas regulator or governor in connection with the pipes leading to and from the meter, wherein the valve within the said governor can be adjusted to maintain a desired pressure within the service pipes and prevent any back pressure to the meter.

To this end the invention consists in the novel construction, combination and arrangement of parts hereinafter described and shown in the accompanying drawings, wherein:—

Figure 1 represents a longitudinal sectional view of my invention. Fig. 2 is a top plan view of the annular valve body. Fig. 3 is a plan view of the valve plate.

Referring to the accompanying drawing, the numeral 1 designates the pipe leading from the gas meter and which is connected to the house service pipe 2 by a hexagonal union nut 3. Situated intermediate the ends of the pipes 1 and 2 is a cylindrical valve casing 4 having an annular flange 5 adapted to seat or rest on the circumference of the upper end of the pipe 1. A gasket 6 is mounted upon the annular flange 5 and the lower end of the service 2, which latter is held to bear firmly upon the said gasket by the union nut 3 thereby forming a sealed joint.

Within the lower end of the valve casing 4 is hinged as at 7 a circular valve plate 8 adapted to rest upon an inclined seat 8' over a contracted opening in order that the slightest back pressure to the meter will easily and firmly close it regardless of the position in which the governor may be.

Threaded centrally and longitudinally through an aperture in the top or head of the valve casing 4, is a regulating screw 9,

provided with a radial indicator hand 10 secured to the head of the screw. As will be seen in Fig. 3, the top or head of the valve casing is provided with suitable graduations which indicate the degrees of the opening movement of the valve. It will be apparent that by moving the indicator hand in the desired direction, thereby raising or lowering the screw, that the degree of opening movement of the valve will be gaged by the intervening space between the said lower end of the screw and the valve plate. The head of the graduated valve casing is provided with a number of apertures 11 adapted to permit of ready passage of the gas.

It will be obvious from the foregoing that a gas regulator constructed in accordance with my invention, the indicator hand having been set at a predetermined point, will maintain the required working pressure in the service pipes, and the valve will instantaneously and firmly close upon the slightest back pressure to the meter caused by raising and lowering the pressure in the gas main, thereby eliminating any possibility of working the meter backward and thus registering upon the meter, gas that has not actually been consumed.

It is to be understood that minor changes and details of construction may be resorted to without departing from the scope of the invention.

Having thus fully described my invention, what is claimed as new is:—

1. A gas governor comprising conductor pipes, means for connecting said pipes and holding the same in operative position, a valve casing within the pipes having perforations in the top and a contracted opening in the bottom, a check valve mounted within the casing and means for regulating the opening movement of the valve for the purpose set forth.

2. A gas governor comprising conductor pipes, means for connecting said pipes, a cylindrical valve chamber within the pipes having openings in the top and a contracted aperture in the bottom, a retaining flange on the said valve chamber, a check valve mounted within the valve chamber and seated over the contracted aperture, and means for gaging the degree of opening movement of the valve for the purpose set forth.

3. A gas governor comprising conductor pipes, means for connecting said pipes, a

cylindrical valve chamber within the pipes
and provided with a retaining flange which
is secured between the adjacent meeting ends
of the pipes, perforations in the tops and a
5 contracted opening in the bottom of the
valve chamber, a hinged check valve within
the valve chamber situated on an inclined
seat over the contracted opening, the
head of the valve chamber having gradua-
10 tions and a regulating screw centrally and

longitudinally threaded in the valve cham-
ber head, and the said screw provided with
an indicator hand for the purpose set forth.

In testimony whereof I affix my signature
in presence of two witnesses.

HENRY T. FISCHER.

Witnesses:

A. G. LINDSAY,
C. A. WESSEL.