

P. KELLER.
Gas Regulator.

No. 98,776.

Fig. 1. Patented Jan. 11, 1870.

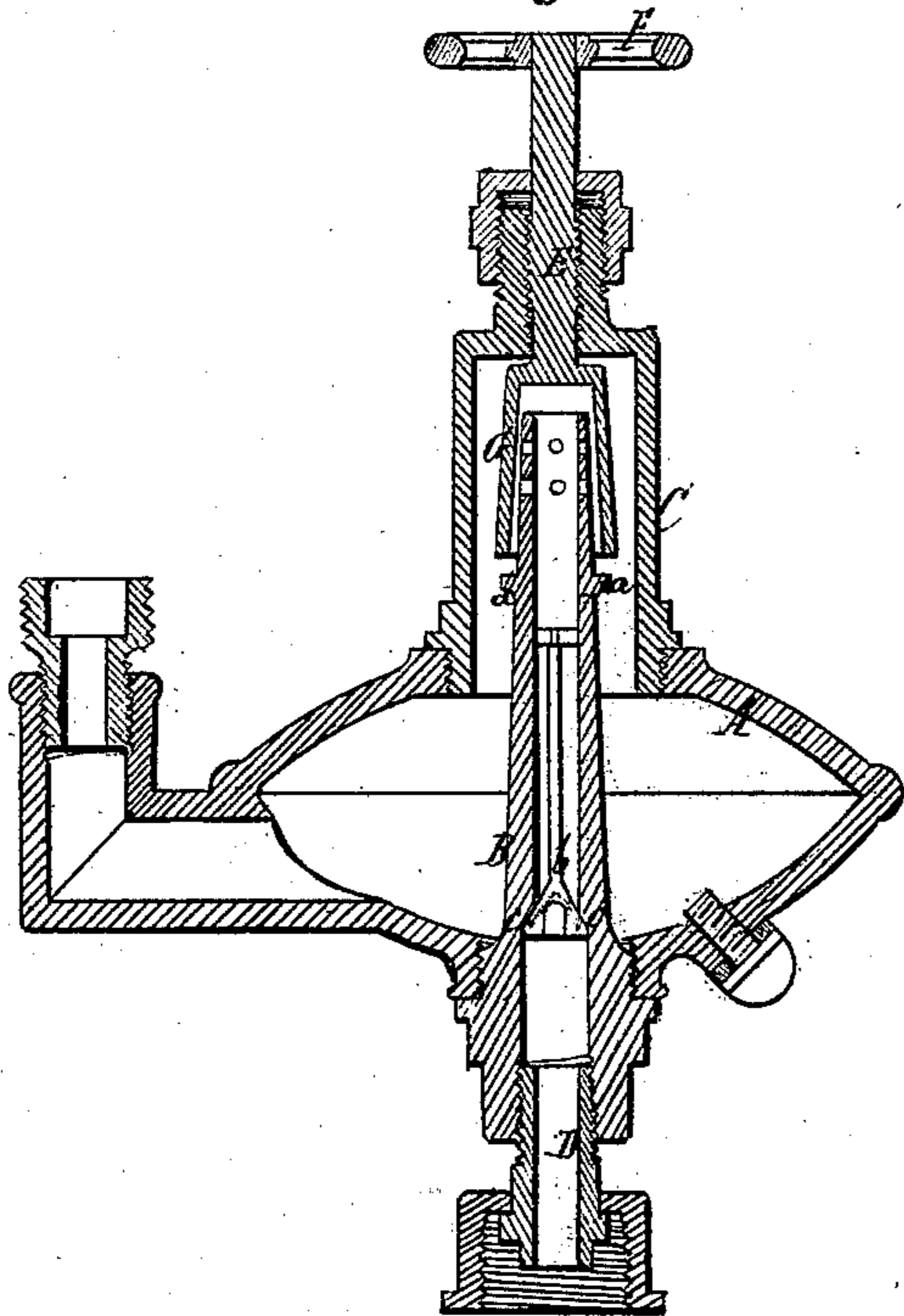
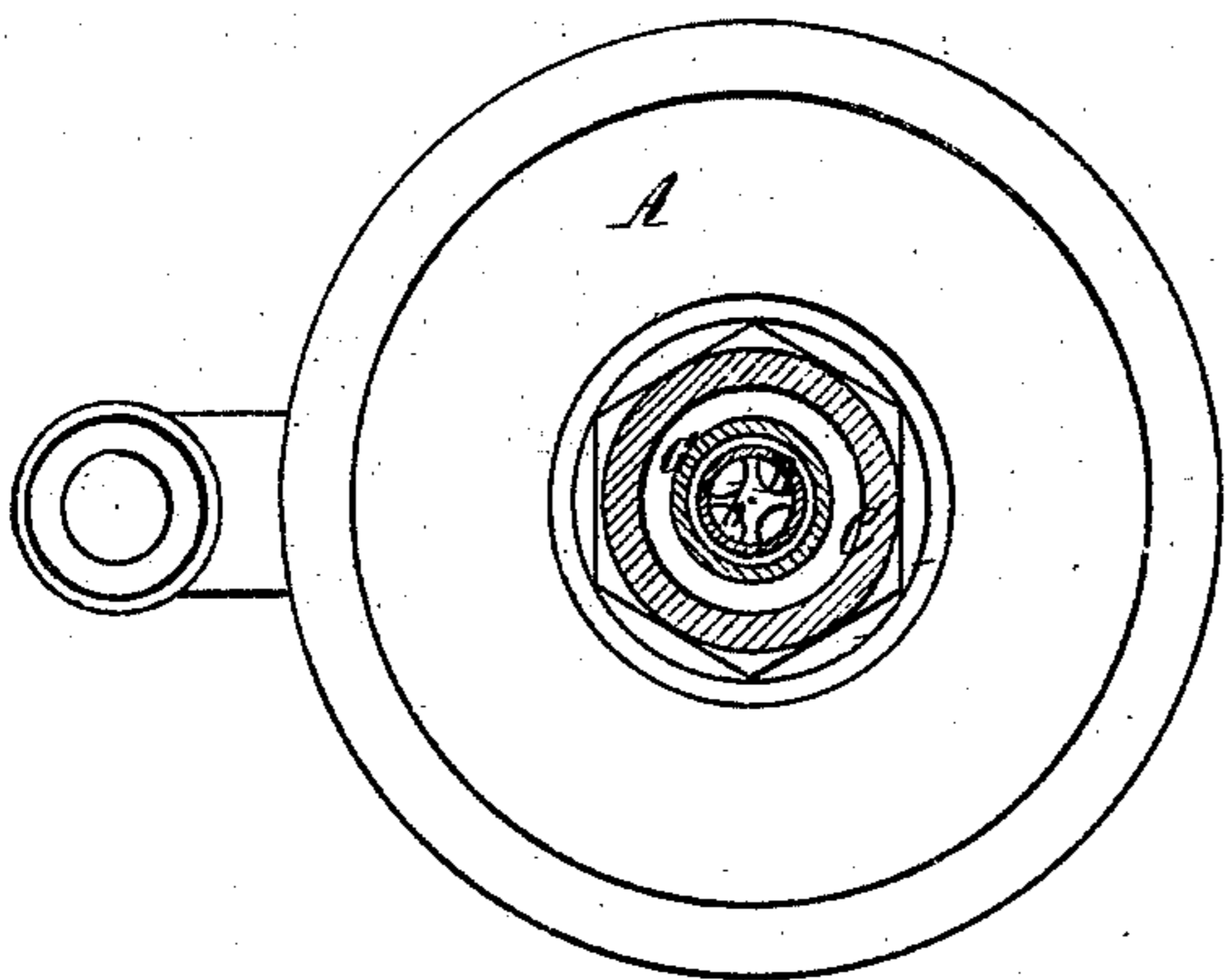


Fig. 2



Witnesses.
C. W. Wablers
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Inventor.
Peter Keller
per
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attm

United States Patent Office.

PETER KELLER, OF NEW YORK, N. Y.

Letters Patent No. 98,776, dated January 11, 1870.

IMPROVEMENT IN GAS-REGULATORS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, PETER KELLER, of the city, county, and State of New York, have invented a new and useful Improvement in Gas-Regulators; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which drawing—

Figure 1 represents a central section of this invention.

Figure 2 is a horizontal section of the same.

Similar letters indicate corresponding parts.

This invention relates to an improvement in that class of gas-cocks for which a patent was granted to me, January 21, 1868.

My present improvement consists in the arrangement of a cap which is attached to a screw-spindle, in combination with a seat formed by a collar, attached to the perforated end of the supply-tube, which extends through a bulb into an expanding-chamber, in such a manner that the gas, on issuing from the supply-tube, is received into the cap, whence it escapes, through the annular space between the bottom edge of said cap and the seat on the supply-tube, into the expanding-chamber, and that by turning the screw-spindle, said cap can be raised or lowered, and the discharge of the gas from the supply-tube can be regulated or shut off at pleasure. With the supply-tube is combined a self-regulating valve, which opens or closes as the pressure of the gas from above or from below changes.

In the drawing—

The letter A represents a hollow bulb, made of cast-iron or of any other suitable material, and provided with two apertures, one exactly opposite the other, as shown in fig. 1.

Both apertures are provided with internal screw-threads—the aperture in the bottom of the bulb to receive the pipe B, and the aperture in the top to receive the pipe or shell C.

The pipe B extends up into the shell C, and its upper end is open and perforated at its sides, while its lower end is provided with an internal screw-thread, to form a connection with the gas supply-pipe D.

The shell C is closed at the top, and provided with

an internal screw-thread, to receive the screw-spindle E, to the outer end of which is secured a hand-wheel, F, while its inner end carries a cap, G, which covers the perforated inner end of the pipe B, and the bottom end of which can be brought down upon a seat, *a*, formed by a collar or flange on the pipe B.

If the spindle E is turned so as to bring the cap G close down upon the seat *a*, the discharge of the gas is cut off, but if said cap is raised from the seat, the gas discharging from the open end of the pipe B, and through its perforations, passes down and out through the annular space between the seat and the cap, and thence into the shell C, which forms a chamber to allow the gas to expand, and to counteract any undulations occurring in the current of the gas.

From the shell C, the gas passes down into the bulb, and thence out through the discharge-pipe H, to the burners.

The pipe B is bored out, to receive a valve, *b*, with a notched or corrugated face, and if the pressure of the gas from below exceeds the desired limit, this valve is carried up against its seat *c*, and the gas, in order to pass up into the pipe B, is compelled to escape through the notches in the face of the valve *b*, but if the pressure of the gas decreases, the valve *b* sinks down, and a free passage for the gas is opened through the scalloped edge of said valve.

By combining the self-regulating valve *b* with the cap G, the flow of the gas to the burners can always be regulated, and all waste of gas is avoided.

I disclaim everything shown and described in my patent of January 21, 1868; but

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

1. The cap G, attached to a screw-spindle E, in combination with the shell C and with the seat *a*, below the perforated end of the pipe B, substantially as set forth.

2. The combination of the self-regulating valve *b*, with the cap G, shell C, pipe B, and bulb A, substantially as shown and described.

PETER KELLER.

Witnesses:

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E. F. KASTENHUBER.