

E. F. BROOKS.

Regulating Cocks for Gas.

No. 156,330.

Patented Oct. 27, 1874.

Fig. 1.

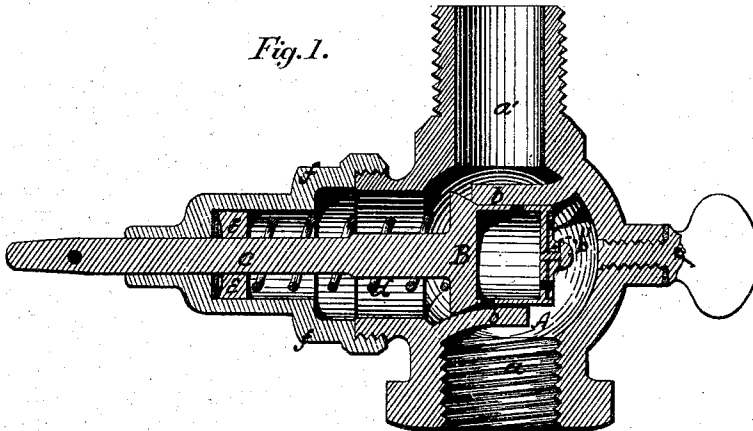


Fig. 2.

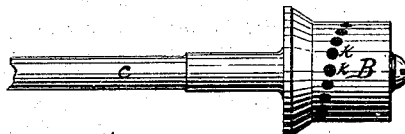
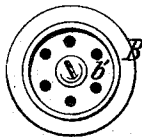


Fig. 3.



Attest:

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Inventor:

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UNITED STATES PATENT OFFICE.

EDWIN F. BROOKS, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN REGULATING-COCKS FOR GAS.

Specification forming part of Letters Patent No. **156,330**, dated October 27, 1874; application filed July 24, 1874.

To all whom it may concern:

Be it known that I, EDWIN F. BROOKS, of the city of Baltimore, State of Maryland, have invented certain Improvements in Regulating-Cocks for Gas, of which the following is a specification:

This invention relates to the device described in the specification of the patent to Charles E. Seal, granted July 1, 1873, No. 140,549, reissued September 30, 1873, No. 5,585, entitled "improvement in cut-offs and regulating-cocks for gas;" and it consists in certain improvements in the valve, hereinafter more particularly described and claimed.

In the various figures of the drawings, the same letters of reference are used to indicate corresponding parts.

Figure 1 is a vertical longitudinal section of the gas-cock. Fig. 2 is a side view of the valve and stem. Fig. 3 is an end view of the valve, showing the perforated stop-valve.

A is the valve-chamber, connected by end tube *a* with the service-pipe, and by end tube *a'* with the meter or pipe leading thereto. B is the valve; *b*, its seat; *c*, the valve-stem; *d*, the actuating spiral spring; *e*, the washer and packing, and *f* is the cap-tube.

The further description of these parts, except the valve, is unnecessary, in view of the full description thereof contained in the original and reissued Letters Patent to Charles E. Seal, before referred to.

The valve B is of cylindrical form, with a projecting coniformed rim at its top. Its seat *b* is adapted to its peculiar conformation, and both valve and seat are ground and arranged to slide the one within the other, with great exactness and nicety. The valve is hollow, closed at the top, and provided at its bottom with a series of perforations arranged in a circle, over which, on the under side of said valve, a disk-valve, *b'*, is seated, provided with corresponding perforations arranged in the same circle. *k k*, &c., are a series of perforations in the side of the valve, extending from the upper end of the cylinder, and diagonally of its outer surface. The setting of the perforated disk-valve regulates the supply of gas

to the house, and is predicated upon the number of burners which may be called into use, while by raising or lowering the valve in its seat, the side perforations being thereby more or less exposed, will still further limit the supply to that requisite for the number of burners in actual use.

When the regulating-cock is placed in its position in the house, the disk-valve *b'* is set so as to open the proper number of perforations in the bottom of the valve, to supply the number of burners in the house, or the number which it is possible will be called into use. The gas will pass through these openings into the valve B, and from it can pass only through such of the side perforations as are exposed by raising the valve from its seat. The valve-stem being connected by means of wire and bell-crank levers with a hand-crank, in any preferred part of the house or room, the supply of gas needed for actual consumption is regulated thereby. Only a sufficient quantity is allowed to pass through the meter to answer the immediate actual want, and, when desired, the whole supply can be shut off from the house. By this means all loss to consumers occasioned by the amount of pressure in the pipes, and leakage resulting therefrom, will be almost if not entirely obviated.

A screw-plug, *p*, is arranged in the lower part of the valve-chamber, to draw therefrom the water that may collect there.

I claim as my invention—

1. In a regulating-cock for gas, a hollow valve provided with outlet-ports opened and closed by the adjustment of the valve in its seat, and inlet-ports opened and closed by an adjustable stop-valve, for the purpose specified.

2. The valve B, provided with inlet-ports in its base, and outlet-ports *k k*, in combination with the stop-valve *b*, substantially as and for the purpose specified.

E. F. BROOKS.

Witnesses:

W. M. BUSEY,
J. W. TRENT.