M. STRATTON.

Gas Cock.

No. 87,522. Patented March 2, 1869.

Fig. 2.

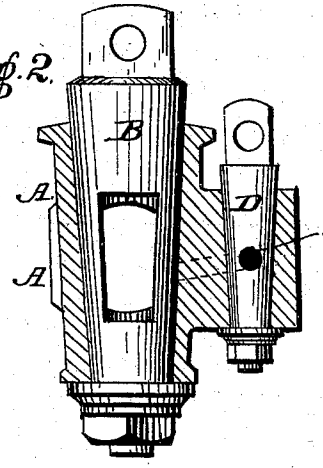


Fig. 3.

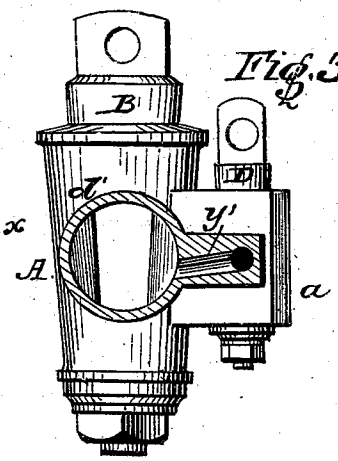


Fig. 1.

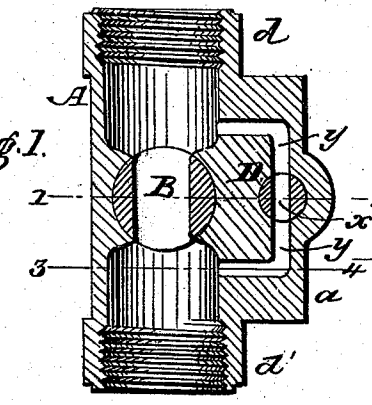
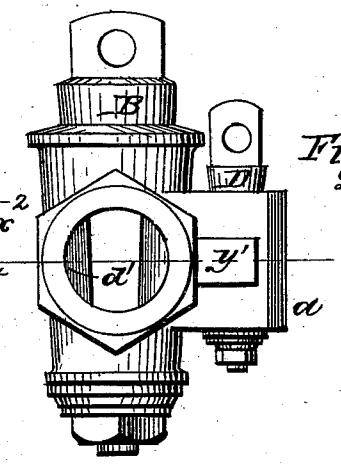


Fig. 4.



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United States Patent Office.

MATTHIAS STRATTON, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 87,522, *dated March* 2, 1869.

IMPROVEMENT IN GAS-COCKS.

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, MATTHIAS STRATTON, of Philadelphia, Pennsylvania, have invented an Improved Gas-Cock; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention consists of a cock, having a passage through it independently of that afforded by the usual plug, or valve, the said passage admitting of being opened or closed by a supplementary plug, or valve, all substantially as described hereafter, so that, on leaving a store, or retiring in a dwelling-house for the night, the main supply of gas may be cut off from the distributing-pipes, while it may flow through the independent passage in quantities sufficient for one or two burners, required during the night.

Among the advantages of my invention is the preventing, in case of fire during the night, the escape of such a volume of gas as may add to the intensity of the conflagration.

In order to enable others to make and apply my invention, I will now proceed to describe its construction and operation, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figure 1 is a sectional plan of my improved gas-cock;

Figure 2, a vertical section on the line 1–2, fig. 1;

Figure 3, a section on the line 3–4, fig. 1; and

Figure 4, an end view of the cock.

Similar letters refer to similar parts throughout the several views.

A is the casing, and

B, the tapering plug of a cock, such as is used near the meter, in a building supplied with gas, there being two branches, *d* and *d'*, on the casing, to which the usual service-pipes are connected.

Adjacent to the larger plug, B, I arrange a smaller plug, D, adapted to an opening, made for its reception, in the projecting portion, *a*, of the casing A.

The transverse hole *x*, of this plug, can, by turning the latter, be made to coincide with the two passages *y* and *y'*, the former communicating with the interior of the branch *d*, at one side of the large plug B, and the passage *y'* with the interior of the branch *d'*, at the opposite side of the said plug B, so that, when the latter is closed, and the flow of gas in a direct course thereby cut off, it may continue to pass, in smaller quantities, to the distributing-pipes, through the said passages *y* and *y'*, and through the plug D, (should the latter be open.)

The casing A, its branches *d* and *d'*, and plug B, are made of the size demanded by the amount of gas required to be consumed throughout the building, but the passages *y y'* are made no larger than is necessary to supply the small amount of gas which may be required for one or two burners during the night.

On leaving a store, or retiring in a dwelling-house, for the night, the plug B is closed, but care is taken that the plug D is open.

Should a fire occur in the store or dwelling, the burning or fracture of the gas-pipes therein will add but little to the intensity of the conflagration, owing to the small amount of gas permitted to enter the said pipes through the passages *y y'* of the cock; whereas, the fracture of the pipes, supplied with the usual quantity of gas, not only adds to the intensity of the fire, but in many cases renders it unmanageable, and is often the cause of the entire destruction of valuable property.

My improved service-cock may be used to the best advantage in theatres, in place of the complex appliances at present employed, for regulating the flow of gas, for the purpose of imparting more or less brilliancy to the scenes.

As long as the small plug is open, there can be no danger of entirely extinguishing the lights, while, by the simple manipulation of the larger plug, any desired quantity of gas can be distributed to the burners, in accordance with the brilliancy or dulness of the illumination required for different scenes.

While my improved cock possesses these advantages, it loses none of the properties of an ordinary stop-cock, for, on closing both plugs, the gas is entirely cut off, and any repairs and alterations of the distributing-pipes may be accomplished.

But it is as a safety-medium for dwelling-houses, stores, &c., that the advantages of my improvement are most prominent.

The manipulation of the plugs demands the exercise of nothing more than the most ordinary intelligence, and the adjacency of the plugs to each other, of itself, affords the necessary suggestion as to the proper manipulation.

Stops may be arranged on both plugs, so that the proper extent of their opening and closing may not be left to conjecture.

Locking-appliances may also be so adapted to the larger plug, that it may be under the control solely of those who have most at stake in the safety of the building.

The importance of my improvement as a gas-saving medium, will be apparent. A watchman, for instance, who has not access to the main plug, cannot burn more gas than is required to enable him to attend to his duties properly.

It will be observed, on reference to fig. 3, that the passages *y* and *y'*, near their communication with the branches *d* and *d'*, are slightly inclined. This is to prevent the possibility of water lodging in these branches, and obstructing the flow of gas through the same.

Without confining myself to the precise arrangement of parts herein described,

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

A cock, having a passage through it, independently of that afforded by the usual plug, or valve, when the said passage can be opened or closed by a supplementary plug, or its equivalent, substantially as and for the purpose herein set forth.

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

MATTHIAS STRATTON.

Witnesses:

JOHN WHITE,

HARRY SMITH.