

(No Model.)

T. H. FOOTE.
GAS COCK.

No. 565,730.

Patented Aug. 11, 1896.

Fig. 1.

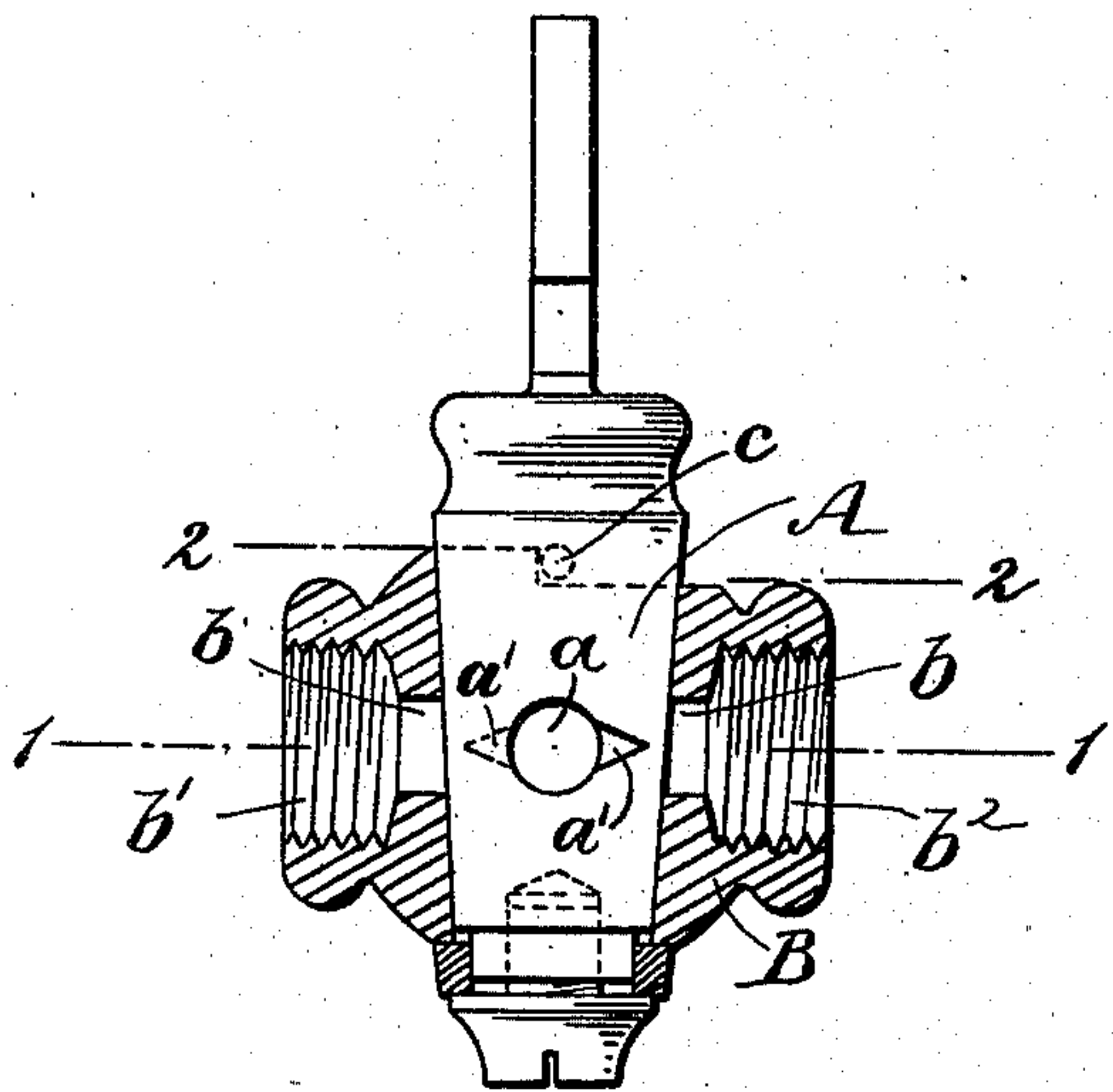


Fig. 2.

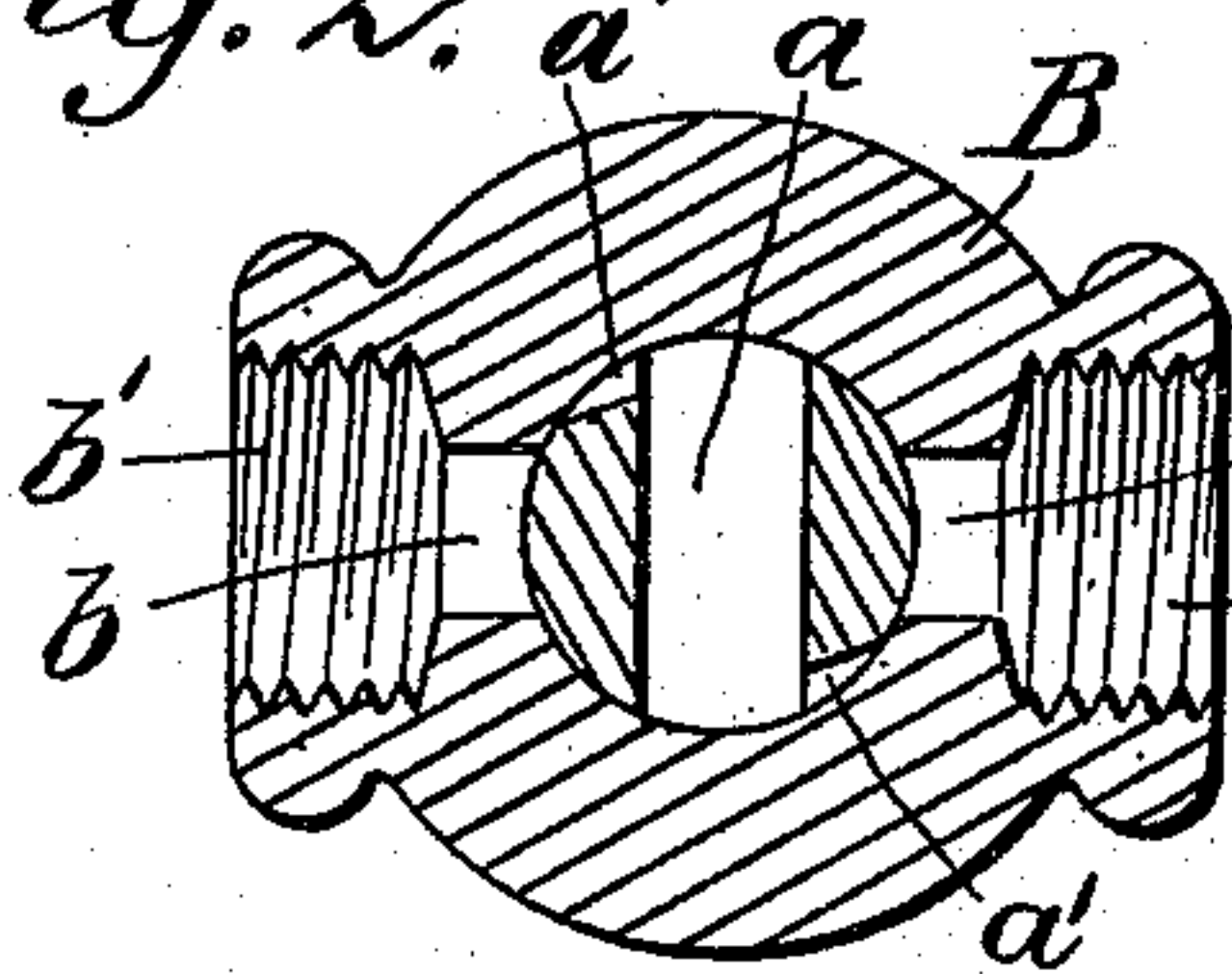


Fig. 3.

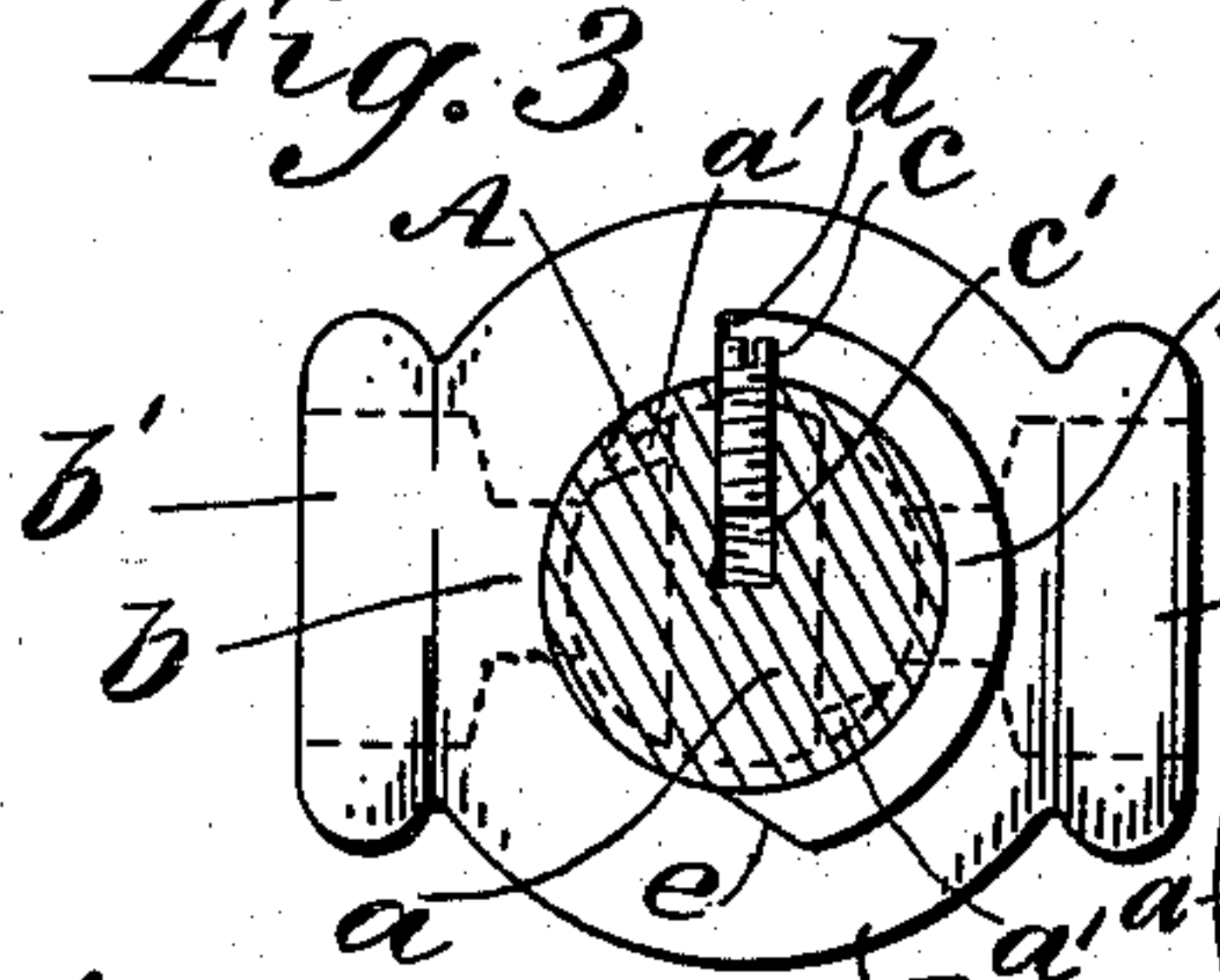
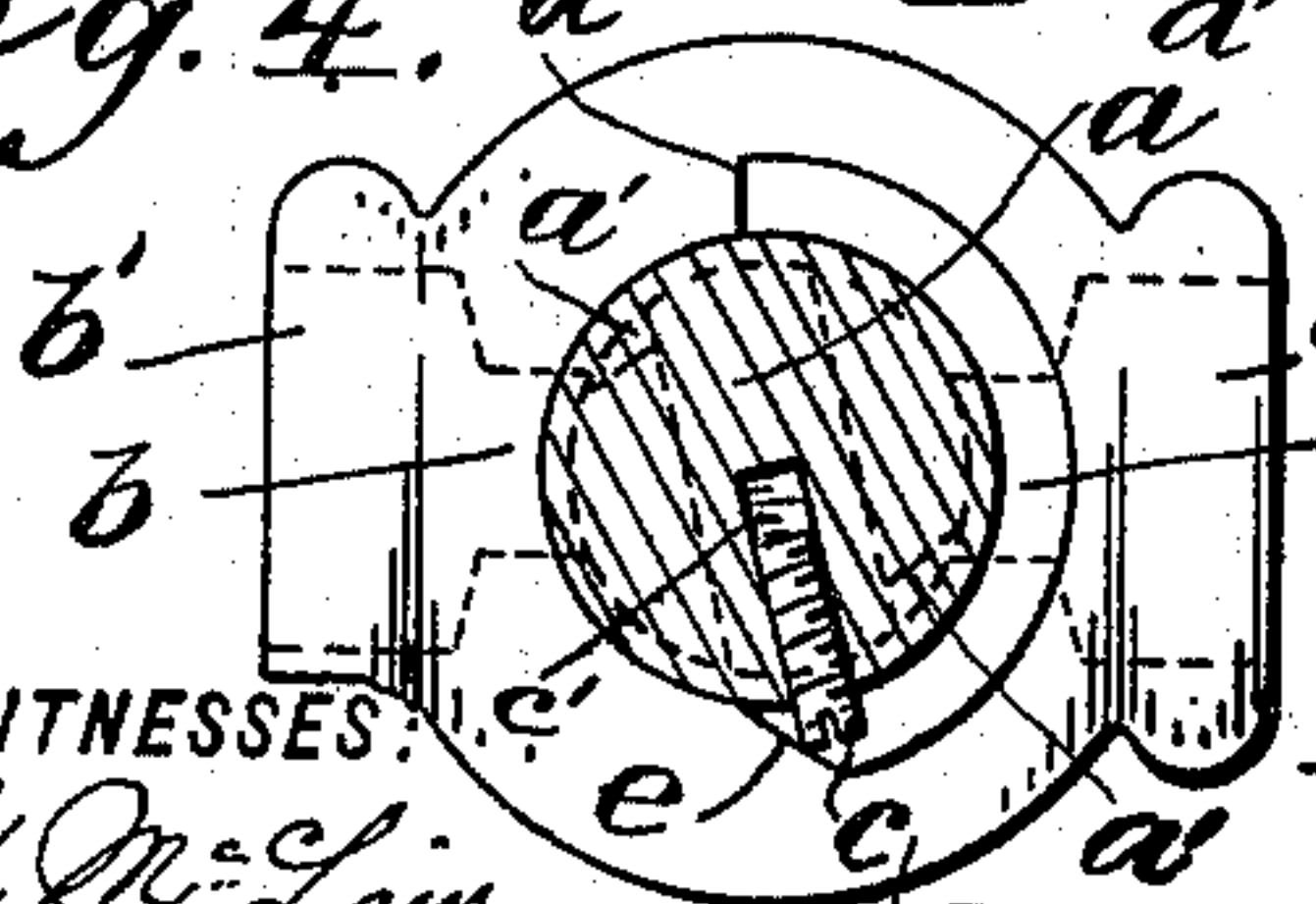


Fig. 4.



WITNESSES:

M. J. McLain.
H. Gentle.

Fig. 6.

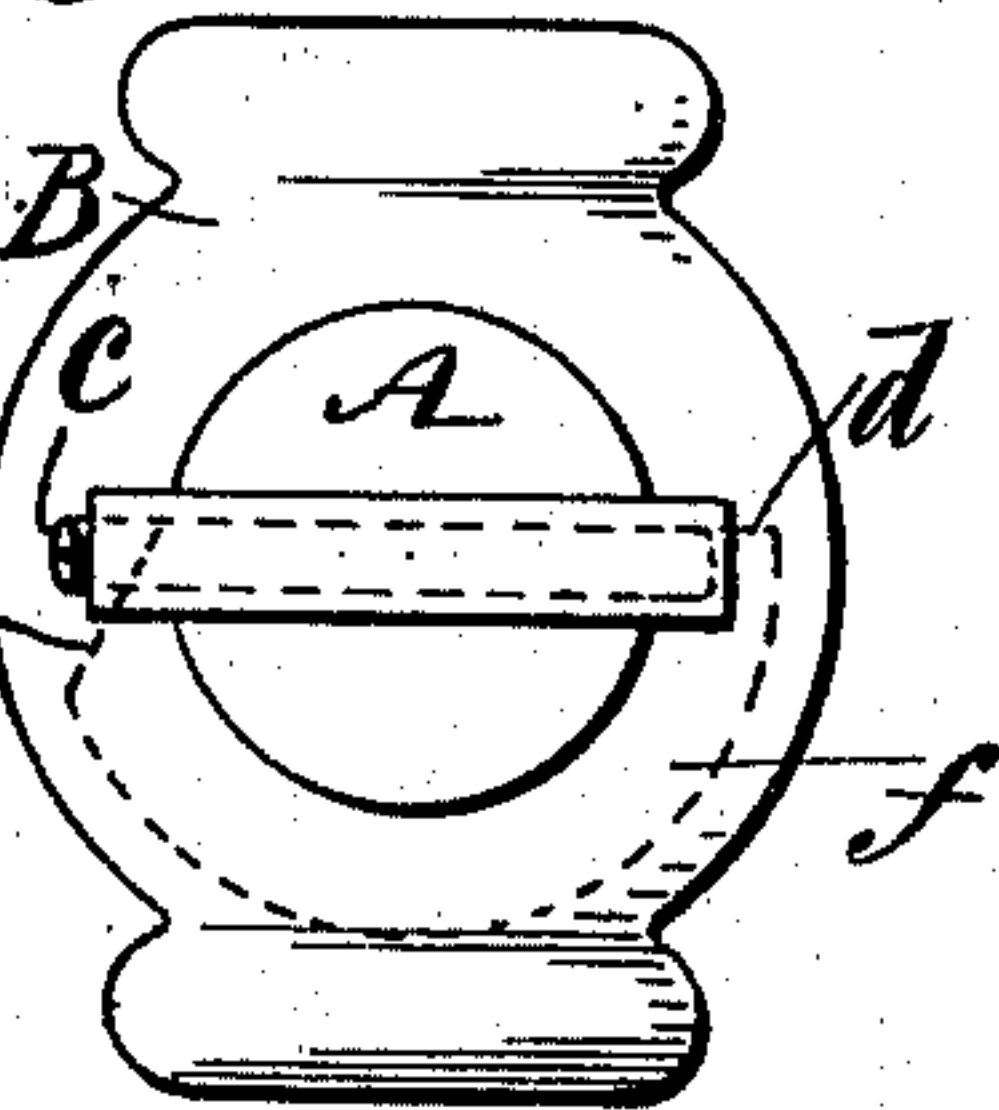
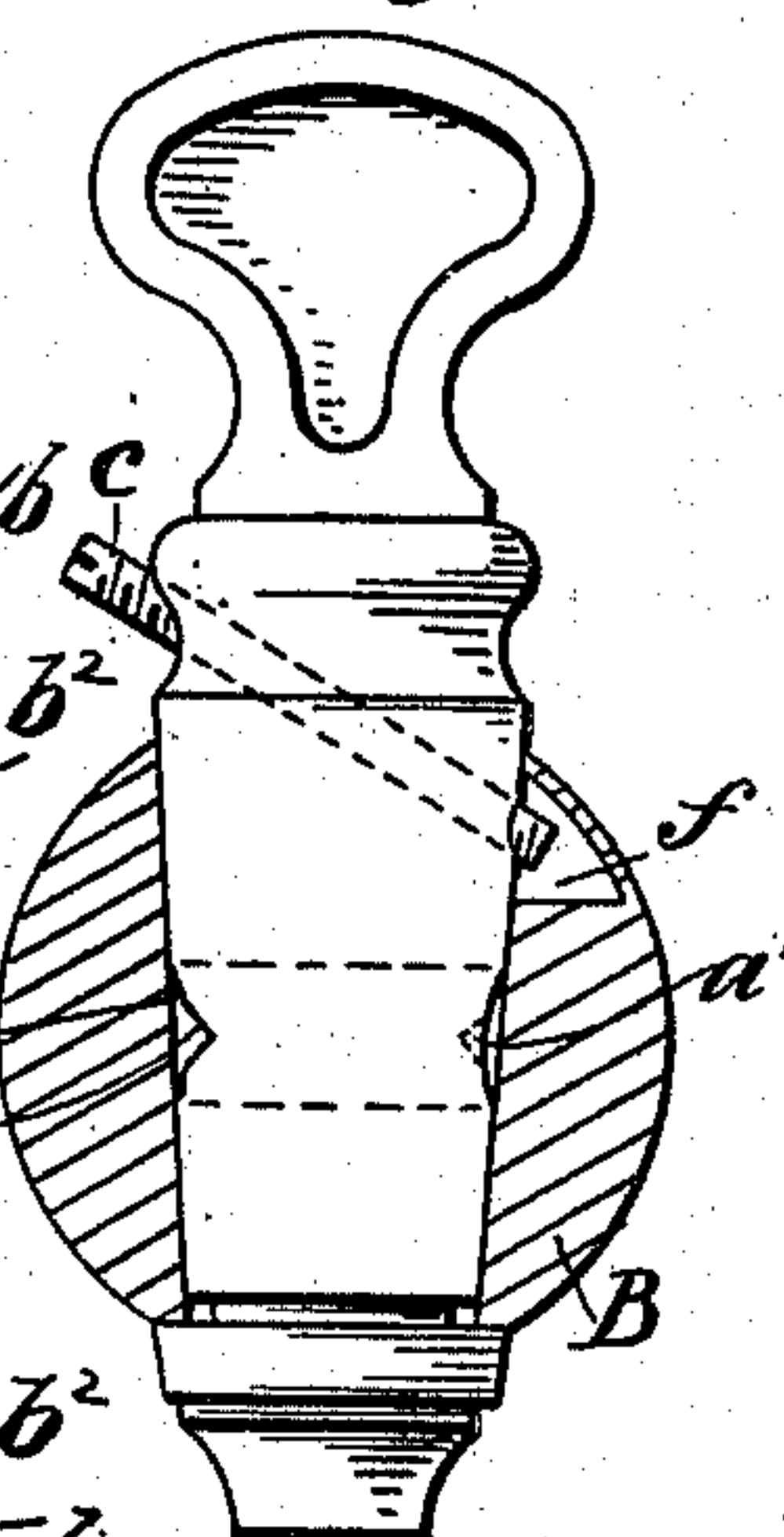


Fig. 5.



INVENTOR

Thomas H. Foote

BY

Clark & Deemer
ATTORNEYS

UNITED STATES PATENT OFFICE.

THOMAS H. FOOTE, OF NEW YORK, N. Y.

GAS-COCK.

SPECIFICATION forming part of Letters Patent No. 565,730, dated August 11, 1896.

Application filed June 24, 1895. Serial No. 553,776. (No model.)

To all whom it may concern:

Be it known that I, THOMAS H. FOOTE, a citizen of the United States, and a resident of New York, county of New York, and State of New York, have invented certain new and useful Improvements in Gas-Cocks, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to improvements in gas-cocks, and has for its object to supply an article of this character which can be manufactured as cheaply as an ordinary gas-cock, but which will be so constructed as to enable an operator to partially turn off a supply of illuminating or other gas leading there-through to such an extent as to produce a very low light without danger of accidentally cutting off the supply altogether, as frequently occurs when endeavoring to produce a light of minimum proportions with the common gas-cock now in general use.

A further object is to supply gas-cocks with adjustable means for controlling a supply of gas leading therethrough, whereby an operator may arbitrarily produce a light of any desired size between the maximum and minimum proportions a burner of given size is capable of producing.

The invention is specially adapted for use upon gas-stoves where the burners are not in full view of an operator.

The invention will be hereinafter fully described, and specifically set forth in the annexed claims.

In the accompanying drawings, Figure 1 is a vertical sectional elevation of my improved gas-cock; Fig. 2, a sectional plan view taken on a line 1 1 of Fig. 1; Fig. 3, a sectional plan view taken on a line 2 2 of Fig. 1; Fig. 4, a similar view showing the valve turned so as admit a limited supply of gas to the burner; Fig. 5, a vertical section showing a further modification, and Fig. 6 is a plan view of same.

In the practice of my invention a plug-valve A is seated within a common spherical housing B, which said housing has a channel *b* leading therethrough and enlarged threaded inlet and outlet openings *b'* and *b''*, adapted

to engage with pipes leading from a source of gas supply and to a burner or burners, respectively. Through the plug-valve A is formed a port or aperture *a*, which is adapted to exactly register with the channel *b* when the gas is turned on full. In the outer surface of the plug-valve A, I form angular notches or grooves *a'*, which lead into the port or aperture *a* of the valve A. The valve A is further supplied with an adjustable screw or stop *c*, which engages with shoulders *d* and *e* of the housing B, as illustrated in Figs. 1, 3, and 4 of the drawings. In said figures the screw-stop *c* engages with an interiorly-threaded aperture *c'*, which passes only part way through the valve A; but in the construction shown in Figs. 5 and 6 the said screw-stop *c* passes at an angle all the way through the valve A and engages with shoulders *d* and *e*, formed at the two ends of a segmental recess *f*, cut into the inner surface of the valve-seat. The shoulder *d* is so arranged as to limit the rotary motion of the valve A, so as to bring its port *a* at right angles to the channel *b*, whereby the gas is entirely cut off; but the shoulder *e* is arranged on an angle, so as to stop the motion of the valve A while the port *a* thereof is at an oblique angle to the channel *b*, whereby admission of gas to said port is effected through the medium of the grooves or notches *a'*, leading into said port, as illustrated in Figs. 3 and 4, respectively.

To regulate the supply of gas when a dim light is being burned, the screw-stop *c* must be forced inwardly to decrease the flow of gas through the port *a*, and outwardly to increase said flow. This applies to the construction illustrated in Figs. 1, 2, 3, and 4. In the construction illustrated in Figs. 5 and 6 the inward movement of the screw *c* increases the flow.

In the construction illustrated the screw-stop *c* is threaded through the housing B and engages with the interior wall of the port *a*. In this form of gas-cock I do away with the shoulders *d* and *e* of the housing B, and the port *a* and channel *b* passes through the device at one side of the center thereof.

In the operation of my device the screw-stop *c* is set to strike the shoulder *e* at any desired

point upon the surface of said shoulder, and the gas is turned on by turning the valve A until the port *a* registers with the channel *b*, precisely as would be the case were an ordinary gas-cock used, and when it is desired to turn off the gas said valve is turned back until the screw *c* again comes in contact with the shoulder *d*; but if a dim or small light is required the valve A is turned in an opposite direction until the head of the screw *c* comes in contact with the shoulder *e*. The gas will then continue to flow to the burners, but in a diminished quantity, owing to the contracted form of the notches *a'*, through which it must pass.

15 Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A gas-cock comprising a housing having a channel therethrough, a plug-valve provided with a port seated therein, a groove in the housing of varying depth adjacent the valve,

and an adjustable pin in the valve projecting into and adapted to move in said groove and vary the motion of the plug in accordance with its adjusted position.

2. A gas-cock comprising a housing with a channel therethrough, a valve in the housing having a port and notches leading thereto, a groove in the housing of varying depth, and an adjustable pin in the valve projecting into the groove and adapted to move therein and vary the motion of the plug in accordance with its adjusted position.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 22d day of June, 1895.

THOMAS H. FOOTE.

Witnesses:

M. G. McLAIN,
G. GENTLE.