

No. 641,573.

Patented Jan. 16, 1900.

A. BACHMEYER.

BY PASS COCK FOR SELF IGNITING GAS BURNERS.

(Application filed Aug. 14, 1899.)

(No Model.)

Fig. 1.

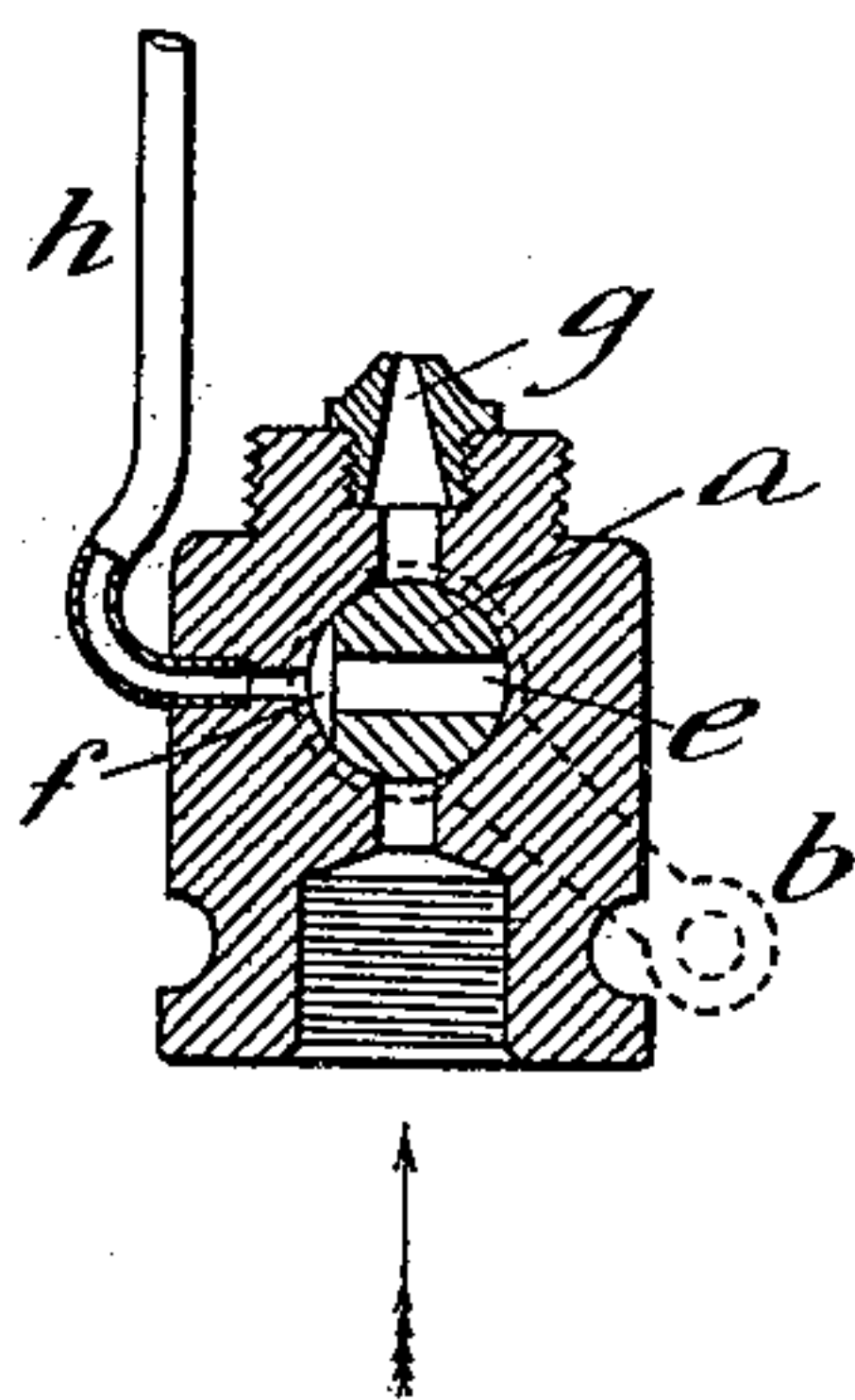


Fig. 2.

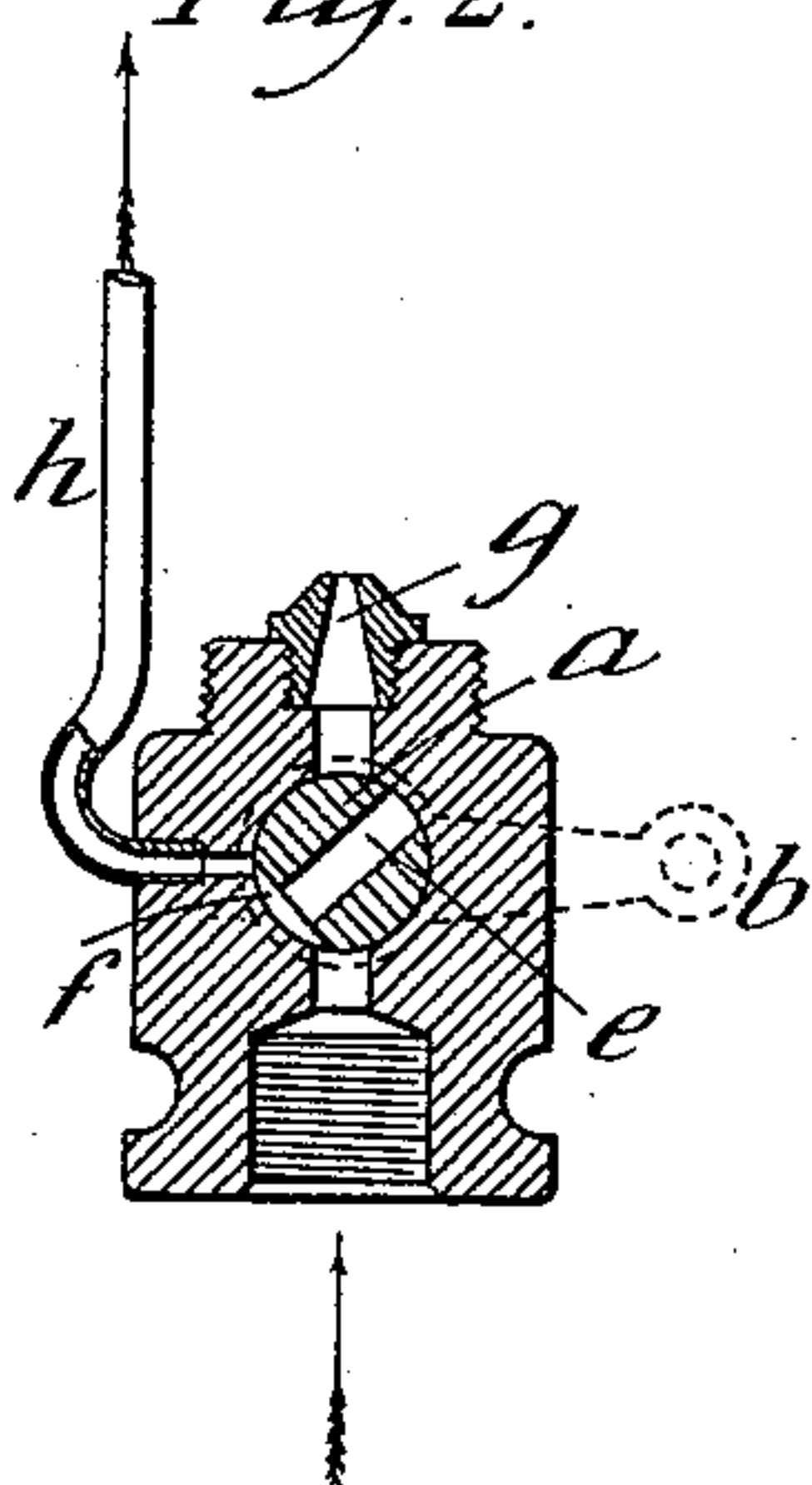


Fig. 3.

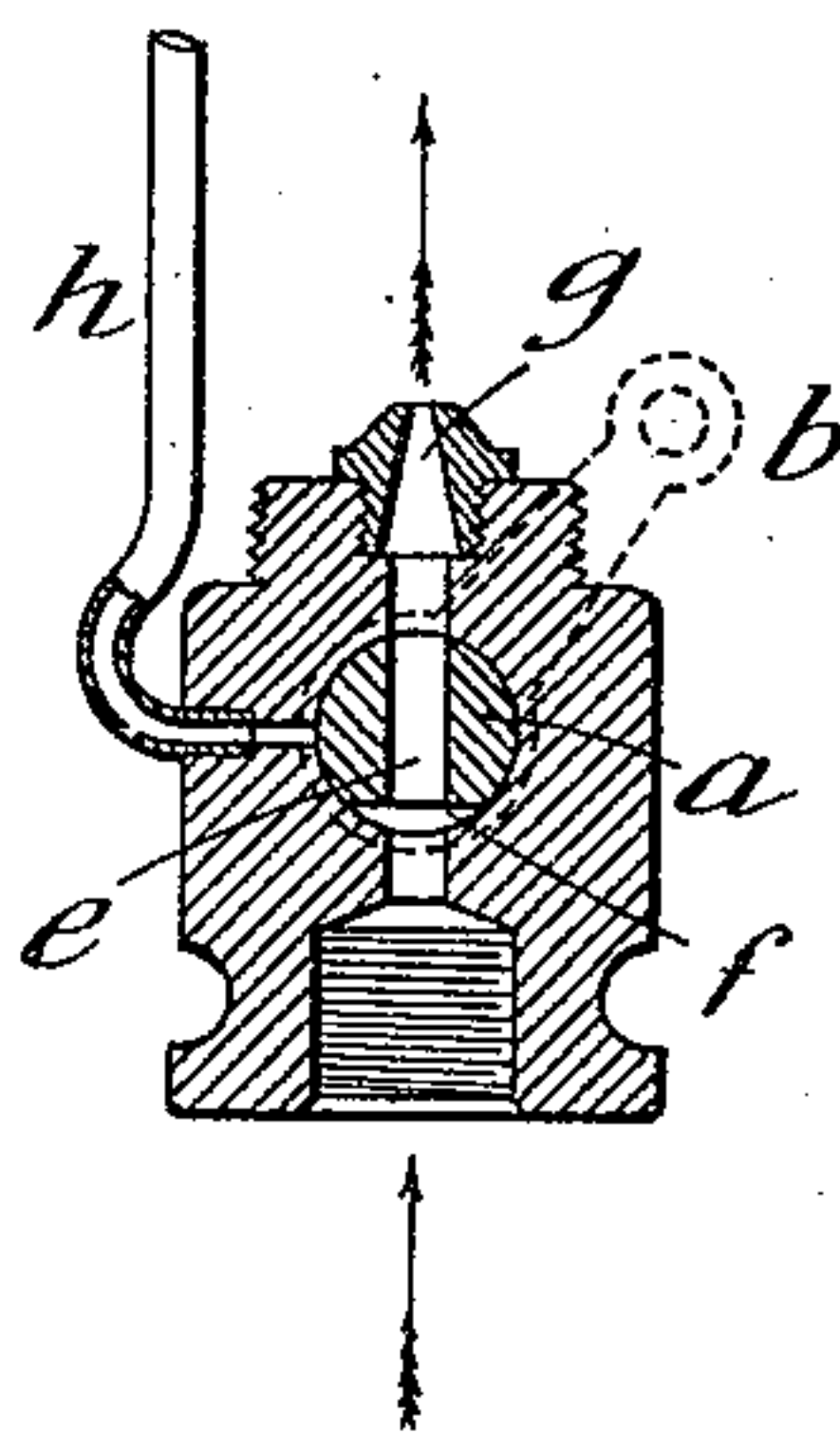


Fig. 4.

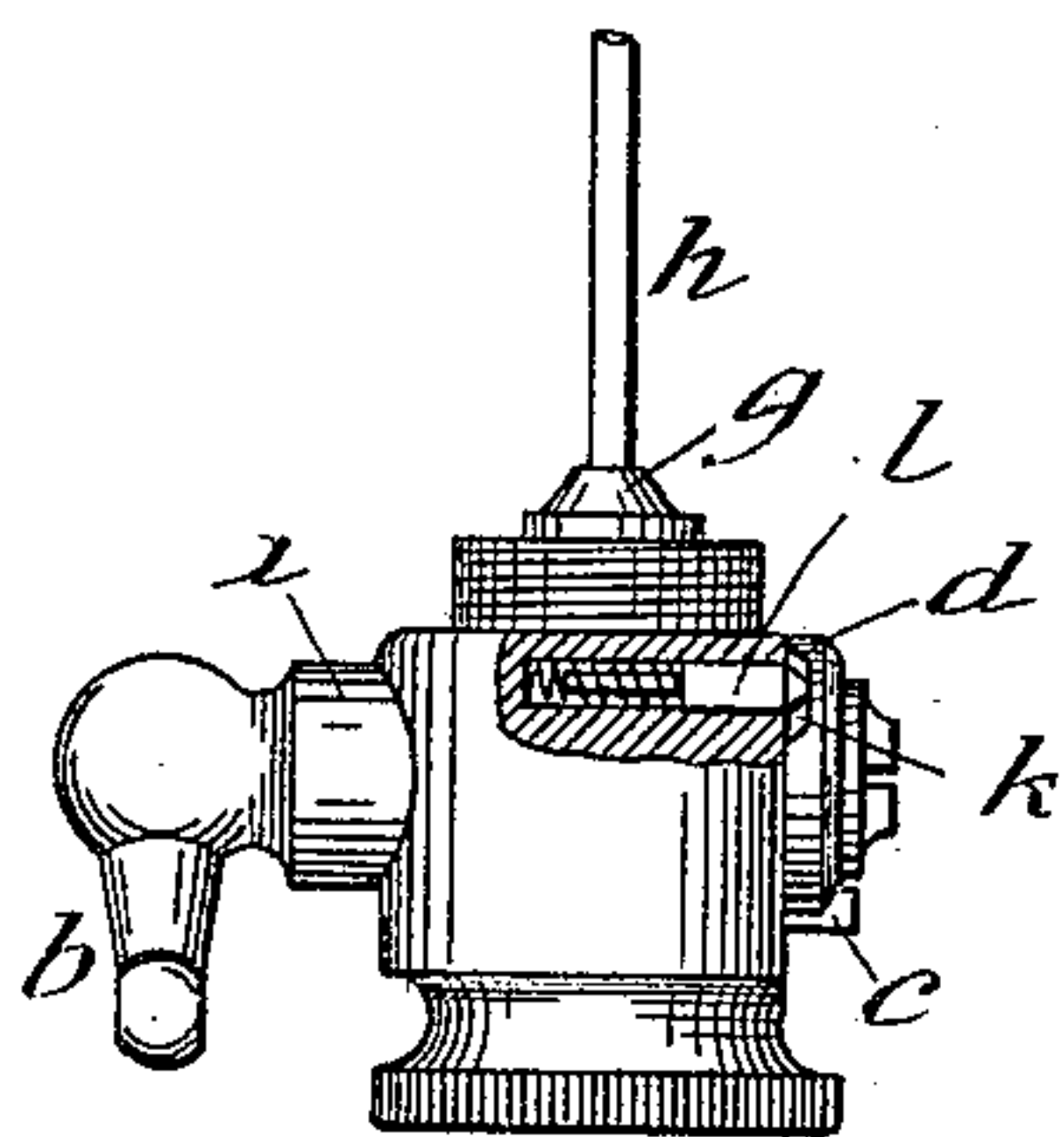
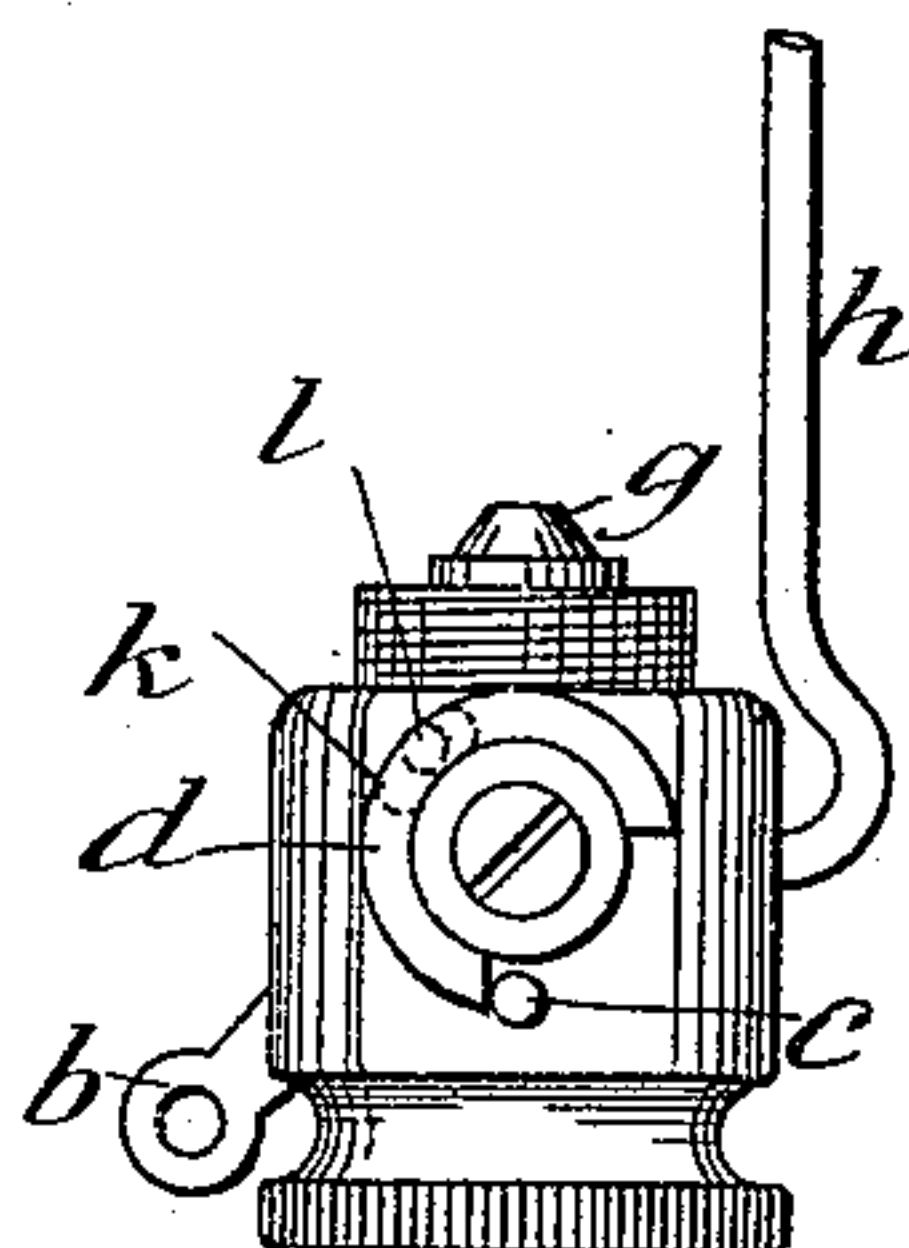


Fig. 5.



Witnesses
J. B. Keefe
Dennis Dumbly

Inventor
August Bachmeyer
James L. Norris
att'y

UNITED STATES PATENT OFFICE.

AUGUST BACHMEYER, OF LONDON, ENGLAND.

BY-PASS COCK FOR SELF-IGNITING GAS-BURNERS.

SPECIFICATION forming part of Letters Patent No. 641,573, dated January 16, 1900.

Application filed August 14, 1899. Serial No. 727,187. (No model.)

To all whom it may concern:

Be it known that I, AUGUST BACHMEYER, a citizen of England, residing at No. 78 York street, Westminster, London, England, have
5 invented a certain new and useful By-Pass Cock for Self-Lighting Gas-Burners, (for which I have made application for patent in Great Britain, dated August 3, 1899, No. 15,900,) of which the following is a specification.
10 tion.

Many gas-burners, especially those of incandescent kind, are provided with self-lighting appliances consisting usually of platinum or other suitable material which when played
15 on by a small jet of gas becomes sufficiently heated to ignite the flame of the burner.

My invention relates to the construction of a by-pass cock for self-lighting burners so arranged that on partially turning it till it meets
20 a check a small jet of gas is directed on the kindling appliance, but no gas passes to the burner; but on turning it beyond the check to its full extent the small jet is cut off, but there is full supply of gas to the burner.

Figures 1, 2, and 3 of the accompanying drawings are transverse sections of a by-pass cock according to my invention, showing its plug in its three positions. Figs. 4 and 5 are
25 respectively front and side elevations.

The plug *a*, which can be turned by a handle *b* as far as permitted by a stop-pin *c* meeting shoulders of a washer *d*, has a passage *e* quite through it and a segment *f* cut away at one end of the passage.

g is the jet-aperture for the burner, and *h* is a small pipe leading to the kindling appliance.

In the position shown in Fig. 1 the gas-supply is quite cut off. When the plug is turned
40 to the position shown in Fig. 2, there is passage for gas to the pipe *h*, leading to the kindling appliance, but as yet no passage for gas to *g* to supply the burner. In the position shown in Fig. 3 there is full supply to *g*, but
45 the supply to *h* is cut off. If the plug could be freely turned from the position in Fig. 1 to that in Fig. 3, this might be done so rapidly that there would not be sufficient time for the gas passing by *h* to act on the kindling appliance, and therefore there would be
50 no lighting of the main flame.

In order to provide a certain check to the movement of the plug sufficient to retain it a little time in the position shown in Fig. 2, I cut in the inner face of the washer *d* a recess
55 *k*, having a sloping end, and in a hole in the body of the cock I fit a spring-plunger *l*, having a coned end. When the plug is in the position shown in Figs. 1 and 5, the end of the spring-plunger *l* is in the recess *k*. On
60 turning the plug to the position shown in Fig. 2 the end of the plunger *l*, meeting the end of the recess *k*, opposes the further turning of the plug, requiring the operator to apply greater force, so that the sloped end of the
65 recess *k* may push in the plunger *l* in opposition to the spring, and then the plug can be fully turned. The check thus offered to the turning of the plug past its middle position causes a little time to pass while it is in
70 this position, and though this is little more than a momentary delay it is sufficient to allow the gas passing by *h* to heat up the kindling appliance.

Obviously instead of a spring-plunger *l* acting in a recess on the face of the washer *d* a spring acting on a notch on the periphery of the washer or other means of checking the turning movement of the plug might be
80 adopted.

Having thus described the nature of this invention and the best means I know of carrying the same into practical effect, I claim—

The combination of the plug *a* having a through-passage *e* provided with a segmental
85 passage *f* across one end, a by-pass pipe *h* with which said segmental passage is adapted to communicate, a burner *g* with which the plug-passage *e* is adapted to communicate, a washer *d* having a segmental recess, a stop-pin
90 *c* to engage said recess, said washer being also provided on its opposite side with a slotted recess *k*, and a spring-plunger *l* adapted to engage the recess *k*, substantially as described.
95

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

AUGUST BACHMEYER.

Witnesses:

C. S. HOPKINS,
FRED. C. HARRIS.