

No. 649,799.

Patented May 15, 1900.

G. W. BISHOP.
GAS COCK OR REGULATOR.

(Application filed Aug. 11, 1899.)

(No Model.)

Fig. 1.

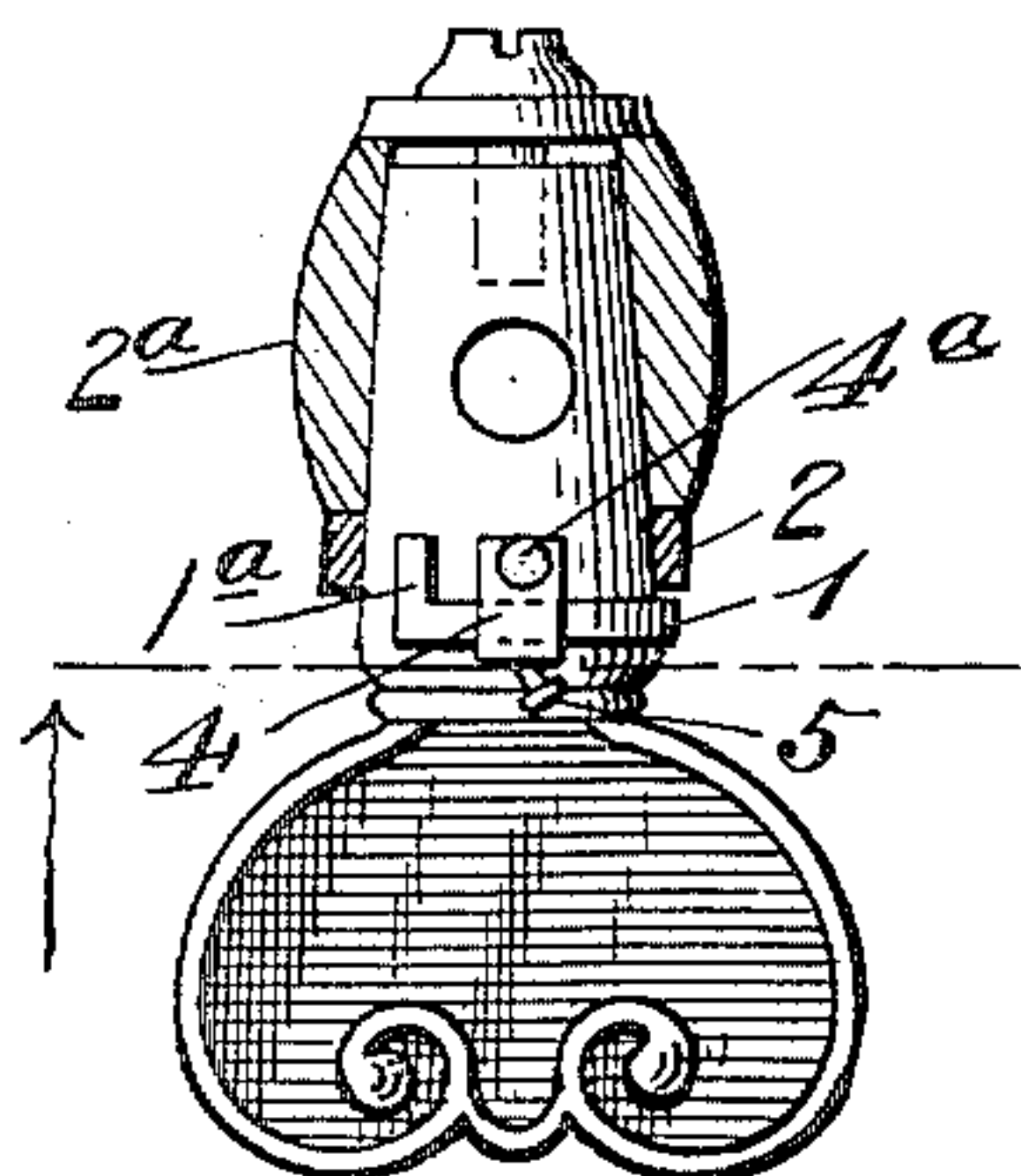


Fig. 2.

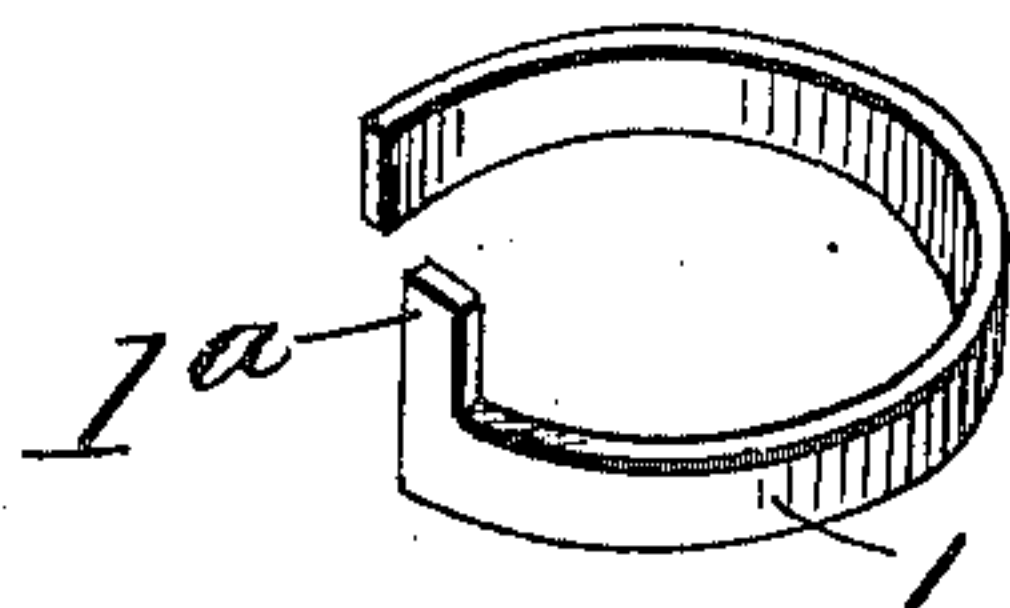
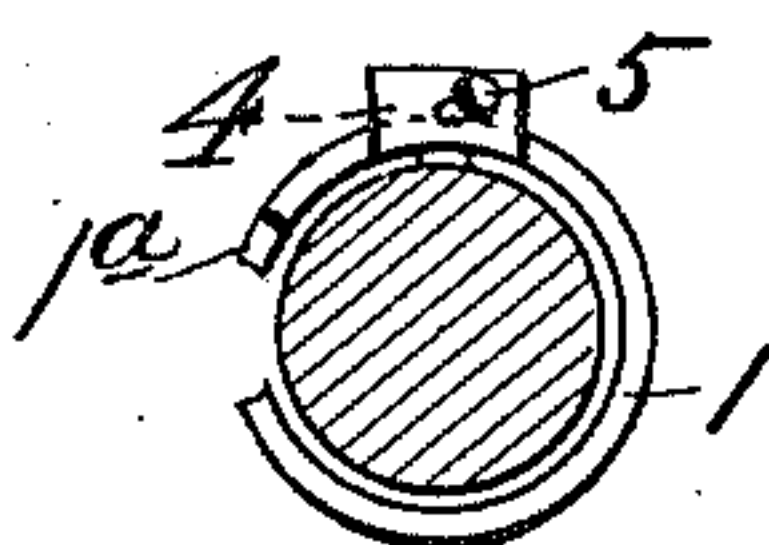


Fig. 3.

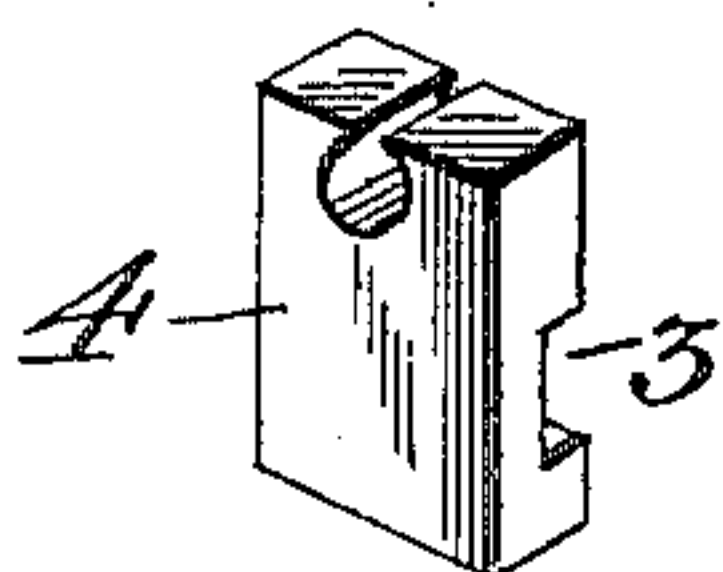


Fig. 4.

Fig. 6.

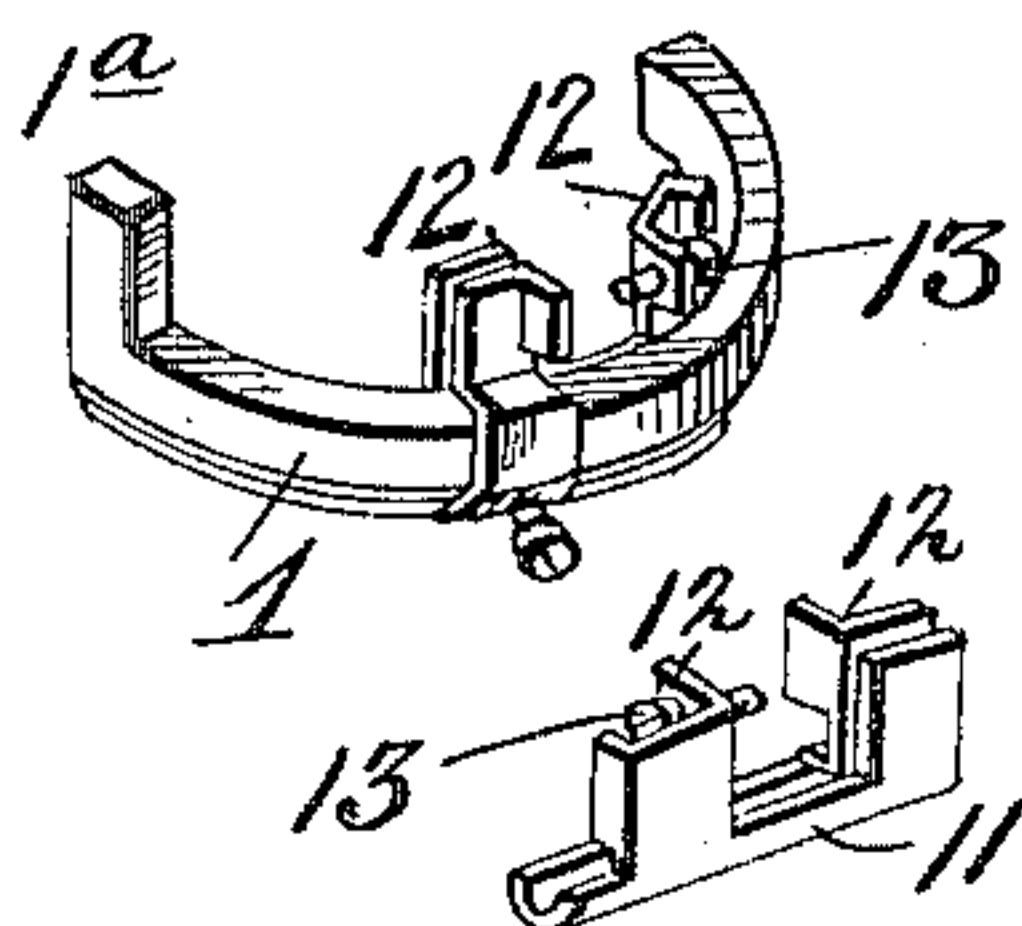
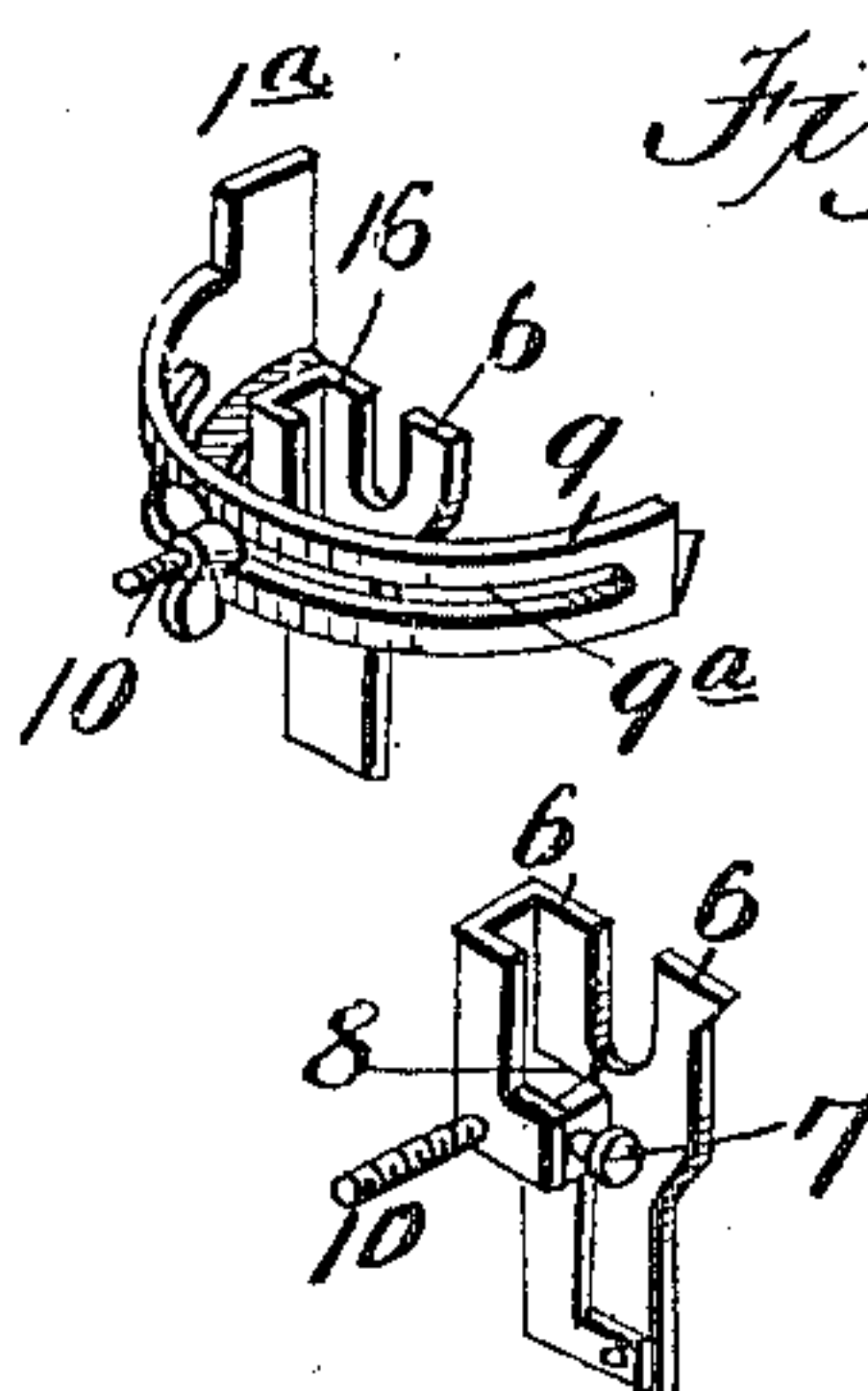


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE W. BISHOP, OF BLOOMINGTON, ILLINOIS.

GAS COCK OR REGULATOR.

SPECIFICATION forming part of Letters Patent No. 649,799, dated May 15, 1900.

Application filed August 11, 1899. Serial No. 726,889. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. BISHOP, a citizen of the United States, residing at Bloomington, in the county of McLean and State of Illinois, have invented new and useful Improvements in Gas Cocks or Regulators, of which the following is a specification.

My invention relates to improvements in means for limiting or prescribing the flow of gas at the burner by mechanically restricting the movement of the key as it is actuated or turned by the hand.

It has for its object, primarily, to prevent the waste or inordinate consumption of the gas, to provide for varying the supply of gas to the burner according to the amount or size of flame wanted or it is desired to be used, and otherwise promote facility and convenience in the use thereof.

To these ends the nature of the invention consists of a circular or arcuate gage or stop suitably applied to the key of the gas-cock, adapted to be adjusted by a set or holding screw with relation to the usual fixed stop or shoulder on the pipe or burner-tube or other means for engaging or arresting the movement of said gage-stop, all substantially as hereinafter more fully disclosed, and specifically pointed out in the claims.

In the accompanying drawings, illustrating the preferred embodiment of my invention, Figure 1 is a view showing its application for use in connection with a gas cock or plug. Fig. 2 is a cross-section taken below the adjustable stop or gage looking in the direction of the arrow on Fig. 1. Figs. 3 and 4 are enlarged detail views disclosing more fully the individual members of the adjustable gage-stop. Figs. 5 and 6 are modifications thereof, wherein in two different forms is shown the adjustable stop or gage connected to the stud or pin on the gas cock or plug by the aid of a holding-screw among other features of difference.

It will be understood that latitude is allowed herein as to details, as they may be varied without departing from the spirit of my invention and the same remain intact and be protected.

In carrying out my invention I employ in connection with the gas-cock key an arcuate or segmental bar or member 1, preferably of

an arc of three hundred and twenty degrees, terminating on one end thereof in a lateral or right-angled arm or projection 1^a, intended to contact with or engage the usual shoulder or stop 2 on the gas-cock pipe or tube 2^a or other suitable or analogous means for restricting or limiting the movement of said key. This segmental or arcuate bar 1 is held in an opening or slot 3 in a block or bracket 4, itself held or suspended upon a lateral pin or stud 4^a on the plug of the gas-cock.

The bar 1, preferably spring metal, is adapted to be sprung into position around or upon the plug of the gas-cock and yet will not clasp or compass the latter, so as to interfere with its being readily slid or moved, as necessary in effecting its adjustment. Said bar is held or fixed at the desired point of adjustment by the use of a set or holding screw 5, inserted or screwed into a threaded aperture or hole in the bracket 4 and engaging said bar or arc. It will therefore be observed that the horizontal or main portion of the adjustable stop or gage being out of alinement or not in the same plane with the shoulder or fixed stop of the gas-cock plug, though its lateral or vertical arm or projection 1^a is, by suitably turning said plug through its key said arm or projection will at the required interval of opening of the cock, according to the previous and predetermined adjustment of said bar or arc, contact with or engage the shoulder or stop of the gas-cock tube or pipe, and thus limit or prescribe the extent of said opening, according to the size or amount of flow of gas wanted or it is desired to be used. This arrangement provides for the turning on of the minimum or maximum flow of gas and of the graduation of said flow intermediately thereof, according to the size of flame to be furnished or wanted. It also insures against the wasting of the gas or its excessive use by reason of ability to put a check on the turning on of the gas at the burner, as above pointed out, as also promotes facility and convenience in use generally, as well as prevents the flagrant appropriation or burning of the gas, it may be, by thoughtless or "heavy-handed" persons.

In the modification as disclosed in Fig. 5 it will be noted that among other changes the bracket or "block" 4, adapted to receive the

pin or stud on the gas-cock plug, is substituted by two bracket sections or plates 6, adapted to receive between them the stud or pin on said plug, said pin or stud being
 5 gripped or clamped in place by a set or holding screw 7, suitably held in one of said plates or parts and engaging a socketed block 8, secured to the other plate or section. Also in this modification a segment or arc 9 is employed in lieu of the previously-described form, having a longitudinal slot 9^a, through which is inserted a set-screw 10, engaging or working in a threaded aperture or socket in the block 8.

15 In the modification as shown in Fig. 6 is employed in lieu of the part or bracket 4 a segmental guide or bracket 11, receiving the segment or arc, and having upstanding arms or prongs 12, between which is received and
 20 suitably held the cock-plug stud or pin by a set or holding screw 13.

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

25 1. An adjustable regulator for a gas-cock, consisting of a stop or gage in the form of a segment only of a circle, and designed to be secured upon a gas-plug, and means for the retention and adjustment of the stop, substantially as described.

30 2. In a gas-cock, an adjustable regulator consisting of a spring-gage in the form of a segment only of a circle and having a stop at one end, and means for adjusting the stop at the desired point upon the plug, substantially as described.

35 3. In a gas cock or regulator, the combination with the plug of said cock having a pin or stud, of a segmental adjustable stop or

gage, a bracket suspended upon said pin or stud and carrying said gage or stop, and means for the retention and adjustment in position of said gage or stop, substantially as specified.

4. In a gas cock or regulator, the combination with the plug of said cock having a pin or stud, of a segmental adjustable gage or stop, a bracket suspended upon said pin or stud, and carrying said gage or stop and an adjusting or set screw adapted to engage or hold said gage or stop, substantially as specified.

5. In a gas cock or regulator, the combination with the plug of said cock having a pin or stud, of a segmental gage having a lateral or right-angled terminal or stop proper, a bracket suspended upon said stud or pin and having a slot or opening to receive said gage, and a set or adjusting screw working in said bracket and adapted to engage said gage, substantially as described.

6. In a gas cock or regulator, the combination with the plug of said cock, having a stud or plug, of a segmental gage or stop, a segmental guide or bracket for said gage, having upstanding arms or prongs between which is received said stud or pin, and adjusting-screws, one adapted to engage said stud between said arms and the other adapted to engage said gage and hold it in said guide or bracket, substantially as set forth.

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

GEORGE W. BISHOP.

Witnesses:

ENOCH BROCK,

ELECTA FENSTEMAKER.