

No. 787,914.

PATENTED APR. 25, 1905.

A. L. GIBSON.
GAS STOVE.

APPLICATION FILED MAY 19, 1904.

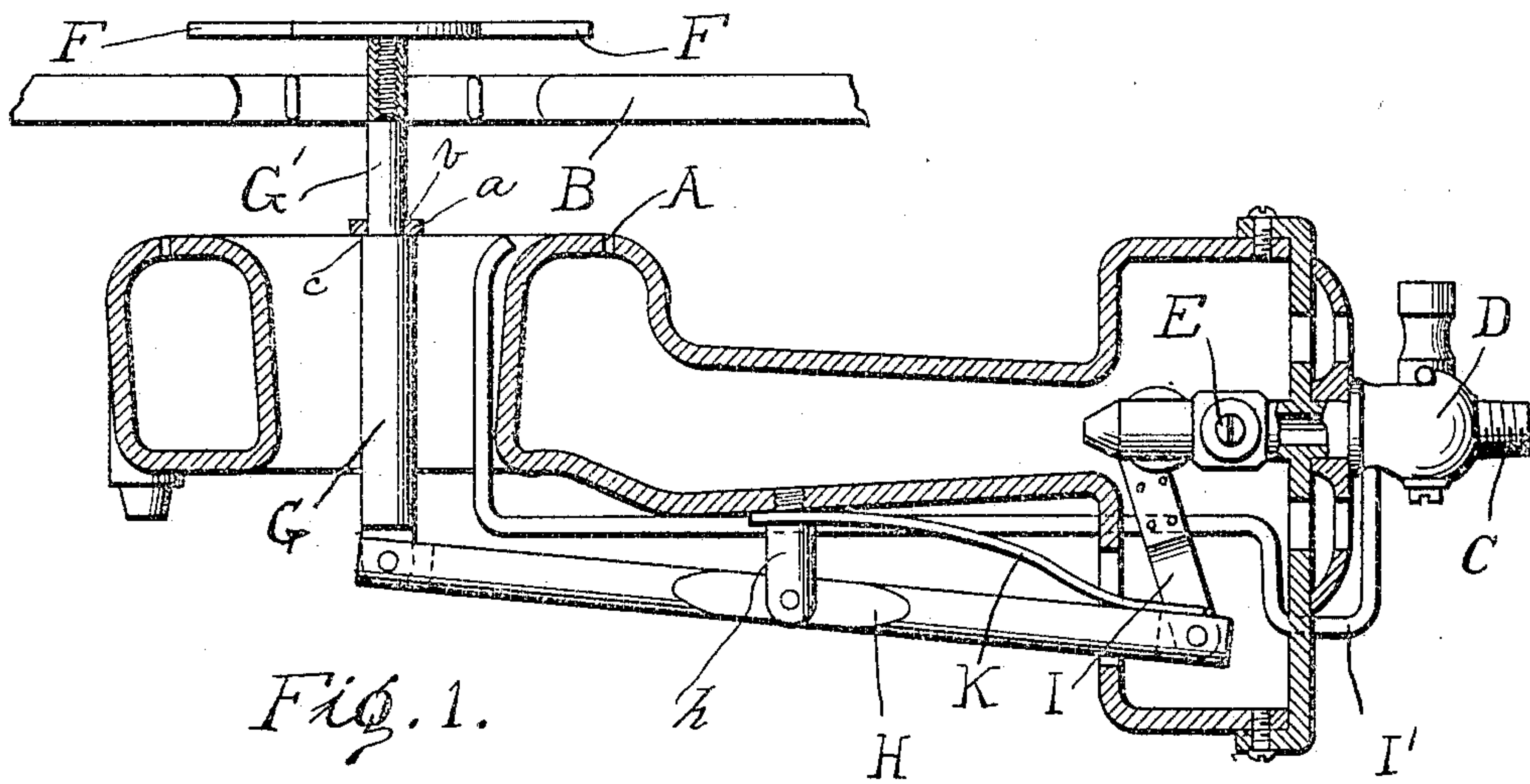


Fig. 1.

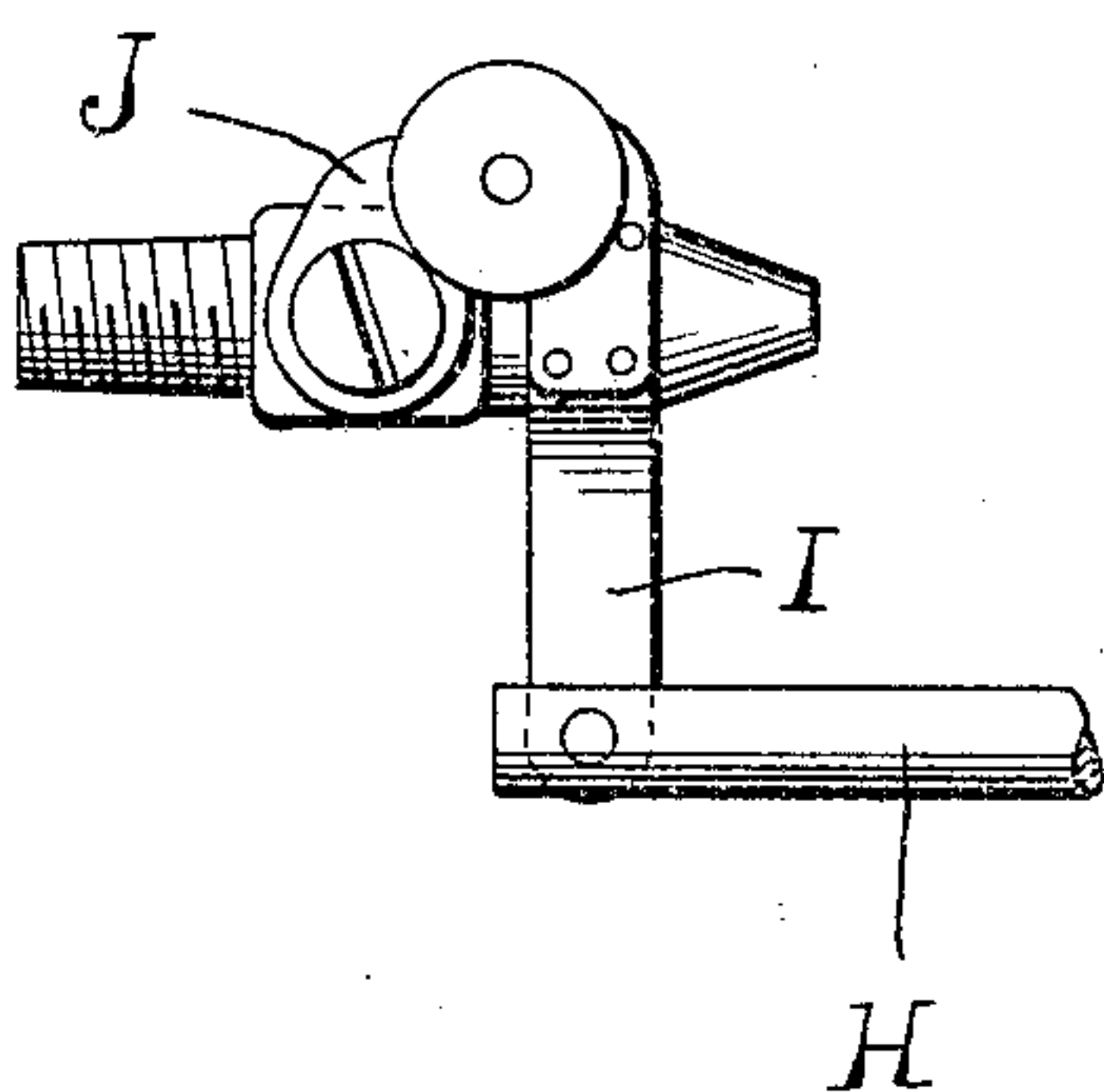


Fig. 2.

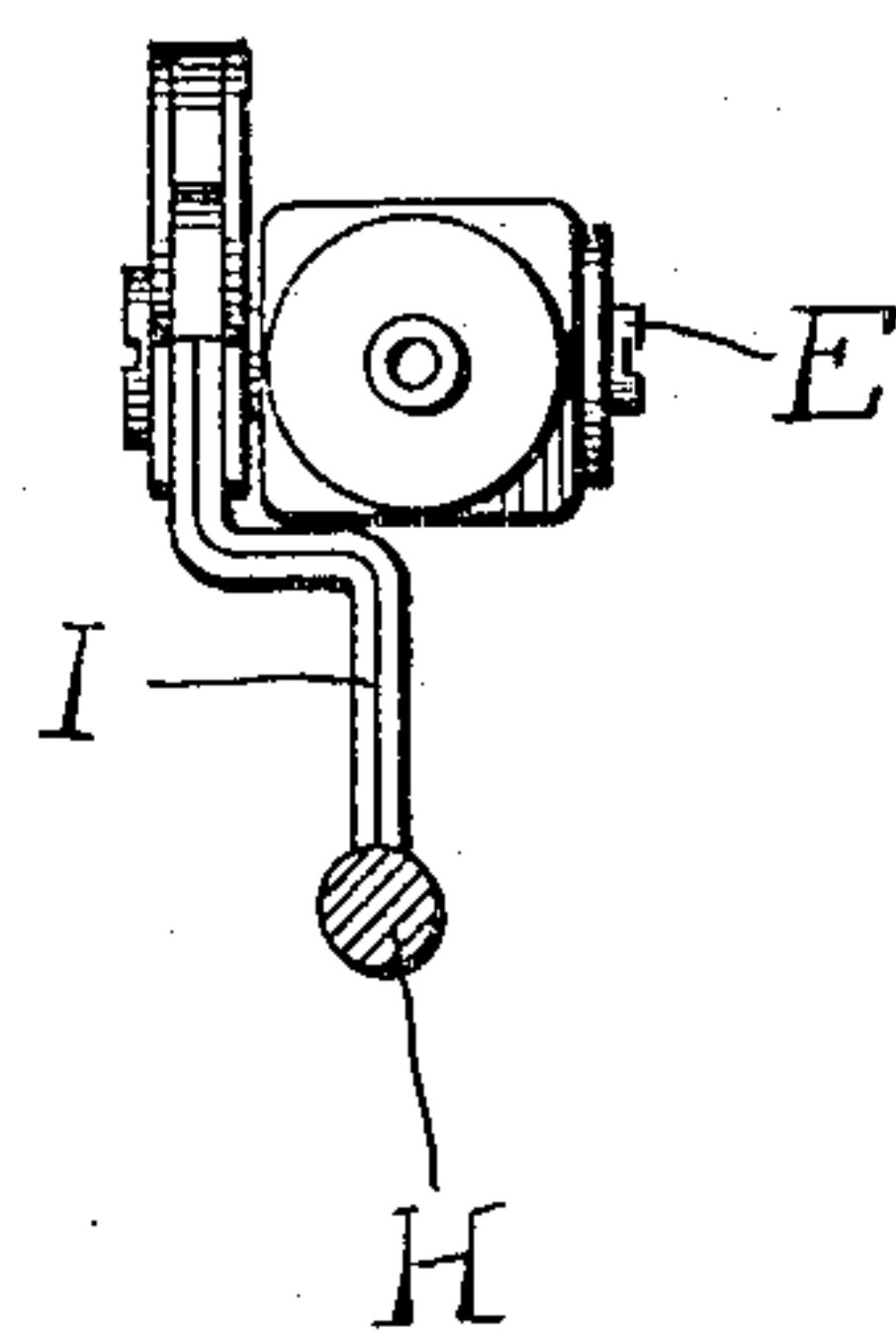


Fig. 3.

WITNESSES:

D. Webster, Jr.
H. B. Hallock.

INVENTOR

Anna L. Gibson

By *W. Preston Williams*
ATTORNEY.

UNITED STATES PATENT OFFICE.

ANNA L. GIBSON, OF PHILADELPHIA, PENNSYLVANIA.

GAS-STOVE.

SPECIFICATION forming part of Letters Patent No. 787,914, dated April 25, 1905.

Application filed May 19, 1904. Serial No. 208,692.

To all whom it may concern:

Be it known that I, ANNA L. GIBSON, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a certain new and useful Improvement in Gas-Stoves, of which the following is a specification.

My invention relates to a new and useful improvement in automatic gas-burners, and has for its object to provide a gas-burner for gas-stoves in which the gas will be automatically shut off from the burner when a cooking utensil is removed from the stove and automatically turned on and lighted when the utensil is placed upon the stove.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a longitudinal section through a burner constructed according to my invention; Fig. 2, a side elevation of the auxiliary valve and lever for operating the same; Fig. 3, a front elevation of the auxiliary valve and lever for operating the same.

A represents the burner of the gas-stove.

B is the plate of the stove.

C is the supply-pipe.

D is the main valve, adapted to be turned on and off by hand.

E is an auxiliary valve, adapted to be operated automatically.

F is a button threaded upon the upper end of an upright vertically-sliding rod G. Extending across the burner is a cross-piece *a*, having a central aperture *b*, through which a reduced upper portion *G'* of the rod G is adapted to slide. The reduced portion forms on the rod G a shoulder *c*, which is adapted to abut the under surface of the cross-piece, and thereby limit the upward movement of the rod. Thus the cross-piece *a* provides a guiding and limiting means for the rod G.

This button F is threaded into the upper end of the rod G, so that the height of the button can be regulated to suit the bottom of different cooking utensils. Prongs *F'* may be formed with the button to extend out radially therefrom, so that more of the surface of the bottom of the utensil will come in contact with the button.

H is a lever pivoted intermediate of its two ends to the free end of the depending lug *h*, which is removably secured to the burner, one end being pivotally connected to the upright rod G and the other end connected to a link I, the other end of said link I being connected to a short lever J, the other end of said short lever being connected to the valve-stem of the auxiliary valve E.

K is a spring normally holding one end of the lever H downward with the button F raised. When in this position, the auxiliary valve E is closed, shutting off the supply of gas. The spring K is held to the burner at one end by the lug *h*, the opposite or free end of the spring bearing against the lever H near its outer end. When a cooking utensil is placed upon the stove, the weight of the same will depress the button F against the action of the spring K, and the lever H will thus push upward upon the link I and open the auxiliary valve to allow for the flow of gas.

L is a small pipe leading from the supply-pipe at a point in between the main valve D and the auxiliary valve E. This small pipe L terminates at a point near the openings through the burner and forms a pilot-light, which is initially lighted with a match, electricity, or any other means desired, and this light will continue to burn as long as the main valve is open, and when the supply of gas is turned on by the opening of the auxiliary valve the pilot-light will light the burner instantly. Therefore, as soon as the button F is depressed the gas is automatically turned on and lighted from the pilot-light.

I am aware that other patents have been granted for devices in which the gas is automatically turned on and off from gas-stoves when the utensils are placed upon or removed from the same; but I have endeavored in my device to provide a means whereby the aux-

iliary valve will be operated by means of a very light utensil and the turning off of the gas will be positive each time.

Of course I do not wish to be limited to the exact construction here shown, as slight modifications could be made without departing from the spirit of my invention.

Having thus fully described my invention, what I claim as new and useful is—

- 10 1. In combination with a gas-burner having an auxiliary valve, a wing on the valve-stem of the auxiliary valve, a depending lug removably secured to the burner, a lever pivoted intermediate its length to the lug, a link
15 connecting an end of the lever and the wing, a rod vertically slidable through the burner, said rod being pivoted at one end to the lever, a button adjustably held by the upper end of the rod, a spring held at one end against the
20 burner by the removable lug, the free end of the spring bearing against an end of the lever to elevate the rod, and means on the burner for limiting the movement of the rod in one direction.
- 25 2. In combination with a gas-burner having an auxiliary valve, a wing on the valve-stem of the auxiliary valve, a depending lug removably secured to the burner, a lever pivoted intermediate its length to the lug, a link
30 connecting an end of the lever and the wing, a rod vertically slidable through the burner,

said rod being pivoted at one end to the lever, a button adjustably held by the upper end of the rod, a spring held at one end against the burner by the removable lug, the free end of the spring bearing against an end of the lever to elevate the rod and guiding means for the rod carried by the burner. 35

3. In combination with a gas-burner having an auxiliary valve, a wing on the valve-stem of the auxiliary valve, a depending lug removably secured to the burner, a lever pivoted intermediate its length to the lug, a link connecting an end of the lever and the wing, a cross-piece on the burner having an aperture, a rod having a reduced upper end slidable through the aperture of the cross-piece, said cross-piece acting as a guide and the shoulder formed by the reduced portion limiting the upward movement of the rod said
50 rod being pivoted at its lower end to an end of the lever, an adjustable button on the upper end of the rod, and spring means carried by the burner and bearing against the lever for holding the rod normally elevated. 55

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

ANNA L. GIBSON.

Witnesses:

MARY E. HAMER,
L. W. MORRISON.