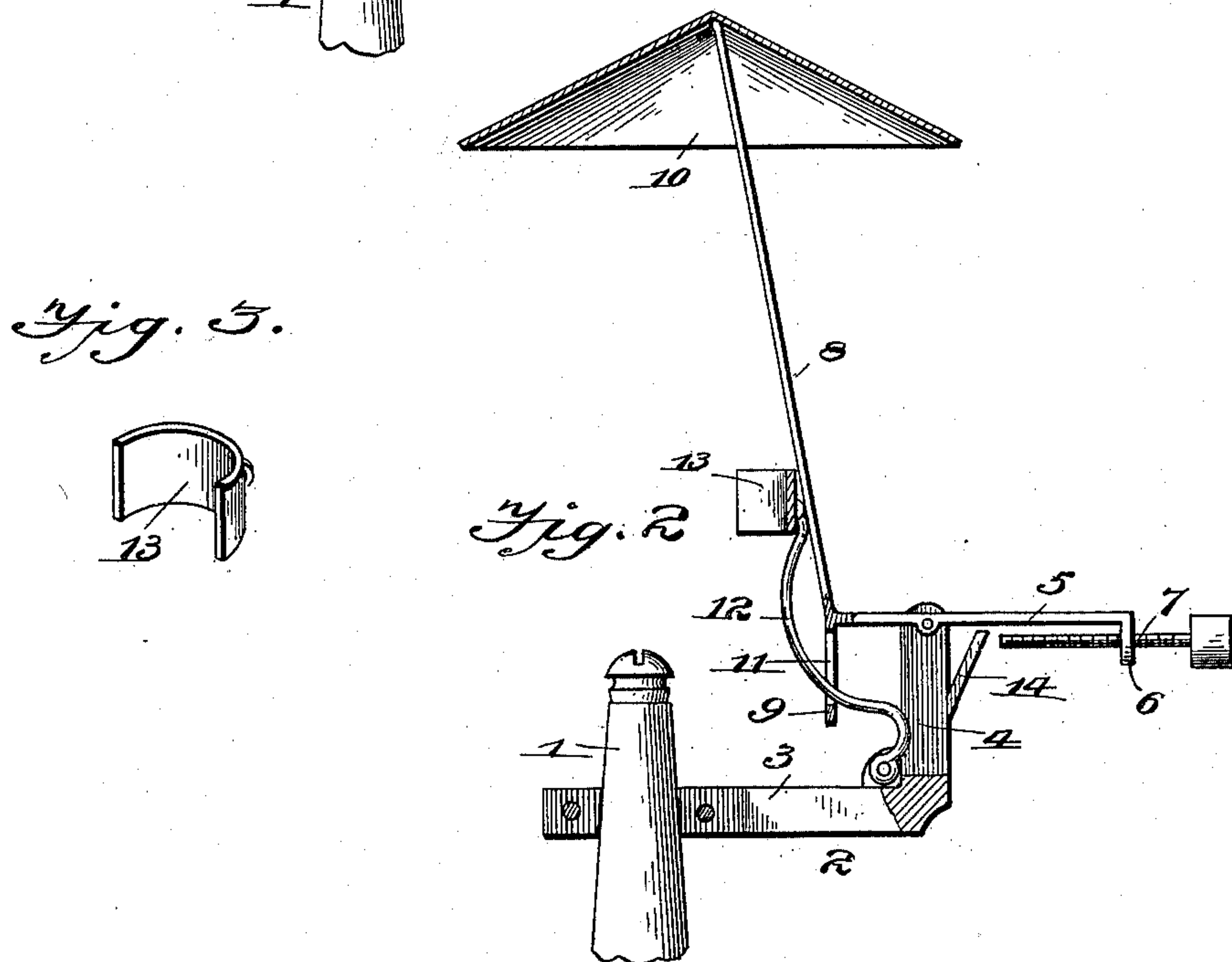
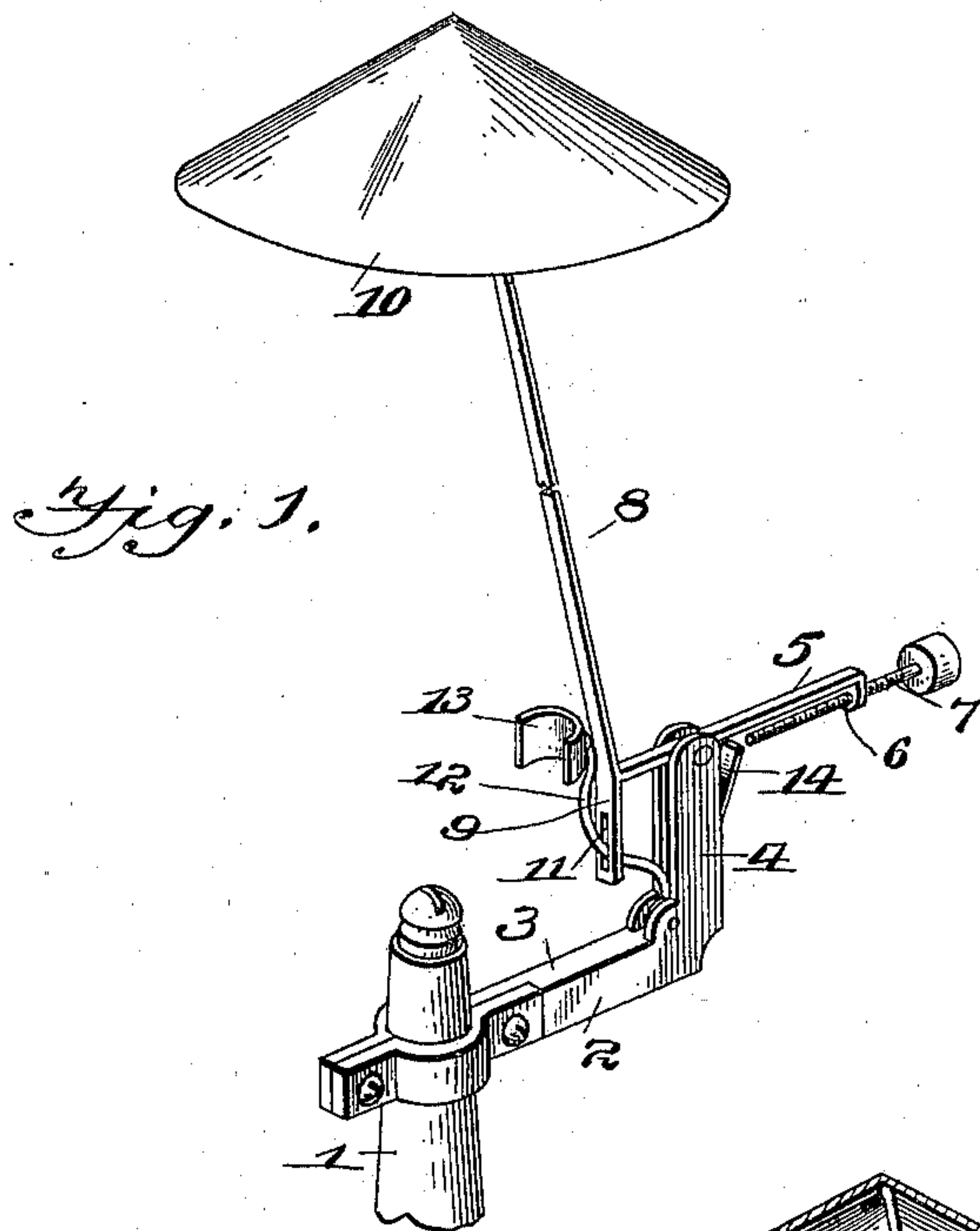


(No Model.)

J. BAIRD.
AUTOMATIC GAS SHUT-OFF.

No. 603,998.

Patented May 10, 1898.



Witnesses
E. E. Hunt,
Victor J. Evans

Inventor
John Baird,
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UNITED STATES PATENT OFFICE.

JOHN BAIRD, OF UNIONTOWN, PENNSYLVANIA.

AUTOMATIC GAS SHUT-OFF.

SPECIFICATION forming part of Letters Patent No. 603,998, dated May 10, 1898.

Application filed July 12, 1897. Serial No. 644,195. (No model.)

To all whom it may concern:

Be it known that I, JOHN BAIRD, of Uniontown, in the county of Fayette and State of Pennsylvania, have invented certain new and useful Improvements in Automatic Gas Shut-Offs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to new and useful improvements in means for automatically preventing the escape of gas from gas-burners; and it has for its object to provide a simple and inexpensive device of the character above mentioned that will automatically operate to prevent the escape of gas from the burner in the event the gas is intentionally or accidentally blown out or the same is temporarily cut off from the dwelling by some accident at the gas-works, which is quite common.

Other objects and advantages of the invention will become apparent in the course of the following description, and the points of novelty will be particularly set forth in the claims.

I am enabled to accomplish the objects of my invention by the simple means illustrated in the accompanying drawings, in which—

Figure 1 represents a perspective view of my improved device applied to a gas-burner. Fig. 2 is a central vertical section thereof, and Fig. 3 is an enlarged detail view of the cap or plate adapted to fit over the tip of the gas-burner.

Referring to the drawings, the numeral 1 indicates a gas-burner of ordinary construction, which has in the present instance adjustably secured thereto an angle-arm 2, formed of a horizontal arm 3 and a vertical arm 4. The vertical arm is bifurcated and has pivoted between its arms a lever 5, which is provided at its rear end with an eye 6 for the reception of a weighted screw 7, the purpose of which is to keep the lever properly balanced, and the pivoted lever is provided at its other end with an upwardly-extending rod or arm 8 and a downwardly-extending arm 9. The upwardly-extending arm is provided at its top with a cone-shaped hollow shade 10, which is supported directly above the gas-

burner, so that it will receive the current of heat produced when the gas is lighted. The extension 9 of said lever is provided near its lower end with a slot or opening 11, through which passes a bent arm or wire 12, which is pivoted at its lower end between the arms of the angle-arm 2, and said wire is provided at its upper end with a cap or plate 13, which is adapted to fit over the lava tip of the gas-burner.

Between the arms of the angle-arm I provide a guard or brace 14, the purpose of which is to prevent the shade at any time from rising high enough to throw the weight in favor of the weighted screw 7. The angle-arm is preferably formed of two sections held together by screws or other convenient means, said sections adapted to be drawn together by said screws to fit various gas-burners.

Having described the mechanism of my device, I will now proceed to describe its operation.

Assuming the gas to be lighted and the arm 8 and the lever 5 being held in the position shown in Fig. 1 by the heat of the gas, now let the gas be suddenly extinguished. The arm 8 will fall toward the burner and carry the cap or plate 13 with it until said cap is brought into engagement with the lava tip, and said cap being so shaped that it will fit snugly over the tip it is apparent that the escape of the gas therefrom will be prevented.

It will be observed that the device herein described is especially simple in construction; but I do not desire it understood that I limit myself to the precise construction shown in the drawings, as many modifications involving mechanical skill may be made without departing from the spirit of the invention.

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

1. In an automatic gas cut-off, the combination with a burner, of an arm secured thereto, a lever fulcrumed in said arm and provided with an upwardly-extending arm, a shade upon the upper end of said arm in position to receive the current of heat from the gas in its upward movement to keep the said arm in elevated position and a cap actuated by said arm and adapted to fit over the tip of the burner when the arm of the pivoted lever

falls toward the gas-burner, substantially as described and for the purpose set forth.

2. In an automatic gas cut-off, the combination of an angle-arm adjustably secured to
5 the burner, a lever pivoted to the vertical arm of said angle-arm and provided with an arm extending above the gas-burner, and a depending arm provided with an opening near
10 its lower end, a curved arm or wire pivoted to the angle-arm at one end and extending through the opening in said depending arm, said curved arm being provided with a cap
15 or plate adapted to fit over the tip of a gas-burner, a shade at the upper end of the upwardly-extending arm of the pivoted lever adapted to receive the current of heat from
20 the gas and keep the said lever in one position, and means for balancing said lever, substantially as and for the purpose described.

3. In an automatic gas cut-off, the combination with an angle-arm adjustably secured

to the gas-burner, of a lever pivoted between the bifurcated ends of said angle-arm, said lever being provided at one end with an eye
25 for the reception of a weighted screw to balance said lever and at the other end with a rod or arm extending above the gas-burner, a depending arm provided with a loop or opening, and an arm or wire passing through said
30 opening and pivoted to the angle-arm at one end and provided with a cap or plate at the other, the upwardly-extending arm of the lever being provided with a shade adapted to be kept elevated by the heat of the gas, substantially as and for the purpose set forth. 35

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

JOHN BAIRD.

Witnesses:

HARRY DOWNS,
R. DOWNS.