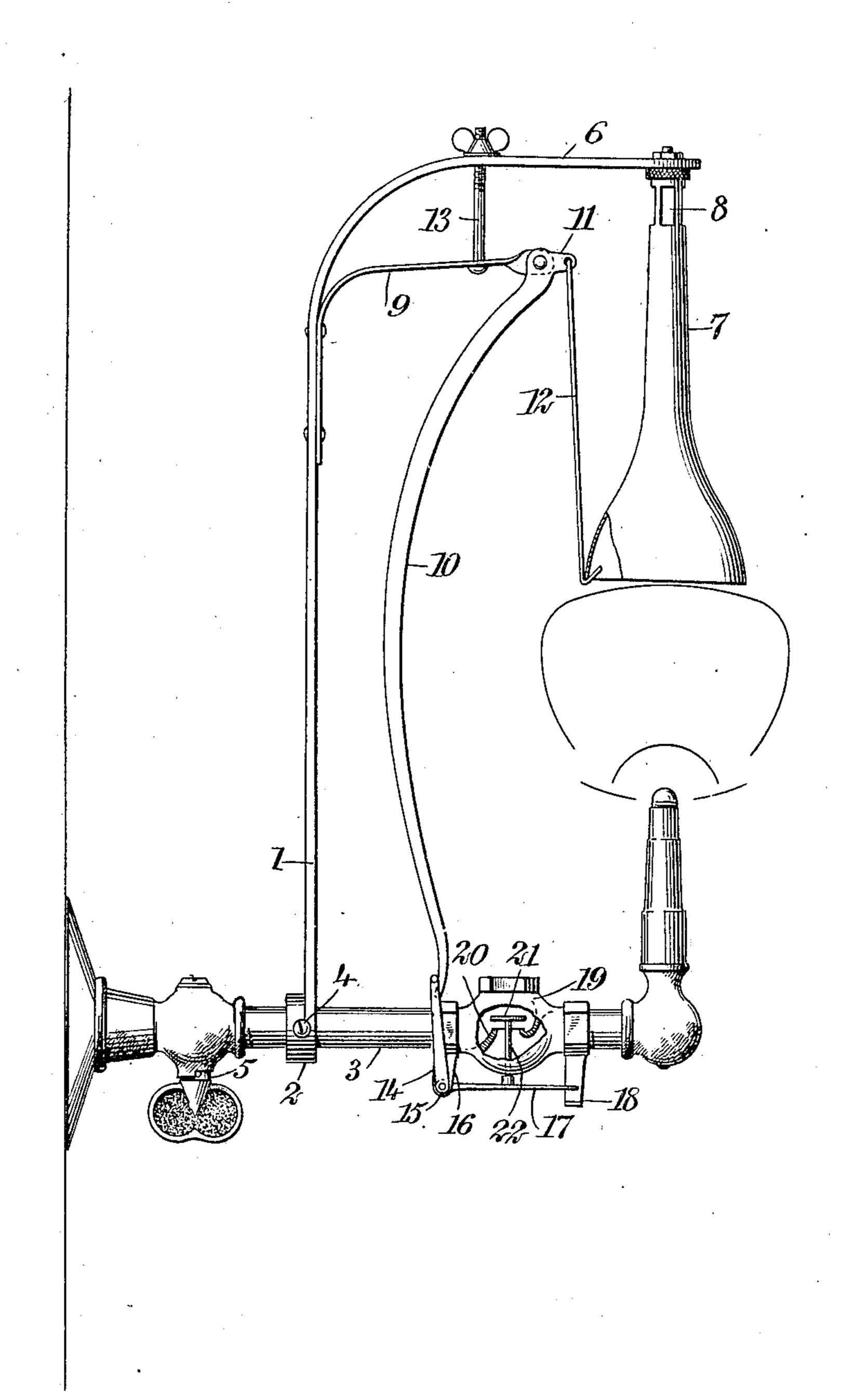
No. 830,845.

PATENTED SEPT. 11, 1906.

## I. C. PETERSON. DEVICE FOR CONTROLLING GAS VALVES. APPLICATION FILED MAR. 15, 1906.



WITNESSES

Le. Geraford Handre C. R. Fingueson INVENTOR
IVER C. Peterson

BY Mumn & Co

## UNITED STATES PATENT OFFICE.

IVER C. PETERSON, OF NEW YORK, N. Y.

## DEVICE FOR CONTROLLING GAS-VALVES.

No. 830,845.

Specification of Letters Patent.

Patented Sept. 11, 1906.

Application filed March 15, 1906. Serial No. 306,150.

To all whom it may concern:

Be it known that I, IVER C. PETERSON, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, 5 in the county of Kings and State of New York, have invented a new and Improved Device for Controlling Gas-Valves, of which the following is a full, clear, and exact description.

This invention relates to improvements in devices for automatically cutting off the flow of gas to a burner should the flame be blown out by accident or otherwise, the object being to provide a device for this purpose that will be simple in construction, positive in operation, and that may be readily applied to a gas-fixture.

I will describe a device for controlling gasvalves embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawing, forming a part of this specification, in which the figure of the drawing is an elevation showing a controlling device embodying my invention.

The device comprises a standard 1, having a collar 2 for engaging around the fixture-pipe 3, and the standard is held from movement by means of a set-screw 4, passing through said collar and impinging upon the pipe. The said pipe is supplied with the usual cut-off valve 5.

The upper end of the standard is extended forward in a substantially horizontal direction, as indicated at 6, and suspended from this portion 6 is a thermostat 7, which is of tubular form, the lower end thereof being enlarged or bell-shaped to receive the heat from the flame directly underneath it, and the upper portion is provided with ports 8, which permit of a free circulation of hot air.

Extended inward from the standard 1 is an arm 9, which is preferably of resilient metal, and pivotally connected to this arm is a controlling-lever 10, having at its upper end a forward projection 11, from which a rod 12 extends downward and has a hook end engaging over the edge of the thermostat, as clearly indicated in the drawing. The arm 9, and consequently the rod 12, may be regulated by means of a screw-rod 13, passing through the portion 6 of the standard and engaging with said arm. The main portion of the lever 10 extends downward and at its free end is designed for engagement with a

cross-bar of a yoke 14, mounted on a shaft 15, having bearings in a hanger 16, attached to the fixture, and extended forward from the rock-shaft 15 is a lifting-plate 17, which 60 is prevented from swinging too far. downward when the yoke 14 is released by means of a horizontally-disposed portion on a hanger 18, attached to the fixture.

Arranged in the fixture-pipe between the 65 valve 5 and the burner is a valve-casing 19, having a valve-seat 20 for receiving a valve 21. The stem 22 of said valve 21 passes through the perforation in the bottom of the valve-casing and rests upon the plate 17.

In the operation after opening the valve 5 the plate 17 is to be held up, permitting the gas to pass to the burner, where it is lighted. In a very short time the heat will cause the thermostat to expand, drawing downward on 75 the rod 12 and moving the lever 10 into engagement with the yoke 14. Then of course the plate 17 may be released from a person's hand and the lever will hold the valve 21 open. Should the gas-flame be blown out, 80 the thermostat will contract, permitting the lever 10 to move by gravity out of connection with the yoke 14, as it will be noted that when in holding position the lower end of said lever 10 is out of vertical alinement with 85 its pivotal point; but of course when the lever 10 swings forward the plate 17 will drop, permitting the valve 21 to seat itself, thus cutting off the flow of gas to the burner.

By making the thermostat tubular and of 90 comparatively thin metal it is obvious that it will be quickly expanded by the heat from the flame, and will also quickly contract when the flame is extinguished.

Having thus described my invention, I 95 claim as new and desire to secure by Letters Patent—

1. A device for controlling a gas-valve, in a gas-fixture, comprising a standard mounted on the fixture-pipe, a valve-casing in said 100 pipe, a valve-seat in the casing, a valve for engaging on said seat, a stem for the valve extending through the bottom of the casing, a swinging plate for engaging with said stem, a yoke having connection with the plate, a 105 swinging lever for engaging with said yoke, and having a forward projection from its pivotal point, a tubular thermostat suspended from said standard, and a rod connection between said forward projection and the thermostat.

2. The combination with a gas-fixture pipe,

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of a valve-casing thereon, a gravity-valve in the casing, a swinging plate for holding said valve in open position, a yoke having connection with the swinging plate, a standard on the fixture-pipe, and having its upper end extended forward, a tubular thermostat on said forward extension, an arm attached to the standard and extended forward, a lever pivoted to said arm and engaging at its lower

end with said yoke, and a rod connection be- 10 tween the lever and thermostat.

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

IVER C. PETERSON.

Witnesses:

John Thoreck, Fredrick J. Boedecker