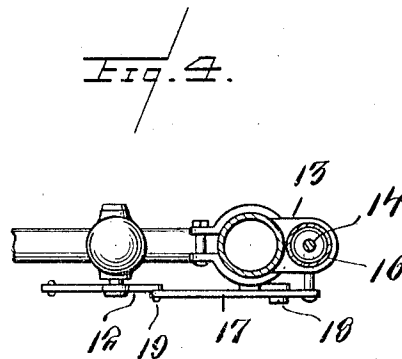
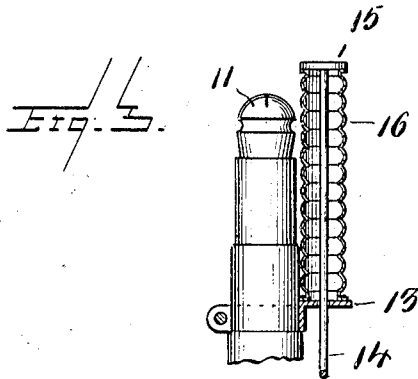
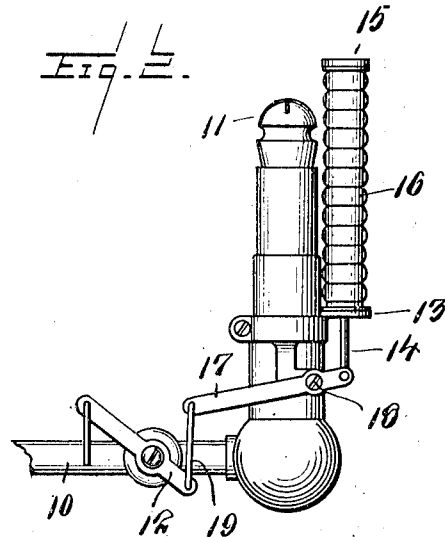
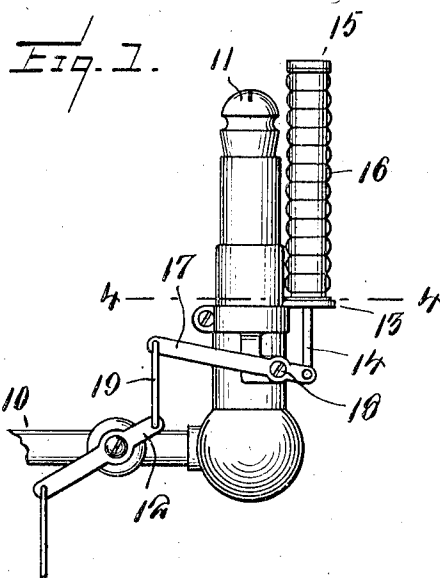


W. MARDEN.
VALVE CONTROL.
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1,048,329.

Patented Dec. 24, 1912.



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WILLIAM MARDEN, OF BOSTON, MASSACHUSETTS.

VALVE CONTROL.

1,048,329.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM MARDEN, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Valve Control, of which the following is a specification.

An object of the invention is to provide a valve control for use in connection with the valves of gas fixtures for operating the valve, by the action of the heat of the burner tip, to control the supply of gas to the burner tip.

The invention resides more particularly in a structure mounted adjacent the burner tip and having connection with the valve of the gas fixture, whereby when the gas pressure in the main is reduced, the decrease of the heat at the burner tip, through the medium of my device will shut off the supply of gas to the burner tip thus preventing the gas from escaping into the room.

In the further disclosure of the invention, reference is to be had to the accompanying drawings constituting a part of this specification, in which similar characters of reference denote corresponding parts in all the views, and in which—

Figure 1 is a side elevation of my device mounted adjacent a burner tip, the valve being closed. Fig. 2 is a similar side elevation showing the valve held in open position by the expansion of the lamina. Fig. 3 is a vertical sectional view. Fig. 4 is a horizontal sectional view taken on the line 4—4 in Fig. 1.

Referring more particularly to the views, I provide the usual gas fixture 10 provided with a tip 11, the said gas fixture being provided with the usual valve operable by the valve lever 12 to open or close the valve for the purpose of controlling the supply of gas to the tip 11. A plate 13 is secured to the fixture 10 and mounted to slidably extend therethrough is a rod 14, having a head 15 formed on the upper end thereof, a lamina 16 capable of expansion and contraction by the action of heat and cold respectively, being mounted to encircle the rod 14 and in-

terposed between the plate 13 and head 15, the said lamina being arranged adjacent the tip 11 and secured to the under side of the head 15. A rod 17 is pivotally connected to the fixture 10 at the point 18 and an end of the said rod is connected to the rod 14, the free end of the rod 16 being connected to a rod 19 having the lower end thereof pivotally connected to the valve lever 12.

As shown in Fig. 1, the valve lever is arranged so that the valve on the fixture 10 will be in closed position and if it is desired to ignite gas at the tip 11 and open the valve to permit the passage of gas to the tip, a lighted match is held in juxtaposition to the lamina 16, thus imparting heat to the lamina, which being made of a material that is sensitive to heat and cold, will expand thus moving the rod 14 upwardly, and the mentioned upward movement of the rod, through the medium of the rods 17 and 19 will operate the valve lever 12 to open the valve of the fixture, thus enabling the gas to pass to the burner 11 where it will be ignited by the lighted match. The arrangement of my device when the gas is burning at the tip 11 is shown in Fig. 2. Now if for any reason the gas in the main supply should be suddenly cut off, or reduced in pressure, the heat produced by the light at the tip 11 will be reduced, thus causing the lamina 16 to cool and contract and the contraction of the mentioned lamina will pull the rod 14 downwardly and the action of the said rod, through the medium of the rods 17 and 19 will operate the valve lever 12 to close the valve of the fixture, thus cutting off the supply of gas to the burner tip and preventing the gas from escaping into the room.

I claim—

In combination with a fixture provided with a valve and a burner, a plate secured to the fixture, a rod slidably extending through the said plate, a head rigid on the upper end of the said rod, a lamina encircling the said rod and rigidly secured to the said head with an end of the lamina



1,048,320

reposing on the said plate and the said
lamina being arranged in juxtaposition to
the said burner, a valve lever for the said
valve, an arm mounted to swing on the said
5 fixture and having pivotal connection with
the said rod, and a link connecting the said
valve lever with an end of the said arm.

In testimony whereof I affix my signature
in presence of two witnesses.

WILLIAM MARDEN.

Witnesses:

LOUIS KOFFMAN,
ABRAHAM MARDEN.