L. SCOTT.

AUTOMATIC GAS VALVE.

APPLICATION FILED NOV. 7, 1910.

1,001,997. Patented Aug. 29, 1911.

Fig. 1.

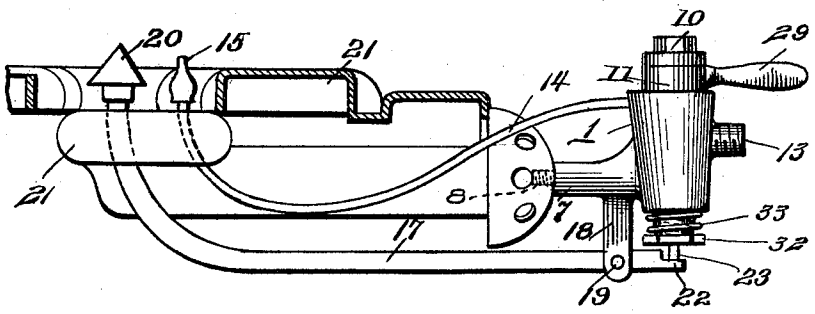
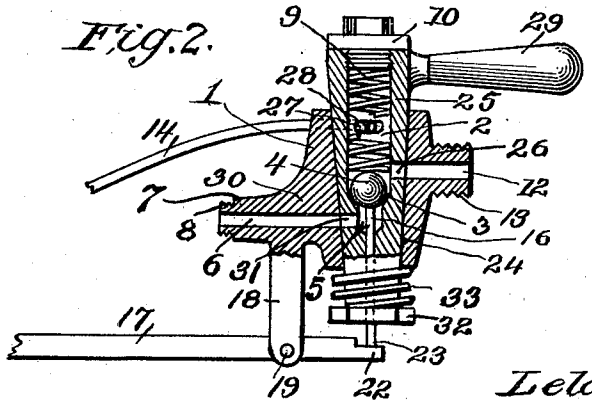


Fig. 2.



Witnesses

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AUTOMATIC GAS-VALVE.

1,001,997. Specification of Letters Patent. Patented Aug. 29, 1911.

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To all whom it may concern:

Be it known that I, LELAND SCOTT, a citizen of the United States, residing at St. Joseph, in the county of Buchanan, and State of Missouri, have invented certain new and useful Improvements in Automatic Gas-Valves; 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.

This invention relates to improvements in valves of the automatic type, and in general to those used on gas stoves.

The object of my invention is to provide a simple and effective burner, which is so constructed that the weight of the article or device placed thereover will open the valve to admit gas to the burner, and one wherein the removal of the weight of the article or device being heated will cause the valve to be closed, thereby economically using the gas.

Another object of this invention is to provide a case with which the valve can be removed for inspection or cleaning without disturbing the other parts, which is a very notable feature of the invention.

The absence of the packing around the valve pin, found to be unnecessary in this construction, is a decided advantage, since it eliminates a trouble-causing element.

Referring to the accompanying drawing forming a part of the specification, in which similar characters of reference indicate corresponding parts in all the figures, Figure 1 is a side elevation of my improved invention as applied to a gas burner; and Fig. 2 is a section of my improved valve.

Referring more particularly to the drawing, 1 represents the casing of the valve, in which a tapered hole 24 is provided for the reception of a correspondingly tapered plug, in which a hole 2 is drilled. The conical bottom of which is formed by the end of the drill and furnishing a seat 3 for the valve ball 4. A recess 5 is formed beneath the valve seat, which communicates with the openings 31 and 6 of the plug valve and the casing respectively. The tapered plug is provided with a handle 29 for turning the same to regulate the flow of gas through the passage 12 to a threaded extension 7. A small pipe 14 is provided and fastened in the casing 1, allowing the gas to flow from the passage 2 to said pipe, the end 15 of which is restricted so as to allow only a small flow of gas. A pin 16 is inserted through an opening in the bottom of the casing 1, said pin extending up through the opening 5, and capable of raising the ball 4 from its seat 3. The lever or operating arm 17 is fulcrumed, as at 19, to the extension 18 of the casing 1 and its longest end is provided with a knob, or similar cap, 20 extending up through the bottom of the gas burner 21, and the short end 22 of the lever 17 rests on the end 23 of the pin 16.

Two holes, 26 and 31, in the tapered plug, correspond with the openings 6 and 12 when the valve is open. A slot 27, cut in the plug 25, communicates with the opening 28 in the pipe extending to the pilot light, the slot being made so that when the main burner flame is reduced by turning the handle 29, thus reducing the opening 12, the pilot burner will not have its supply of gas reduced. A nut 32 and spring 33 are provided on the bottom of the tapered plug 25 to hold same in tight connection with the casing 30. The pin 16 extends through the bottom of the tapered plug, and is operated in the same manner as already described.

The operation of the device is as follows: The handle valve is opened, thus allowing the gas to flow to the pilot light, which is then ignited. On placing a receptacle over the burner of the stove the knob 20 is depressed, this in turn connecting through the lever 17, lifts the pin 16, which in turn lifts the ball valve 4 from its seat 3, and allows gas to flow through passages 5 and 6 and into the main burner of the stove. By removing the receptacle from the stove, the weight being removed from the knob 20, the action of the spring 9 will return it to its normal position through the medium of the ball valve 4 and pin 16, the spring thus forcing the ball valve 4 against the seat 3 and shutting off the supply of gas to the main burner.

What I claim as new and desire to secure by Letters Patent is:

In combination with a gas burner, of an automatic valve connected thereto, said valve comprising a casing having a vertically tapered opening formed therein, a tapered plug fitted within said tapered opening and provided with a handle, the said tapered plug having a central opening, said burner communicating with said central opening, a pilot light communicating with

said central opening and extending within the gas burner, a supply pipe communicating with said burner, a spring pressed ball valve mounted in said central opening, the said plug having an opening below the ball valve which communicates with the fuel burner, and which is normally closed by said valve, the said pilot light communicating with a slot-shaped opening in said plug valve, a pin extending through an opening in said plug valve, its upper end abutting against the ball valve, a lever fulcrumed to said valve casing, one end bearing against the lower end of the said pin, and the other end extending up within the burner for operating said ball valve, substantially as described.

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

LELAND SCOTT.

Witnesses:
JOSEPH V. FENNELL,
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