No. 828,862. PATENTED AUG. 14, 1906.

O. E. MYERS.

AUTOMATIC THERMOSTATIC SHUT-OFF.

APPLICATION FILED APR. 19, 1906.

Fig. 1.

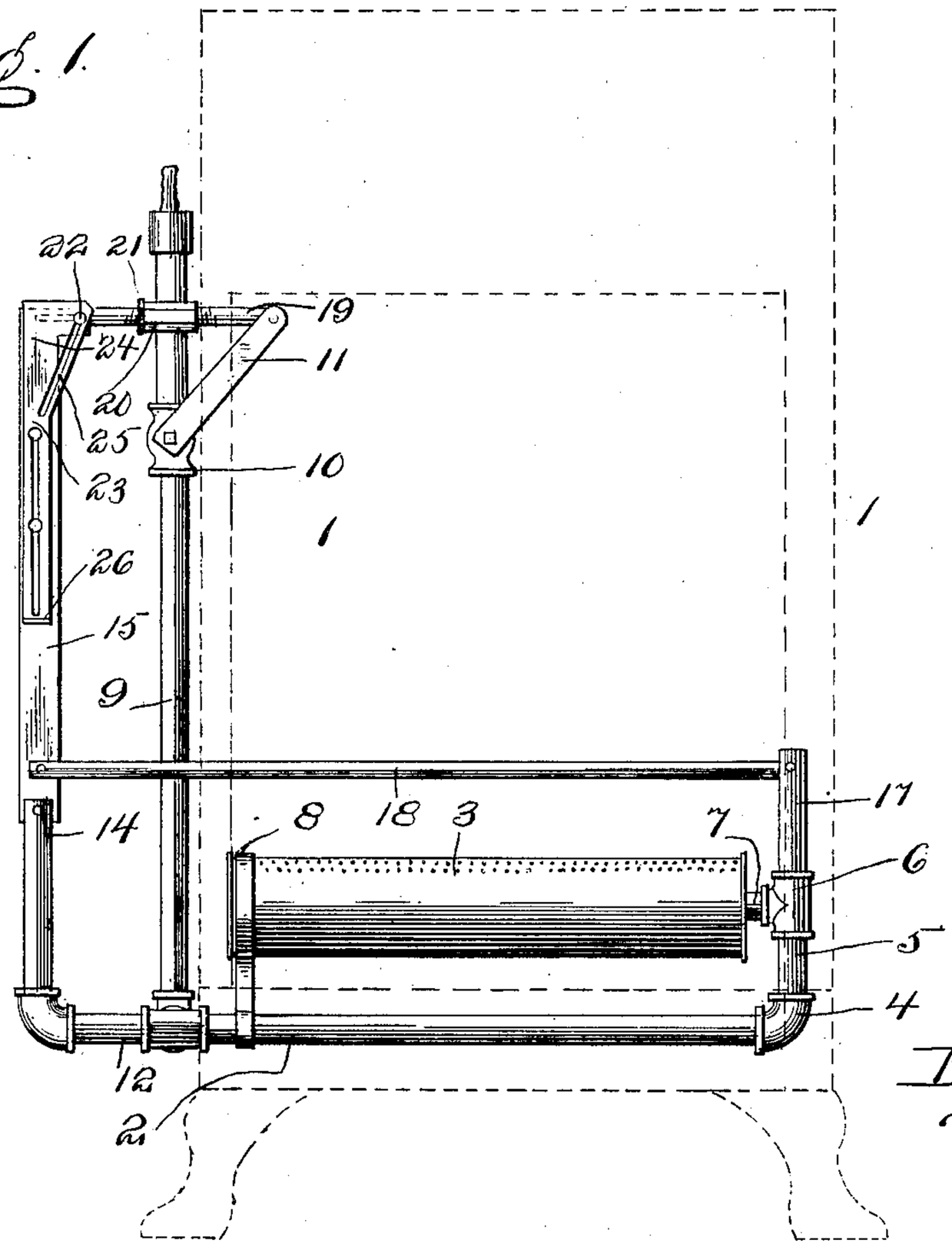


Fig. 2.

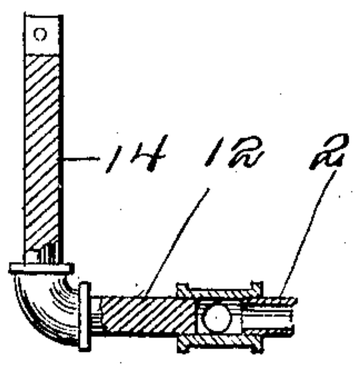


Fig. 3.

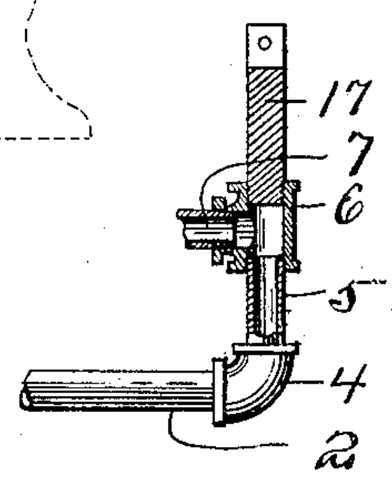


Fig. 4.

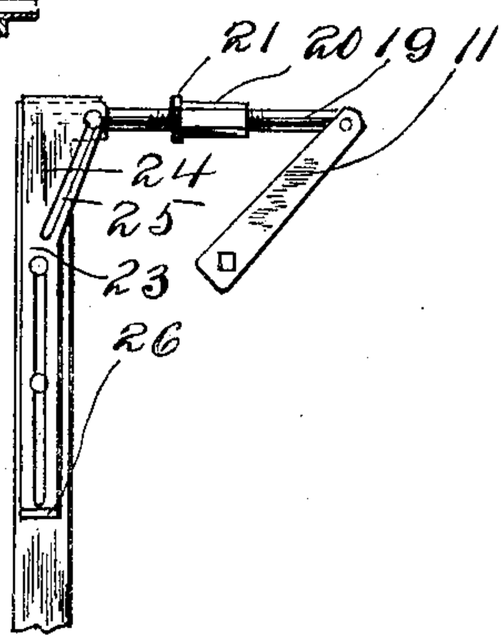
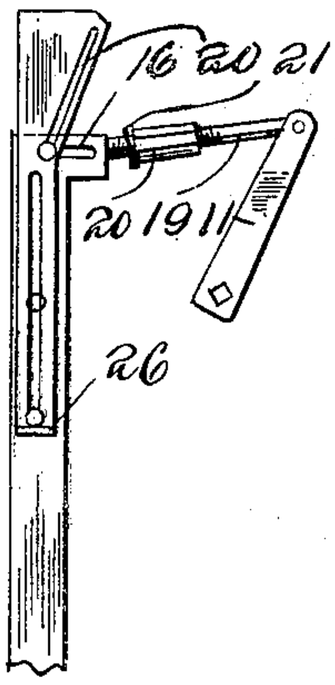


Fig. 5.



Witnesses:
Jesse C. Miller.
R. C. Butler.

Inventor:
O. E. Myers'
by H. C. Smith & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

OLLA E. MYERS, OF VERONA, PENNSYLVANIA, ASSIGNOR OF ONE-FOURTH TO JOHN SCHMITT, OF VERONA, PENNSYLVANIA.

AUTOMATIC THERMOSTATIC SHUT-OFF.

No. 828,862. Specification of Letters Patent. Patented Aug. 14, 1906.

Application filed April 19, 1906. Serial No. 312,691.

To all whom it may concern:

Be it known that I, OLLA E. MYERS, a citizen of the United States of America, residing at Verona, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Automatic Thermostatic Shut-Offs, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in automatic thermostatic shut-offs; and the invention has for its primary object to provide novel means for shutting off the supply of gas admitted to a burner in case of accidental shutting off of the gas-supply or the accidental extinguishing of the flame, said means consisting of a thermostatic rod or its equivalent which is mounted over a burner and is adapted to operate a valve mounted upon the main gas-supply pipe.

Another object of this invention is to provide a novel form of lock in connection with the valve of my improved shut-off for locking said valve and preventing the gas-pressure from opening said valve after it has been once closed.

With the above and other objects in view, which will more readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts to be hereinafter more fully described and claimed, and referring to the drawings accompanying this application like numerals of reference designate corresponding parts throughout the several views, in which—

Figure 1 is a front elevation of my improved gas shut-off. Fig. 2 is a detail sectional view of a portion of the same. Fig. 3 is a similar view. Fig. 4 is a front elevation of a lock used in connection with my improved gas shut-off. Fig. 5 is a similar view illustrating a lock in another position.

In the accompanying drawings the reference-numeral 1 designates a conventional form of gas-stove as having a branch gas-supply pipe 2 extending therein, the pipe 2 supporting a conventional form of burner 3, which, as herein illustrated, is connected to the pipe 2 by an elbow 4, a section of pipe 5, a T 6, and a leading-in pipe 7, also by a bracket 8. The pipe 2 is connected with a main gas-supply pipe 9, carrying a valve 10, which is operated by a lever 11.

My invention resides in providing the end of the pipe 2 with an extension 12, carrying an upright 14, to which is pivotally connected a bar 15, having its upper end slotted, as at 16. The T connection 6 of the pipe 2 is provided with an upright 17, and connected to said upright and to the bar 15 is an expansion-rod 18, said rod extending longitudinally of the burner 3 directly thereabove and being made of copper or a metal having thermostatic properties.

The lever or handle 11 of the valve 10 is provided with a two-part rod 19, carrying a turnbuckle 20 and a jam-nut 21, said rod being provided with an outwardly-extending pin 22, which passes through the slot 16 of the bar 15.

Slidably mounted upon the bar 15 is a plate 23, which constitutes the lock of my improved shut-off. The upper end of the plate 23 is enlarged, as at 24, and provided with an angularly-disposed slot 25, through which the pin 22 of the rod 19 protrudes.

The valve 10, as illustrated in Fig. 1 of the drawings, is in a closed position and is retained in said position by the rod 19 and the plate 23, the pin 22 of said rod engaging in the upper end of the slot 25 of the plate 23 and preventing the lever 11 from being moved into alinement with the main gas-supply pipe 9, which would open the valve 10. In order that the gas may be ignited at the burner 3, the plate 23 is elevated through the medium of the lip or lug 26, said lip or lug being used to enable a person to elevate the plate 23 and move the rod 19, whereby the lever 11 may be swung approximately into alinement with the main gas-supply pipe 9. This position of the plate 23 and the rod 1 is illustrated in Fig. 5 of the drawings, where it will be observed that the plate 23 is elevated and that the pin 22 engages in the lower end of the slot 25 of said plate. Should the pressure of gas be shut off, so as to extinguish the flame, or the flame be otherwise extinguished while the cock is open, the expansion-rod 18 will contract and move the bar 15 inwardly. It is to be observed that the expansion of the rod 18 moves bar 15 outwardly, so that plate 23 is free to drop to the position shown in Figs. 1 and 4. Then when the flame is extinguished

the contraction of rod 18 pulls on bar 15, and the upper end of the bar, moving toward the burner, tends through the connection with rod 19 and lever 11 to close the cock and shut off the gas from the burner.

The turnbuckle 20 upon the rod 19 is employed for regulating the throw of the bar 15 and the lever 11, said turnbuckle being adjusted according to the pressure of gas in connection with which the shut-off is used.

I preferably construct my improved shut-off of light and durable metal, and while I have herein illustrated the same in connection with a certain type of gas-stove it is obvious that the size, general arrangement, and minor details of my improved shut-off may be changed to conform to the various types of stoves at present used, and such changes as are permissible by the appended claims may be resorted to without departing from the spirit and scope of the invention.

What I claim, and desire to secure by Letters Patent, is—

1. In a device of the character described, the combination with a gas-supply pipe, a shut-off valve therein, a branch supply connected to said supply-pipe, and a burner supported on said branch supply-pipe, of uprights carried by said branch supply-pipe, a bar pivoted at its lower end to one of said uprights, an expansion-rod connecting said bar to the other of said uprights, said bar having a horizontal slot at its upper end, a rod carrying a pin projecting into said slot, a lever connecting said rod with the stem of the shut-off valve, and a locking-plate slidably mounted on the bar and having an inclined slot receiving the pin carried by said rod, substantially as described.

2. In a device of the character described, the combination with a gas-supply pipe having a shut-off valve, and a burner in communication with the gas-supply pipe, of a pair of uprights, a vertical bar pivoted at its lower end in one of said uprights, an expansion-rod connected to said bar and to the other of the uprights, a two-part rod slidably connected at one end to said bar, a lever connecting the other end of said rod to the shut-off valve, a pin carried by said rod and a locking-plate slidable on the bar and having a slot arranged at an incline to the bar and receiving said pin, as and for the purpose described.

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

OLLA E. MYERS.

Witnesses:

A. M. WILSON,

K. H. BUTLER.