F. EITAPENC.

GAS CUT-OFF FOR BUILDINGS.

APPLICATION FILED OCT. 12, 1915. RENEWED NOV. 17, 1917.

1,270,389. Patented June 25, 1918.

Fig. 1

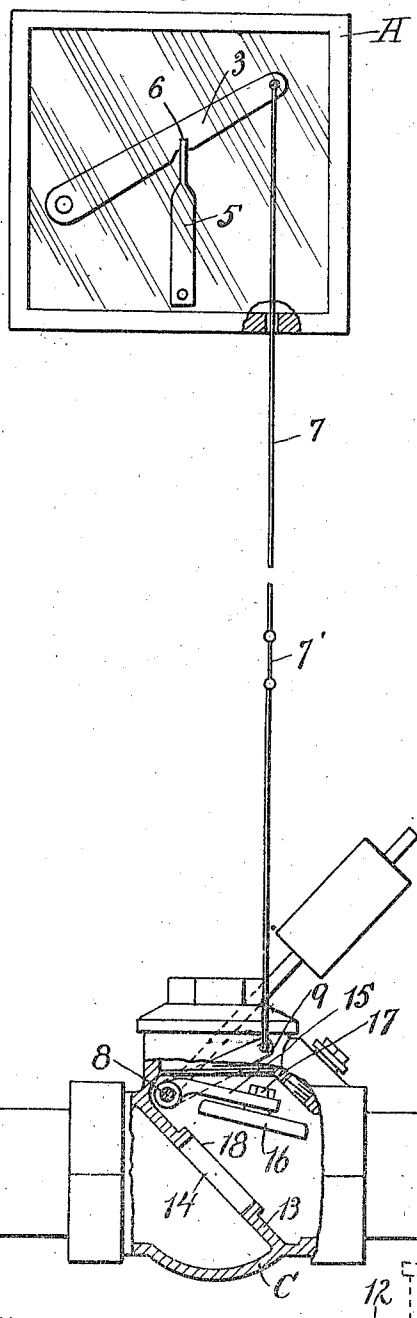


Fig. 2

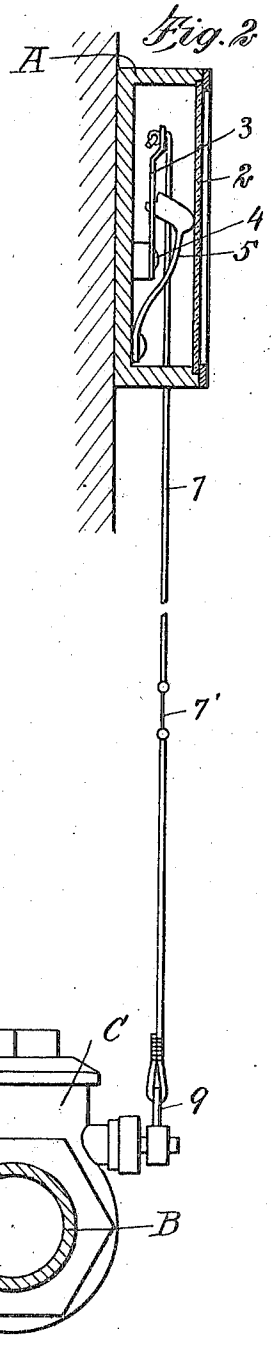


Fig. 3

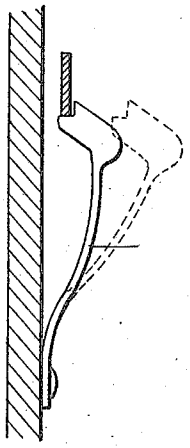
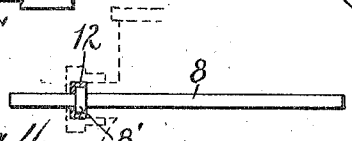


Fig. 4



Witnesses:
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UNITED STATES PATENT OFFICE.

FREDRICK EITAPENC, OF BINGHAMTON, NEW YORK.

GAS CUT-OFF FOR BUILDINGS.

1,270,389. Specification of Letters Patent. Patented June 25, 1918.

Application filed October 12, 1915, Serial No. 55,543. Renewed November 17, 1917. Serial No. 202,645.

To all whom it may concern:

Be it known that I, FREDRICK EITAPENC, a citizen of the United States, residing at Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Gas Cut-Offs for Buildings, of which the following is a specification.

My invention relates to an improvement in gas cut-offs for buildings in which the main flow of gas leading to the basement or interior of the building may be immediately stopped or cut off by manipulating a valve from the exterior of the building in case of fire or other exigency and it has for its object to provide an easily constructed and mounted device simple in operation and with the minimum liability of getting out of order, for the purposes aforesaid.

With these objects in view my invention consists of certain novel features of construction and arrangement of parts as will be hereinafter fully described and pointed out in the claims, reference being had to the accompanying drawings in which—

Figure 1 is a front elevation of a part of my device shown in connection with a side elevation partly in cross section of another part of my device. Fig. 2 is a side elevation of a part of my device shown in connection with a front elevation of another part of my device. Fig. 3 is a vertical side view of a fragmentary part of my device. Fig. 4 is a modified form of a part of my device.

The same reference characters denote like parts in each of the several figures of the drawings.

In carrying out my invention I provide a lever box A, having mounted on the front face thereof a pane of glass 2 and on the front face of the inner side of the box I have mounted a lever 3 on the pivot 4. On this front face and beneath the lever 3 I have mounted the vertical spring trigger 5 which has contact with lever 3 at the point 6 held in contact with lever 3 by the pressure of the glass 2 upon the spring trigger 5. Fastened to lever 3 in any convenient manner I have a small wire cord or cable 7 which extends downward from box A into the basement or part of the building where the gas pipe enters, said cable having within it a fuse link 7′ located at any convenient point. Mounted on gas pipe B I have the cut-off valve casing C. Mounted in the cut-off valve casing C, I have the shaft or turn pin 8 passing through the casing C and I have mounted on one end of the turn pin 8 the lever arm 9 to the outer end of which is attached cable 7. On the other end of shaft 8 I have mounted the lever arm 10 on which is mounted the weight 11. I, however, may elect to have cable 7 connect directly with arm 10 and my device operate without the additional arm 9. Mounted on shaft 8 I have the bushings 12, 12; also in a modified form I have on shaft 8 a shoulder 8′ and the bushing 12 in its mounting to cover shoulder 8′. Within the cut-off valve casing C I have the partition or wall 13 having in it the valve opening 14. At a point in the interior of valve casing C, where shaft 8 passes through it, I have mounted on shaft 8 the arm 15 and loosely mounted on arm 15 I have the disk 16 held in place by nut 17 and adapted to engage the valve seat 18.

In the operation of my device when a fire occurs or other exigency arises where it is desired to immediately cut off the main flow of gas from the building or basement portion of the same, the fireman or other person in charge immediately breaks glass 2 of the valve box which is preferably mounted on the outer part of the building and the breaking of glass 2 releases the pressure upon spring trigger 5, which pressure holds it in contact with lever 3 and which lever 3 supports cable 7 connecting with arm 9 on shaft 8, and spring trigger 5 being released from lever 3 the weight 11 mounted on arm 10 is carried down by gravity from its suspended position heretofore, and it turns shaft 8, which in turn moves downward the interior arm 15, which closes the disk 16 down upon seat 18 and thus shuts off the flow of gas.

Having thus described my invention, what I claim as new and for which I desire Letters Patent is as follows:

1. In a gas cut off, the combination with a gas pipe and a valve therein normally tending to close and setting means at a distance connected to said valve to normally hold it open, said means including a resilient catch and a frangible member bearing upon said catch and holding it under tension and in position to hold the other parts of the setting means and the valve in open position, said frangible member when broken releasing said setting means and permitting the valve to close.

2. In a gas cut off, the combination with

a gas pipe and a valve therein normally tending to close, rocking means at a distance connected to said valve and adapted to be rocked to open said valve, a resilient latch when placed under tension to hold said rocking means in its position to hold the valve open and a frangible member bearing on said latch to hold it tensioned but releasing the same and the valve when broken.

3. In a gas cut-off, the combination with a valve in a gas pipe normally tending to close, a casing at a distance from said valve, a lever in said casing, a connection between said lever and said valve to hold the latter open when the former is turned to a determined position, a spring latch designed to maintain said lever in its determined position, and a frangible side for said casing that holds said spring latch in engagement with said lever, but when ruptured releases said latch and permits the valve to close.

4. In a gas cut-off, the combination with a gravity actuated valve in a gas pipe normally tending to close, a casing at a distance from said valve, a trip controlled means in said casing, a connection between said trip controlled means and said valve to normally hold said valve open, and a frangible side for said casing bearing upon said trip means to maintain it in position to hold the valve open, but releasing said means when broken that the valve may close.

5. In a cut-off, the combination with a supply pipe and a valve in said supply pipe, normally tending to close, means at a distance connected to said valve and movable into position to hold said valve open, a resilient catch when placed under tension to hold said means in its set position for holding the valve open, and a frangible member bearing upon said catch to hold it tensioned, said frangible member when ruptured releasing the catch and permitting the valve to close.

6. In a gas cut-off, a box having a glass mounted on the face thereof, a lever within said box, a spring catch or trigger held under tension by pressure thereon of said glass to maintain said lever in elevated position, a cut-off valve casing, a turn pin passing through said casing, a valve arm projecting from the pin within the casing, a valve on the arm, a valve seat in the casing, a connection from said pin to the lever to hold the valve open, and a weight for closing the valve when the glass is ruptured and the catch released.

7. In a gas cut-off, a box, and a lever mounted within said box, a spring catch or trigger also in the box and adapted when held under tension to hold said lever raised, a glass plate forming the front of the box and bearing on said catch or trigger to hold it under tension in engagement with the lever; a cut-off valve casing, a turn pin or shaft passing through said casing, a valve arm on said shaft, a valve on said arm, a connection between said shaft and said lever for opening the valve when the lever is raised and holding it open during the elevation of the lever, and a weighted arm on the shaft adapted to close the valve when the glass plate is ruptured and the catch released.

8. In a gas cut-off, a box, and a lever within said box, a spring trigger also in said box to support when under tension said lever in raised position, a frangible side for said box bearing on said trigger and placing it under tension and in position to support said lever, a cut-off valve casing, a shaft or turn pin passing through said casing, an arm on the shaft within the valve casing, a valve on said arm, a weighted arm on one end of said shaft without the casing tending to close said valve, a connection between said shaft and the lever, and a fusible link in said connection.

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

FREDRICK EITAPENC.

Witnesses:
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M. F. TERRY.