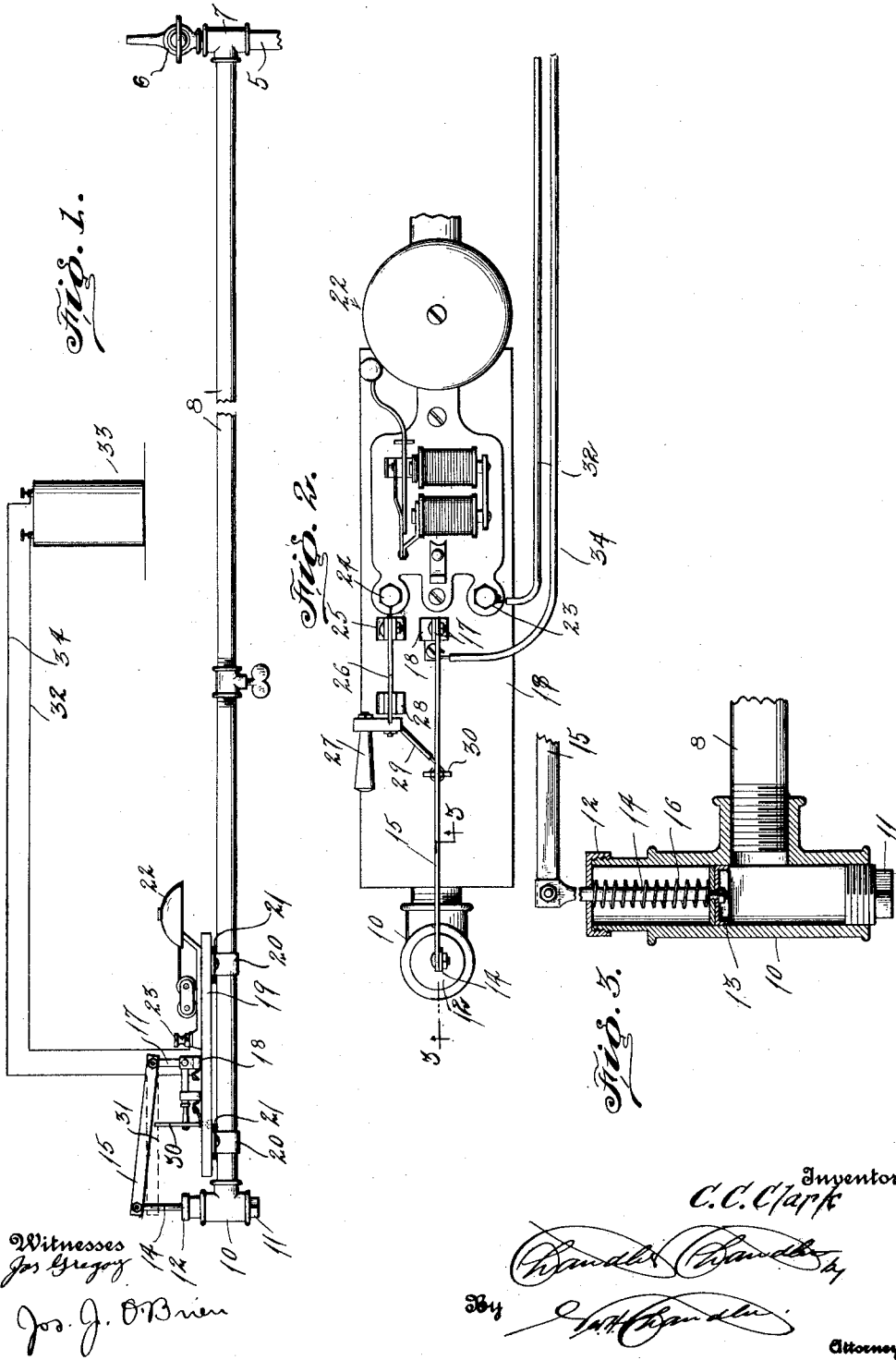


C. C. CLARK.
ELECTRIC GAS ALARM.
APPLICATION FILED NOV. 29, 1910.

1,024,061.

Patented Apr. 23, 1912.



UNITED STATES PATENT OFFICE.

CHARLES C. CLARK, OF GUYANDOTTE, WEST VIRGINIA.

ELECTRIC GAS-ALARM.

1,024,061.

Specification of Letters Patent.

Patented Apr. 23, 1912.

Application filed November 29, 1910. Serial No. 594,750.

To all whom it may concern:

Be it known that I, CHARLES C. CLARK, a citizen of the United States, residing at Guyandotte, in the county of Cabell, State of West Virginia, have invented certain new and useful Improvements in Electric Gas-Alarms; 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 electric alarms for indicating when gas pressure is cut off, and the leading object of the invention is to provide a device which can be readily secured in position on a gas pipe and which will instantly sound an alarm when the gas is shut off.

With the above and other objects in view the invention consists in certain constructions, combinations and arrangements of parts, clearly described in the following specification, and clearly illustrated in the accompanying drawings in which:—

Figure 1 is a diagrammatic view showing the improved device secured in position on a gas pipe. Fig. 2 is a detail plan view of the alarm mechanism. Fig. 3 is a detail sectional view taken on the line 3—3 of Fig. 2.

Referring to the accompanying drawings, 5 denotes a supply pipe which is connected by the elbow 7 to the pressure pipe 8.

The pressure pipe 8 carries on one end a T-shaped casing 10 which is provided with a closure plug 11 on its lower end and a cap 12 on its upper end. A piston 13 operates in the casing 10 and is connected to a plunger rod 14 which extends through the cap 12 and is pivotally connected to the contact bar 15. A spring 16 is mounted on the plunger rod 14 and serves to force the piston 13 toward the pressure pipe 8. A valve 6 is located on the pressure pipe 8.

The contact bar 15 is pivoted to a vertical post 17, which post is mounted on the metallic clip 18, which clip is secured to the insulating base-board 19. The base-board is secured by the metallic bands 20 to the pressure pipe 8 and is insulated from said pressure pipe by means of insulating strips or

blocks 21. The base 19 supports an electric bell 22 which is provided with binding posts 23 and 24. The binding post 24 is connected to the clip 25 which supports the switch bar 26 on one end of which a handle 27 is secured. The switch bar 26 is adapted to contact with the contact clip 28. The contact clip 28 is connected by a conductor wire 29 with the vertical post or contact member 30, which is bifurcated to receive the contact bar 15.

When the contact bar 15 is brought into engagement with the contact post 30 current will flow from the battery 33 through the wire 32 to the bell 22 and thence through the clip 25 to the clip 28 by the switch bar 26 and thence from the clip 28 and the wire 29 to the contact post 30 thereby completing the circuit.

When the valve 6 is opened and the gas from the supply pipe 5 is being consumed either by a stove or other device the pressure of the gas will hold the piston 13 into its innermost position in the casing 10 and the contact bar 15 out of contact with the post 30. Should the gas main be temporarily shut off the pressure in the pipe 8 will be immediately decreased and the bar 15 will be brought into contact with the post 30 thereby completing the circuit and sounding an alarm.

The occupants of the house or building will be thereby notified that the gas has been cut off and prevent the subsequent waste of the gas, thereby avoiding the possible dangerous results, by shutting the stove or burner valves.

What is claimed is:—

In an alarm mechanism, a supply pipe, a pressure pipe connected therewith, a casing secured to one end of the pressure pipe and provided with a cap member, a piston operating in the casing, a plunger rod connected with the piston and extending through the cap, a contact bar pivoted to the plunger rod and extending longitudinally above the pressure pipe, a base clamped to the pressure pipe and insulated therefrom, a clip secured to the base and pivotally supporting one end of the contact bar, an alarm bell secured on the base, a contact post secured

to the base and adapted to be engaged by the contact bar, a coiled spring arranged upon the plunger rod interiorly of the casing between the cap and the piston to hold
5 the piston in a normally lowered position, conducting means connecting one of the terminals of the bell with the contact post, a wire connected with the bar supporting clip, and a generator connected to the other terminal of the bell and said wire. 10

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

CHARLES C. CLARK.

Witnesses:
S. C. CHILDERS,
T. P. SMITH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
