

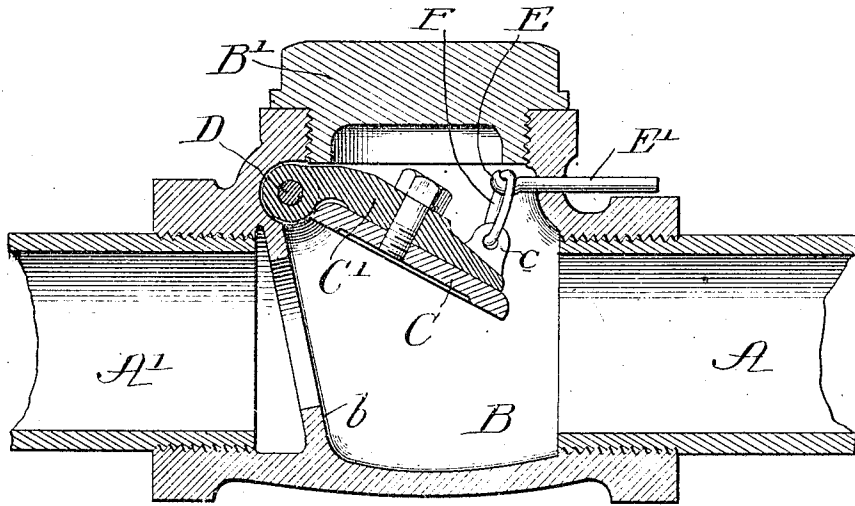
No. 824,932.

PATENTED JULY 3, 1906

A. W. JENCZEWSKY.

AUTOMATIC SAFETY VALVE FOR GAS SUPPLY PIPES.

APPLICATION FILED MAR. 31, 1905.



Witnesses:

W. Bantitt.

A. B. Wilkins

Inventor:

Adolph W. Jenczewsky

by Poole & Brown.

his attys

UNITED STATES PATENT OFFICE.

ADOLPH W. JENCZEWSKY, OF CHICAGO, ILLINOIS.

AUTOMATIC SAFETY-VALVE FOR GAS-SUPPLY PIPES.

No. 824,932.

Specification of Letters Patent.

Patented July 3, 1906.

Application filed March 31, 1905. Serial No. 253,132.

To all whom it may concern:

Be it known that I, ADOLPH W. JENCZEWSKY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Automatic Safety-Valves for Gas-Supply Pipes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to an automatically-acting or self-closing safety-valve intended to be applied to the supply-pipe for illuminating-gas at a point within a house or building and adapted to close the pipe against passage of gas from the main in case a fire occurs within said house or building.

It has been usual heretofore to provide in the supply-pipe running from a gas-main into the basement of a building at a point between the meter and the wall through which the supply-pipe enters the basement an ordinary valve adapted to be closed by a wrench; but in case of fire within the building it is frequently difficult, if not impossible, to reach said valve for the purpose of shutting off the gas, with the result that through the melting or destruction by heat of the pipes or fittings or of the meter gas in large quantities enters the burning building, making it highly dangerous for firemen to enter the same because of liability of explosion, and frequently resulting in explosions which endanger life and destroy property.

In carrying out my invention I provide the gas-supply pipe within the cellar or basement of the building at a point between the gas-meter and the place where the pipe enters the building with a valve having a movable part or closure so constructed that it has tendency to assume a closed position either by the gravity of the parts or by means of an actuating-spring, together with means for holding the valve normally in its open position, embracing a fusible connection, and which will be melted when the valve is subjected to a comparatively low degree of heat, and thus effect the automatic closing of the valve.

In said drawing the figure is a view in central longitudinal section of a valve having a hinged flap or closure adapted to be closed by gravity.

As shown in the figure of the accompanying drawing, A indicates a supply-pipe lead-

ing into a building from a gas-main, A' a pipe leading to a gas-meter, and B a valve-casing connecting the ends of the pipes A and A'. The valve-casing B is provided at the side of its central chamber nearest the pipe A', toward which the gas flows, with an inclined valve-seat *b*.

C indicates a valve disk or closure adapted to fit against the seat *b* and attached to an arm C', which is mounted on a horizontal pivot D, which extends across the upper part of the valve-chamber above the seat *b*.

E indicates a hook or projection extending into the upper part of the valve-chamber at its side opposite the hinge of the closure, *c* an eye or loop on the free end of the lever C', and F a link, made of readily-fusible metal which engages the loop or eye *c* and the hook E and holds the valve-closure in its elevated or open position. Said hook E is shown as formed on the inner end of a rod E', which extends through the wall of the valve-casing and projects some distance outside of the same. The projecting end of the rod E' will be exposed to heat of flames which may surround the valve-casing and will serve to quickly convey or transmit heat to the fusible link F. The valve-casing B is shown as provided with screw-cap B', which may be removed to give access to the parts within the valve-chamber.

The valve closure or disk C will be held by the fusible link F in its elevated or open position, as shown in the drawing, so that the gas may freely pass through the valve-casing; but in case of fire within the building which reaches the neighborhood of the valve the fusible link will be melted and the valve disk or closure will then drop against the seat *b*, which latter is inclined in such manner that the weight of the hinged parts will tend to keep the disk against said seat. Moreover, said disk is arranged to close toward the outlet from the casing, so that when the disk is dropped against its seat the pressure of the gas from the main will tend to hold or press it against said seat, and thus keep the valve tight.

The construction described has the advantage that the valve-casing is permanently closed and the fusible link or connection holding the valve-closure open is located entirely within the casing and is adapted to be fused or destroyed by heat transmitted thereto from the exterior of the casing.

A safety-valve embodying my construc-

tion may be constructed in various forms other than those illustrated, the principal feature of my invention consisting in a permanently-closed valve-casing, a closure within the casing which has a tendency either by action of gravity or other means to assume its closed position, and a link or connection of easily fusible metal or material destructible by heat which is located within the closed valve-casing and acts to normally hold the closure in its open position.

I claim as my invention—

1. A safety-valve for gas-pipes comprising a permanently-closed valve-casing, a closure within the casing which has a tendency to assume a closed position, and means within the casing for holding the closure in its open position, embracing a fusible metal link.

2. A safety-valve for gas-pipes comprising a permanently-closed valve-casing, a closure within the casing which has a tendency to assume a closed position, and means within the casing for holding said closure in its open position, embracing a link made of material destructible by heat, and a rod passing through the wall of the closure and projecting outside of the same, said rod being engaged at its inner end with said link.

In testimony that I claim the foregoing as my invention I affix my signature, in presence of two witnesses, this 29th day of March, A. D. 1905.

ADOLPH W. JENCZEWSKY.

Witnesses:

ALBERT JENCZEWSKY,
ODE L. RANKIN.