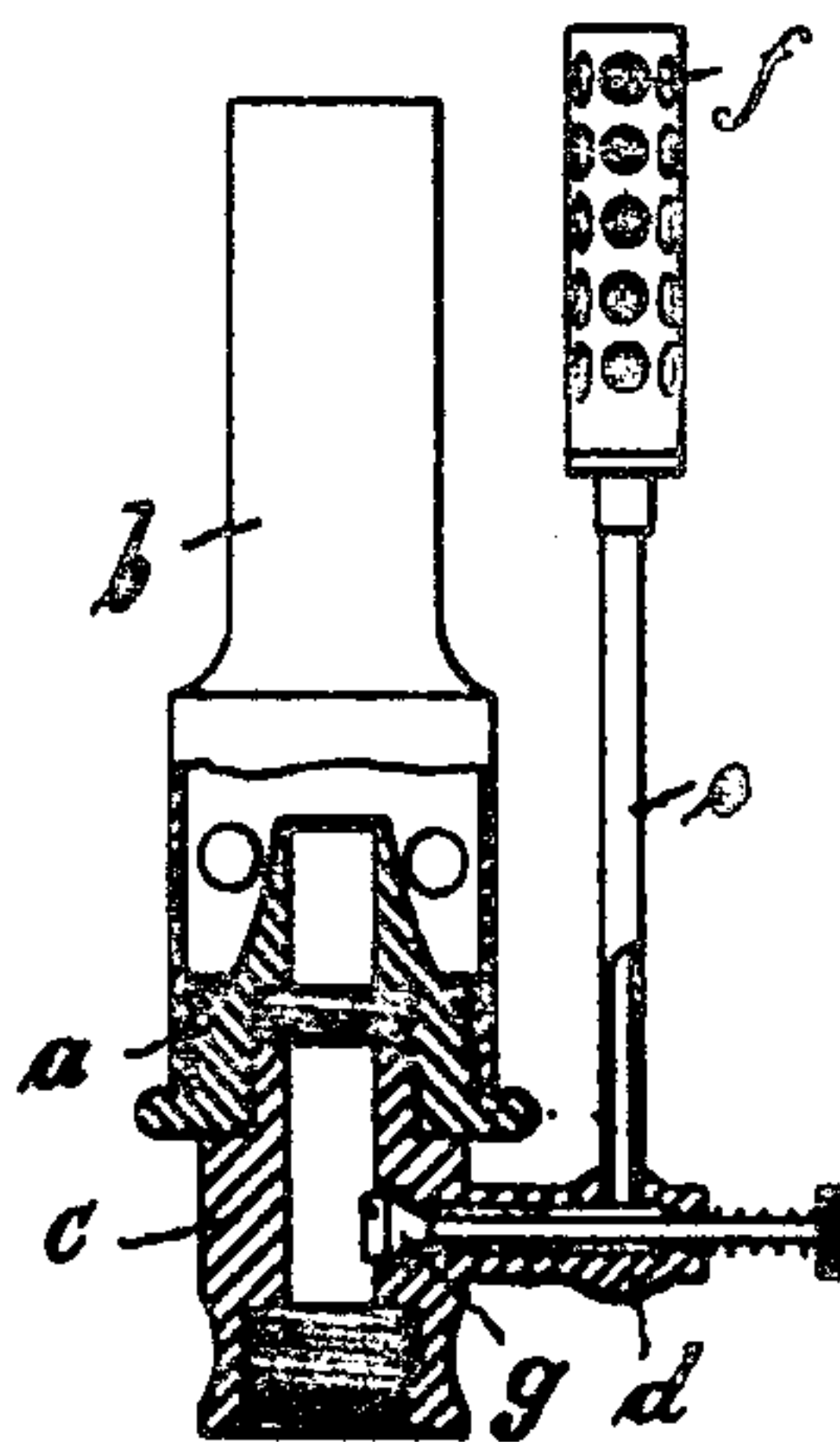


No. 891,528.

PATENTED MAR. 10, 1908.

M. BAER & P. FLACHSHAAR.  
IGNITION DEVICE FOR GAS BURNERS.  
APPLICATION FILED SEPT. 20, 1906.



WITNESSES:

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INVENTORS

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# UNITED STATES PATENT OFFICE.

MAX BAER AND PAUL FLACHSHAAR, OF BERLIN, GERMANY.

## IGNITION DEVICE FOR GAS-BURNERS.

No. 881,528.

Specification of Letters Patent.

Patented March 10, 1908.

Application filed September 20, 1905. Serial No. 279,254.

*To all whom it may concern:*

Be it known that we, MAX BAER and PAUL FLACHSHAAR, subjects of the King of Prussia, German Emperor, residing at Berlin, Dresdenstrasse 86, in the Kingdom of Prussia and Empire of Germany, have invented certain new and useful Improvements in Ignition Devices for Gas-Burners, of which the following is a full, clear, and exact description.

For igniting burners on incandescent gas lights it is usual to have pilot lights. These pilot lights are arranged to either burn constantly, or the same have to be specially lighted when the burner is required to be lighted. In those of the last mentioned pattern the gas is shut off and only put on again as soon as the flame is wanted. For turning on the gas a two-way cock is generally used, the manufacture of which is known to be difficult and expensive, and the cock has to be specially attended to, also causing loss of gas when not properly shut off.

The present invention refers to an arrangement for igniting gas burners, where the pilot light is not constantly burning, but is only lighted when the main flame is required. To effect the aforesaid ignition an ignition pill is used, which through the escaping gas is brought to a red heat. The gas is shut off from the pilot light by means of a valve and the same is only opened again to give the pilot light the necessary quantity of gas. The main pipe for the burner remains in the present invention always open.

The annexed drawing shows an ignition device for gas-burners constructed in accordance with the invention.

Into the cone *a* of the burner *b* is screwed the body or nipple *c* in which the main gas-passage is arranged. On the side of said nipple is attached the side-tube *d*, on which is mounted the ignition-pipe *e*. At the upper end of the ignition-pipe is the mantle *f* in which the ignition-pellet is contained. Movable in the gas-passage of the side-tube *d* is a

valve *g* the body of which is intended to be moved into the main gas-passage. Said valve is provided with a spindle which extends through the side-tube and is provided with an operating-knob and controlled by a spring, as shown.

To light the gas, the main pipe is first of all opened, when the spindle of the valve is pushed down, to allow the gas to enter the burner *b* and at the same time into pipe *e* towards the ignition pellet. The pellet now begins to glow igniting the rising gas, which will also ignite the gas inside the burner.

To open the valve the spindle is forced inwardly in the nipple or body *c* and at right angles to the main gas-passage, and the valve *g* is thereby caused to move away from its seat and permit the passage of gas to the pilot-burner, said valve thus being pushed into the main gas-passage and reducing the cross-sectional area of the same so that the flow of gas to the main burner is reduced. In this manner too much gas is not delivered to the main-tube, and there is no violent explosion when the gas-current is ignited.

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

"The combination, with a gas-burner having a main gas-passage in the body thereof, of a side-tube extending laterally from said body and having a gas-passage leading laterally from said main gas-passage, an ignition-tube mounted on said side-tube and a valve to control said lateral gas-passage movable at right angles to the main gas-passage and into the same when said valve is opened, whereby the flow of gas through said main-gas passage is reduced.

In witness whereof, we subscribe our signature, in presence of two witnesses.

MAX BAER.  
PAUL FLACHSHAAR.

Witnesses:

HENRY HASPER,  
WOLDEMAR HAUPT.