

(No Model.)

P. KELLER.
GAS BURNER.

569,155.

Patented Oct. 6, 1896.

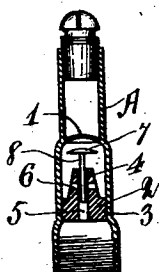


Fig. 1.

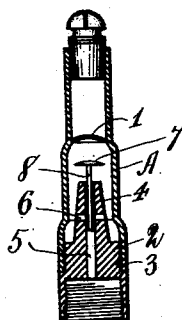


Fig. 2.

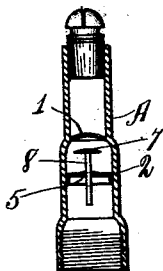


Fig. 3.

Witnesses:

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UNITED STATES PATENT OFFICE.

PETER KELLER, OF CHICAGO, ILLINOIS.

GAS-BURNER.

SPECIFICATION forming part of Letters Patent No. 569,155, dated October 6, 1896.

Application filed October 4, 1895. Serial No. 564,628. (No model.)

To all whom it may concern:

Be it known that I, PETER KELLER, 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 Gas-Burners; 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.

My invention relates to a novel construction in a gas-burner, the object being to provide a device of this kind of simple and durable construction in which the pressure of the gas is automatically regulated.

My invention consists in the features of construction and combinations of parts hereinafter fully described and claimed.

In the accompanying drawings, illustrating my invention, Figure 1 is a longitudinal section of a gas-burner constructed in accordance with my invention. Figs. 2 and 3 are modified forms of construction of the same.

Referring now to said drawings, A indicates a gas-burner of ordinary construction provided, as usual, with a sieve 1 in the lower end of the upper contracted portion of the burner. A valve-seat 2 is mounted, preferably, in the middle portion of said burner, and, as illustrated in Fig. 1, consists of a plug having a base portion 3, adapted to fit tightly in said middle portion of said burner A, and an upper contracted portion 4 of less diameter than said middle portion of said burner. Said plug is provided with a central longitudinal opening 5 and transverse openings 6 in said upper contracted portion 4. A valve 7, provided with a stem 8 of less diameter than said opening 5 and extending into the same, is mounted on said valve-seat 2. Said valve 7 is of less diameter than said sieve 1 and preferably conforms in shape with the same, so that in case of excessive pressure said valve will be forced against said sieve, thus closing the greater portion of the same against the passage of the gas and preventing waste.

In Fig. 2 I have shown a modified construction in which the base portion of said valve-seat 2 is exteriorly screw-threaded to fit with in the lower screw-threaded end of said burner A, and is provided with an interiorly-screw-threaded extension adapted to fit the end of the gas-fixture.

In Fig. 3 I have shown another modifica-

tion in which a metal cap is substituted for said plug. Said cap is provided with a central opening 5, adapted to receive the valve-stem, and a small perforation adjacent said central opening and within the area covered by said valve 7 when at the lower limit of its movement. The central portion of said cap is preferably slightly raised to conform to the shape of said valve 7.

By means of my construction the gas flows uniformly through said burner, as the slightest variation in pressure is automatically controlled. In no case is the gas entirely shut off, as the valve is of less diameter than the sieve and cannot close the same entirely, and, further, said valve and valve-stem are loosely fitted in the valve-seat, thus allowing the passage of gas under the slightest pressure. By means of thus loosely fitting said valve in its seat the same is always free to move and is in no danger of becoming inoperative through corrosion, which was heretofore a very objectionable feature in burners of this description.

A burner constructed as above is also very cheap to manufacture.

I claim as my invention—

1. The combination with a gas-burner provided with a sieve, of a gravity-valve of less diameter than said sieve and conforming in shape with the same adapted to partially close said sieve under excessive pressure, said valve having a stem adapted to loosely fit within an opening in a valve-seat mounted within said gas-burner, substantially as described.

2. In a gas-burner, the combination with a valve-seat consisting of a metal cap securely mounted in the middle portion of said burner below the sieve and having a central opening therein, of a gravity-valve having a stem adapted to enter said opening in said valve-cap; and said sieve situated above said valve-seat and conforming in shape with said valve, said valve being adapted to come into contact with said sieve and partially close the same under excessive pressure, substantially as described.

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

PETER KELLER.

Witnesses:

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