

United States Patent Office.

PETER KELLER, OF NEW YORK, N. Y.

IMPROVED GAS-COCK.

Specification forming part of Letters Patent No. 73,534, dated Junuary 21, 1868.

To all whom it may concern:

Be it known that I, Peter Keller, of New York, in the county and State of New York, have invented a new and useful Improvement in Gas-Cocks; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which drawing—

Figure 1 represents a vertical central section of this invention. Fig. 2 is a horizontal sec-

tion thereof.

Similar letters indicate corresponding parts. This invention consists in the arrangement of a tube with a perforated tip, said tube being fitted into a shell which is adjustable in a chamber or bulb in such a manner that, if the shell is raised, a gas-chamber is formed between the same and the tube, whereby the pressure of the gas flowing to the burners is equalized; and, furthermore, the gas, on emanating from said equalizing-chamber, passes into the bulb, where water or other condensable parts contained in the gas are precipitated, and the gas, on reaching the burners, produces a steady flame.

A represents a hollow bulb, made of brass, iron, or any other suitable material, and provided with two apertures, one exactly opposite the other, as shown in Fig. 1. Both apertures are provided with internal screw-threads—the aperture in the bottom of the bulb to receive the pipe B, and the aperture in the top of the

bulb to receive the pipe or shell C.

The pipe B is screwed up tight to the bulb, and it is provided with a union-joint at its end, so that it can be readily attached to the gasmeter in a building, or to the service-pipe extending from said gas-meter to the burners.

Said pipe B extends up through the aperture in the top of the bulb A, and into the shell C, and its upper end is reduced in thickness, so as to form a shoulder, a, and said upper end or tip is perforated with a large number of apertures, b, as shown.

The pipe or shell C is provided with a long screw-thread, c, so that it can be raised or lowered, and it is bored out in such a manner that when it is screwed down it will fit close to the tip of the pipe B; but when it is screwed out a gas-space, d, is formed above the tip of the pipe B, and an annular escape-channel, e, around said pipe, and between it and the shell C.

From the bulb A extends a pipe, D, which connects with a pipe or pipes leading to the burners, and in the bottom of said bulb is an aperture, which is closed by a plug, f. When the shell C is raised, the gas which enters the pipe B from the gas meter passes up through the apertures b into the gas-space p, whence it escapes through the annular channel e into the bulb A. The gas is thus allowed to expand in the gas-space d, and then it is compelled to pass through the narrow channel e, after which it is again allowed to expand in the bulb A before it passes off to the burners, and by these means the pulsations produced in the current of gas by the action of the gas-meter are counteracted and a steady current is obtained, which produces a uniform and steady flame; and, furthermore, the gas, on being allowed to expand after it passes the narrow channel e, frees itself from water and other condensable parts still contained in it, and the illuminating effect of the gas is increased.

The liquids resulting from the condensation of the impurities are drawn off from the bulb

by means of the plug f.

What I claim as new, and desire to secure

by Letters Patent, is-

1. A gas-cock which, when opened, forms a space, d, and an annular channel, e, substantially as and for the purpose described.

2. The arrangement and combination of the pipe B with a perforated tip, adjustable shell C, and bulb A, substantially as and for the purpose set forth.

Witnesses:

PETER KELLER.

W. HAUFF, GUSTAV BERG.