

(No Model.)

P. KELLER.
GAS BURNER.

No. 528,883.

Patented Nov. 6, 1894.

Fig. 1.

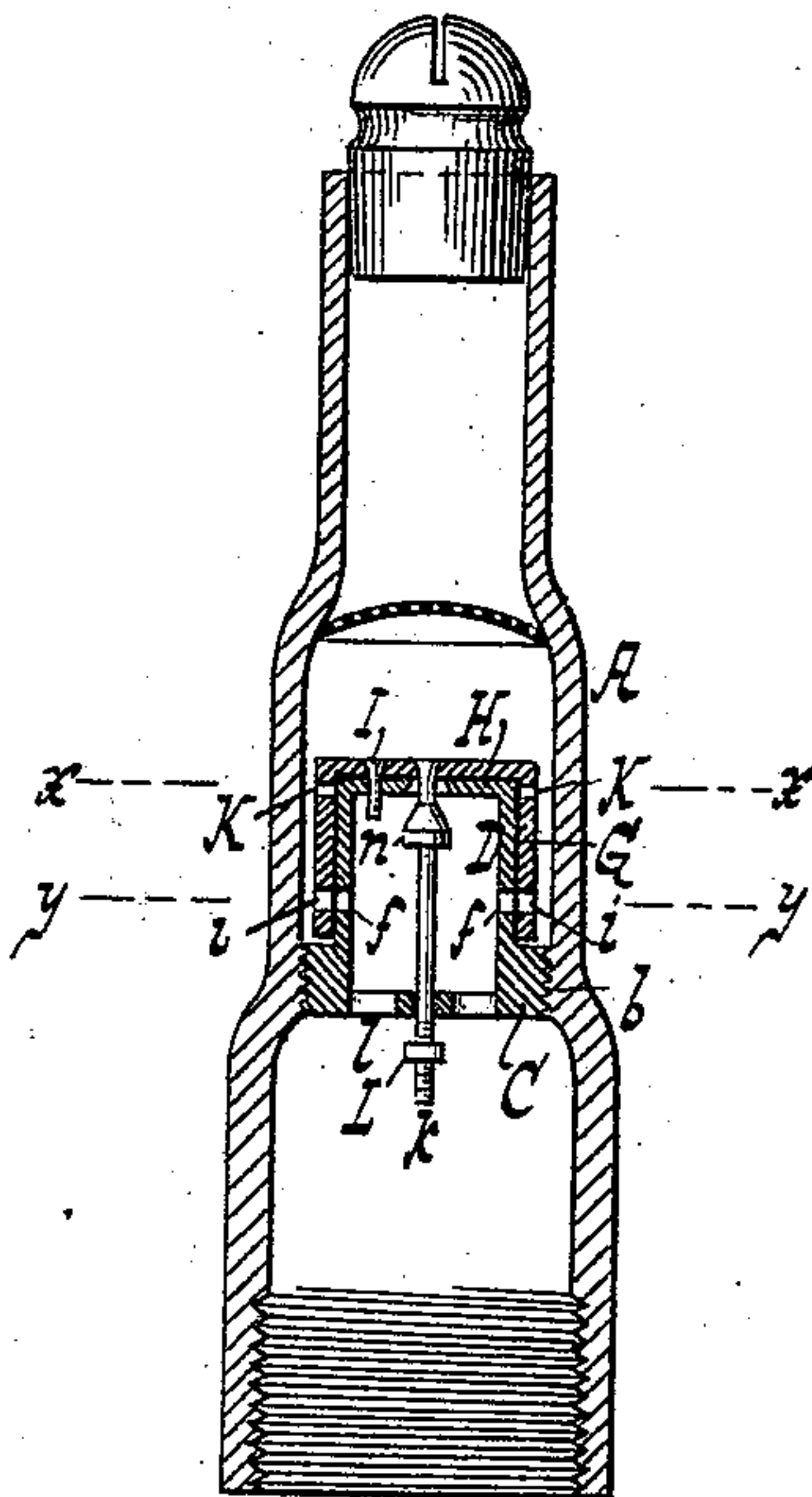


Fig. 3.

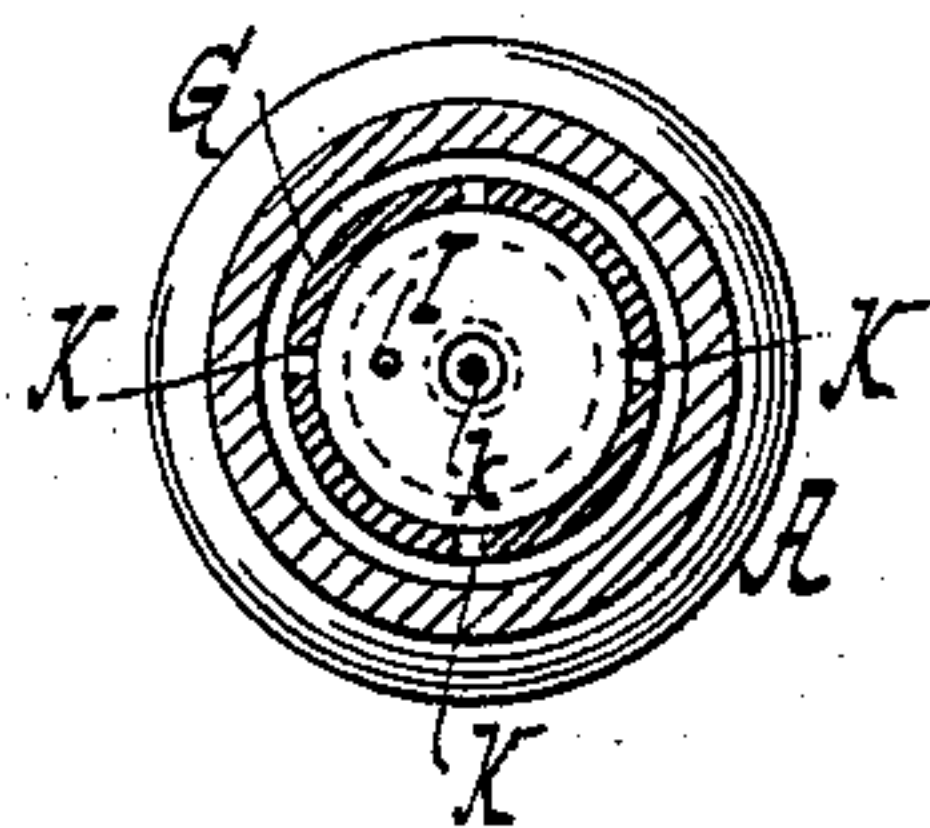


Fig. 4.

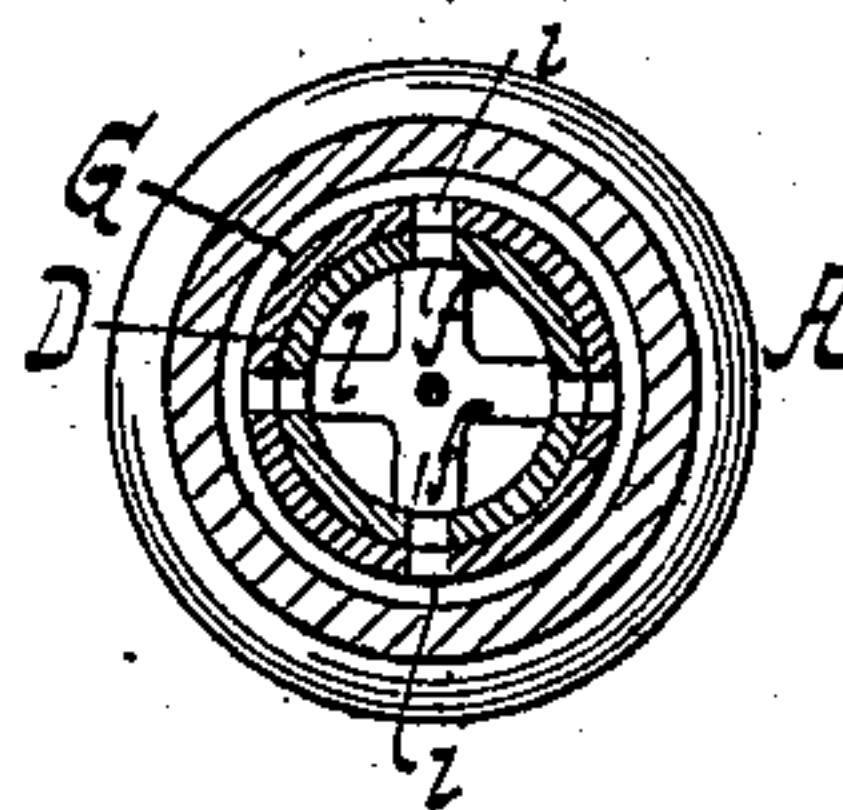
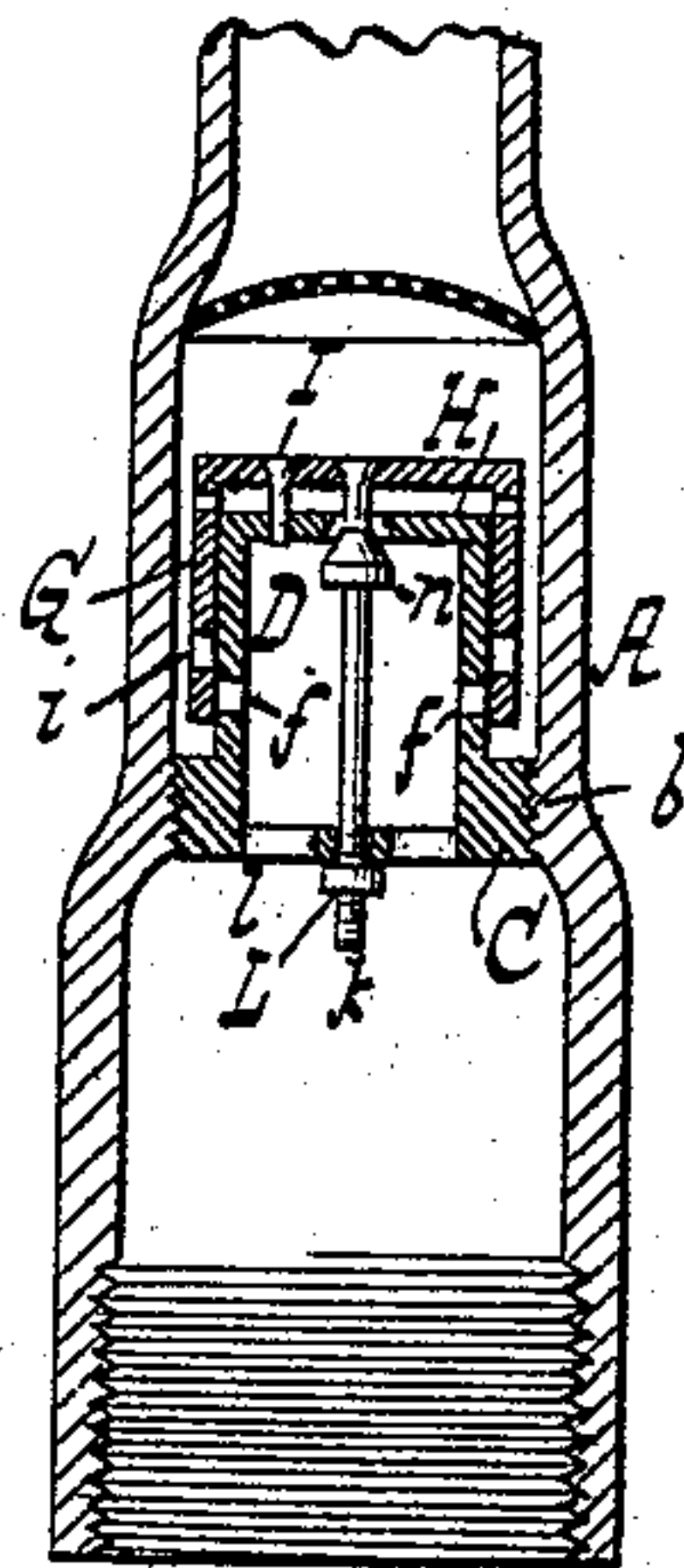


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

PETER KELLER, OF CHICAGO, ILLINOIS.

GAS-BURNER.

SPECIFICATION forming part of Letters Patent No. 528,883, dated November 6, 1894.

Application filed July 19, 1894. Serial No. 518,042. (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 new and useful Improvements in Gas-Burners, of which the following is a specification.

This invention relates to an improvement in gas regulators, the invention residing in the novel features of construction set forth in the following specification and claim and illustrated in the annexed drawings, in which—

Figure 1 is a sectional side elevation of the regulator. Fig. 2 is a view similar to Fig. 1 with parts in a different position than in Fig. 1. Fig. 3 is a section along *x x* Fig. 1. Fig. 4 is a section along *y y* Fig. 1.

The letter A indicates the shell of a burner having a tip and a lower screw thread as well known for attachment to a gas pipe or meter. The shell is provided with an internal screw thread *b* to which is fitted a screw ring C having cast or otherwise formed thereon a nozzle comprising the side D and top H. In the side of the nozzle between its upper and lower edges are formed holes *f*.

The valve G is of inverted cup shape and is fitted on the nozzle D and provided with openings *i* in its side. Under normal conditions the valve G rests on the ring C and its openings *i* are situated opposite to the holes *f* of the nozzle D, so that the gas admitted to the nozzle can escape freely in an upward direction, while when the pressure of the gas rises to a sufficient degree to raise the valve the openings *i* are brought above the escape holes *f*, and the latter are partially closed by the valve.

The valve G is weighted to resist the upward pressure of the gas, and it is guided in its vertical movement by a stem *k* passing through a bridge *l* cast to the ring C. The valve is provided with a secondary valve *n* on stem *k*, which secondary valve when the main valve G has risen will partly close the opening or seat for valve *n* formed in the nozzle top H.

The upward movement of the main valve G is determined by a stop L adapted to strike the bridge *l*.

The main valve G has a stem or guide I sliding in a hole in the nozzle top H and which stem prevents rotation of valve G so that the openings *i* will not come into improper position relatively to the openings *f*.

The gas which flows through the openings in the top H into valve G can escape from said valve through openings K in the upper part of valve G.

What I claim as new, and desire to secure by Letters Patent, is—

The combination of a shell having an internal screw-thread, a screw ring adapted to said thread and formed with the upwardly projecting nozzle having a side and a top, and gas escape holes in said side and top, the inverted cup-shaped valve fitted on the nozzle and provided with openings situated opposite to the gas escape holes in the side of the nozzle under normal conditions and which are brought above said holes when the valve is raised by the pressure of the gas, a stem for said cup-shaped valve, a bridge L secured to the screw ring for guiding the stem and a second valve carried by the stem for partly closing the nozzle top, said cup-shaped valve having a guide stem engaging the nozzle for preventing rotation of said cup-shaped valve, the parts being so proportioned that when the cup-shaped valve is raised to close the openings in the side of the nozzle the upper openings in the cup-shaped valve are uncovered to permit the escape of the gas, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

PETER KELLER.

Witnesses:

WM. C. HAUFF,
E. F. KASTENHUBER.