

J. ELLIS.
Gas-Burners.

No. 151,369.

Patented May 26, 1874.

FIG. 1.

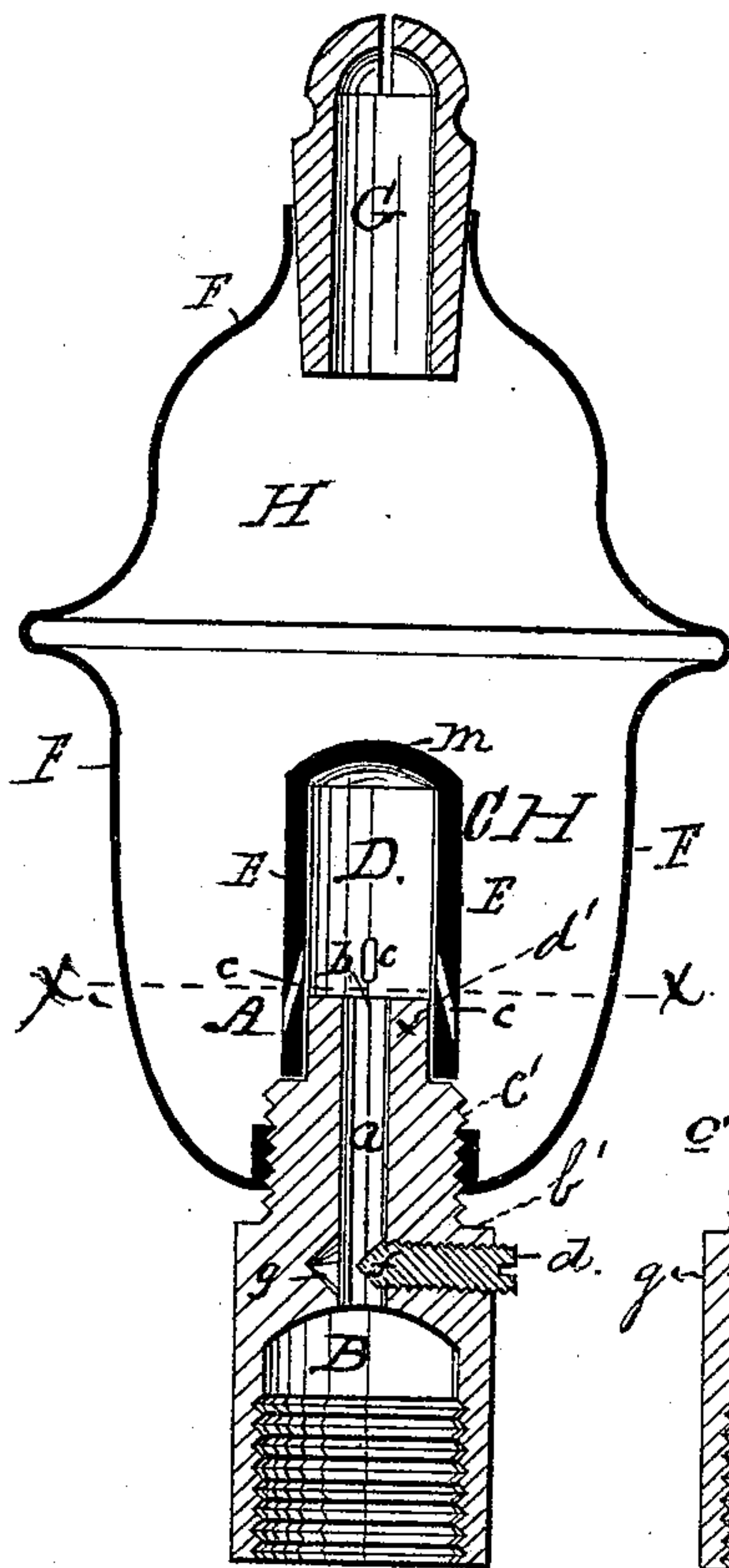


FIG. 3.

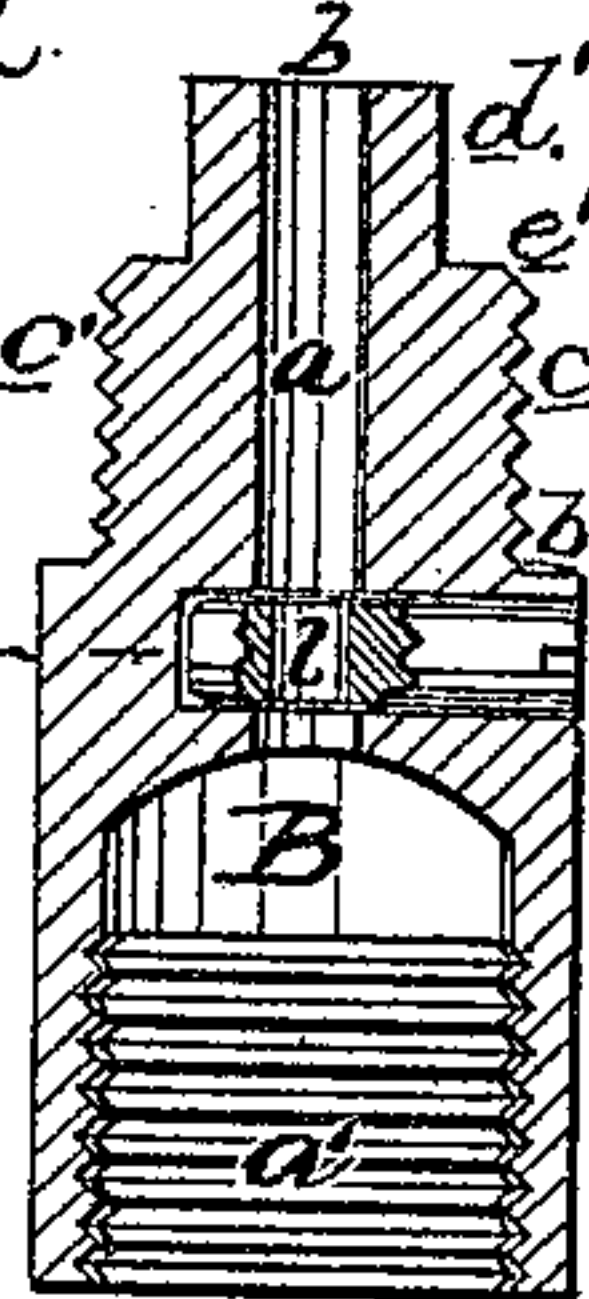
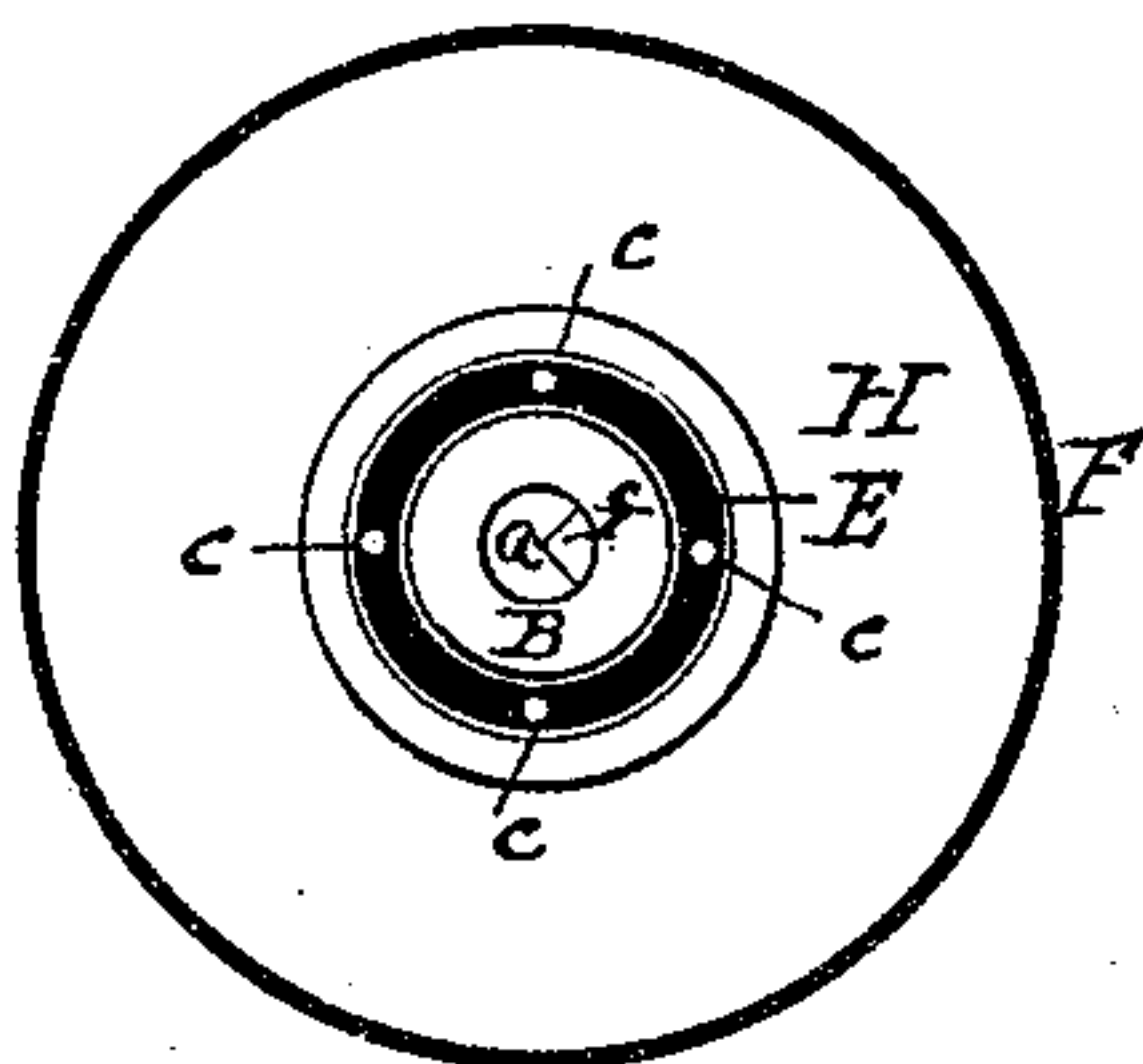


FIG. 2.



WITNESSES.
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UNITED STATES PATENT OFFICE.

JOHN ELLIS, OF LYNN, MASSACHUSETTS.

IMPROVEMENT IN GAS-BURNERS.

Specification forming part of Letters Patent No. **151,369**, dated May 26, 1874; application filed April 27, 1874.

To all whom it may concern:

Be it known that I, JOHN ELLIS, of Lynn, in the county of Essex, State of Massachusetts, have invented certain Improvements in Gas-Burners, of which the following is a specification:

This invention relates to certain improvements in gas-burners which are provided with a cap forming a chamber over the orifice in the burner, said cap having apertures in it to make a communication from the chamber to another chamber on the outside of the latter, through and from which chamber the gas passes directly to the burner. This invention consists in providing the burner-base with an internal screw-threaded socket at its lower end for attaching it to the gas-pipe, and with a screw-threaded shank and a shoulder near its upper end for supporting the casing which forms the outer chamber, and with a shouldered upper end for supporting the inner chamber, said burner-base being also provided with a transverse regulating-plug for cutting off the flow of gas, said screw and its seat being so constructed that the screw can be made to pass into its seat, so as to be flush with the external surface of the lower portion of the burner-base, whereby the ring or collar of a lamp-shade can be made to pass over such screw, which could not be effected if the ordinary stop-cock was employed, all of which will be fully hereinafter described.

In the drawings, Figure 1 represents a vertical central section with the parts in position; Fig. 2, a cross section on the line *xx* of Fig. 1, and Fig. 3 a vertical section of the burner-base constructed according to my invention.

The burner-base B is provided with an internally screw-threaded socket, *a'*, for attaching it to the gas-pipe, and with a shoulder, *b'*, and screw-threaded shank *c'* near its upper end, for receiving and supporting the casing F, which forms the outer chamber. The upper end of the burner-base B is provided with a reduced portion or stem, *d*, and a shoulder, *e'*, for receiving and supporting the cap

C, which forms the inner chamber. A screw-plug, *d*, passes transversely through the burner-base for cutting off the passage of the gas through the vertical passage *a*, formed in the burner-base. This plug may be either a screw-plug, as above mentioned, to cut off the flow of gas by screwing it in or out, or it may be a plane plug having a passage, *l*, near its inner end in line with the passage *a* in the burner-base, and by turning the plug half a revolution the opening through it will be out of coincidence with the passage *a*, and thus cut off the flow of gas. The gas in its passage from the gas-pipe passes up and through the orifice *a* into the chamber D, where it impinges against the under side of the top *m* of the cap C, and, being deflected downward, passes through inclined apertures *c* in the wall of the cap *c*, when it enters the chamber H and passes to the burner-tip G.

It will be noticed that the transverse plug *d*, when in position to cut off the flow of gas, is perfectly flush with the outside surface of the burner-base, whereby no obstruction is offered to the free passage of a ring or collar of a lamp-shade down over the burner-base, for resting upon the usual ring for supporting such shades, which will be located as usual at the bottom of the burner-base.

I claim—

The burner-base B of a gas-burner, constructed with the stem *d'*, screw-thread *c'*, and shoulder *b'*, for receiving, respectively, the cap C and casing F, and provided with the transverse plug *d*, adapted to be forced within its seat to bring its head flush with the external surface of the burner-base, for the passage of the ring of a lamp-shade, all combined as herein shown, for the purposes specified.

The above specification of my invention signed by me this 11th day of April, A. D. 1874.

JOHN ELLIS.

Witnesses:

EDWIN W. BROWN,
GEO. H. EARL.