

H. B. STILLMAN.
Gas-Burner.

No. 215,546.

Patented May 20, 1879.

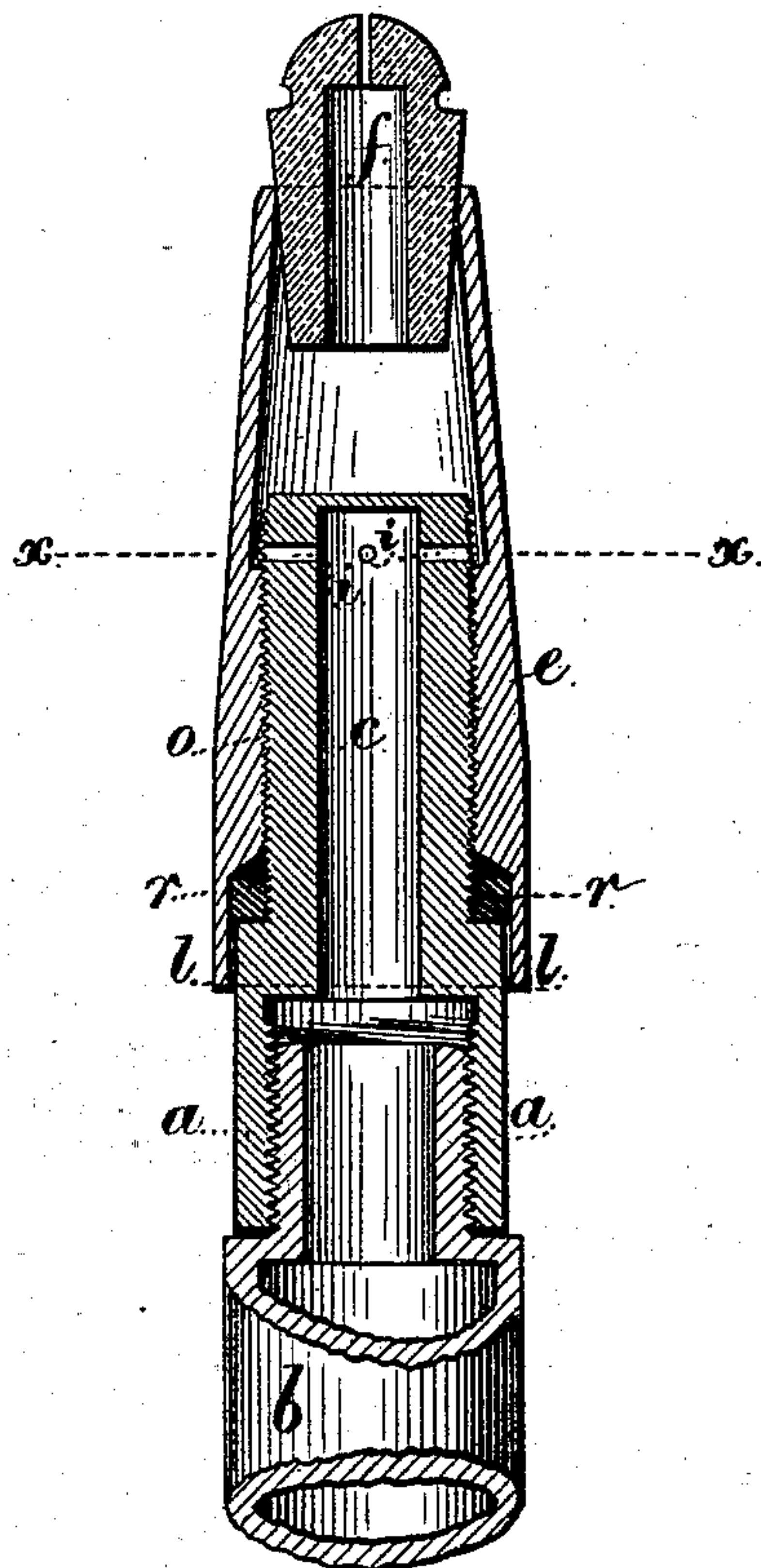


Fig. 1.

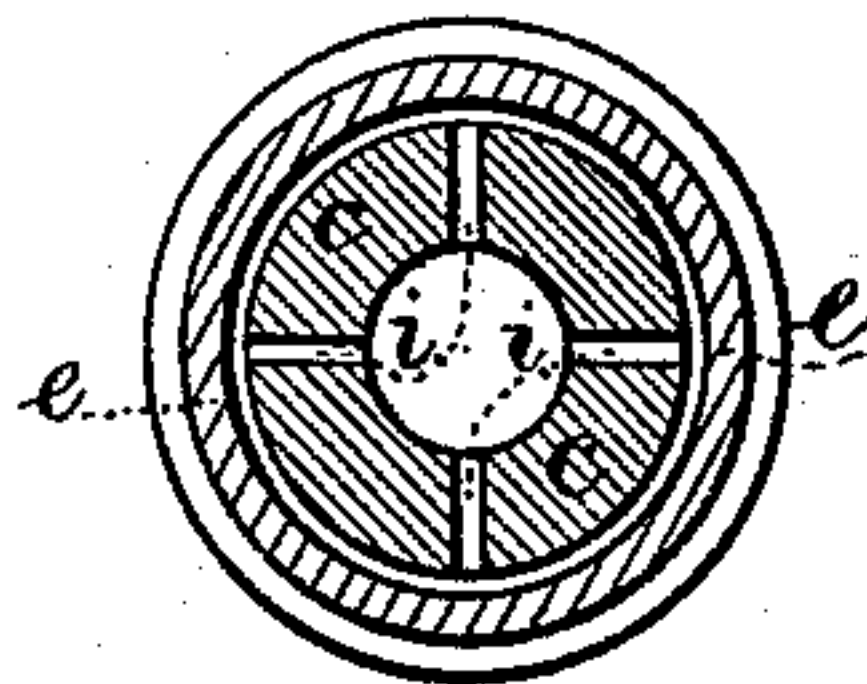


Fig. 2.

Witnesses:
Harold Terrell
Geo. F. Pinckney

Inventor
Henry B. Stillman.
per Lemuel W. Terrell
att'y.

UNITED STATES PATENT OFFICE.

HENRY B. STILLMAN, OF NEW YORK, N. Y.

IMPROVEMENT IN GAS-BURNERS.

Specification forming part of Letters Patent No. 215,546, dated May 20, 1879; application filed March 20, 1879.

To all whom it may concern:

Be it known that I, HENRY B. STILLMAN, of the city and State of New York, have invented an Improvement in Gas-Burners, of which the following is a specification.

Gas-burners have been made with a tubular stem to the Scotch tip, such stem having a screw upon the outside and passing into a base, and having lateral openings adapted to be closed, more or less, by screwing the stem up or down. In this instance the screw-stem is objectionable in appearance. It becomes hot when the jet is burning, and there is but a small tube for passing the gas to the burner.

My invention is for regulating the flow of gas to the burner, for providing an expansion or equalizing chamber for the gas that issues from the lateral apertures, for covering up the adjusting-screw for preventing leakage of the gas, and for allowing the burner to be adjusted while in use, so as to regulate the size of the flame.

In the drawings, Figure 1 is a vertical section of the burner in an enlarged size, and Fig. 2 is a sectional plan at the line *x x*.

The coupling or socket *a*, to screw upon the gas-pipe *b*, is of any usual character, and upon this is a cylinder *c*, having a fine screw-thread upon its exterior surface, a closed upper end, and lateral holes *i i* for the escape of gas. The sleeve *e* is provided with the tip *f* at the upper end, having a slit or holes for gas to escape and burn. Such sleeve has an internal screw-thread at *o*, to fit upon the cylinder *c*, and a plain cylindrical skirt at *l*, to surround the outside of the socket *a*. There is a ring, *r*, of leather or other suitable material, at the base of the screw-cylinder *c*, and resting upon the top of the socket-piece *a*, and this is of a size

to form a gas-tight packing against the inside of the skirt *l*.

It will now be evident that the gas will issue from the holes *i* into the equalizing-chamber within the sleeve *e* and pass up to the burner. By screwing the sleeve up or down, the screw portion thereof will cover the holes *i* more or less, and so regulate the escape of gas; and this sleeve, extending down around the socket-piece *a*, will not become highly heated, and hence the sleeve can be moved while the gas is burning, so as to regulate the size of the flame.

Furthermore, the screw portions of the burner are covered and protected from dirt or injury; and the packing *r* renders the parts gas-tight, so that leakage is prevented.

The sleeve *e* is slightly enlarged above the upper end of the internal screw, and forms an expansion or equalizing chamber for the gas between the upper end of *e* and the burner *f*, so that the gas issues in a steady jet.

I claim as my invention—

1. The sleeve *e*, having an internal screw-thread and a skirt, *l*, in combination with the cylinder *c*, with its external screw-thread and the holes *i*, the socket *a*, and the tip *f*, substantially as set forth.

2. The combination of the packing-ring *r* with the perforated screw-cylinder *c*, socket *a*, sleeve *e*, skirt *l*, and burner *f*, substantially as and for the purposes set forth.

Signed by me this 17th day of March, A. D. 1879.

HENRY B. STILLMAN.

Witnesses:

HAROLD SERRELL,
GEO. T. PINCKNEY.