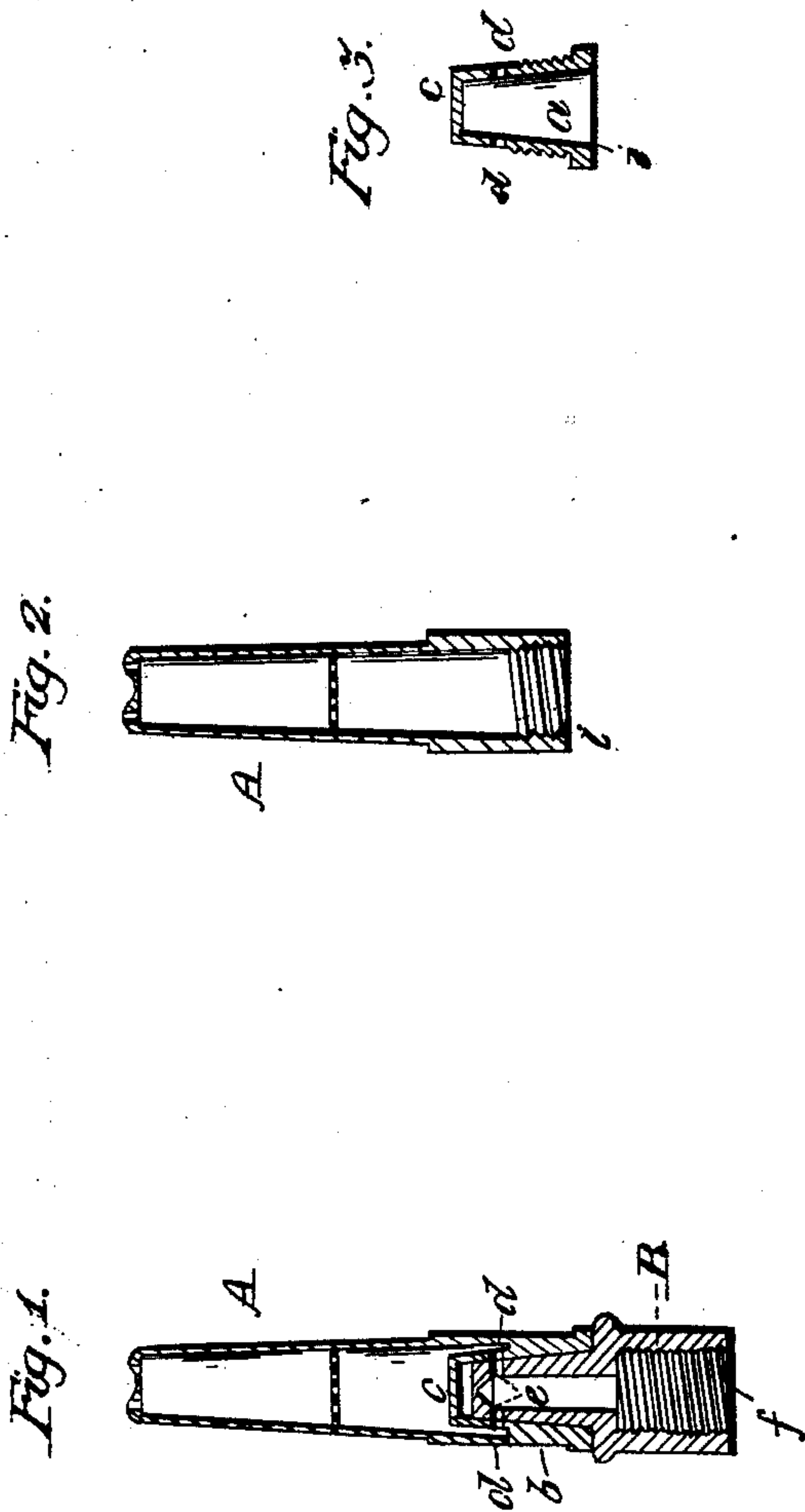


J. S. FORD.
Gas-Burner Regulator.

No. 69,556.

Patented Oct. 8, 1867.



Witnesses:
F. S. Haffa.
George P. Weaver.

Inventor:
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Attorney

UNITED STATES PATENT OFFICE.

JOSEPH S. FORD, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN GAS-BURNERS.

Specification forming part of Letters Patent No. 69,556, dated October 8, 1867.

To all whom it may concern:

Be it known that I, JOSEPH S. FORD, of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Regulating Gas-Burners; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in a combined key and gas-burner, in combination with the base of the burner in such a manner that the flow of gas is regulated by turning the burner partly around, so as to turn the gas from the pipe (more or less) on the burner, to give the requisite flow of the same, as will be understood by the following description.

In the accompanying drawings, Figure 1 is a vertical section of the improved burner A, in connection with its base B. Figs. 1 and 2 are like views of the combined key and burner, in two parts, for the purpose of conveniently constructing the same.

A is the burner, whose socket *a* fits on the hollow pillar *b* of the base B. Through the inner projection, *c*, of the burner, as seen in Figs. 1 and 3, there are openings *d d*, which are made to communicate with the openings *e e* of the pillar *a* of the base B for regulating the flow of gas from the pipe with which the latter is connected, by means of the female screw *f*, to the burner. In Fig. 1 these openings are shown in full connection with each other.

The operation is as follows: When the maximum flow of gas to be burned is desired, the burner is turned by means of the thumb and finger so as to bring the openings *d d* in the

key part 1 of the burner into full connection with the openings *e e* of the hollow pillar *b*, which position is ascertained by turning on the full flow of gas through the ordinary stop-cock and applying a match; but when it is desired to burn a less amount of gas, the burner B is so turned that the openings *d d* shall overlap the openings *e e*, so as to only allow the desired flow. Then the burner is left set, and the maximum amount of gas consumed or light given is determined. Any less amount of either is varied by the adjustment of the ordinary stop-cock in lighting the gas.

The combined key and burner need only to be in a single piece, as represented in Fig. 1, so far as its operation is concerned; but for the purpose of conveniently constructing the device, I usually construct it in two pieces, 1 2, as represented in Figs. 2 and 3, and screw them together permanently.

I do not claim broadly a key with vent-holes which coincide with holes in the supply-pipe, as this feature exists in the patent of Edward Jones, dated October 3, 1865; but

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

The combination of the key *a* and burner A, with the cone *b* of the base B, with vent-holes *d d*, substantially in the manner described, and for the purpose specified.

In testimony whereof I have hereunto set my hand and affixed my seal this 31st day of January, 1867.

JOS. S. FORD. [L. S.]

Witnesses:

STEPHEN USTICK,
JOHN WHITE.