

E. P. Gleason.

Burner for Heating Gas &c.

Nº 72188

Patented Dec. 17, 1867.

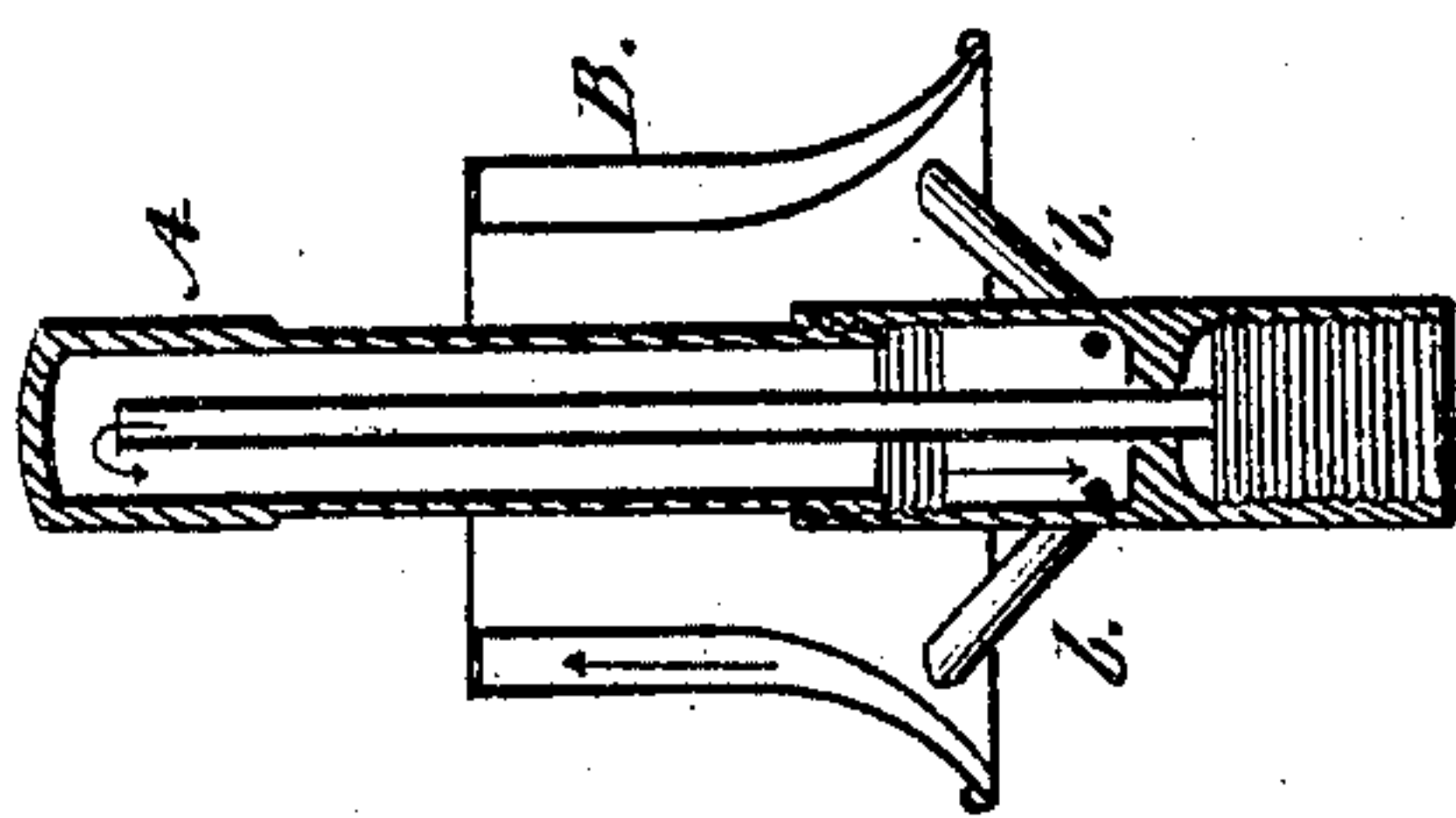


Fig. 2.

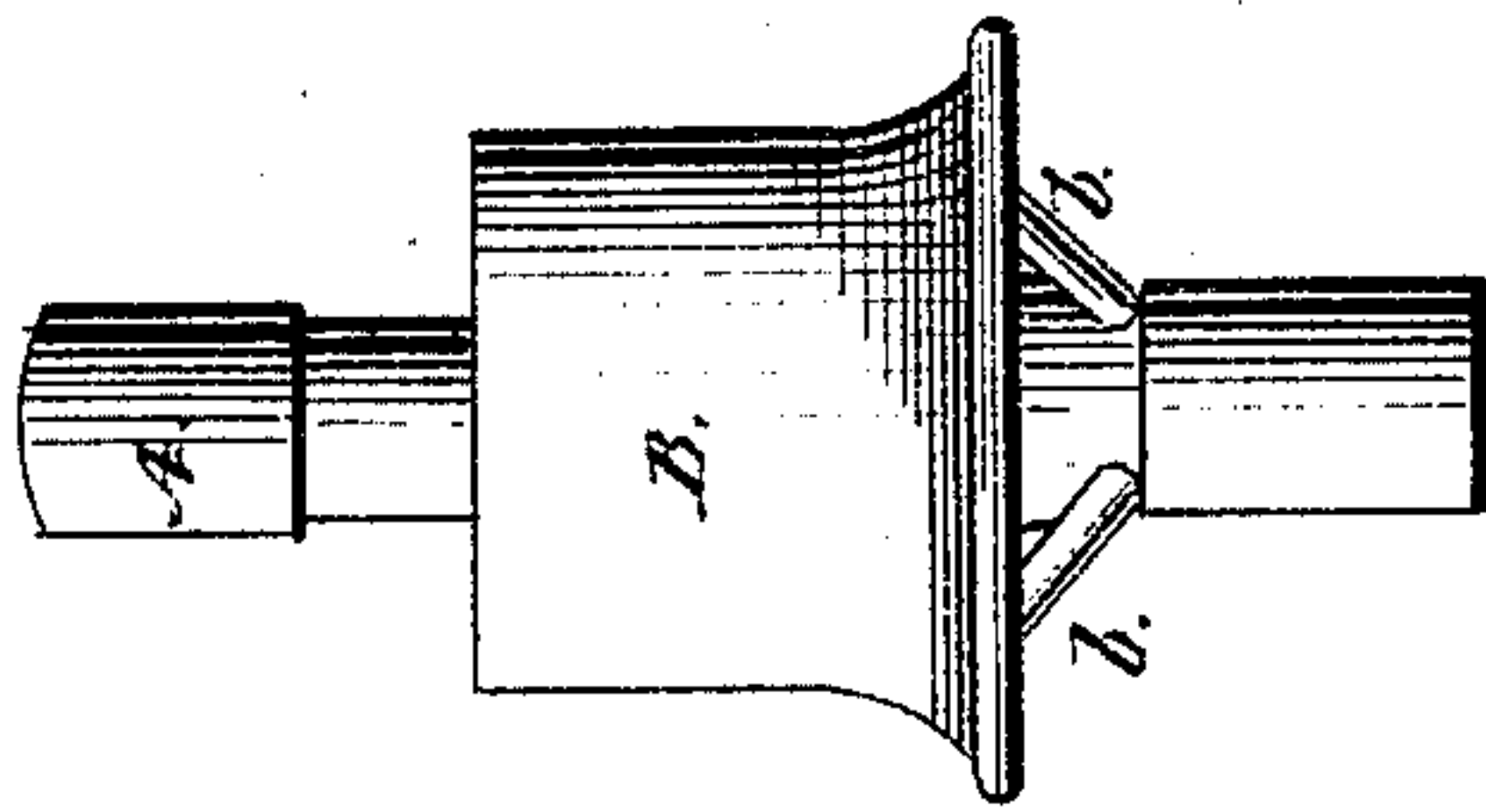


Fig. 1.

Witnesses;
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United States Patent Office.

ELLIOTT P. GLEASON, OF NEW YORK, N. Y.

Letters Patent No. 72,188, dated December 17, 1867.

IMPROVED BURNER FOR HEATING GAS, &c.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, ELLIOTT P. GLEASON, of the city, county, and State of New York, have invented, made, and applied to use certain Improvements in the Construction and Operation of Burners for Heating and Rarefying Gas; and I do declare the following to be a full, clear, and correct description of my invention, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, in which—

Figure 1 is a front view of my improved burner.

Figure 2, a sectional view of the same.

In the drawings, like parts of the invention are indicated by the same letters of reference.

The nature of my invention consists in certain improvements, as more fully hereinafter set forth, in the construction and operation of burners for heating and rarefying gas.

To enable those skilled in the arts to make and use my invention, I will proceed to describe the construction and operation of the same.

The present invention has reference to that class of burners in which the gas supplied to the flame is formed from naphtha, benzine, or any similar fluid introduced into the burner, or that portion of it which is termed the retort, which is heated sufficiently to cause the gas to be generated from the fluid therein introduced by heat from the flame of the burner.

A shows an outer tube, communicating by means of the arms *b* to the burner B, which burner is formed of circular plates of metal, having the space between them left open to form a chamber for the reception of the gas, while the upper end or top of said burner is provided with a series of small openings near its outer edge, to allow the gas to be supplied to the flame. Within this tube, about centrally, is placed a smaller and shorter tube, C, in which tube the gas is generated from naphtha, benzine, or any suitable fluid introduced into the same. The tube C is made so much smaller than the outer tube that when placed in position a space shall be left between its outer edge and the inner edge of the tube A, and also between its upper edge and the upper edge of the tube A, which latter is capped or closed.

Such being the construction of my improved burner, the operation may be thus described:

The naphtha, benzine, or similar fluid may be applied to the interior tube C in any convenient manner, entering the same at its lower end. An alcohol torch lighted may then be applied beneath the bottom of the burner, and kept there until the naphtha, benzine, or similar fluid introduced into the tube C be sufficiently heated to supply gas to the flame. The gas thus generated passes up the tube C, and down the space or chamber formed between the outer and inner tubes, and through the arms *b* to the chamber of the burner, from which it is supplied to the flame. The flame heats the outer tube, A, sufficiently to cause gas to be generated from the naphtha, benzine, or other similar fluid introduced into the inner tube, C.

The principal advantages which my invention will be found to present over the many burners of its class in the market, are the simplicity of its construction, its non-liability to get out of order, and the fact that a more thorough and perfect combustion of the gas is effected.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The use or employment of the tube C, within the tube A, in combination with the burner B, when the same shall be combined, constructed, and operated substantially as shown, for the purposes set forth.

ELLIOTT P. GLEASON.

Witnesses:

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