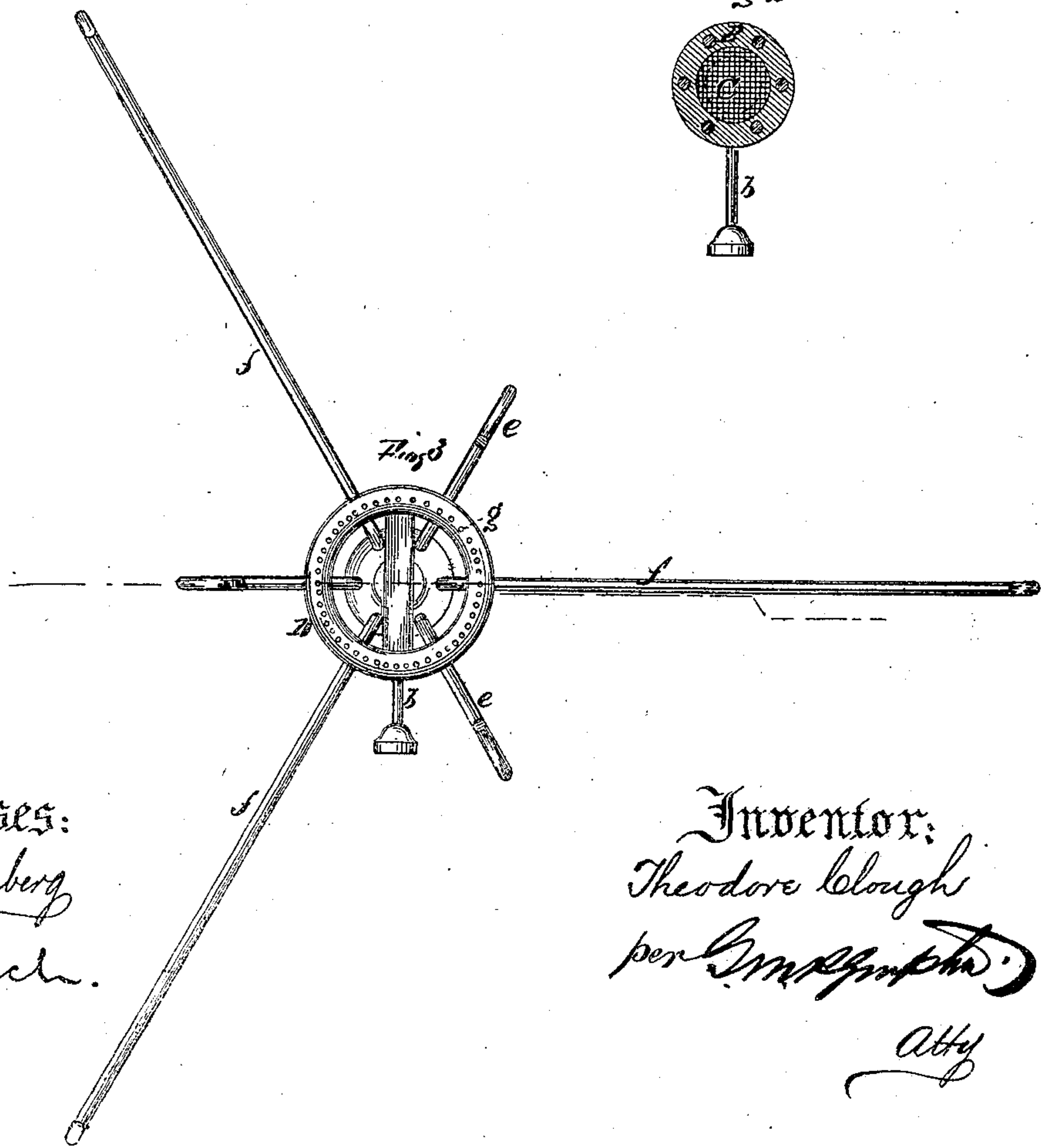
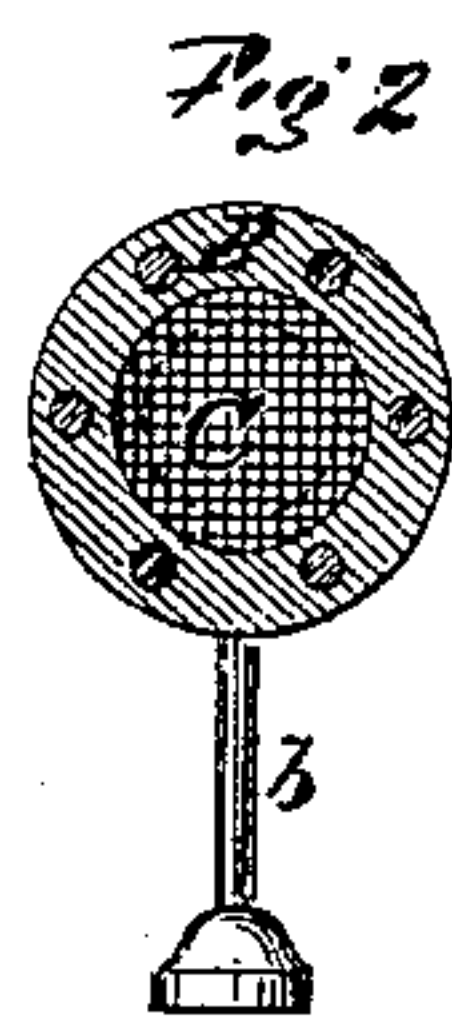
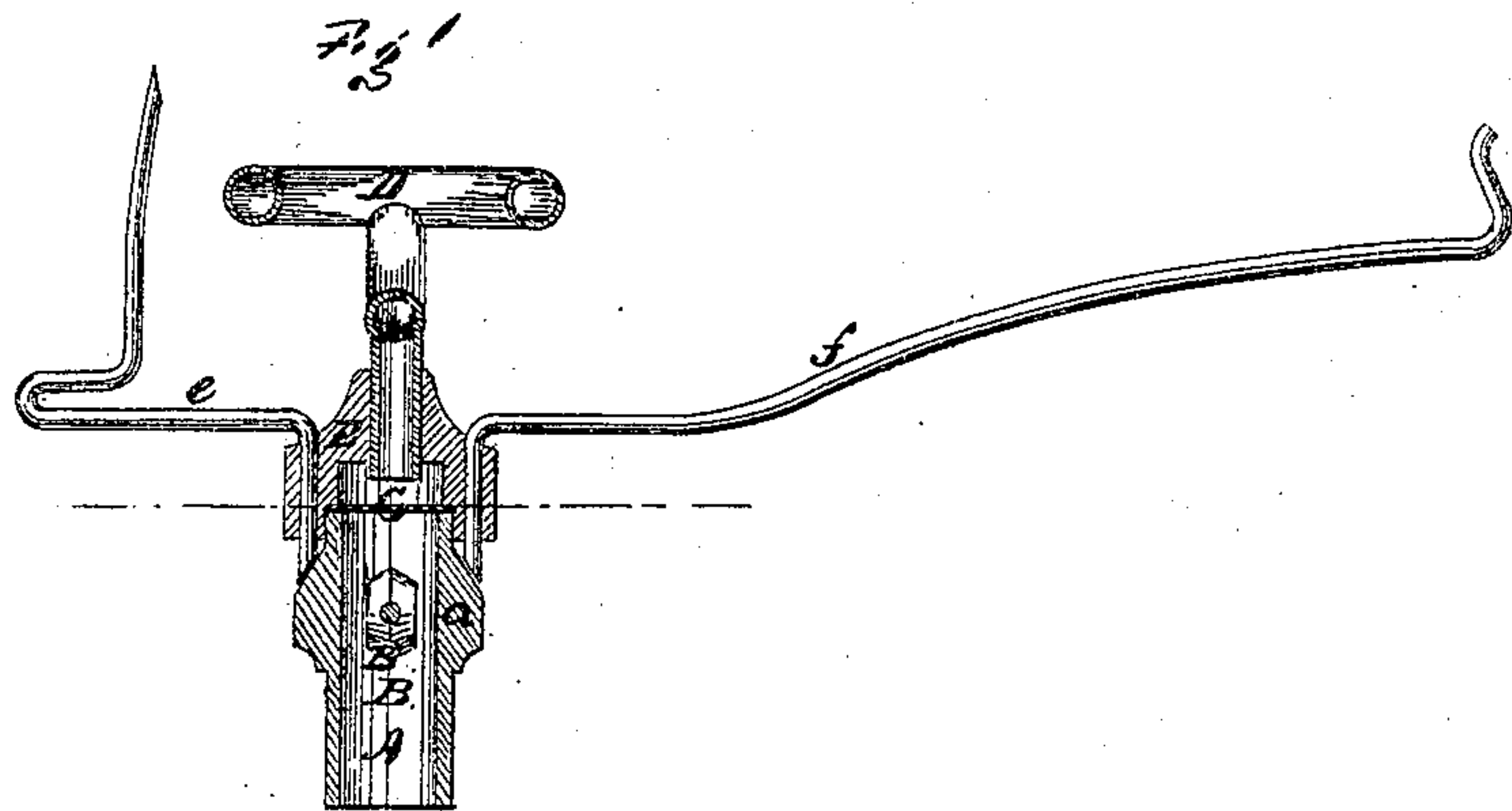


T. CLOUGH.
Argand Gas Burners.

No. 138,858.

Patented May 13, 1873.



Witnesses:
H. L. Mattenberq
A. T. Welch.

Inventor:
Theodore Clough
per *G. M. Smith*
Atty

UNITED STATES PATENT OFFICE.

THEODORE CLOUGH, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF, ALONZO T. WELCH, HENRY IDEN, AND LORING P. HAWES, OF SAME PLACE.

IMPROVEMENT IN ARGAND GAS-BURNERS.

Specification forming part of Letters Patent No. 138,858, dated May 13, 1873; application filed December 18, 1872.

To all whom it may concern:

Be it known that I, THEODORE CLOUGH, of the city, county, and State of New York, have invented a new and Improved Argand Burner; and that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

This invention consists of a ring Argand burner provided with a valve having a double-beveled periphery and mounted on a shaft, so that when said valve is turned at an angle within the burner its beveled edges fit snugly against the walls of the burner, thereby serving to regulate the flow of gas, and the valve is made of a slightly-greater diameter than the interior of the burner, so that it cannot be turned completely around within it, but is held in a vertical plane or at an angle, according to the amount of gas it is desired to use. The invention also consists of a ring Argand burner having a valve with a double-beveled periphery, a strainer, and chimney, and shade-holders, as hereinafter described, as a new article of manufacture.

In the accompanying drawing, Figure 1 is a longitudinal section of my burner; Fig. 2, a transverse section of same; and Fig. 3, a plan or top view of same.

Similar letters of reference indicate like parts in the several figures.

A represents the stem of my burner, upon which is formed a collar, *a*, beveled at its upper side. Within the stem A is fitted a throttle-valve, B, with beveled edges. Through the stem and valve passes a shaft, *b*, the valve being secured to the shaft in such manner as will enable said valve to be turned readily in either direction by turning the shaft *b* or that part of said shaft that projects from said stem. Within the stem, near its upper end, is secured a fine wire-gauze, C, and fitting into the top of said stem is the Argand burner proper D. Near the top of the stem A is tightly affixed a collar, E, having holes drilled therein, through which pass the chimney-supports *e* and shade-supports *f*. These supports are formed of any suitable spring wire, and the ends of that portion which passes through

the collar E are beveled, so that they fit snugly against the bevel of the collar *a*.

My burner being constructed substantially as above described, its operation is as follows: Gas is admitted through the lower end of the stem A, and its volume is checked by turning more or less the throttle-valve B. This throttle-valve may be turned so as to admit any quantity of gas, either from the full volume, or the volume may be reduced to the lowest possible supply which will support combustion—i. e., a blue light. The volume of gas being thus regulated by the action of the throttle-valve B, its velocity is checked as it passes through the burner by the fine wire-gauze C, which strains, as it were, the gas before admitting it for consumption, the result being that the gas, by the time it has passed the obstruction offered by the throttle-valve B and the wire-gauze C, issues from the perforations *g* with such reduced volume and force as to burn without "blowing" or noise of any kind.

As above stated, the chimney-supports *e* and the shade-supports *f* pass through holes drilled in the collar E for that purpose, and the ends so passing through are beveled to fit the bevel on the collar *a*. This method of securing these supports not only holds them securely in position, but the bevel on their ends, before referred to, prevents their turning out of position, so that they will always be permanently fixed to the burner.

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

1. The valve having a double-beveled periphery and mounted on a shaft, *b*, in combination with a ring Argand burner, substantially as and for the purpose herein described.

2. As a new article of manufacture, a ring Argand burner having a valve with a double-beveled periphery mounted on a shaft, a strainer, and chimney and shade holders, as described.

THEODORE CLOUGH.

Witnesses:

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