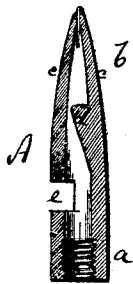


F. GOULD.  
Vapor Burner.

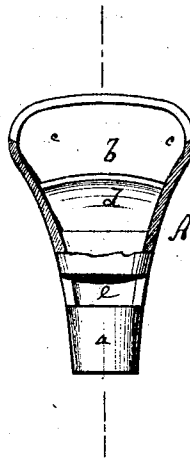
No. 102,251.

Patented April 26, 1870.

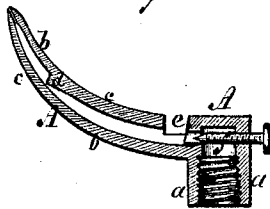
*Fig: 1.*



*Fig: 2.*



*Fig: 3.*



Witnesses:

*Edgar Tate*  
*John Brooks*

Inventor:

*F. Gould.*  
PER *Munn & Co.*  
Attorneys.

# UNITED STATES PATENT OFFICE.

FRANKLIN GOULD, OF PATERSON, NEW JERSEY, ASSIGNOR TO HIMSELF  
AND WM. C. GOULD, OF ST. LOUIS, MISSOURI.

## IMPROVEMENT IN VAPOR-BURNERS.

Specification forming part of Letters Patent No. **102,251**, dated April 23, 1870.

*To all whom it may concern:*

Be it known that I, FRANKLIN GOULD, of Paterson, in the county of Passaic and State of New Jersey, have invented a new and Improved Gasoline-Burner; and I do hereby declare that the following is full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification in which—

Figure 1 represents a vertical transverse section of our improved burner. Fig. 2 is a side view, partly in section, of the same. Fig. 3 is a transverse section of a modified form of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to that class of burners intended to produce their own gas from some hydrocarbon located in suitable proximity thereto.

I do not profess to have applied any principle to burners which was not known in connection with them heretofore, but rather to have brought together into a single burner certain features of construction, and placed them in such relation to each other as to form an improved whole or article of manufacture.

A in the drawings represents the burner. It consists of a tubular lower part or shank, *a*, and of a flattened broader upper part or burner proper, *b b*. The gas enters the shank from a suitable reservoir, and ascends into the flat upper part, which is slotted along its entire outer or upper edge, so that the flame will extend along such entire edge.

On the inner side of one of the two cheeks of the burner proper is secured or formed a projecting rib, *d*, which causes the gas to be spread and properly distributed to the entire width of the burner. The flame is produced immediately above the rib *d*, and heats the cheeks to such an extent that their heat will produce gas from the liquid in the reservoir. The flame in the upper part of the burner will furthermore be so intense as to consume any products of combustion that may be formed in the same. Air is admitted to the burner through an aperture, *e*, below the rib.

The burner may be straight, as in Fig. 1 and 2, or it may be curved or angular, as indicated in Fig. 3, or of any other suitable form. The angular form is most convenient for the application of a screw, *f*, which closes the entrance to the burner proper, and by which the amount of gas consumed may be regulated at will.

As this burner consumes the entire combustible matter contained in the gas, it will produce a more brilliant flame, and use less gas proportionately than the ordinary burners now in use.

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

The improved burner A, combining the supply-tube *a*, adjustable valve *f*, air-inlet *e*, flattened top *b b*, and rib *d*, each constructed and relatively located, essentially as and for the purpose described.

FRANKLIN GOULD.

Witnesses:

C. H. ADAMS,  
H. B. ADAMS.