

C. H. HINDS.

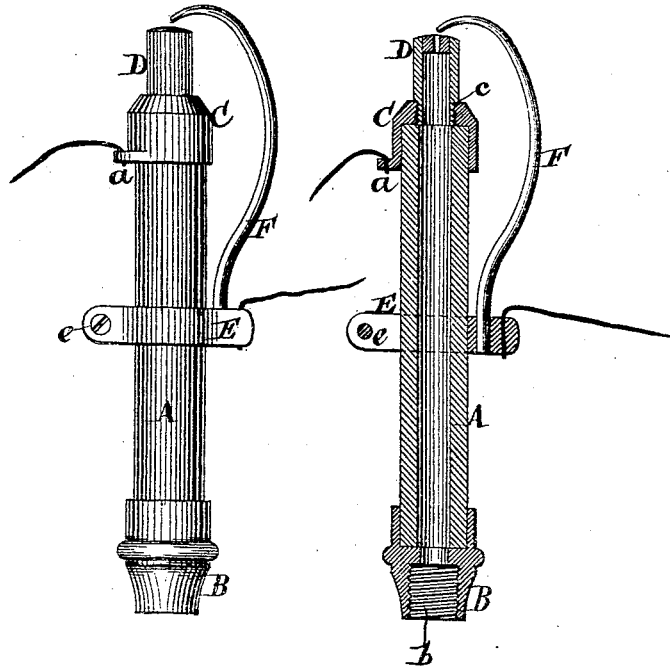
GAS-BURNER.

No. 184,620.

Patented Nov. 21, 1876.

Fig. 1.

Fig. 2.



Witnesses.

Geo. Miller.  
Chas. Wahlen.

Inventor.

Charles H Hinds  
by Vansantwood & Hauff  
his attys.

# UNITED STATES PATENT OFFICE.

CHARLES H. HINDS, OF NEW YORK, N. Y.

## IMPROVEMENT IN GAS-BURNERS.

Specification forming part of Letters Patent No. **184,620**, dated November 21, 1876; application filed August 26, 1876.

*To all whom it may concern:*

Be it known that I, CHARLES H. HINDS, of the city, county, and State of New York, have invented a new and useful Improvement in Gas-Burners, which invention is fully set forth in the following specification, reference being had to the accompanying drawing, in which—

Figure 1 represents a side view. Fig. 2 is a longitudinal central section.

Similar letters indicate corresponding parts.

This invention consists in a gas-burner composed of a body of asbestos, or of a compound in which asbestos is the principal ingredient, and of two caps, which are secured to the ends of said body, and one of which is provided with a screw-socket to fit the gas-pipe, while the other has a screw-socket to receive the burner-tip.

In the drawing, the letter A designates the body of my gas-burner, which is made of asbestos, or of a compound of which asbestos forms the principal ingredient, the asbestos being, by preference, reduced to a pulpy state and mixed with a suitable cement and water, so as to form a pasty mass which can be readily brought in the required shape by suitable molds. If desired, other suitable materials may be added to the asbestos, such as silicate of soda; but in all cases care must be taken to select substances which are non-conductors of heat and of electricity. With this body A are combined two caps, B C, which are made of brass or other suitable metal, and which are connected to the body A by a suitable cement, such as the substance known by the term "asbestos cement." The cap B is provided with a screw-socket, *b*, to fit a gas-pipe, and the cap C has a screw-socket, *c*, to receive the burner-tip D. On the body A is secured a clamp, E, which is secured in the required position by a screw, *e*, and to which is secured a spark-conductor, which can be adjusted in the proper relation to the burner-tip in case the gas is to be lighted by electricity.

The great advantage of my burner is, that the heat has no injurious influence on the asbestos composing the body A, and the screw-caps B C can be readily and securely cemented to the same, so that they are not liable to work loose, or to allow the gas to leak through between the joints; neither is said body liable to crack or break. Another advantage of my burner is, that the body A, when made of asbestos, as above stated, is a superior non-conductor of electricity, and it can, therefore, be used with great advantage in connection with a spark-conductor for lighting the gas by electricity. For this purpose the screw-cap C, which receives the burner-tip, is provided with an eye, *a*, for connecting the same with one pole of an electric circuit, the other pole of which is connected to the screw-clamp E, that supports the spark-conductor. It must also be remarked that, by making the burner-tip detached from the cap C, I am enabled to introduce tips of different construction, or to replace one tip for another whenever it may be desirable, without detaching the burner from the gas-pipe.

The asbestos body of my burner may be vitrified by subjecting it to a very high heat, and thereby its durability is materially increased.

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

In combination with the non-conducting body A, constructed of asbestos or a compound of the same, the metallic tips C B, constructed with screw-sockets for the reception of the end of the gas-pipe and the burner-tip, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 19th day of August, 1876.

CHAS. H. HINDS. [L. S.]

Witnesses:

W. HAUFF,  
E. F. KASTENHUBER.