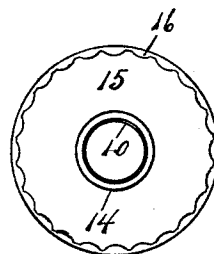
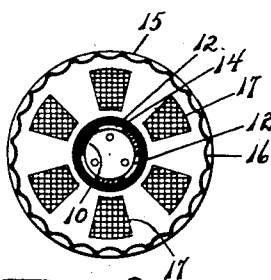
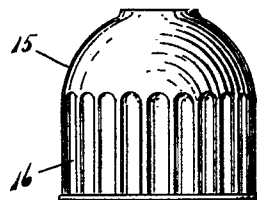
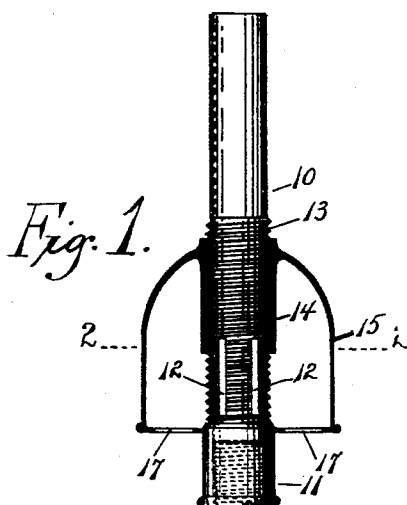


(No Model.)

S. H. MOORE.  
INCANDESCENT GAS BURNER.

No. 593,364.

Patented Nov. 9, 1897.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

SILAS H. MOORE, OF NEW YORK, N. Y.

## INCANDESCENT GAS-BURNER.

SPECIFICATION forming part of Letters Patent No. 593,364, dated November 9, 1897.

Application filed February 9, 1897. Serial No. 622,622. (No model.)

*To all whom it may concern:*

Be it known that I, SILAS H. MOORE, of New York, in the county and State of New York, have invented certain new and useful  
5 Improvements in Incandescent Gas-Burners, of which the following is a full, clear, and exact description.

My invention relates to improvements in incandescent gas-burners of the well-known  
10 Welsbach type, in which certain attachments and materials are used in connection with the well-known Bunsen tube. It is well understood that the success of this light depends on the nicety with which the mixture of gas  
15 and air takes place in the Bunsen tube, and it is necessary to have means for regulating such a mixture, so as to adapt the burner to different conditions of both gas and air. It is also desirable to provide a simple means of  
20 excluding insects from the air-openings in the Bunsen tube.

The object of my invention is to produce an extremely simple and inexpensive device which can be easily applied to the ordinary  
25 Bunsen tube by slightly modifying the tube, which can be instantly adjusted so as to make the air-holes of the tube larger or smaller, which can be made as ornamental as desired,  
30 which in no wise interferes with the ordinary burner attachments.

To these ends my invention consists of certain features of construction and combinations of parts which will be hereinafter fully  
35 described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

40 Figure 1 is a side elevation of the Bunsen tube and my improved attachments, the hood and regulating-sleeve being shown in vertical section. Fig. 2 is a sectional plan on the line 2-2 of Fig. 1 of the apparatus. Fig. 3 is a side  
45 elevation of the hood, and Fig. 4 is a plan of the device.

The Bunsen tube 10 is in the main like the ordinary tube, having at its lower end the internally-screw-threaded base 11, in order that

it can be applied to the usual fixture, and it  
50 has the customary air-holes 12, made in the form of elongated slots extending longitudinally of the tube. It has also the usual gas-check below the slots, as will be seen by reference to Fig. 2. So far there is nothing new  
55 about the device.

The tube 10 is externally screw-threaded, as shown at 13, the thread extending from the base 11 to a point well above the slots 12, and the thread is engaged by an internally-thread-  
60 ed sleeve 14, which, therefore, is movable up and down on the tube 10, as by simply turning the sleeve to the right or left it acts on the thread 13 and ascends or descends. The  
65 holes, therefore, can be made of any desired size within the limits of their length or may be nearly or quite closed, if desired. This arrangement, then, makes it possible to perfectly regulate the relative proportion of air  
70 and gas.

The sleeve 14 is made integral with a hood 15 and is held mainly within the hood, so as to render the complete device more artistic, and the hood 15 is preferably corrugated on the sides, as shown at 16, in order that it may  
75 be conveniently grasped and turned to the right or left, thus moving the sleeve 14 and regulating the air-supply. It will be seen that this hood may be made in any desired  
80 shape; also, that it can be made separately from the sleeve 14 and attached thereto without affecting the principle of the invention. The hood has a bottom, which fits closely  
85 around the tube and in which are openings 17, large enough to permit the air to flow readily into the hood and so through the holes 12 to the tube 10, and these holes 17 are preferably covered by gauze, as shown in Fig. 2, so  
90 as to prevent insects from passing into the tube and choking the same.

From the foregoing description it will be observed that this device is very simple, that it can be made in many artistic shapes, and that it serves perfectly the purpose of regulating the air-supply to the tube.  
95

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

In an incandescent gas-burner, the combination with the slotted Bunsen tube having an exterior screw-thread extending around it opposite the slots, of the sleeve threaded to  
5 fit the tube and adapted to cover and close the slots, the hood rigid on the sleeve and surrounding the tube, and the screened air-

holes in the hood-bottom substantially as described.

SILAS H. MOORE.

Witnesses:

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