

No. 843,379.

PATENTED FEB. 5, 1907.

F. T. WILLIAMS.  
INCANDESCENT GAS BURNER.  
APPLICATION FILED NOV. 18, 1905.

Fig. 2.

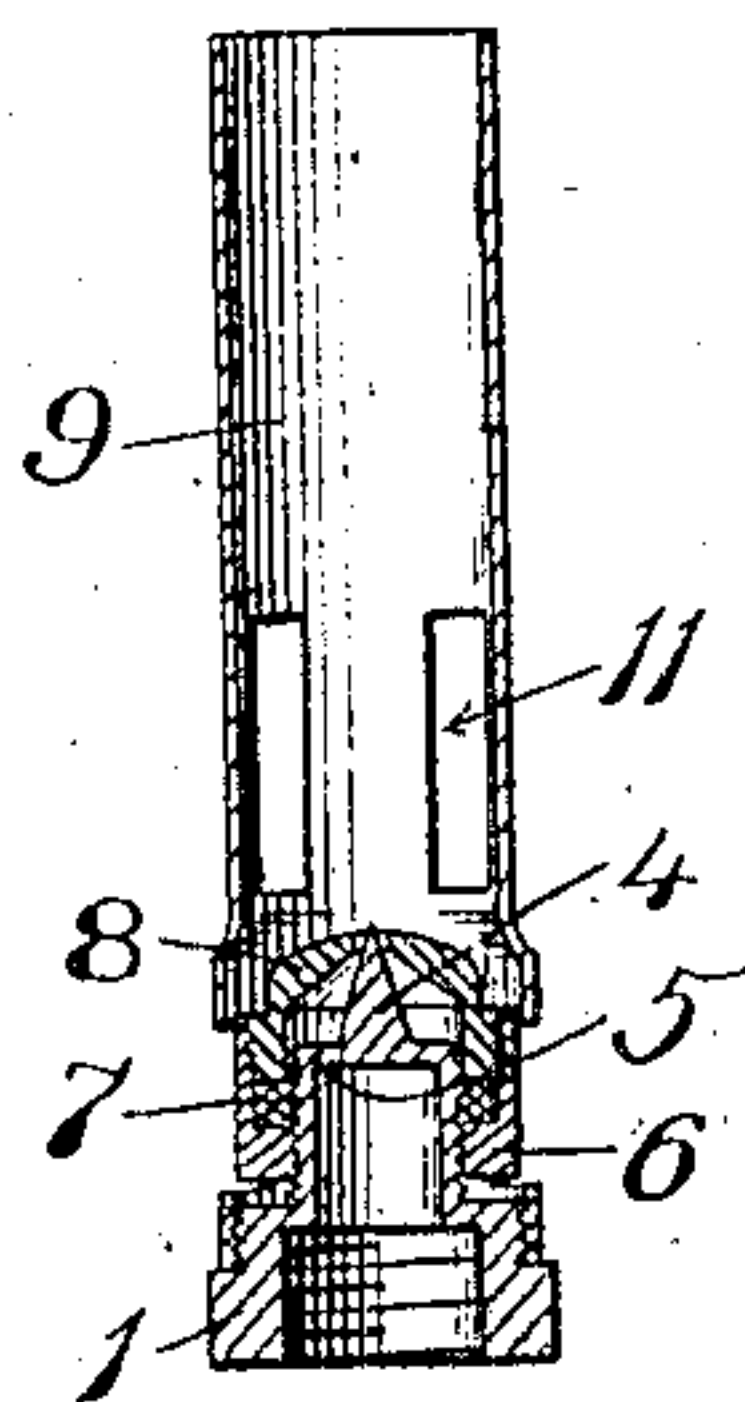


Fig. 1.

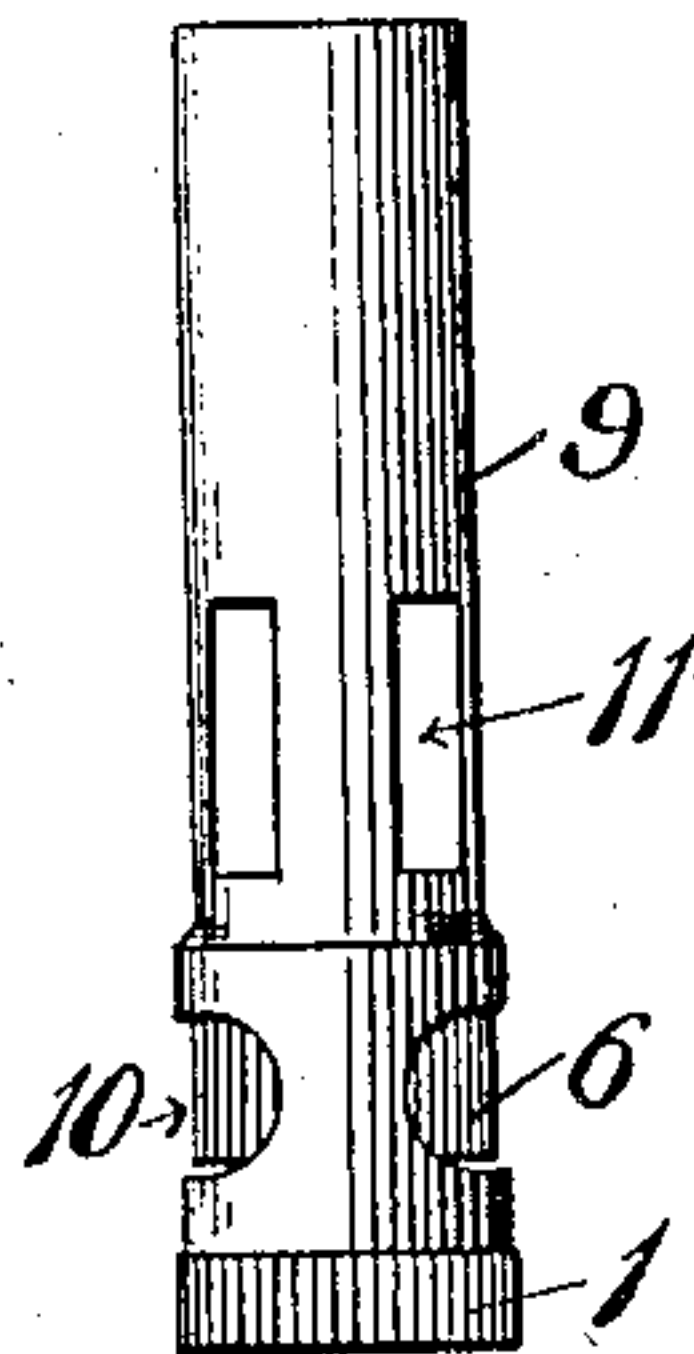


Fig. 3.

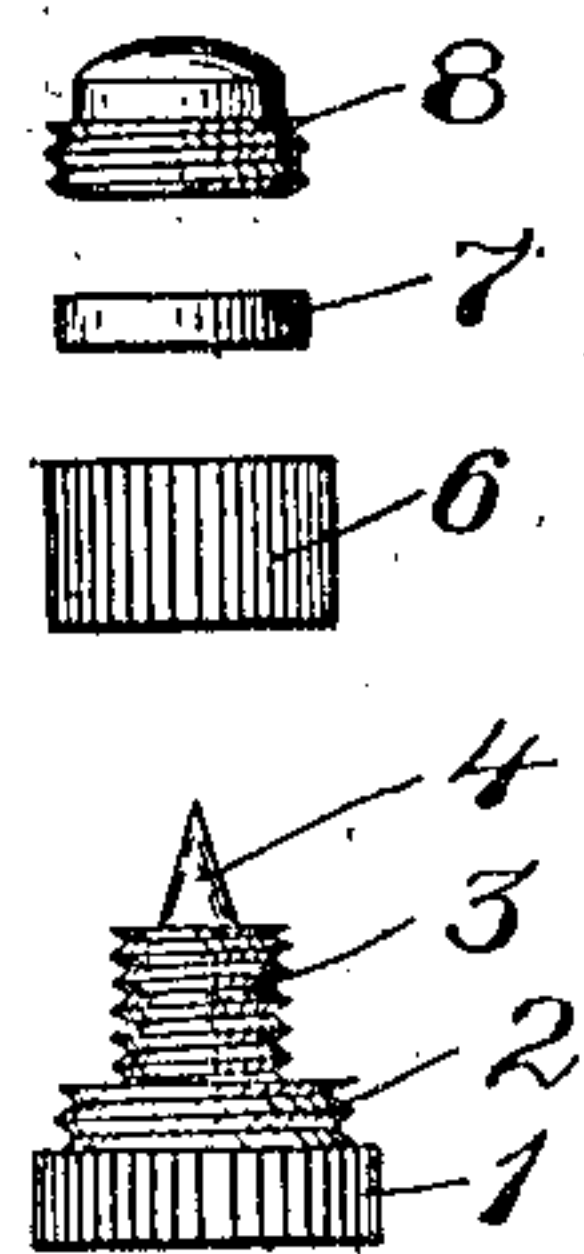


Fig. 5.

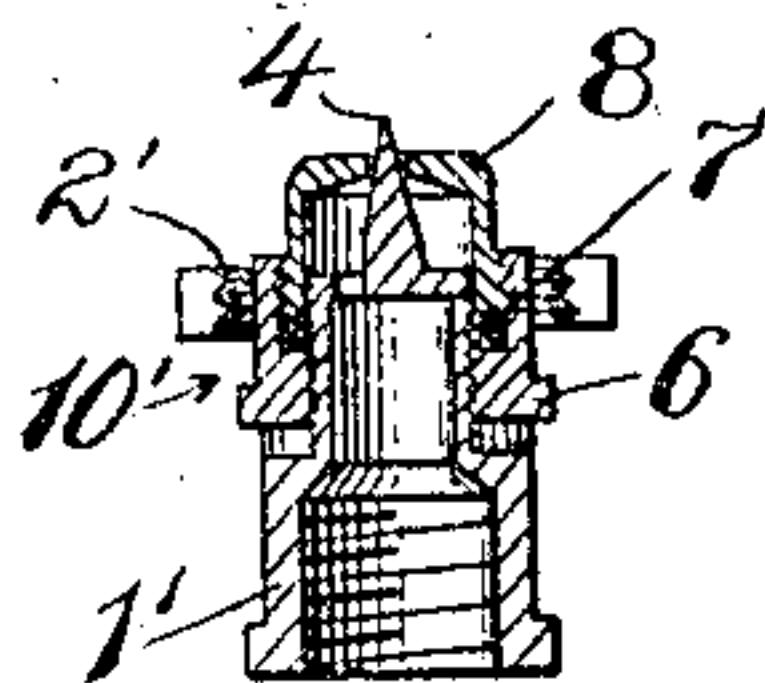
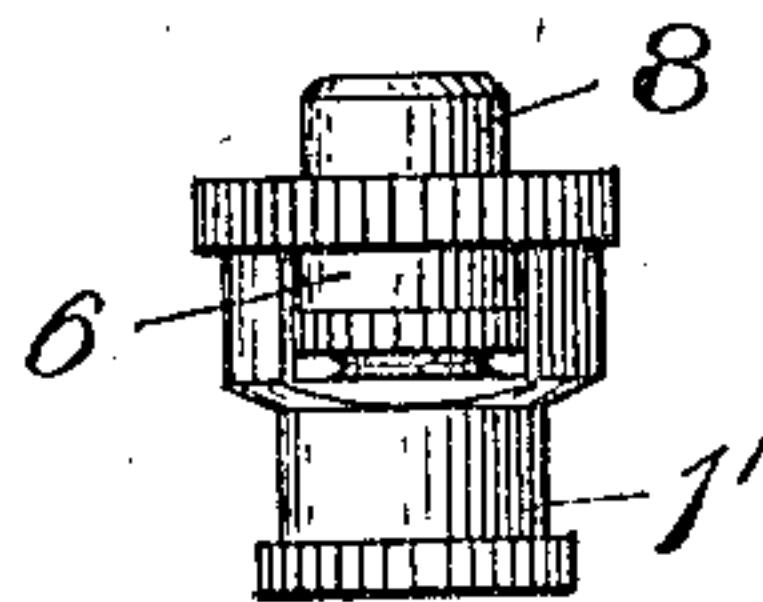


Fig. 4.



Witnesses  
*Chas. A. Reed*  
*R. S. Allen*

Inventor  
FRANK THEODORE WILLIAMS  
By his Attorneys  
*Bartlett, Brownell & Mitchell*

# UNITED STATES PATENT OFFICE.

FRANK THEODORE WILLIAMS, OF MERIDEN, CONNECTICUT, ASSIGNOR TO  
EDWARD MILLER AND COMPANY, OF MERIDEN, CONNECTICUT, A COR-  
PORATION OF CONNECTICUT.

## INCANDESCENT GAS-BURNER.

No. 843,379.

Specification of Letters Patent.

Patented Feb. 5, 1907.

Application filed November 18, 1906. Serial No. 287,947.

*To all whom it may concern:*

Be it known that I, FRANK THEODORE WILLIAMS, a citizen of the United States, residing at Meriden, county of New Haven, Connecticut, have invented certain new and useful Improvements in Incandescent Gas-Burners, of which the following is a full, clear, and exact description.

My invention relates to improvements in burners for incandescent gas-light fixtures, and particularly of the Bunsen type.

The object of the invention is to provide a simple construction which may be manufactured economically, adjusted readily, and which will operate efficiently without leakage of gas or variation in adjustment due to vibration.

The invention consists in improvements the principles of which are illustrated in the accompanying sheet of drawings. Its preferred form comprises a base member with means for the admission of gas, a burner-tube with means for the admission of air, and a regulator formed in two parts and having a washer which affords frictional engagement and prevents leakage of gas.

Figure 1 is a side elevation of a burner embodying the improvements of my invention. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a view showing the base and parts of the regulator separated. Fig. 4 is a side view of a base and regulator of modified construction. Fig. 5 is a vertical sectional view of the same.

1 is the base or tip member, adapted to be screwed onto the end of the gas-fixture.

2 is a screw-threaded portion for attachment of the burner-tube.

3 is a screw-threaded portion for the attachment of the regulator.

4 is a conical valve-point.

5 is a passage for the gas through the base member.

6 is the body of the regulator, having an interiorly-threaded portion adapted to screw onto the threads 3.

7 is a washer formed, preferably, of leather or similar material which is of slightly less diameter than the diameter of the screw-threads 3. This fits within the body 6 of the regulator.

8 is the tip of the regulator, having a passage for the gas and forming a valve-seat in conjunction with the valve-point 4. This is screw-threaded on its exterior and adapted to screw into the body of the regulator and clamp the washer 7 tightly in place.

When the parts are screwed together, the washer yields slightly and affords a tight joint around the screw-threads 3, so that no gas can leak back from the interior of the regulator. This yielding frictional engagement also prevents the regulator from being vibrated, so as to disturb its adjustment.

9 is a burner-tube, preferably formed in one piece and having an interiorly-threaded portion adapted to the threads 2 of the base. It also has a passage 10, through which the body of the regulator may be reached for purposes of adjustment, and air-openings 11 adjacent to the gas-outlet.

In the form shown in Figs. 4 and 5 the screw-threads 2 for the attachment of the burner-tube are formed on the interior of an annular portion and the openings 10 for access to the regulator are in the base instead of in the burner-tube. Both forms of devices, however, embody the same elements of the regulator—namely, the body and tip portions and the washer. The advantages of these features will be apparent to those skilled in the art.

What I claim is—

In an incandescent lamp-burner, the combination of a base member having screw-threads thereon, a valve-point thereon, a regulator comprising a body member screw-threaded on the base member, a centrally-perforated tip portion having a screw-threaded connection between its external wall and the internal wall of said body member, a yielding washer inclosed between the body member and said tip portion, said washer making direct engagement at its inner side with the threads on the base member, a Bunsen tube overstanding all of said parts, and an opening in the side affording access to said body member.

FRANK THEODORE WILLIAMS.

Witnesses:

I. B. MILLER,

FANNIE A. HIRSCHFELD.