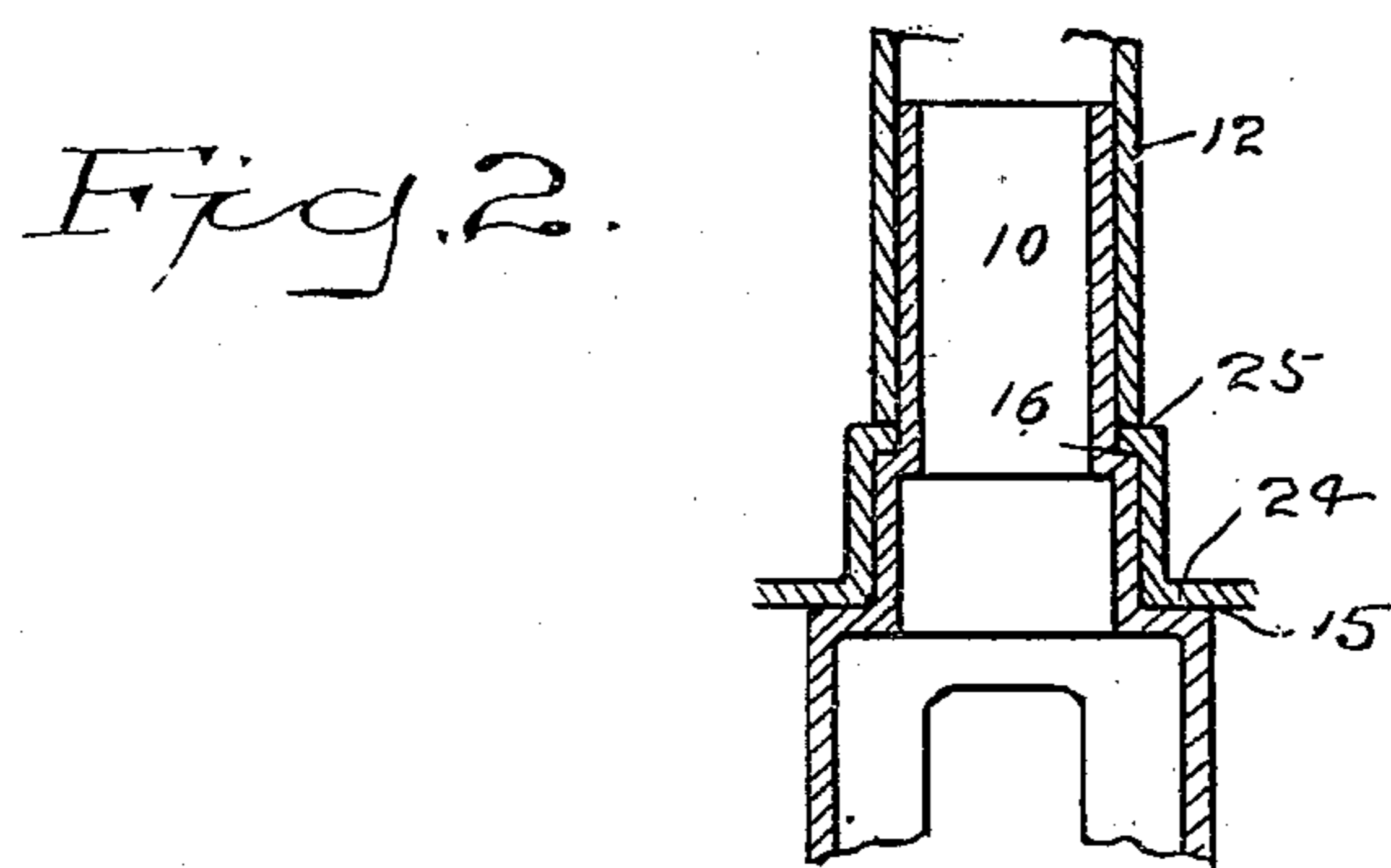
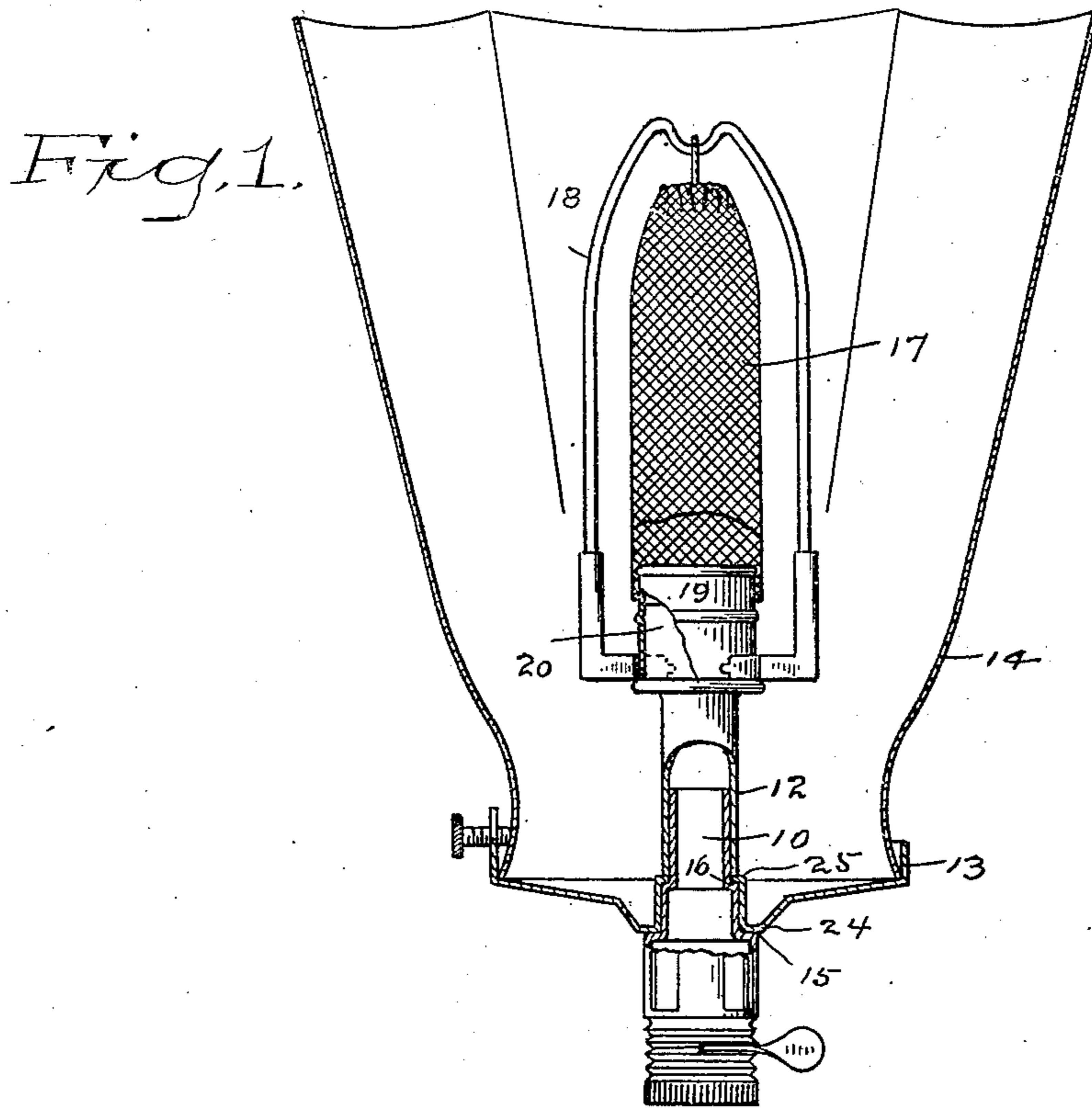


W. S. STAPLEY.  
INCANDESCENT GAS BURNER.  
APPLICATION FILED JAN. 7, 1909.

921,748.

Patented May 18, 1909.



WITNESSES:

*H. a. Lamb,*  
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INVENTOR

*William S. Stapley*  
BY  
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# UNITED STATES PATENT OFFICE.

WILLIAM S. STAPLEY, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO BRIDGEPORT BRASS COMPANY, OF BRIDGEPORT, CONNECTICUT, A CORPORATION OF CONNECTICUT.

## INCANDESCENT GAS-BURNER.

No. 921,748.

Specification of Letters Patent.

Patented May 18, 1909.

Application filed January 7, 1909. Serial No. 471,079.

*To all whom it may concern:*

Be it known that I, WILLIAM S. STAPLEY, a citizen of the United States, residing at Bridgeport, county of Fairfield, State of Connecticut, have invented a new and useful Incandescent Gas-Burner, of which the following is a specification.

This invention has for its object to simplify, cheapen and to generally improve the construction of incandescent or mantle gas burners, the special object in view being to produce a burner of this character which shall be firm and steady in use and in which vibration of the mantle shall be reduced to the minimum.

With this and other objects in view I have devised the novel details of construction which I will now describe, referring to the accompanying drawing forming a part of this specification and using reference characters to indicate the several parts.

Figure 1 is a view partly in elevation and partly in section, illustrating the construction and mode of operation of my novel burner; and Fig. 2 is a detail sectional view on an enlarged scale of the Bunsen tube, mantle tube and globe holder detached.

10 denotes a Bunsen tube, 12 a mantle tube, 13 a globe holder and 14 a globe.

It is of course well understood that all the parts of a burner are carried by the Bunsen tube. It is furthermore well understood that the destruction of mantles through vibration is an important item in the cost of using this class of burners. In order to secure perfect stability and freedom from movement of the parts carried by the Bunsen tube and thereby reduce vibration of the mantle to the minimum, I provide the Bunsen tube with lower and upper shoulders indicated respectively by 15 and 16. These shoulders are formed by closing in the metal of the tube. In the form of burner illustrated, no chimney is used and

the mantle, indicated by 17, is carried by a wire 18 secured to a cap 19 which slides over a head 20 on mantle tube 12 which in turn slides over the upper end of the Bunsen tube.

14 denotes a globe which is secured in the ordinary or any preferred manner to a globe holder 13. The novel features of the globe holder are that it is provided with a shoulder 24 which rests firmly upon lower shoulder 15 of the Bunsen tube and with an inwardly turned flange 25 which rests upon upper shoulder 16 of the Bunsen tube and the inner edge of which engages the tube itself so that the globe holder and the globe carried thereby are firmly seated on the Bunsen tube and cannot move independently thereof and thereby impart vibration to the Bunsen tube and the mantle. The mantle tube slides over the upper end of the Bunsen tube and rests upon flange 25 of the shade holder, as clearly shown in the drawing. This construction insures stability and firm attachment of the globe holder and the mantle tube to the Bunsen tube and reduces vibration of the mantle to the minimum.

Having thus described my invention, I claim:

In an incandescent gas burner, the combination with a Bunsen tube having lower and upper shoulders, of a globe holder having a shoulder adapted to engage said lower shoulder, and an inwardly turned flange adapted to rest on the upper shoulder with its inner edge in engagement with the Bunsen tube and a mantle tube adapted to rest on the flange of the globe holder.

In testimony whereof I affix my signature, in presence of two witnesses.

WILLIAM S. STAPLEY.

Witnesses:

A. M. WOOSTER,  
S. W. ATHERTON.