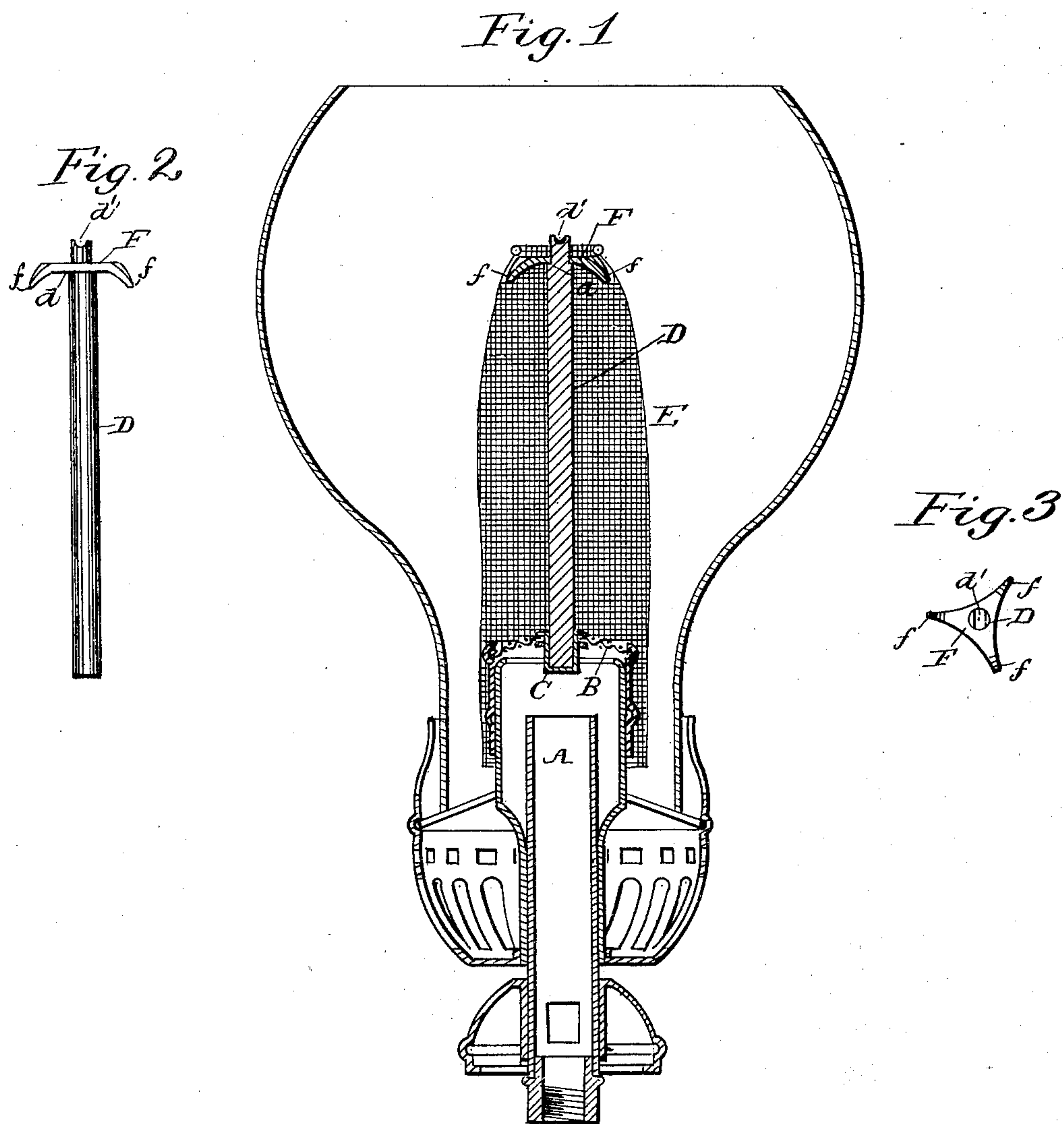


No. 731,961.

PATENTED JUNE 23, 1903.

H. J. SIEGEL.  
MANTLE SUPPORT FOR GAS BURNERS.  
APPLICATION FILED NOV. 14, 1902.

NO MODEL.



WITNESSES:  
*George Lane*  
*James O'Neil*

INVENTOR  
*Hilmar J. Siegel*  
BY  
*Connelly Bros.*  
ATTORNEYS



# UNITED STATES PATENT OFFICE.

HILMAR J. SIEGEL, OF MONACA, PENNSYLVANIA.

## MANTLE-SUPPORT FOR GAS-BURNERS.

SPECIFICATION forming part of Letters Patent No. 731,961, dated June 23, 1903.

Application filed November 14, 1902. Serial No. 131,377. (No model.)

*To all whom it may concern:*

Be it known that I, HILMAR J. SIEGEL, a citizen of the United States, residing at Monaca, in the county of Beaver and State of Pennsylvania, have invented certain new and useful Improvements in Mantle-Supports for Gas-Burners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has relation to gas-burners of the Welsbach type, and has for its object the provision of novel means for supporting the mantle which is supported above the burner and heated to incandescence by the gas from the burner.

Heretofore it has been customary to support the mantle by suspending it from the hooked end of a wire, which was attached to the burner at its lower end and extended above the top of the mantle outside of the same. These wire supports being subjected to the intense heat of the gas frequently become so soft as to bend, and as the mantles are exceedingly fragile the bending of the wire results in the destruction of the mantle. Another objection to the use of the wire supports is that being very light and springy they vibrate under any shock that may be communicated to the gas-fixture and by such vibration destroy the mantle. It has also been proposed to support the mantle upon a rod of magnesia; but such material is not well adapted for the purpose owing to its liability to break off under the action of the heat.

I have discovered that certain natural products are well adapted for use as supporting-rods for mantles, among these being slate and kindred stones, which are easily worked into the desired shape, are not appreciably affected by heat, and are of such strength that even in the form of a slender rod they will support the mantle without any danger of breaking or of injuring the mantle by vibrating under shock communicated to the fixture on which the mantle is supported.

My invention consists in the novel material and construction, combination, and arrangement of parts hereinafter described and claimed.

Referring to the accompanying drawings, Figure 1 is a vertical sectional view of a burner of the Welsbach type with my improved man-

tle-support. Fig. 2 is a detail view of the supporting-rod, and Fig. 3 an end view of the same.

A designates a gas-burner of the type usually employed in connection with incandescent gas-lights, and B designates the woven-wire screen at the top of the burner. A metallic thimble C is fixed at the center of the screen B, and said thimble serves as a socket for a rod D, of slate, which is of a length sufficient to extend to the top of the mantle E. The rod D is formed with a shoulder *d*, and a ring or washer F, which has projecting points *ff*, rests on the shoulder *d* and supports the mantle, fitting within the neck of the same, the spaces between the points *ff* allowing the products of combustion to escape from within the mantle.

The device as above described provides a simple, inexpensive, and efficient support for the mantle, and the slate of which the rod is composed being unaffected by the heat is practically everlasting and by its strength and rigidity obviate the danger of the mantle being broken by accidental blows against the gas-fixture to which the burner is attached.

The rod D may be provided with a notch *d'*, as shown in the drawings, and where the rod is to be used in connection with mantles which have a loop or cross-piece of asbestos cord across the neck the mantle can be hung upon the rod by resting the loop in the notch and the washer F dispensed with.

Having described my invention, I claim—

1. A support for incandescent mantles, consisting of a slender rod of roof-slate, and said rod being formed with a notch on its upper end to receive the cord of a mantle, substantially as described.

2. A supporting device for incandescent mantles consisting of a rod of slate having a shoulder near its upper end and a metallic washer resting on said shoulder.

3. A supporting-rod for incandescent mantles consisting of a rod of slate having a notch on its end to receive a loop on the mantle, a shoulder below said notch and a washer resting on said shoulder.

In testimony whereof I have affixed my signature in presence of two witnesses.

HILMAR J. SIEGEL.

Witnesses:

J. A. IRONS,

H. C. WEIRICH.