

No. 756,117.

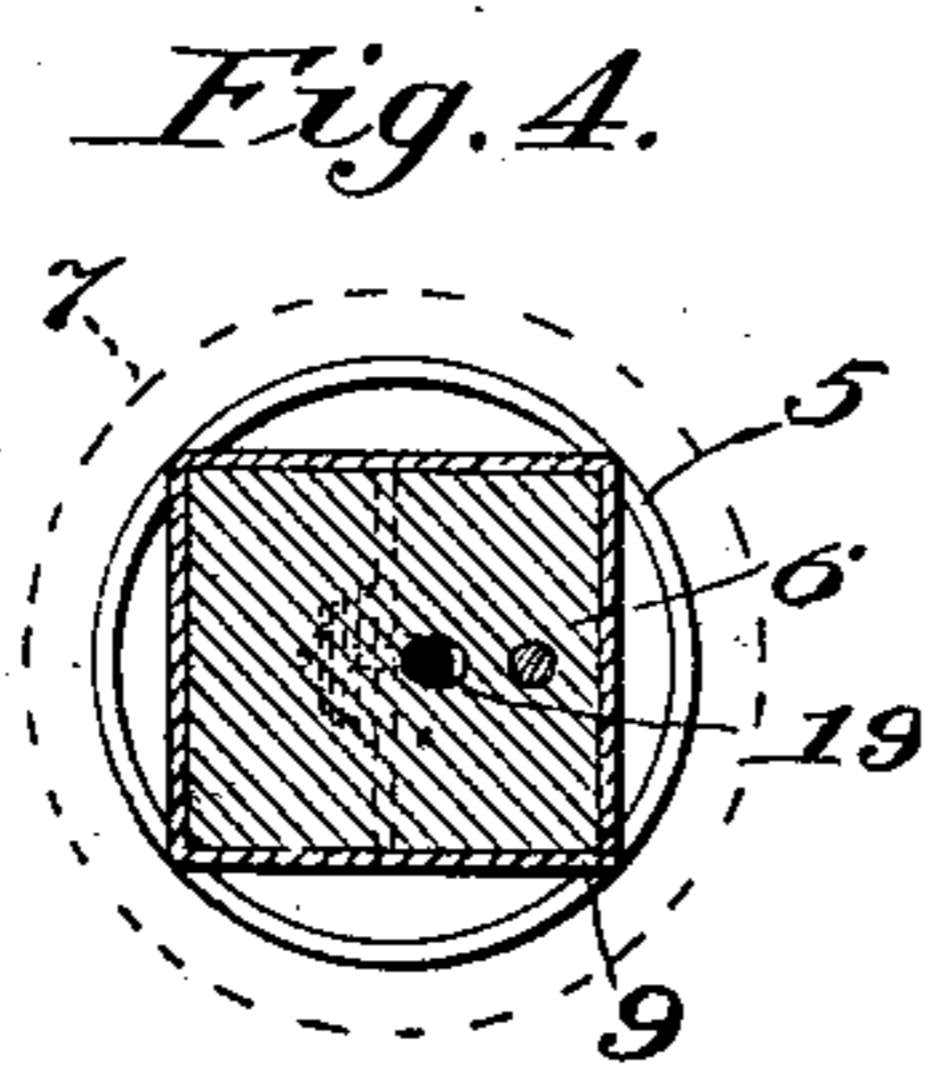
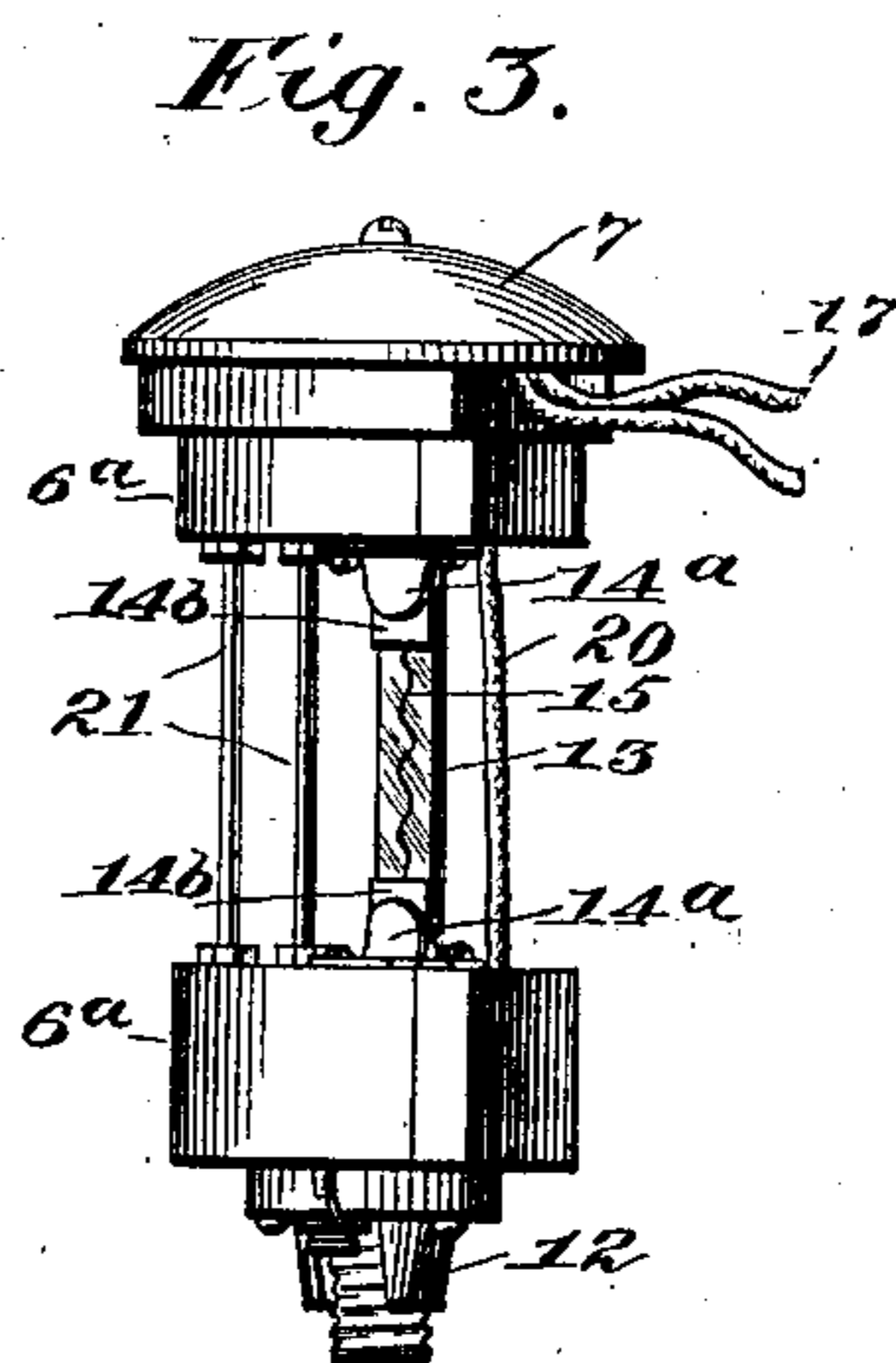
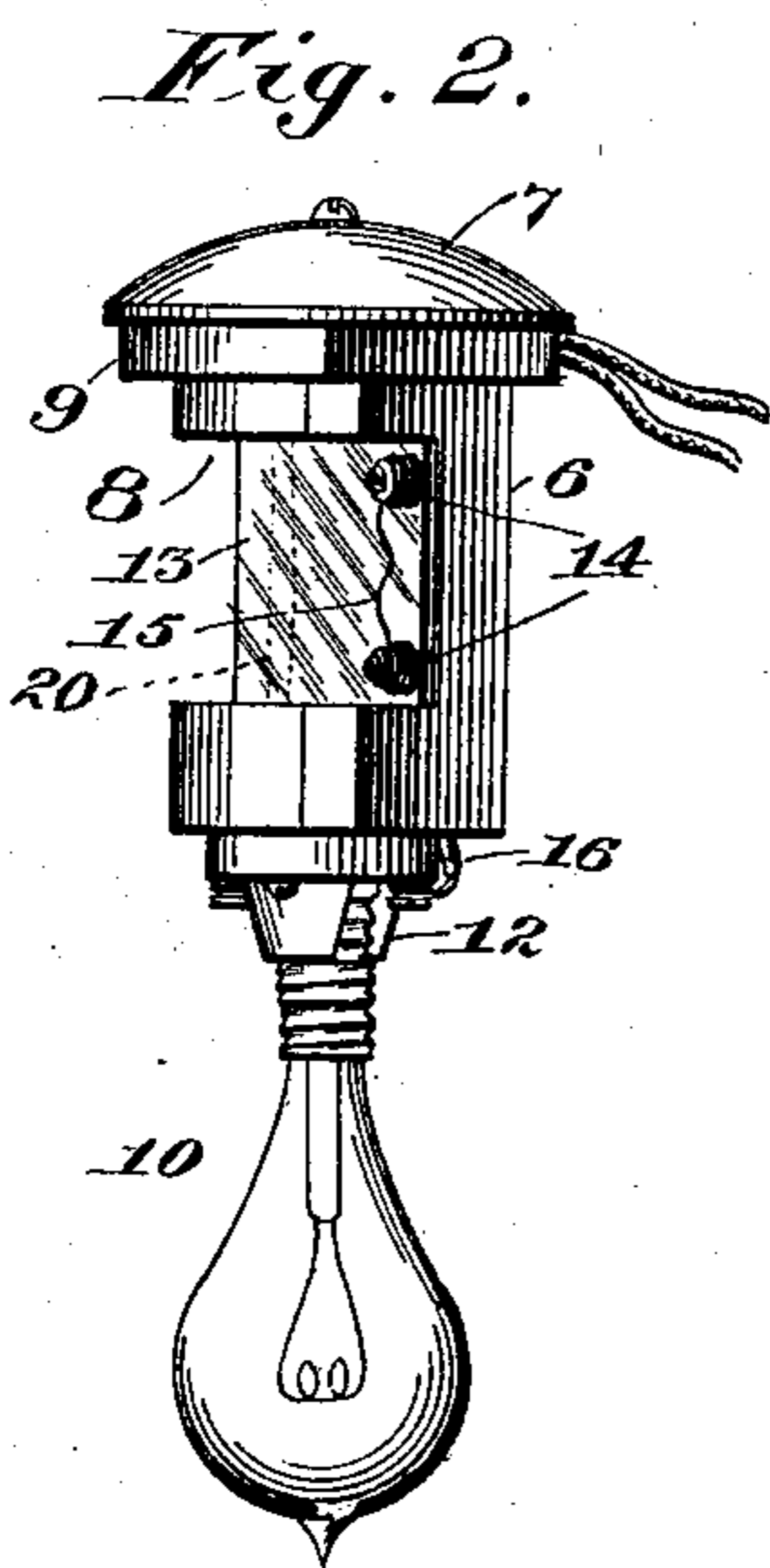
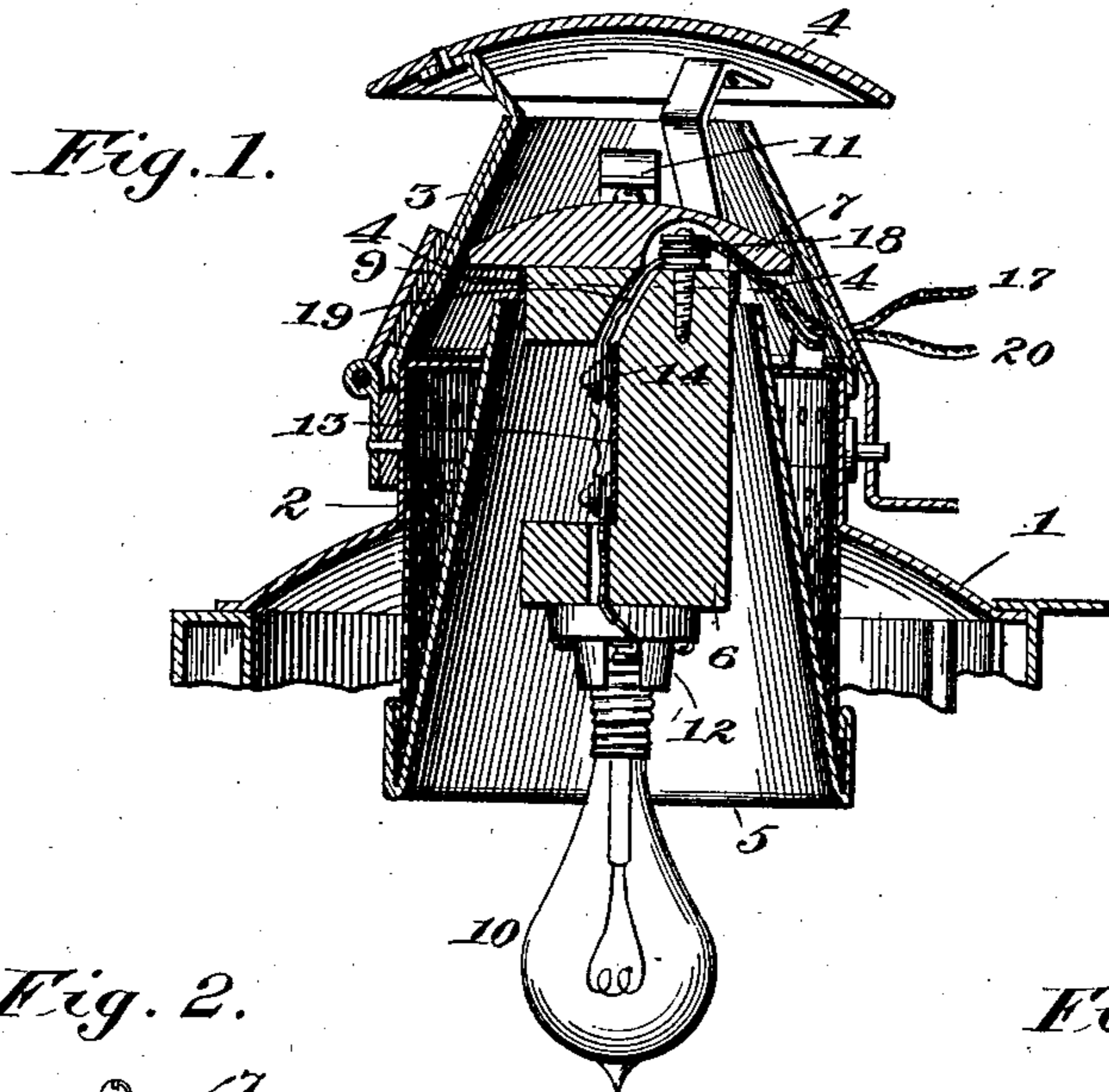
PATENTED MAR. 29, 1904.

L. H. W. KERBER.

ELECTRIC LAMP SUPPORT FOR CONVERTIBLE SIGNAL LANTERNS.

APPLICATION FILED MAY 13, 1903.

NO MODEL.



Witnesses:

G. F. Tolson.

C. D. Bull

Inventor:

Louis H. W. Kerber,

by *L. H. W. Kerber*  
*att'y.*

# UNITED STATES PATENT OFFICE.

LOUIS H. W. KERBER, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE ADAMS AND WESTLAKE COMPANY, OF ILLINOIS.

ELECTRIC-LAMP SUPPORT FOR CONVERTIBLE SIGNAL-LANTERNS.

SPECIFICATION forming part of Letters Patent No. 756,117, dated March 29, 1904.

Application filed May 13, 1903. Serial No. 156 912. (No model.)

*To all whom it may concern:*

Be it known that I, LOUIS H. W. KERBER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Electric-Lamp Supports for Convertible Signal-Lanterns, of which the following is a specification, reference being had to the accompanying drawings, forming part thereof.

This invention relates to a support for an incandescent electric light, particularly where such a light is used as the illuminant for a semaphore signal lamp or lantern. The more common practice heretofore has been to use oil-lamps alone for this purpose; but attempts have been made toward the introduction of signal lamps or lanterns electrically illuminated, their construction being such that the electrical devices may be removed from the lantern in case of failure of the electric lamp and an oil-lamp substituted.

A principal object of my invention is to provide a simple and efficient support or holder for an incandescent or glow lamp bulb having in it means to prevent the destruction or impairment of the lamp in the event of short-circuiting, and while my invention is more especially adapted as an element in a convertible signal lamp or lantern it is obvious that it may be used in other relations.

Other features of my invention will appear hereinafter.

In order to more clearly understand my invention, reference is made to the accompanying drawings, in which—

Figure 1 represents a vertical section through the upper portion of a signal-lantern with my invention applied thereto, and Fig. 2 a perspective view of the device separated from the lantern. Fig. 3 is a similar view showing a modification. Fig. 4 is a horizontal section on the line 4 4 of Fig. 1.

Similar numerals of reference indicate similar parts in the respective figures.

The body or casing of the signal-lantern (represented by 1) has an upwardly-projecting portion 2 of lesser diameter, to which the

cap 3, open at the top, is hinged, a hood 4 being secured to said cap to cover its open top.

5 is a tube, preferably frusto-conical, through which the products of combustion pass when an oil-lamp is used.

The above parts are common to lanterns of this type and require no further description.

A block 6, Figs. 1 and 2, preferably of wood, is secured to a cap-piece 7, a portion of said block being removed at one side, there being thus formed a recess 8. A square band of metal 9 surrounds the block 6 just beneath the cap-piece 7, the four corners of which band rest upon the frusto-conical tube 5 when the block 6 and its attached incandescent or glow lamp 10 are inserted into the lantern through said tube. A spring 11, riveted to the cap 3, presses when said cap is closed upon the cap-piece 7 and holds the device in place. A socket 12, of the ordinary form and construction, is secured to the bottom of the block 6 for supporting the bulb 10. The vertical wall of the recess 8 of the block 6 is covered with one or more sheets 13 of mica, rubber, or other non-conductor of electricity, on which sheets are placed two binding-posts 14 14, they being fastened to the block 6. These binding-posts are separated from each other, but connected by a fusible conductor 15. From the lower binding-post 14 a wire 16 passes through the lower portion of the block 6 to the socket 12, where it is attached to one part of the circuit-closer contained therein. One of the leads or conducting-wires 17 passes between the cap 7 and the block 6 to a binding-post 18, which is connected by a wire 19 to the upper binding-post 14. The other lead 20 is attached to a similar binding-post (not shown) and passes thence downward behind the non-conductor 13 to the other post of the circuit-closer within the socket 12.

In the modification shown in Fig. 3 instead of employing a block 6, recessed, as hereinbefore described, I use two separated blocks 6<sup>a</sup> 6<sup>a</sup>, connected by standards 21 21. Instead of the binding-posts 14 14 of Figs. 1 and 2 metallic clips 14<sup>a</sup> 14<sup>a</sup> are secured to the blocks 6<sup>a</sup> 6<sup>a</sup>, between each of which clips are clamped

metallic plates 14<sup>b</sup> 14<sup>b</sup>, with which the fusible conductor 15 is in contact. A body of mica or other non-conductor of electricity 13 is held between the metallic plates 14<sup>b</sup>. The metallic plates are so connected by the body of mica that they, it, and the fusible conductor together may be removed bodily from the clips 14<sup>a</sup> 14<sup>a</sup> for the substitution of a new conductor or for other reasons. In other respects the modification of Fig. 3 is similar to the construction shown in Figs. 1 and 2.

In operation, a number of electric lamps being included in one circuit, the current passes through the leads or conducting-wires 17 20, the fusible conductor 15, and the filament of the lamp or bulb 10. Should the resistance in the circuit beyond the lamp be lessened, as by short-circuiting, the current might be increased to such a degree that the filament would be destroyed, which destructive action is, however, prevented by the fusible conductor 15, which will melt before the current has increased sufficiently to burn out the lamp.

I do not restrict myself to the exact details of construction, combination, and arrangement herein set forth, it being obvious that minor variations thereof not involving the exercise of invention may be made by the skilled mechanic, and such departures from what is herein described and claimed not involving invention I consider as within the scope and terms of my claims.

Having thus described my invention, I claim—

35 1. The combination, with a convertible signal lamp or lantern having a central tube for

the escape of products of combustion when an oil-lamp is used, of a removable electric-lamp support held by and within said tube, and having an electric cut-out, substantially as set forth. 40

2. The combination, in a convertible signal lamp or lantern having a fixed open-topped central draft-tube and an attached liftable cap, of a support having mounted thereon an electric-lamp socket and removably held by and within said open-topped central draft-tube, and conductors provided with an electric cut-out, said conductors being attached to said support and to the lamp-socket, substantially as set forth. 45 50

3. The combination, in a convertible signal lamp or lantern having a fixed open-topped central draft-tube and an attached liftable cap, of a support having mounted thereon an electric-lamp socket and removably held by and within said open-topped central draft-tube, a non-conducting material attached to said support, binding-posts within the compass of said support and secured thereto and insulated by said non-conducting material, a fusible conductor between said binding-posts, and conducting-wires attached to said posts and to the lamp-sockets, substantially as set forth. 55 60 65

In testimony whereof I hereunto set my hand and seal.

LOUIS H. W. KERBER. [L. s.]

In presence of—

LOUIS V. EGGERT,

THOS. G. TROXEL, Jr.