

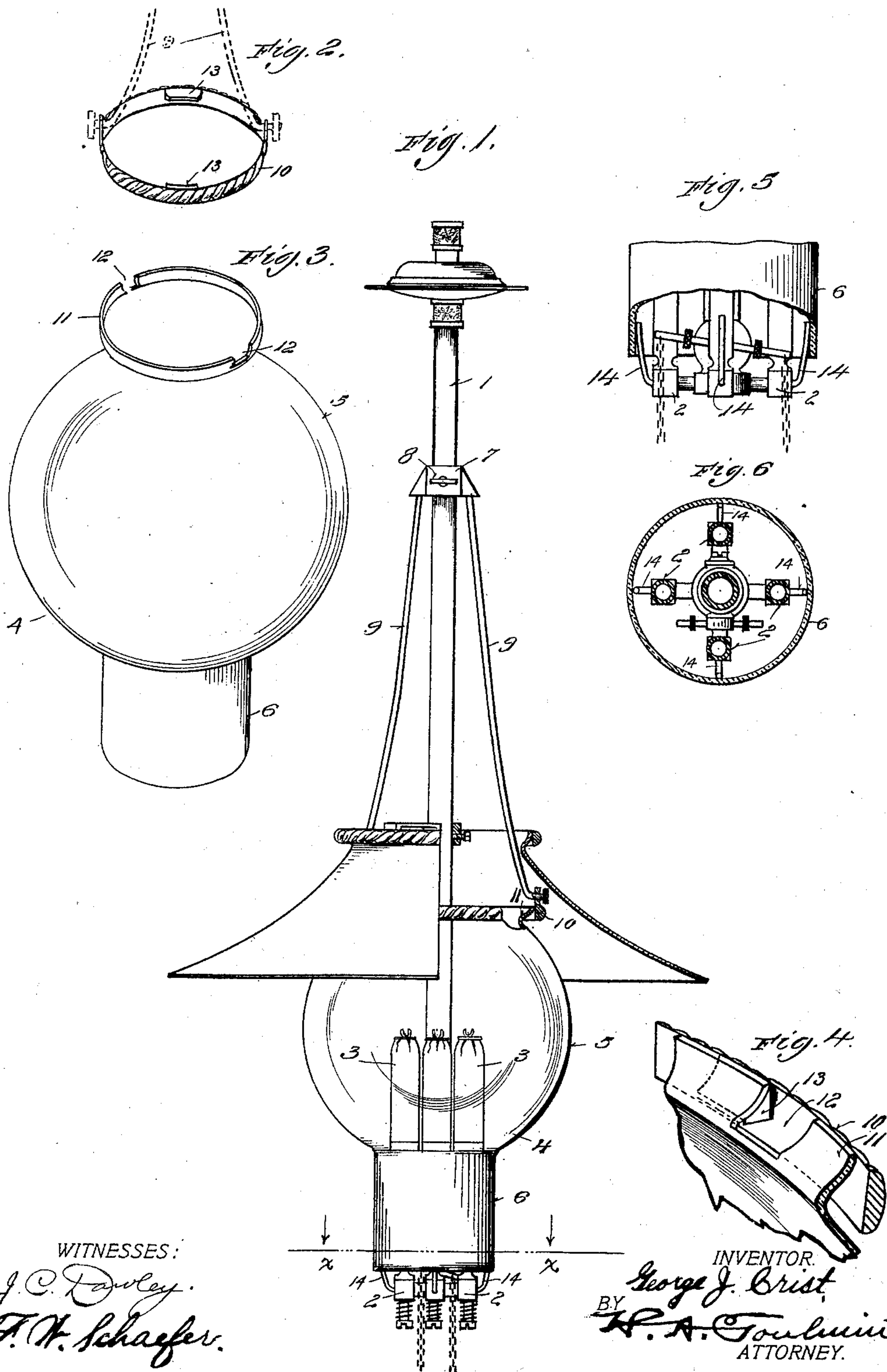
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G. J. CRIST.  
SUPPORT FOR LAMP GLOBES OR THE LIKE.

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NO MODEL.



WITNESSES:

*J. C. Dawley.*  
*F. H. Schaefer.*

INVENTOR.

*George J. Crist,*  
BY *H. A. Foulmer,*  
ATTORNEY.



# UNITED STATES PATENT OFFICE.

GEORGE J. CRIST, OF SPRINGFIELD, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS, TO MELVIN L. MILLIGAN, JOHN C. BRECKENRIDGE, AND PEARL YOUNG, OF SPRINGFIELD, OHIO.

## SUPPORT FOR LAMP-GLOBES OR THE LIKE.

SPECIFICATION forming part of Letters Patent No. 719,754, dated February 3, 1903.

Application filed April 24, 1902. Serial No. 104,434. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE J. CRIST, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Supports for Lamp-Globes or the Like, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to supports for lamp-globes and the like, it being particularly adapted for use in connection with suspended gas-lamps employing incandescing mantles, and has for its object to provide a globe and  
15 support for the same whereby the globe may be readily lowered without detaching the same to give access to the mantles when desired, while at the same time the globe may be readily detached and removed when necessary for cleaning purposes.

A further object of my invention is to provide a globe which will properly inclose and protect the mantles and burners without interfering with the diffusion of light or the  
25 supply of air and which will be properly supported when in position and guided during its raising and lowering.

To these and other ends my invention consists in certain novel features which I will  
30 now proceed to describe and will then particularly point out in the claims.

In the accompanying drawings, Figure 1 is an elevation, partly in section, of a lamp embodying my invention in one form. Fig. 2 is  
35 a detail perspective view of the globe-supporting ring detached. Fig. 3 is a similar view of the globe detached. Fig. 4 is a detail sectional perspective illustrating the preferred form of connection between the globe  
40 and globe-support. Fig. 5 is a detail elevation, on an enlarged scale, of the lower portion of the lamp, the lower portion of the globe being shown partly broken away; and Fig. 6 is a detail sectional view, on an enlarged scale, taken on the line *x x* of Fig. 1  
45 and looking in the direction of the arrows.

My invention is particularly applicable to gas-lamps of the suspended type, and in the

present instance I have shown it as applied to such lamp, comprising a vertical supply-pipe 1, which also constitutes the support for the lamp, being provided at its lower end with a plurality of burners or mixing-tubes 2, above which are suspended the usual  
50 mantles 3. These parts are inclosed in a globe 4, of glass, having an upper portion 5, which is globular or spherical in form and incloses the mantles 3 when the globe is in position, and a lower cylindrical portion 6, which  
55 incloses the burners. This lower portion is preferably made of glass in one piece with the upper portion and is preferably rendered translucent by roughening its surface, so as to constitute what is known as "ground" or "frosted" glass. The extension or cylindrical  
60 portion 6 may, however, be made of other material, if desired.

The entire globe is supported from above by means of a support vertically adjustable upon the pipe 1. In its preferred form this support comprises a collar 7, adjustable longitudinally of the pipe 1 and adapted to be  
70 secured in position by a set-screw 8. Rods 9 extend downward from this collar and have secured to their lower ends a ring or annulus 10, to which the globe is detachably connected. The form of connection which I prefer is one which I have devised and which is  
75 illustrated in the accompanying drawings. This connection comprises an outwardly-flaring flange 11 at the upper end of the globe, provided at intervals with notches or cut-away portions 12, the ring or annulus 10  
80 being provided with corresponding inwardly-projecting lugs 13, which are adapted to pass through the notches 12 and engage under the flange 11 when the globe is so turned as to bring said projections under said flange, as  
85 illustrated more particularly in Fig. 4 of the drawings. Any other suitable form of detachable connection between the globe and its support may be employed, however.

The lower end of the lamp proper is provided with suitable means for guiding the globe and preventing lateral movement thereof, and for this purpose I prefer to employ  
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elastic or spring arms 14, secured to the lower end of the burner and extending thence outward and upward, their free ends bearing against the inner surface of the cylindrical portion 6 of the globe.

It will be observed that with my construction the weight of the globe is entirely supported from above, leaving the lower portion entirely unobstructed except for the burners or mixing-tubes, which must be located there in any case. It follows from this that the air supply or draft is interfered with to a minimum extent. Furthermore, the operation of cleaning the globe or getting access to the mantles is materially facilitated. When it is desired to have access to the mantles, the set-screw 8 is loosened and the collar 7 is then lowered along the pipe 1, thus correspondingly lowering the globe to the desired extent, it being secured in its lowered position, if necessary, by means of the set-screw 8. The globe is as readily returned to its proper position and secured there when desired. In case it is desired to remove the globe for the purpose of cleaning it or for any other purpose it is only necessary to turn the globe sufficiently to cause the notches 12 to coincide with the projections 13, whereupon the globe may be detached from its support, lowered, and removed in an obvious manner. When the globe is in its normal position, its lower end is supported against lateral movement by means of the spring-arms 14, which latter also serve as a means for guiding the globe while it is being raised and lowered, so as to prevent it from coming into contact with the mantles or other portions of the lamp.

When the lower or cylindrical portion of the globe is constructed of translucent material, as hereinbefore described, it interferes but slightly with the distribution of the light in a downward direction and avoids the shadows usually produced in this portion of the lighted area. Even when this portion of the globe is constructed of other material not translucent there is much less shadow cast at this point than where the globe is supported from below, thus involving the presence of a globe-support which from its character must detract from the illumination of the area lying under the lamp.

I do not wish to be understood as limiting myself to the precise details of construction hereinbefore described, and shown in the accompanying drawings, as the same may obviously be modified without departing from the principle of my invention.

In the claims here following the word "burners" is employed to include within its meaning the word "mixers," as it is obvious that either burners or mixers may be used, according to the character of the combustible employed.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent, is—

1. A lamp of the character described, comprising a vertical supporting and supply pipe, burners, and mantles above the latter, in combination with a globe comprising an upper globular or spherical portion normally inclosing the mantles, and a lower cylindrical portion normally inclosing the burners, a support for said globe vertically adjustable upon the supporting and supply pipe, the globe being detachably connected at its upper end to said globe-support, and means mounted on the lower end of the lamp for guiding and laterally supporting the cylindrical lower portion of the globe, substantially as described.

2. A lamp of the character described, comprising a vertical supporting and supply pipe, burners, and mantles above the latter, in combination with a globe comprising a spherical upper portion and a cylindrical lower portion, a support for said globe vertically adjustable upon the supporting and supply pipe, the globe being detachably connected at its upper end to said globe-support, and spring-arms mounted upon the burners and adapted to bear against the inner wall of the cylindrical lower portion of the globe, substantially as described.

3. A lamp of the character described, comprising a vertical supporting and supply pipe, burners connected with the lower end thereof, and mantles supported above the burners, in combination with a globe open at top and bottom, and a vertically-adjustable support for said globe, comprising a collar longitudinally adjustable on the pipe and provided with a set-screw for securing it in position thereon, the globe being detachably connected to its support at its upper end only, and being free from opaque attachments at its lower end, substantially as described.

4. A lamp of the character described, comprising a vertical supporting and supply pipe, burners, and mantles above the same, in combination with a globe comprising a transparent spherical upper portion and a translucent cylindrical lower portion, a vertically-adjustable support for said globe, comprising a collar provided with a set-screw and adjustable longitudinally on the pipe, rods depending from said collar, and a ring or annulus provided with means for detachably engaging the upper end of said globe, and spring-arms connected to the lower end of the lamp and adapted to bear against the inner wall of the cylindrical lower portion of the globe, substantially as described.

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

GEORGE J. CRIST.

Witnesses:

IRVINE MILLER,  
WILL O'LAUGHLIN.