

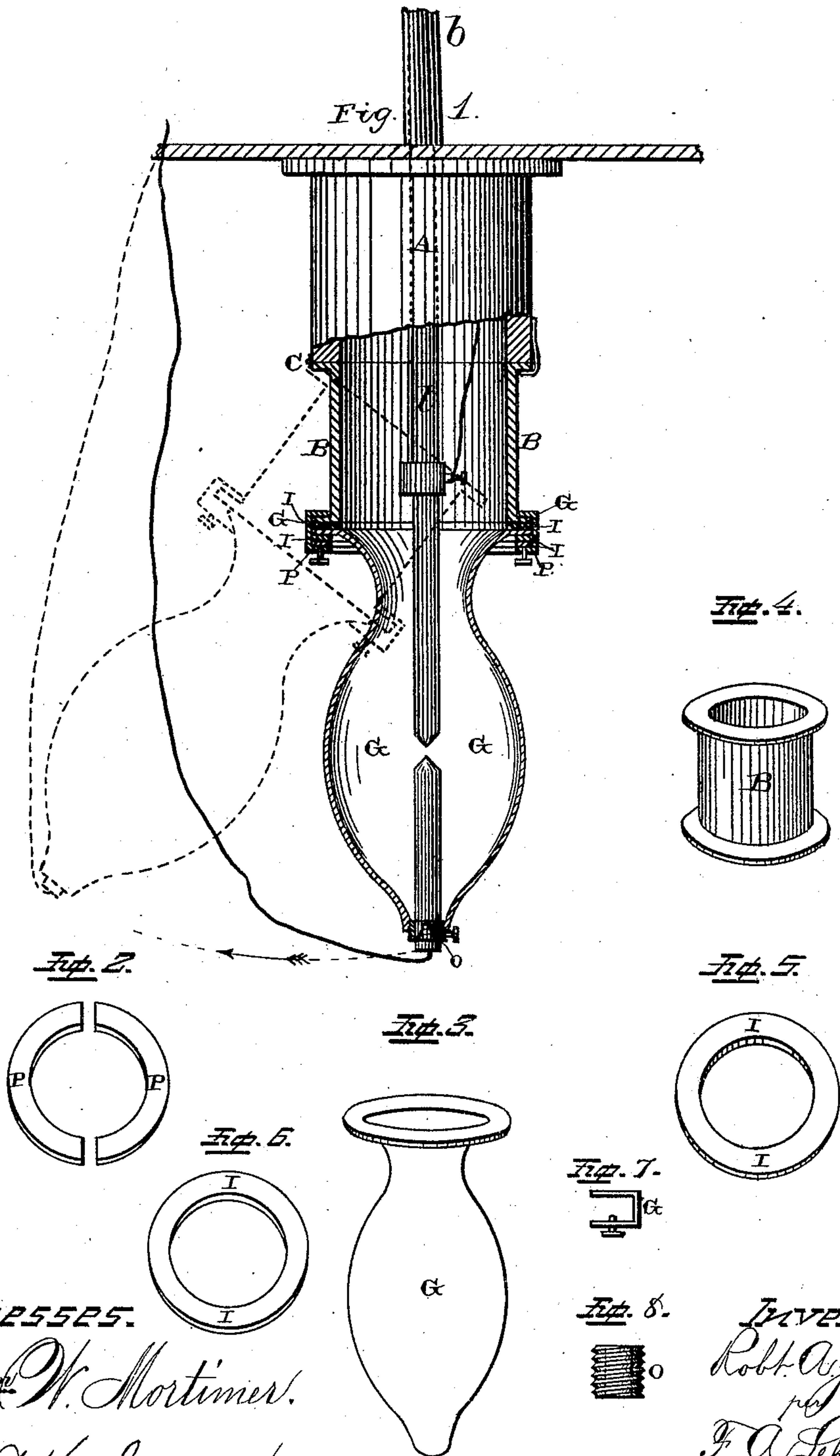
(No Model.)

R. A. JOHNSTON.

ELECTRIC LAMP.

No. 251,599.

Patented Dec. 27, 1881.



Witnesses.

W. W. Mortimer.

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UNITED STATES PATENT OFFICE.

ROBERT A. JOHNSTON, OF CLEVELAND, OHIO, ASSIGNOR OF ONE-HALF
TO ALPHONSE CHABONNEAN, OF SAME PLACE.

ELECTRIC LAMP.

SPECIFICATION forming part of Letters Patent No. 251,599, dated December 27, 1881.

Application filed June 10, 1881. (No model.)

To all whom it may concern:

Be it known that I, ROBT. A. JOHNSTON, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and
5 useful Improvements in Electric Lamps; 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
10 which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in electric lamps; and it consists in attaching the lower-carbon holder in the bottom of the
15 globe, by means of a nut or any other suitable device, so as to do away with the spider and frame which usually supports the globe, as will be more fully described hereinafter.

The object of my invention is to dispense with
20 all those parts of the lamp which have heretofore been used for holding the lower-carbon holder and the globe, and which not only increase the cost of the lamp, but cause a heavy shadow to be made under it—the very place,
25 frequently, where the light is needed.

Figure 1 is a vertical section of my invention, the globe-holder being shown as capable of being turned back in dotted lines for giving access to the upper-carbon holder. Figs. 2, 3,
30 4, 5, 6, 7, 8 are detail views of different parts of the lamp.

A represents the support, which is secured to the under side of the ceiling or any other suitable place, and to which the globe-holder
35 B is hinged. This holder is provided with a hinge, C, and with either a spring-catch, clamp, or any other suitable device for retaining the holder in place after it has been closed. Upon the top of the support A is formed any suitable tubular extension, *b*, up into which the upper-carbon holder *t* can be pushed, so as to move the upper carbon out of the way at any time. By means of this hinge the holder can be swung back at any time, so as to give ready
40 access to the carbons or other parts of the lamp. The globe G, having a flange formed around its upper edge, is fastened to this globe-holder by means of suitable washers, I, and clamps G, so as to be held rigidly in place.
45 One washer is placed upon the top of this flange

and a second one is placed against its under side, and then a divided metallic band or ring, P, is applied to the under side of the lower washer. The clamps will catch over the top of the globe-holder and under the divided band, 55 which is placed against the under side of the lower washer. The lower-carbon holder is held by a small nut, O, which may be screwed into the lower part of the globe, or secured thereto in any suitable manner. To this nut will be 60 attached as light a wire as possible, which will convey the current to the lower carbon. As this nut is very small, and as it is the only opaque substance which is connected to the lower part of the globe, it will readily be seen 65 that it can cast but very little, if any, shadow directly under the lamp.

Where the usual frame is used for supporting the globe and a spider for supporting the lower-carbon holder a heavy shadow is always 70 cast directly under the lamp, which in many instances causes a very great inconvenience, besides adding to the cost of the lamp. To dispense with this shadow and to simplify and cheapen the cost of the lamp has been the ob- 75 ject of this invention.

Where this lamp is to be used as a street-lamp the nut may be screwed upon the outside of the globe instead of the inside.

Having thus described my invention, I 80 claim—

1. In an electric lamp, the combination, with the lower carbon, of a glass globe surrounding the arc, holding devices at its upper edge, and a socket for the said carbon, attached to the 85 lower end of said globe and supported by it.

2. In an electric lamp, the combination of the carbons and a globe surrounding the arc with a hinged support to which the globe is attached, and which support is adapted to be 90 turned backward, carrying the globe with it, substantially as described, so as to give access to the interior of the globe and the carbons.

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

ROBT. A. JOHNSTON.

Witnesses:

ALPHONSE CHARBONNEAN,
W. E. MORROW.