

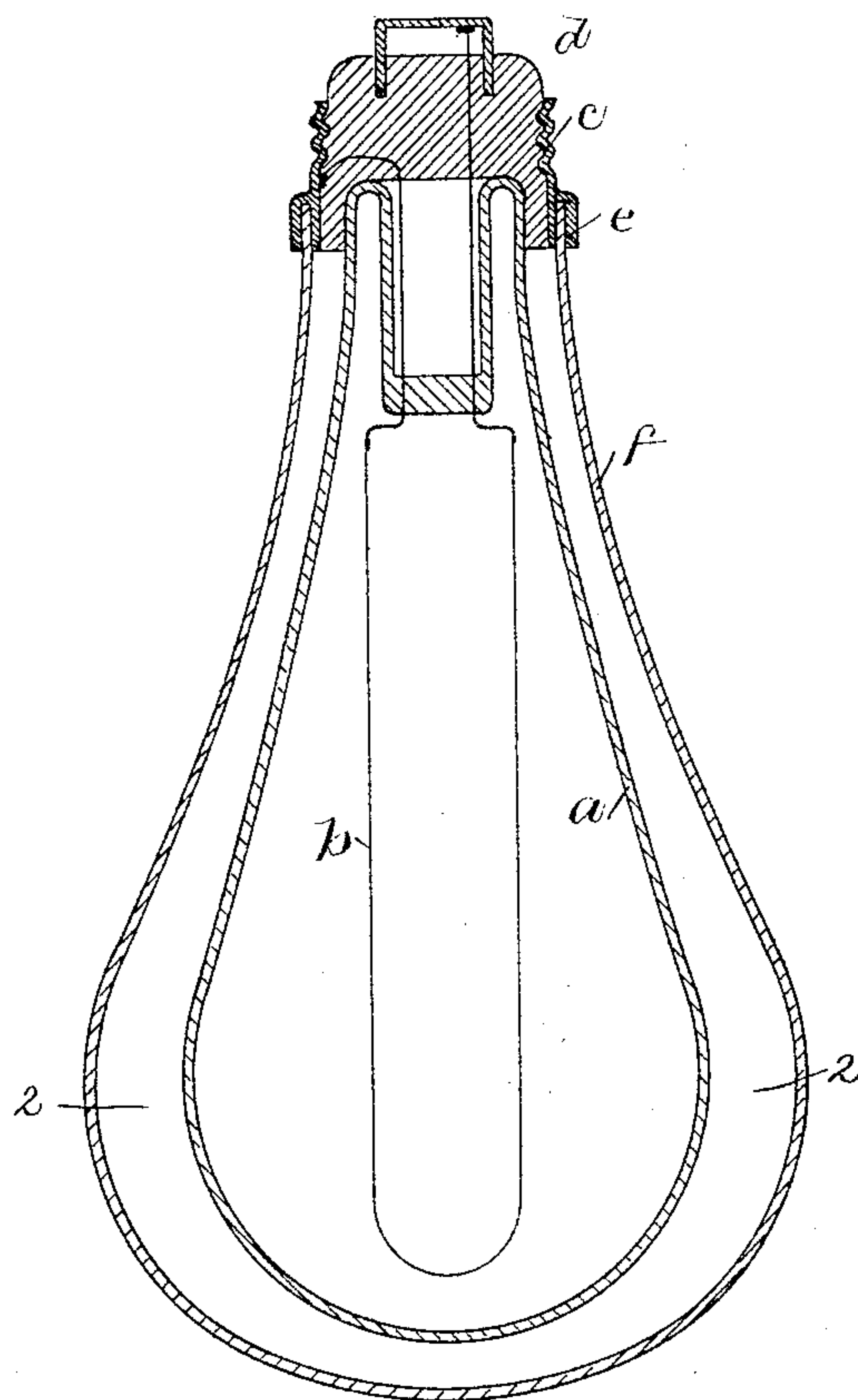
(No Model.)

G. P. BARTLETT.

GLOBE FOR INCANDESCENT ELECTRIC LAMPS.

No. 285,784.

Patented Oct. 2, 1883.



WITNESSES
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GEORGE P. BARTLETT, OF WOBURN, MASSACHUSETTS.

GLOBE FOR INCANDESCENT ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 285,784, dated October 2, 1883.

Application filed May 7, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE P. BARTLETT, of Woburn, county of Middlesex, State of Massachusetts, have invented an Improvement in Globes for Electric Lamps, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

My invention relates to a globe for electric lamps, and has for its object to refract the rays, so as to vary the distribution of light proceeding from the lamp, and also, if desired, to give a tint or color to the light.

The invention consists, essentially, in the usual globe inclosing the luminous part of the lamp, and a secondary globe surrounding and inclosing the same, the space between the said globes being filled with any desired fluid for refracting or imparting a color to the light passing through, in combination with a collar and filling common to both, and connecting them, as hereinafter specified and claimed.

The drawing shows in vertical longitudinal section an electric lamp provided with a globe embodying this invention.

The globe *a* and filament *b* therein, constituting the luminous part, may be of any usual construction, one end of the said filament being shown as electrically connected with a threaded metallic collar, *c*, adapted to screw into a suitable socket, and attached to the globe *a* in any suitable manner, as by a cement filling, *d*. The said collar *c* is shown in this instance as provided with a flange, *e*, adapted to receive and hold the mouth of an inclosing-globe, *f*, similar in general outline to the globe *a*, but larger than it, so as to leave a space of varying thickness between the said globes, the said space being filled with a fluid, by which the light may be refracted, and, if de-

sired, may have a tint or color imparted to it. As shown in this instance, the space between the globes *a* and *f* gradually increases toward the points 2, the said compound globe thus acting as a lens to concentrate the rays in a horizontal direction, or cause a larger amount of light than usual to pass laterally from the globe, the amount of light being diminished above and below the said globe. The collar *c* serves to close the mouth of the outer globe, and the opening between it and the inner globe is tightly sealed, so as to prevent the escape of the fluid. The two globes are securely held in the proper position relative to one another by the collar *c*. If desired, the relative shape of the two globes might be varied so as to concentrate the light in any desired direction.

I am aware that lenses consisting of walls of glass filled with a fluid have been used in connection with artificial lights, and do not broadly claim such a device.

I claim—

1. The globe *a*, inclosing the luminous part of an electric lamp, and a second globe, *f*, surrounding the same, with an intervening chamber and a fluid filling in said chamber, combined with the collar *c* and a cementitious filling for tightly connecting said globes, substantially as shown and described.

2. The globes *a* and *f*, combined with the collar *c*, its flange *e*, and the filling *d*, to hold the globes in proper relative position, all combined and arranged substantially as shown and described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE P. BARTLETT.

Witnesses:

JOS. P. LIVERMORE,
B. J. NOYES.