

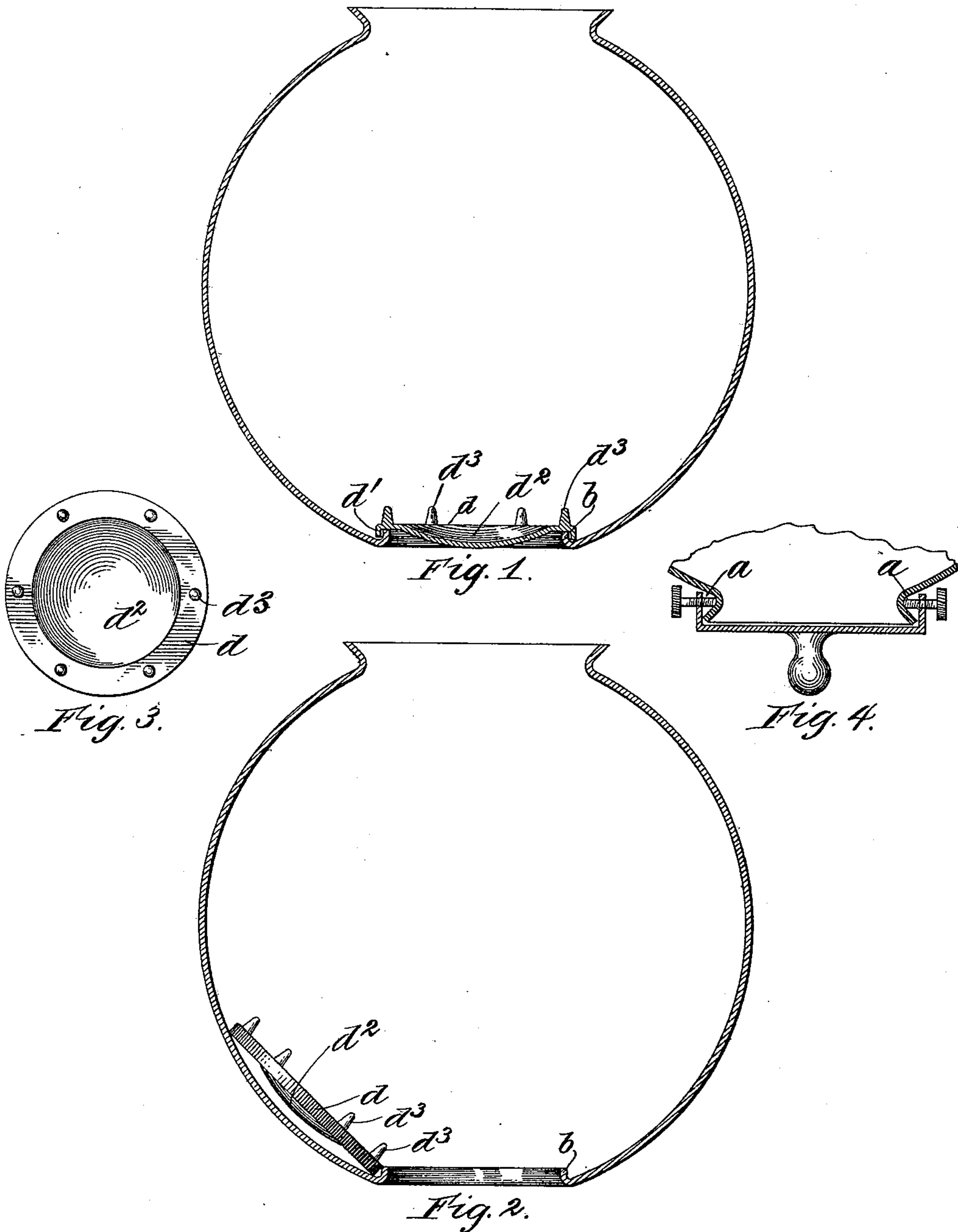
No. 627,487.

Patented June 27, 1899.

T. E. DROHAN.
GLOBE.

(Application filed Dec. 23, 1898.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

THOMAS E. DROHAN, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE SIEMENS & HALSKE ELECTRIC COMPANY OF AMERICA, OF SAME PLACE.

GLOBE.

SPECIFICATION forming part of Letters Patent No. 627,487, dated June 27, 1899.

Application filed December 23, 1898. Serial No. 700,137. (No model.)

To all whom it may concern:

Be it known that I, THOMAS E. DROHAN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Globes for Electric - Arc Lamps, (Case No. 190,) of which the following is a full, clear, concise, and exact description.

My invention relates to a globe for electric-arc lamps; and its object is to provide a globe of improved construction with an opening in the bottom formed in a convenient manner, so that the interior thereof may be readily accessible for the purpose of trimming the lamp, and to provide an improved cover for this opening which may be quickly and readily removed therefrom and which will not be interfered with in any way by the action of the elements if the globe is exposed to the weather.

Heretofore when globes for arc-lamps have been made with an opening in the bottom to permit access to the interior it has been usual to form the globe with a flaring lip or flange around the edge of the opening and to provide a cover fitting on the exterior thereof and held in place by the engagement of thumb-screws with the flange before referred to. There are two objections to this construction. First, in the winter-time rain and sleet are apt to run down the outside of the globe and freeze in the interstices between the cover, thumb-screws, and flange, so that it is very difficult for the numbed fingers of the lamp-trimmer to loosen the thumb-screws and remove the cover. Secondly, the exterior cover, which is usually provided with a knob to be grasped by the trimmer, is apt to be accidentally connected with some current-carrying part of the lamp, so that persons may often be injured by accidentally touching the external cover or its projecting knob. In accordance with my invention a globe is provided wherein these objections are eliminated and which is satisfactory in every respect.

In accordance with my invention that portion of the globe which forms the edge of the opening in the bottom thereof is turned upward and forms an annular ledge projecting into the interior of the globe. To close this opening, a cover is provided of a larger diam-

eter than the annular ledge, and this cover is adapted to fit upon the ledge like a cap. When it is desired to remove the cover, the fingers may be inserted within the opening, and the cover or cap may be lifted off and pushed to one side of the globe, where it will lie, resting against the annular upturned lip or ledge. The cover is inserted into the globe in the first place through the upper opening, which is made for this purpose of a larger diameter than the lower opening and is provided with a projecting flange, which is engaged by thumb-screws upon the lamp-frame, as usual, and is never disturbed, the trimming of the lamp being done entirely through the lower opening.

My invention will be further described by reference to the accompanying drawings, wherein—

Figure 1 is a vertical sectional view of a globe embodying my invention. Fig. 2 is a similar view, except that the cap or cover is shown as removed from the lower opening and pushed to one side in the position which it would occupy during the trimming of the lamp. Fig. 3 is a detail plan view of the cap. Fig. 4 is a detail sectional view illustrative of the prior art.

Like letters indicate like parts wherever they are shown.

Referring to Fig. 4 it will be evident at a glance that rain or sleet falling upon the outside of the globe in cold weather will trickle down, finally coming to rest in the spaces *a a*, and will freeze there, so that it will be very difficult to remove the cover. In fact, globes are very frequently broken at this point during the winter-time by the endeavors of the lamp-trimmer to remove covers held in place, as indicated in this view, Fig. 4.

My device will be easily understood by reference to Figs. 1 and 2. The glass around the edge of the opening in the bottom of the globe is turned upward, as indicated, and forms an annular lip or ledge *b*, projecting into the interior of the globe. The cover *d* is in the form of a circular cap resting upon the annular lip *b* and has itself a rim *d'* encircling the lip and preventing accidental dislodgment. The cap also is preferably formed with a central depression *d''*, as indicated, so that it will interfere as little as possible with

that part of the lower-carbon holder which usually projects downward into the lower part of the globe. A number of projecting lugs d^3 d^3 may be provided at intervals around the upper edge of the cap. The purpose of these lugs will be apparent upon a glance at Fig. 2, whereby it will be seen that one of these lugs will always be near the edge of the opening, so that it may be grasped by the fingers of the lamp-trimmer in order to lift the cap enough to clear the lip b , against which it rests, and allow it to slide into place.

It will be seen that by the construction above set forth the interior of the globe will always be readily accessible by the simple act of lifting the cap with the fingers and that there will be no possibility of this cap becoming frozen fast to the ledge upon which it rests, for no rain can go far enough upward into the interior of the globe to cause such trouble.

It is an important feature in a lamp-globe of this class to provide a retaining part for the interiorly-disposed cover, whereby the said cover may be held when desired in a position away from the lower opening to permit the free access of the trimmer to the lamp mechanism. This feature in addition prevents frequent breakages of the said globes by reason of the cover being dislodged or by its slipping and striking the glass with sufficient force to fracture it.

I have found in practice that globes made in accordance with my invention are very convenient and give little trouble.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a globe for electric-arc lamps having top and bottom openings therein, of a cover d disposed within the globe adapted normally to close the bottom opening through which the lamp is attended, the portion of the globe surrounding said bottom opening terminating in an upwardly-projecting rim providing a seat upon which the cover normally rests and affording a means to sustain said cover to one side of the opening for the purpose of allowing free access to the interior of the globe, substantially as described.

2. The combination with a globe for electric-arc lamps having a bottom opening therein through which the lamp is attended, of a cover d provided with an annular rim disposed within the globe adapted normally to close said opening, which opening is provided with an interiorly-projecting rim over which the rim carried upon the cover is adapted to fit when the cover is seated thereon to close said opening, whereby access of rain to the cover is prevented, substantially as described.

3. The combination with a globe having an opening in the bottom thereof, of a cap normally covering said opening upon the inside of the globe, such cap being of larger diameter than the diameter of said opening, and a projecting lug upon the upper surface of said cap, substantially as and for the purpose set forth.

In witness whereof I hereunto subscribe my name this 19th day of December, A. D. 1898.

THOMAS E. DROHAN.

Witnesses:

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