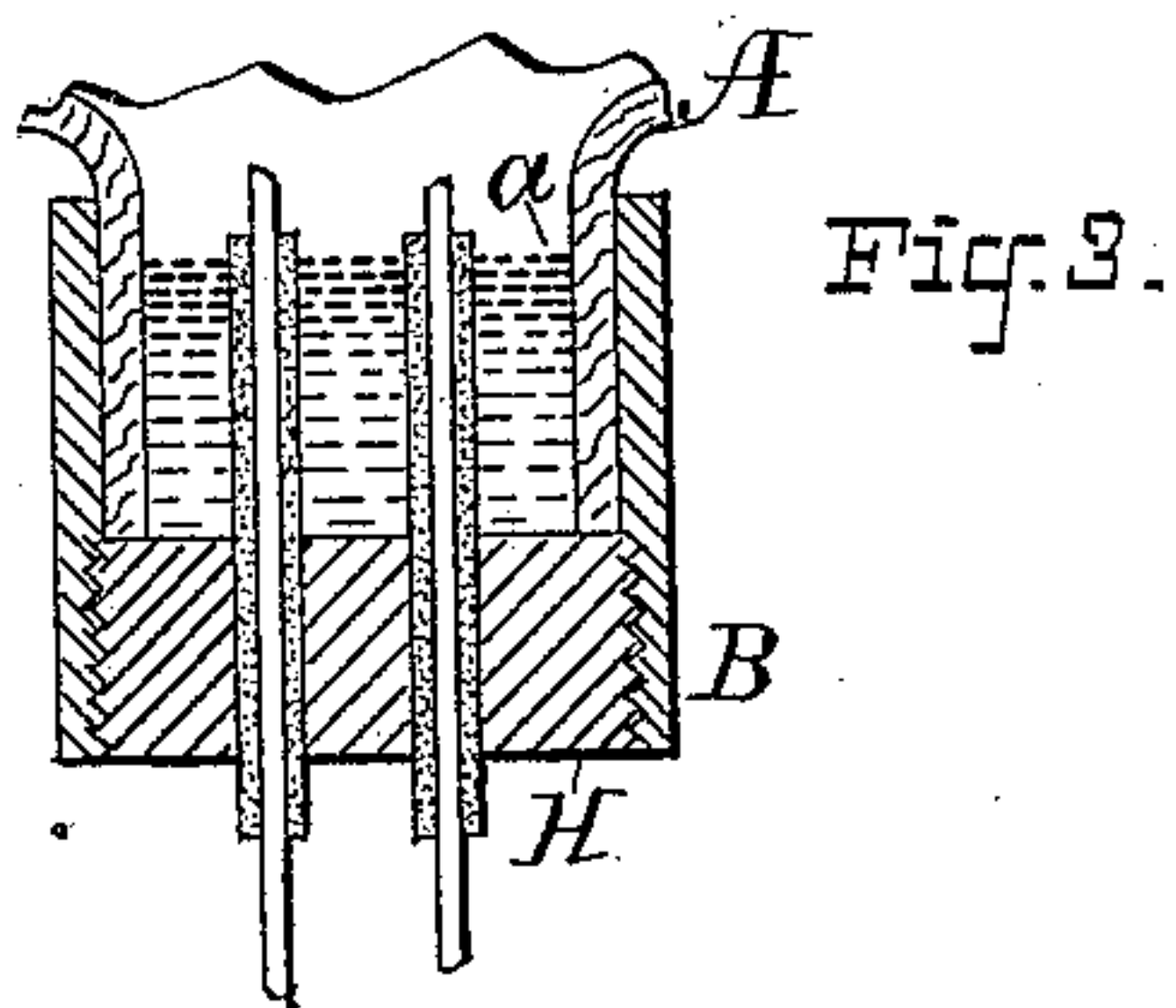
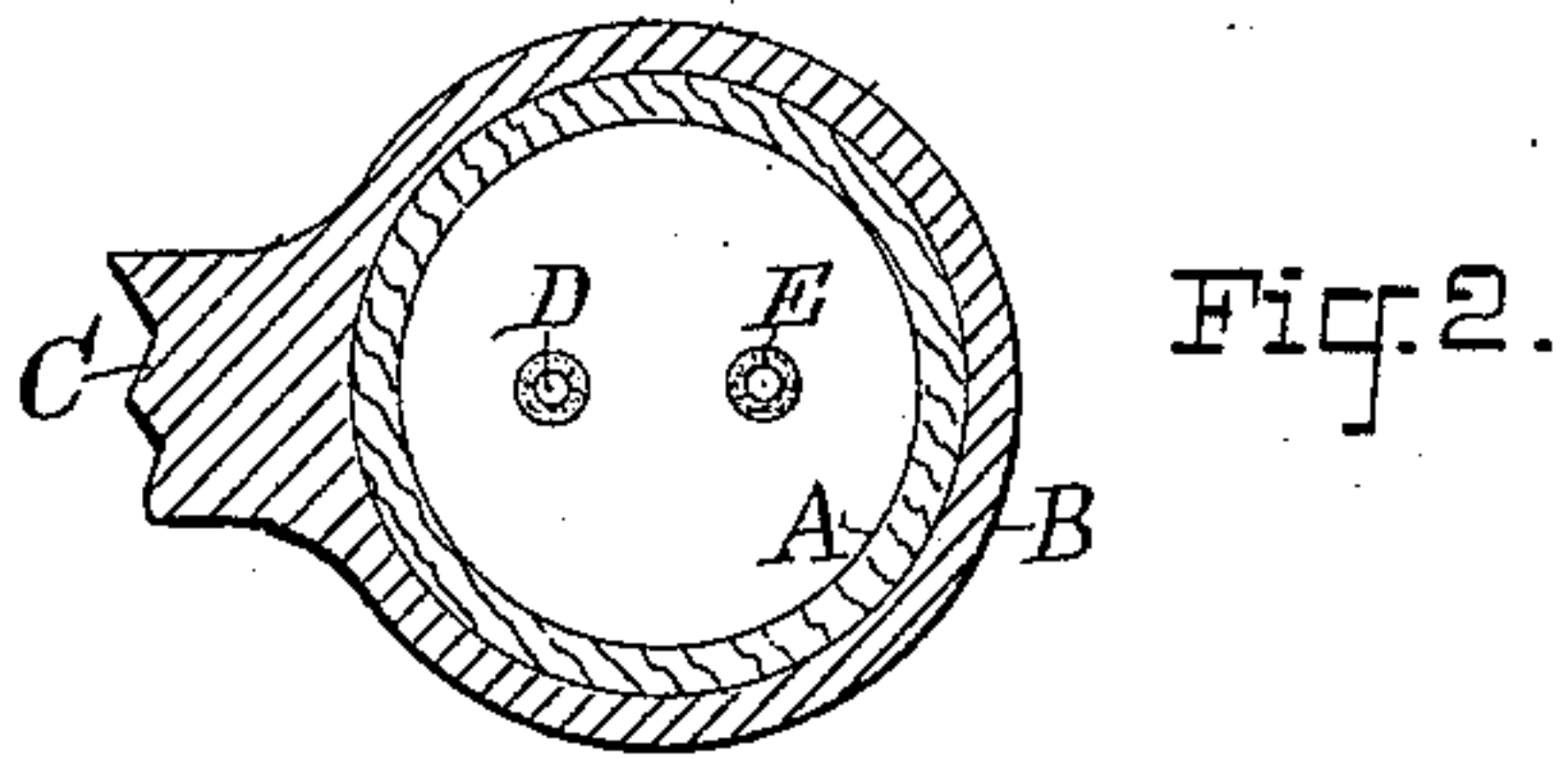
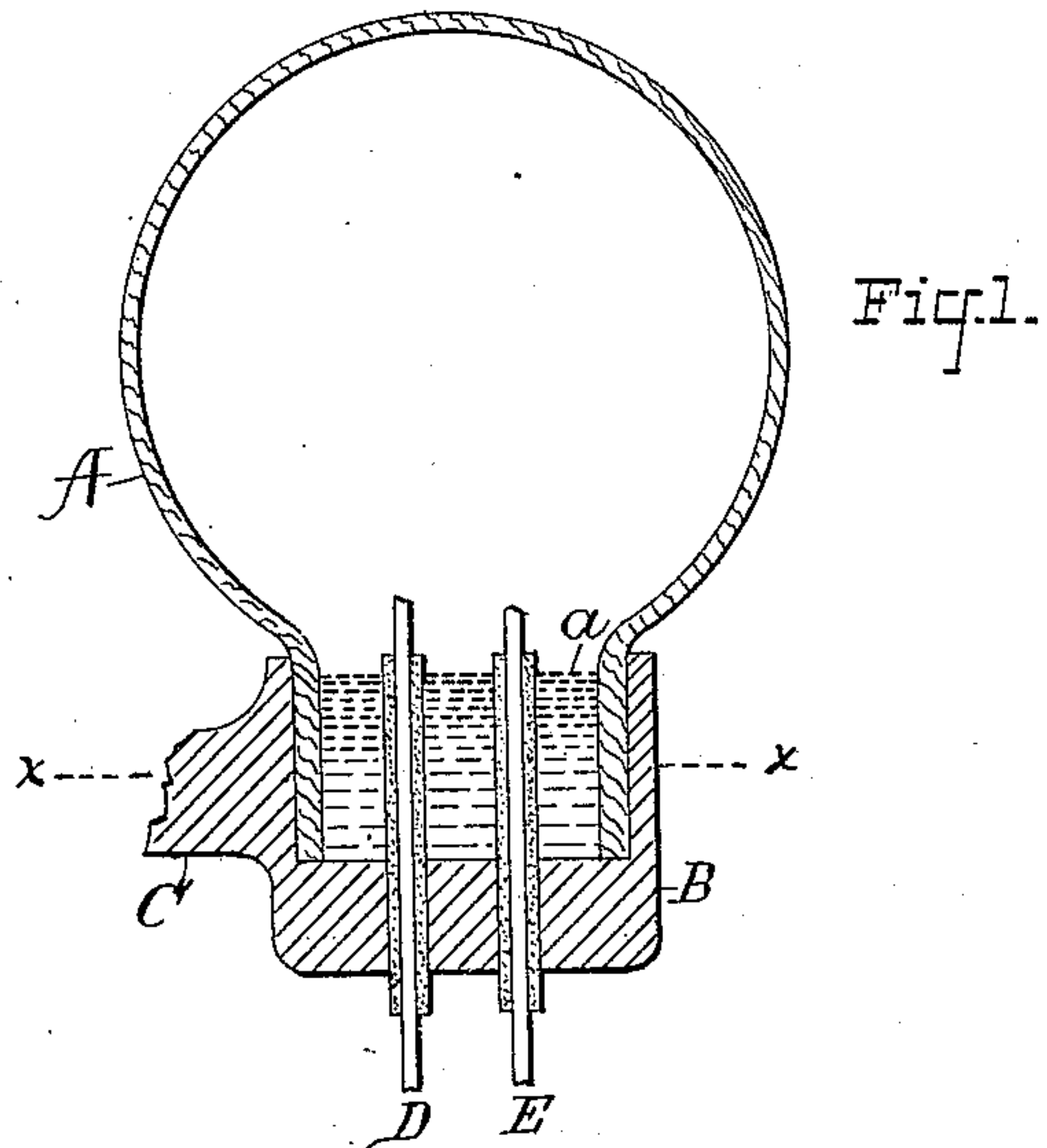


(No Model.)

S. F. VAN CHOATE.
INCANDESCENT ELECTRIC LAMP.

No. 362,128.

Patented May 3, 1887.



ATTEST:

J. A. Hurdle
Thos. Torrey

INVENTOR:

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by W. C. Townsend
Att'y.

UNITED STATES PATENT OFFICE.

SILVANUS F. VAN CHOATE, OF NEW YORK, N. Y.

INCANDESCENT ELECTRIC LAMP.

SPECIFICATION forming part of Letters Patent No. 362,128, dated May 3, 1887.

Application filed August 11, 1882. Serial No. 69,082. (No model.)

To all whom it may concern:

Be it known that I, SILVANUS F. VAN CHOATE, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Incandescent Electric Lamps, of which the following is a specification.

The object of my invention is to provide a simple and effective arrangement whereby the incandescing filament or other light-giving portion of electric lamps may be sealed from the access of external air.

A further object is to so construct the lamp that the inclosing globe or casing may be readily removed and replaced at pleasure for the purpose of obtaining access to the light-giving portion of the lamp, and so that the lamp will be resealed upon the simple restoration of the globe to its proper position.

To these ends my invention consists in a certain combination, in an electric lamp, of a cup containing mercury or other sealing fluid or liquid and supporting the light-giving portions of the lamp, two insulated supporting-conductors secured in said cup, and an inverted globe or casing, the neck of which rests within the cup and is immersed in the fluid or liquid, so as to practically seal the lamp, said globe being so constructed and arranged that it can be at any time lifted out of the sealing fluid or liquid to expose the light.

In the accompanying drawings, Figure 1 is a vertical central section of a lamp embodying my invention. Fig. 2 is a horizontal section on the line *xx* of Fig. 1. Fig. 3 is a vertical central section of a modification of the sealing portion of the lamp.

Referring to Fig. 1, B represents a cup or suitable receptacle, of any desired shape or material, containing a sealing fluid or liquid, preferably mercury, and supported by a bracket-arm or other fixture, C, of any suitable construction, separate from or formed in one piece with the cup, or by any other suitable means.

D E indicate the electric conductors which supply the electric current to the lamp, and which pass through the bottom of the cup and are suitably insulated by a non-conducting envelope applied thereto in any desired manner, or in any other way known in the art.

At the points where the conductors pass through the cup, when desired, a cementing

material is applied to prevent the escape of the sealing fluid or liquid. The insulation for the two conductors extends to a point above the level of the sealing fluid or liquid, as indicated in the drawings, or as may be desired. The fluid or liquid rises to the point *a* when the inverted globe is in place. The incandescent strip or filament or other light-producing substance or material is supported or connected in any suitable manner with the conductors D E.

A indicates the inclosing and protecting globe, of glass or other substance. The globe A is supported in any suitable manner in an inverted position from the cup, bracket, or other support, with its neck dipping into the fluid or liquid, so as to seal the space within the globe containing the light. In the form here shown the neck rests upon and is supported by the bottom of the cup B. The neck may be shaped to fit snugly within the cup, so as to hold it in place, or it may fit loosely and be secured by a screw set in the side of the cup.

In the modification shown in Fig. 3 a stopper, H, is screwed or fitted into the lower end of a tube, B, and when desired the joints in the cup may be cemented with any suitable material.

The plug or stopper H may be of some insulating material, in which case the application of insulating material to the conductors at the portion where they pass through the plug is unnecessary.

What I claim as my invention is—

The combination of the cup or receptacle B, containing a liquid, the supporting-conductors D E for the light, fitting in openings in the bottom of said cup, as described, so as to be directly supported thereby, and rising through and in contact with the liquid, said conductors being provided with an insulating-envelope to a point above the level of the liquid, and the inverted removable globe or holder having an open mouth or neck which fits snugly within the cup, as and for the purpose described.

Signed at New York, in the county of New York and State of New York, this 9th day of August, A. D. 1882.

SILVANUS F. VAN CHOATE.

Witnesses:

THOS. TOOMEY,
H. C. TOWNSEND.