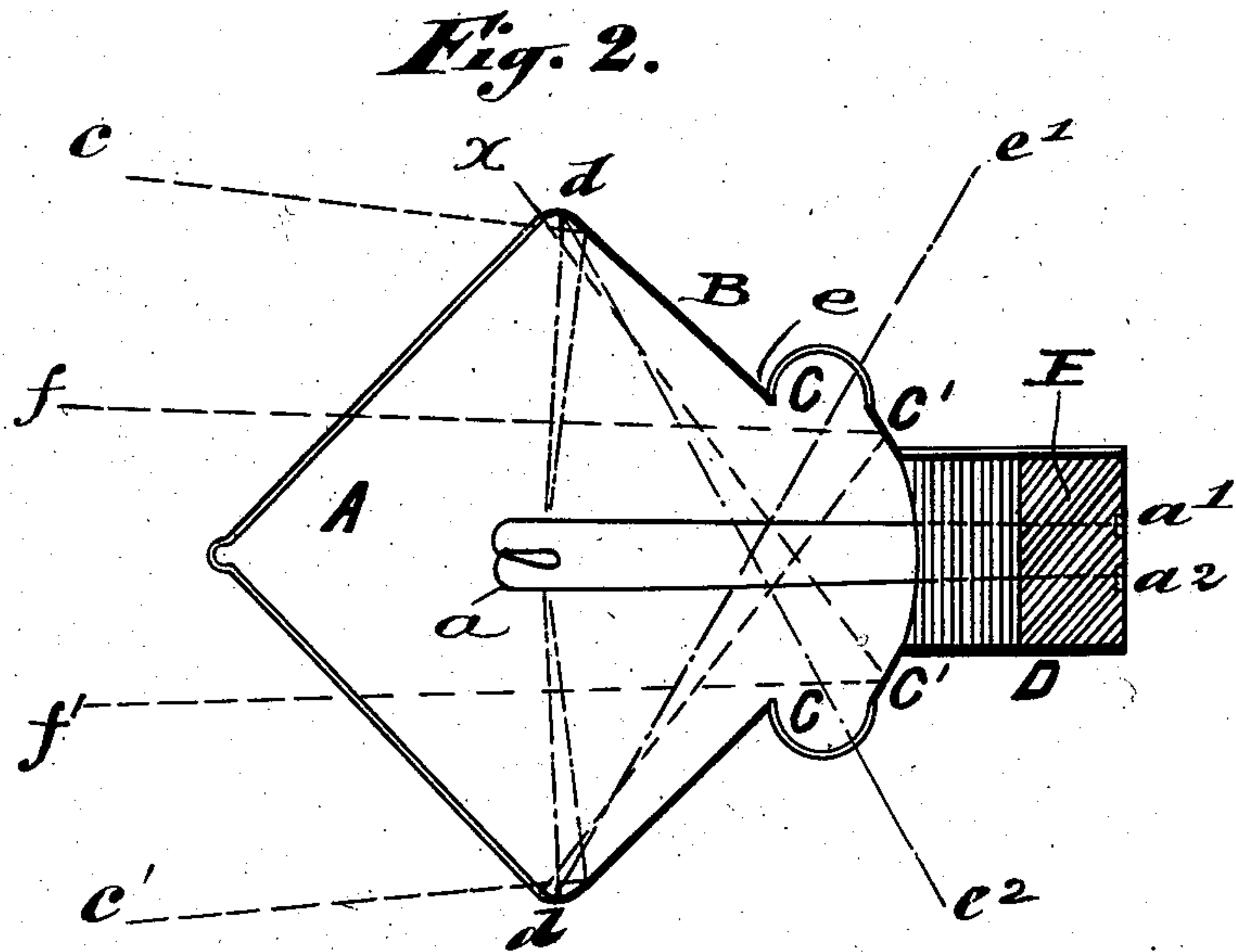
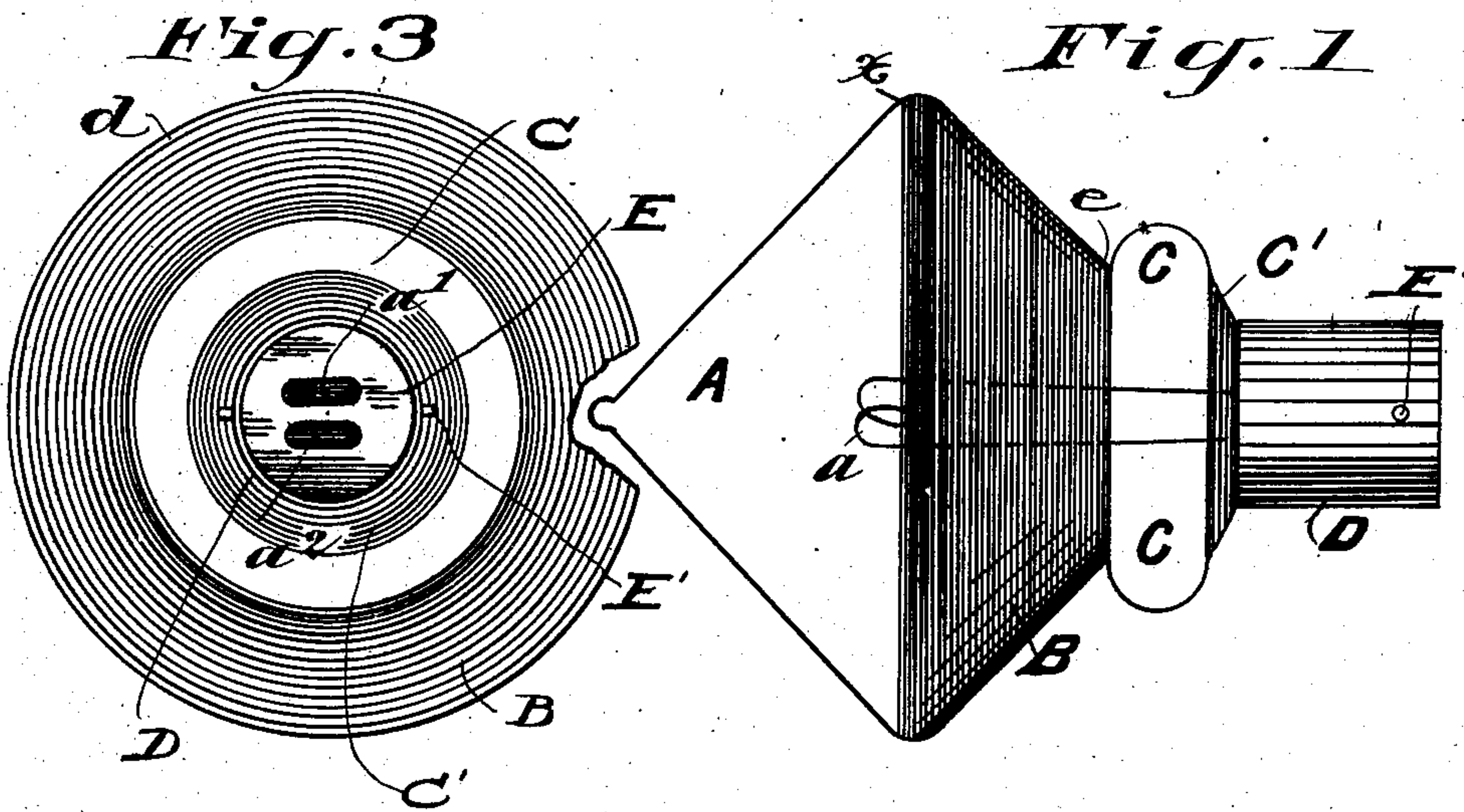


(No Model.)

V. DE SPRUNER-MERTZ.  
GLOBE FOR INCANDESCENT LAMPS.

No. 605,026.

Patented May 31, 1898.



Witnesses:-

*P. Krueper*  
*George E. Gutz*

Inventor

Victor de Spruner-Mertz.  
By his Atty. *M. Reichelt*



# UNITED STATES PATENT OFFICE.

VICTOR DE SPRUNER-MERTZ, OF BRUSSELS, BELGIUM.

## GLOBE FOR INCANDESCENT LAMPS.

SPECIFICATION forming part of Letters Patent No. 605,026, dated May 31, 1898.

Application filed November 18, 1897. Serial No. 658,916. (No model.) Patented in Germany July 30, 1896, No. 92,154.

*To all whom it may concern:*

Be it known that I, VICTOR DE SPRUNER-MERTZ, a citizen of the Kingdom of Belgium, residing at Brussels, Belgium, have invented certain new and useful Improvements in Globes for Incandescent Lamps, (patented in Germany, No. 92,154, July 30, 1896,) of which the following is a specification.

This invention relates to an improvement in globes of incandescent lamps, and has for its object to provide for a more complete reflection of light in the usual incandescent-lamp globes employing a carbon film contained in vacuum.

The invention therefore consists in a globe of double conical shape in longitudinal cross-section, the rear portion of the globe having a semicircular bulge adjacent to the reduced portion of the rear conical portion, the front conical surface and bulged portions being transparent, and the rear conical surface being opaque and coated with a reflecting material, whereby the light-rays from the film are reflected both forwardly and rearwardly.

The invention further consists in the parts shown in the drawings, described in the specification, and more particularly pointed out in the claims.

In the drawings, Figure 1 is a side elevation of a globe embodying the novel features of my invention. Fig. 2 is a longitudinal vertical sectional view of the same, and Fig. 3 is an end view of the lamp.

In carrying out my invention the lamp is formed with a conical-shaped front portion A, the base of the portion A terminating in a curved line, as at  $d$ , from which point a like base of the conical-shaped portion B commences, the said portion B being in the form of a truncated cone, the contracted end  $e$  terminating in an annular semicircular bulged portion C, contracted in rear thereof in conical form at  $C'$ , the rear end of the lamp terminating in an annular extension D. With in the annular extension D is secured the base E of the lamp, which is provided with pins  $E'$  upon diametrically opposite sides of the same by which to attach the lamp to the wall or ceiling fixture in the usual or in any preferred manner.

The conical portion B of the globe is faced with a reflecting-surface, such as quicksilver,

the reflecting-coating extending forward to a point  $x$  or at the forward limit of the curved connection  $d$  between the conical portions A and B of the globe.

$a$  designates the usual carbon film connected with the contact-points  $a'$   $a''$  in the usual or in any preferred manner.

In the operation of the lamp the light-rays from the film are radiated against the reflecting-surface upon the portion B of the globe, and are consequently reflected forwardly in the direction indicated by the lines  $c$   $c'$ . The rays of light projected against the curved surface  $d$ , however, are reflected rearwardly through the clear glass of the bulge C, as at  $e'$   $e''$ . The rays of light are radiated from the extreme forward edge of the reflecting-surface upon the curved portion  $d$  rearwardly against the reflecting material upon the conical portion  $C'$  and from thence are reflected forwardly in a line indicated at  $f$   $f'$ , as shown in Fig. 2.

It will thus be seen that I have provided a lamp-globe which provides for a perfect radiation of light-rays in a direction in front of the globe and a like radiation in rear thereof, whereby the room in which the lamp is placed is lighted in every part.

What I claim is—

1. A lamp-globe formed of transparent material and consisting of a double conical portion truncated at one end, a narrow conical portion, and an intermediate annular portion integrally connecting the two first-named portions, the said conical portion and the adjacent member of the double conical portion being lined with reflecting material, and the source of light being adapted to be situated between the annular portion and the extreme end or tip of the globe, substantially as described.

2. A lamp-globe formed of transparent material and consisting of a double conical portion truncated at one end, a narrow conical portion, and an intermediate bulging and annular portion integrally connecting the two first-named portions, the walls of the truncated member of the double conical portion and the conical portion being lined with reflecting material and being substantially parallel and the source of light being adapted to be situated between the annular portion and



the extreme end or tip of the globe, substantially as described.

3. A globe for incandescent electric lamps formed of transparent material and consisting of a double conical portion truncated at one end and having the meeting ends of its members joined in a curved surface, a narrow conical portion, and an intermediate bulging and annular portion integrally connecting the two first-named portions, the wall of the double conical portion being lined with reflecting material from its truncated end to and somewhat beyond the line of junction of the members of said portion, the wall of the conical portion being likewise lined with reflecting material and arranged substantially parallel to the wall of the truncated member of said double conical portion, and the source of light being adapted to be situated between the annular portion and the extreme or tip end of the globe, substantially as described.

4. A globe for incandescent electric lamps formed of transparent material and consisting of a double conical portion truncated at one end and having the meeting ends of its

members joined in a curved surface, a bulging portion adjoining said truncated end of the double conical portion, a narrow conical portion, and an annular portion, all integrally connected together in the order named, the wall of the double conical portion being lined with reflecting material from its truncated end to and somewhat beyond the line of junction of the members of said portion, the wall of the conical portion being also lined with reflecting material and arranged parallel to the wall of the truncated member of said double conical portion, and the source of light being adapted to be situated approximately in the plane of the line of junction of said members of the double conical portion, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in the presence of two subscribing witnesses.

VICTOR DE SPRUNER-MERTZ.

Witnesses:

CHARLES SCHACHANEYER,  
GREGORY PHELAN.