(No Model.)

# G. C. THOMAS.

## BASE FOR INCANDESCENT ELECTRIC LAMPS.

No. 531,663. Patented Jan. 1, 1895.

Fig. 1.

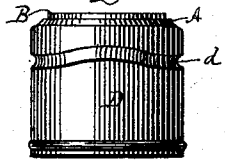



Fig. 3.

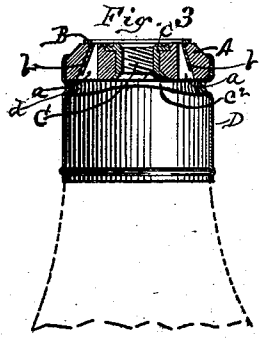



Fig. 2.

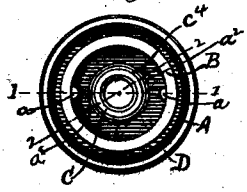



Fig. 4.

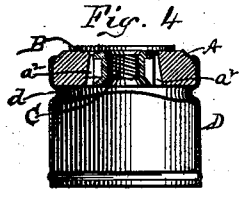



Fig. 5.

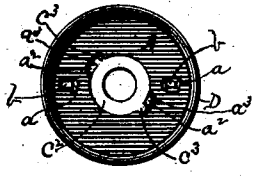



Fig. 6.

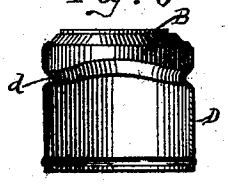



Fig 7.

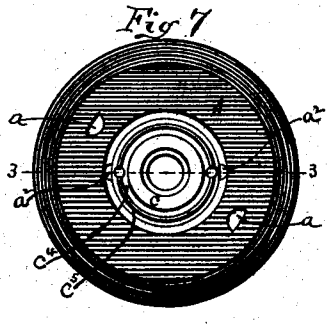
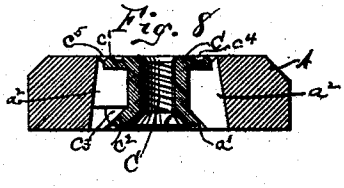



Fig. 8.




Witnesses
F. P. Valentine
George Maclean

Geo. C. Thomas Inventor

# UNITED STATES PATENT OFFICE.

GEORGE C. THOMAS, OF SOUTH FRAMINGHAM, MASSACHUSETTS.

## BASE FOR INCANDESCENT ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 531,663, dated January 1, 1895.

Application filed November 28, 1893. Serial No. 492,316. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE C. THOMAS, a citizen of the United States, and a resident of South Framingham, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Bases for Incandescent Electric Lamps, of which the following is a specification.

My invention relates to the manufacture of bases for incandescent electric lamps, whereby they are improved in construction and operation.

The object of my invention is to improve the base by using a vitreous infusible substance for the insulating part, and to improve the details of construction.

My invention consists in the improvements designated and combinations specifically claimed.

Figure 1 is a side view of a base for an incandescent electric lamp. Fig. 2 is a top view. Fig. 3 is a vertical central section on line 1 1. Fig. 4 is a vertical central section on line 2 2. Fig. 5 is a bottom view. Fig. 6 is a sectional view of the shell with the vitreous disk in place. Fig. 7 is an enlarged top view of insulating disk and central contact piece. Fig. 8 is an enlarged sectional view on line 3 3 of Fig. 7.

A is a disk of vitreous insulating material to which are attached the contact pieces B and C.

D is a metal shell which supports the disk A.

The contact piece B is made of some electrical conducting substance and is attached to A by means of the prongs *b b* forming part of B and bent so as to pass through the openings *a a* holding it firmly in position by pressing against the inclined sides of said openings *a a*. One terminal of the carbon fiber of the lamp consisting of a wire can be passed through either aperture *a* or *a* and soldered to B.

The contact piece C is made of some electrical conducting substance and occupies an opening *a'* in A. It is attached to A concentrically by means of flanges $c'$ $c^2$ which embrace the top and bottom respectively of A and prevent their separation. The contact piece C has a recess in its surface for the purpose of receiving the wire, constituting one terminal of the carbon fiber of the lamp, which is soldered thereto. This recess may consist of a groove $c^4$ near the edge or the edge may be beveled as at $c^5$, or the insulating material may be recessed. The wire terminal may pass through either groove $a^2$.

To prevent the turning of C in A, two points $c^3$ $c^3$ of the flange $c^2$ enter respectively two notches $a^3$ $a^3$ in A. The sides of opening *a'* have the grooves $a^2$ $a^2$ extending from top to bottom of A.

To prevent a rotary movement of the disk A, with relation to the shell D, I provide the shell with an inwardly extended annular cam-shaped head *d*, and the inner surface of the disk is beveled off at opposite sides, thus varying the thickness of the edge, or, in other words, providing an undulating annular surface conforming to and designed to bear upon the head *d*.

What I claim is—

1. In a base for an incandescent lamp, the combination of a shell having an inwardly extended cam-shaped head, and a disk of insulating material having its edge surface conformed substantially to said head, substantially as specified.

2. The combination of a shell having an inwardly extended annular, cam shaped head, and a disk of insulating material having an undulating inner edge, substantially as specified.

3. In bases for incandescent electric lamps, a vitreous disk having its edge of varying thickness, substantially as specified.

Signed at South Framingham, in the county of Middlesex and State of Massachusetts, this 24th day of November, A. D. 1893.

GEO. C. THOMAS.

Witnesses:
FRED L. OAKS,
JAMES J. VALENTINE.

Corrections in Letters Patent No. 531,663.

It is certified that in Letters Patent No. 531,663, granted January 1, 1895, upon the application of George C. Thomas, of South Framingham, Massachusetts, for an improvement in "Bases for Incandescent Electric Lamps," errors appear in the printed specification requiring correction as follows: In lines 66, 71, 75, 77, and 80, the word "head" should read *bead;* and that the said Letters Patent should be read with these corrections therein that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 29th day of January, A. D. 1895.

[SEAL.]

JNO. M. REYNOLDS,
*Assistant Secretary of the Interior.*

Countersigned:

JOHN S. SEYMOUR,
*Commissioner of Patents.*