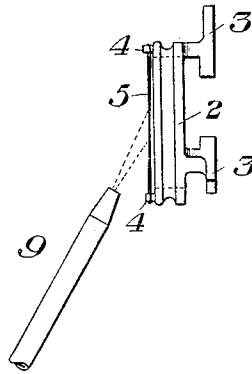


T. J. LITTLE, JR.  
 INCANDESCENT LIGHTING BODY.  
 APPLICATION FILED JULY 26, 1911.

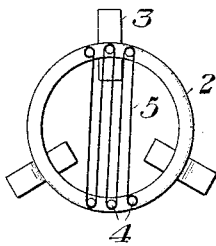
1,056,285.

Patented Mar. 18, 1913.

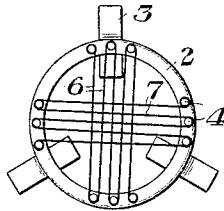
*Fig. 1.*



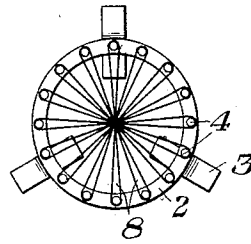
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



WITNESSES

*R. A. Balderson*  
*G. B. Blumling*

INVENTOR

*T. J. Little Jr.*  
 by *Behrman, Rymer & Parnell*,  
 Attys.

# UNITED STATES PATENT OFFICE.

THOMAS JAMES LITTLE, JR., OF WOODBURY, NEW JERSEY, ASSIGNOR TO WELSBACH LIGHT COMPANY, OF GLOUCESTER CITY, NEW JERSEY, A CORPORATION OF NEW JERSEY.

## INCANDESCENT LIGHTING-BODY.

1,056,285.

Specification of Letters Patent.

Patented Mar. 18, 1913.

Application filed July 26, 1911. Serial No. 640,611.

*To all whom it may concern:*

Be it known that I, THOMAS J. LITTLE, JR., a resident of Woodbury, in the county of Gloucester and State of New Jersey, have  
5 invented a new and useful Improvement in Incandescent Lighting-Bodies, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

10 Figure 1 is a side view of an incandescent lighting body embodying my invention; and Figs. 2, 3 and 4 are plan views showing different forms of the invention.

15 My invention has relation to incandescent lighting bodies or diaphragms, and is designed to provide a body of this character for use in lighting apparatus which can be readily and cheaply made and which will be  
20 efficient in service.

In accordance with my invention, I provide a supporting ring 2 of refractory material and preferably provided with legs 3, by means of which it can be attached to a  
25 suitable support. This ring may, in general, be similar to the rings commonly employed with inverted incandescent mantles. One face of the ring is provided with a series of projecting pins or studs 4, around  
30 which are wound or looped a plurality of threads or filaments 5, of a suitable textile material which has been treated in any well known or suitable manner similar to the treatment given incandescent gas mantles.  
35 These threads or filaments may be wound in various ways. Thus they may be wound back and forth across the ring, as indicated in Fig. 2 (only a portion of the windings being shown in this figure) until a sufficiently compact body has been formed; they  
40 may be a double winding, one over the other, as shown at 6 and 7 in Fig. 3; or the incandescent body may be made up of a plurality of radial loops 8, as shown in Fig. 4, a sufficient number of windings being provided  
45 in each case to make a body of the desired

compactness, especially at the central portion thereof. The gas is preferably directed against the body or diaphragm at an angle from a suitable burner nozzle 9, as indicated  
50 in Fig. 1.

My invention provides a very simple and cheap method of making an incandescent body or diaphragm of this character.

I claim:

1. An incandescent body or diaphragm comprising a supporting ring, and a plurality of radially disposed threads wound or looped across one end of the ring; substantially as described.  
60

2. An incandescent body or diaphragm comprising a ring of refractory material, a plurality of layers of threads wound or looped across one end of the ring, and a plurality of supporting projections on the  
65 other end of the ring; substantially as described.

3. An incandescent body or diaphragm, comprising a ring of refractory material having studs or projections on one of its  
70 ends, and a plurality of layers of threads wound or looped across the ring over the studs or projections, said layers of threads being in engagement with each other and on the same end of the ring; substantially as  
75 described.

4. An incandescent body or diaphragm, comprising a ring of a refractory material having studs or projections on one end thereof, and a plurality of radially disposed  
80 threads wound or looped across the ring over the studs or projections, so that the threads will be closer to each other at the central portion of the diaphragm than at the periphery thereof; substantially as de-  
85 scribed.

In testimony whereof, I have hereunto set my hand.

THOMAS JAMES LITTLE, JR.

Witnesses:

R. B. WASHINGTON,  
EDGAR LENTON.