

R. D. TIFFANY.
INCANDESCENT LAMP.
APPLICATION FILED AUG. 27, 1908.

941,593.

Patented Nov. 30, 1909.

Fig. 1.

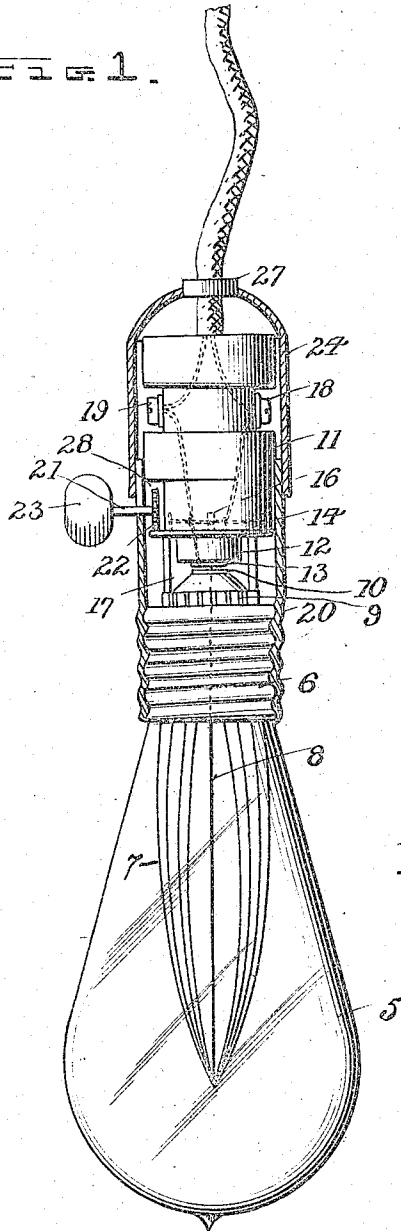


Fig. 4.

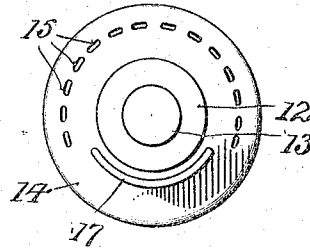


Fig. 2

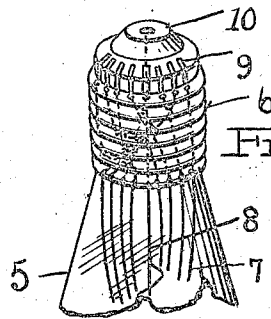
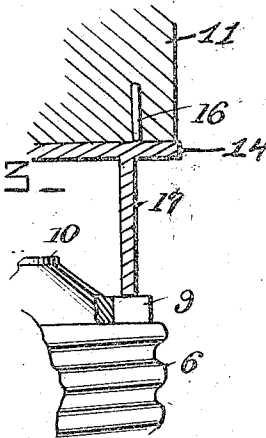


Fig. 3.



Witnesses

H. C. D. Nunn
W. A. Schmitt

Inventor

Ross D. Tiffany

By

Charles C. Tiffany

Attorneys

UNITED STATES PATENT OFFICE.

ROSS D. TIFFANY, OF BELLINGHAM, WASHINGTON.

INCANDESCENT LAMP.

941,593.

Specification of Letters Patent.

Patented Nov. 30, 1909.

Application filed August 27, 1908. Serial No. 450,484.

To all whom it may concern:

Be it known that I, ROSS D. TIFFANY, a citizen of the United States, residing at Bellingham, in the county of Whatcom, State of Washington, have invented certain new and useful Improvements in Incandescent Lamps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to incandescent lamps, and more particularly one provided with a plurality of filaments, and means whereby any number thereof may be thrown into circuit to vary the intensity of the light.

The object of the invention is to provide the usual globe or bulb with a plurality of looped filaments each connected intermediate their ends to a conductor located within the globe and provided at their ends with contacts. One of the leading-in wires is connected to the aforesaid conductor, and the other leading-in wire is connected to a movable contact-member which is adapted to successively engage the contacts of the filaments whereby any number of the latter may be thrown into circuit.

A further object of the invention is to provide a lamp of this kind which is simple in structure and which can be easily manipulated to produce the desired intensity of light.

In the accompanying drawings, Figure 1 is a vertical section through the lamp casing. Fig. 2 is a perspective view of the upper part of the bulb and the parts carried thereby. Fig. 3 is a sectional detail. Fig. 4 is a bottom plan view of one of the members hereinafter referred to.

Referring more particularly to the drawings, 5 denotes a bulb or globe of an incandescent lamp which is sealed and provided with a screw-sleeve 6, as usual. The bulb contains a plurality of looped filaments 7 which are connected intermediate their ends to a conductor 8, of fine copper wire depending into the bulb. The ends of the filaments are embedded in the seal as usual, and on the outside thereof, each of said ends is connected to a contact 9. The conductor 8 also extends through the seal, and on the outside thereof, is connected to a metallic disk 10.

At 11 is indicated a cylindrical block of insulating material having at its lower ends a reduced portion 12 to the end of which is

secured a metallic plate 13. To the lower end of the block 11, and surrounding the part 12, is secured a ring 14 which is provided near its outer edge with a number of regularly spaced holes 15, which are for a purpose to be presently described. The ring is fastened to the block by means of lugs 16 embedded therein. From the ring projects a segmental sleeve 17 which forms a movable contact-member adapted to engage the contacts 9 as will be explained hereinafter. The block 11 is provided with binding screws 18 and 19, respectively, whereby connection is made with the leading-in wires. The screw 18 is in electrical connection with the lugs 16, and the screw 19 is electrically connected to the plate 13.

The lower part of the block 11 is inclosed by a sleeve 20 which is threaded at its lower end to receive the threaded sleeve 6 of the bulb 5, and in its upper edge is a notch in which works a stem 21 connected to a toothed wheel 22 which is engageable with the holes 15 of the ring 14. The outer end of the stem 21 is fitted with a finger piece 23 of suitable insulating material.

The upper part of the block 11 is inclosed by a cap 24 which is removably connected to the sleeve 20 by a pin 25 and bayonet slot 26. In the top of this cap is an opening through which the leading-in wires pass to the binding screws 18 and 19, said opening being lined with a bushing 27 of insulating material.

To assemble the parts, the block 11 is placed within the sleeve 20 and cap 24, and said sleeve and cap are then coupled together by the pin 25 and bayonet slot 26. The bulb is then screwed into the sleeve 20 until the disk 10 is in contact with the plate 13, whereby the conductor 8 is connected to one of the leading-in wires. With the parts in this position, the block 11 is free to rotate in the sleeve 20 and the cap 24, and the sleeve 17 engages the contacts 9 when it is brought above the same, which is done by rotating the block 11 by means of the toothed wheel 22 and the ring 14. The block 11 adjacent the wheel is cut away as indicated at 28 and that portion of the ring 14 which is provided with the holes 15 projects therefrom so that the toothed wheel 22 may engage with said holes. Upon rotating the block 11 and engaging the sleeve 17 with two or more of the contacts 9, a corresponding number of filaments will be thrown into circuit and the in-

tensity of the light is thus regulated. When the sleeve is disengaged from all the contacts, all the filaments will be cut out. The filament-contacts are arranged in pairs the members of each pair being located adjacent to each other, as shown in Fig. 2 so that when the first pair of contacts is engaged by the sleeve 17 one filament will be in circuit. When the next pair of contacts is engaged by the sleeve another filament will be in circuit, and so on until all the filaments are in circuit. Four filaments are shown, but their number is immaterial and may be varied to suit the demands of the trade. If desired only one side of a filament may be thrown in circuit by engaging the contact 17 with the first one of the contacts 9.

The current may be traced from one of the leading-in wires to the binding screw 18, thence to the lugs 16, ring 14, sleeve 17, the contacts 9, filaments 7, conductor 8, disk 10, plate 13, and then to the binding screw 19 and to the other leading-in wire.

What is claimed is:

1. A socket for incandescent lamps which have a multiplicity of filaments, comprising a casing, an insulating element rotatably held in said casing, a central contact, a conductor plate on the end of said insulating

element provided with gear engaging means, an arcuate flange on said plate to form a multiple contact, a gear in said socket engaging the means on the plate to rotate said plate and element, means exterior of the socket to rotate the gear, and conductor wires connected to said plate and the central contact of the socket.

2. The combination with an incandescent lamp having a plurality of filaments, a wire connected to each of said filaments, and a base provided with a centrally disposed contact connected to said wire and a contact point for and connected to each of said filaments; of a socket, an insulating element rotatably held in said socket, a central contact forming connection with the central contact of the lamp, a conductor plate on the end of said insulating element, an arcuate flange on said conductor plate, means to rotate said conductor plate, and conductor wires connected to said plate and the central contact of the socket.

In testimony whereof I affix my signature in presence of two witnesses.

ROSS D. TIFFANY.

Witnesses:

ED E. HARDIN,
J. W. ROSE.