

R. H. HENDERSON.
ELECTRIC ILLUMINATING DEVICE.
APPLICATION FILED MAY 19, 1909.

1,024,573.

Patented Apr. 30, 1912.

Fig. 1.

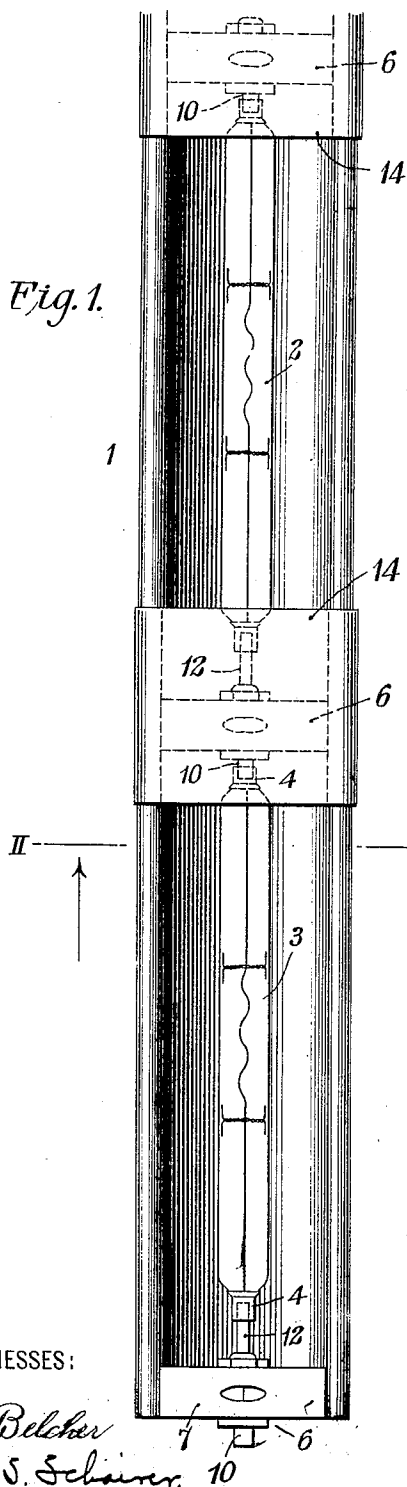


Fig. 3.

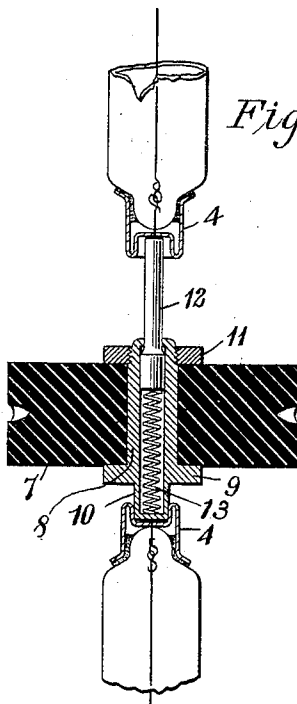
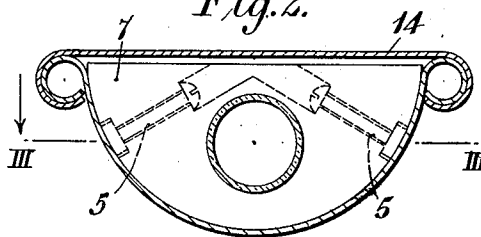


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ROBERT H. HENDERSON, OF EAST ORANGE, NEW JERSEY, ASSIGNOR TO WESTINGHOUSE LAMP COMPANY, A CORPORATION OF PENNSYLVANIA.

ELECTRIC ILLUMINATING DEVICE.

1,024,573.

Specification of Letters Patent.

Patented Apr. 30, 1912.

Application filed May 19, 1909. Serial No. 497,058.

To all whom it may concern:

Be it known that I, ROBERT H. HENDERSON, a citizen of the United States, and a resident of East Orange, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Electric Illuminating Devices, of which the following is a specification.

My invention relates to shades and mountings for electric lamps, and particularly for tubular lamps having terminal members upon opposite ends thereof and filaments which extend between and connect together the terminal members.

The object of the invention is to provide a shade and mounting for lamps of the character indicated such that lamps of different lengths may be utilized in connection therewith while still maintaining a symmetrical appearance of the combined parts.

For many kinds of illumination, such as desk, show-window and show-case lighting, tubular lamps having straight filaments extending approximately centrally there-through have been found most useful and convenient. Such lamps are usually provided, at their ends, with metal terminal members or caps, and have been supported by bases having terminal devices that engage the caps on the ends of the lamps, the bases being mounted in substantially semi-cylindrical shades or reflectors. With the shades and mountings heretofore provided, variations, of more than one-eighth of an inch in the lengths of the lamps used in connection therewith have been prohibitory, with the result that the cost of manufacture of the lamps has been unduly high, since it is difficult to produce lamps of substantially uniform length.

The present invention provides a shade and mounting that is adapted to receive lamps varying in length as much as one-half to five-eighths of an inch, which variations in the lengths are sufficient to permit of economical manufacturing of the lamps.

According to the present invention, the lamps are more securely held in position than by the mountings previously provided, and a symmetrical appearance of a plurality of lamps arranged end to end is also maintained.

Figure 1 of the accompanying drawing is a face view of a shade and two lamps constructed and mounted therein in accordance

with the present invention. Fig. 2 is a sectional view thereof upon the line II—II of Fig. 1, and Fig. 3 is a partially sectional view of some of the parts upon the line III—III of Fig. 2.

The invention is most conveniently illustrated and described in connection with a shade and reflector 1, such as that shown in Fig. 1, which is of sufficient length to receive a plurality of tubular incandescent lamps 2 and 3 that are arranged end to end therein and are provided with terminal members 4 having recessed ends, substantially as shown in detail in Fig. 3. Secured within the trough of the shade 1 by means of tap screws 5 that are threaded in nuts attached to the shade, and arranged at such intervals that the lamps 2 and 3 may be mounted therebetween, are a plurality of terminal devices 6 each of which comprises a substantially semi-cylindrical porcelain or other suitable insulating block 7 in which is mounted, and through which extends, a tubular cartridge-shaped conducting member 8 having at one end a flange or shoulder 9 that bears against the side of the insulating block 7, and a boss 10 that extends somewhat beyond the flange 9 and is adapted to project into the recess in the end of one of the lamp terminal members 4, substantially as shown in Fig. 3. The member 8 is secured in position in the insulating block 7 by suitable means, such as a nut 11 that is threaded upon the end opposite the flange 9. Located partially within and projecting from the member 8 is a rod 12 having an enlarged inner end, the edges of the open end of the member 8 being turned or spun inwardly to prevent the enlarged end of the rod 12 from being withdrawn therefrom. The rod 12 is normally maintained in its outermost position by means of a helical spring 13 which is also located within the member 8.

In order to place a lamp in position, one of the terminal members 4 thereof is first seated upon the end of the rod 12 and the spring 13 is compressed sufficiently to permit of seating the terminal member at the other end of the lamp upon the boss 10 of another of the terminal devices 6. The rod 12 is of sufficient length to permit of the use of lamps varying considerably in length, which variations, with lamps of the present commercial size, amounts to as much as one-half to five-eighths of an inch.

Since adjacent lamps may be of consider-

ably different lengths, and also since the rod 12 projects beyond the side of the insulating block 7 a greater distance than the boss 10 projects beyond the opposite side of the said block, a line of lamps would present an unsymmetrical appearance if it were not for the provision of a plate-like member or slide 14 that is suitably mounted upon the shade 1, substantially as shown, and that is adjustable longitudinally thereof to cover or uncover the terminal devices 6 and the end portions of the lamps 2 and 3 in such a manner that only the illuminated portions of the lamps are disclosed to view. In applying the lamps to the terminal supporting device, it is necessary to adjust the slides longitudinally of the reflector, as will be understood from an inspection of the drawing. The slide 14 may, of course, be mounted in any other suitable manner than that illustrated and many of the other details of construction may be modified within wide limits without departing from the spirit and scope of my invention.

I claim as my invention:

A mounting for tubular electric lamps, comprising a shade, a plurality of insulators extending the full width of the cross section of said shade, secured to said shade and properly spaced apart, said insulators having a central opening adapted to receive a connecting device for succeeding lamps, which consists of a hollow tubular conducting member provided with an integral boss at one end, a rod slidably mounted in said conducting member and means adapted to maintain said rod in a given position, the integral boss of said conducting member engaging a recessed terminal of a lamp, while the adjustable rod engages a recessed terminal of another lamp.

In testimony whereof, I have hereunto subscribed my name this 6th day of May, 1909.

ROBERT H. HENDERSON.

Witnesses:

R. C. KARCHNER,
F. H. MCSORLEY.