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SWITCHBOARD INCANDESCENT LAMF

H. T. BELLAMY

Filed June 23, 1919





Inventor Harry Tristram Betlamy by JERoberto Alty.

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STATES PATENT UNITED OFFICE.

HARRY TRISTRAM BELLAMY, OF OAK PARK, ILLINOIS, ASSIGNOR TO WESTERN ELEC-TRIC COMPANY, INCORPORATED, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

SWITCHBOARD INCANDESCENT LAMP.

Application filed June 23, 1919. Serial No. 306,170.

To all whom it may concern:

Be it known that I, HARRY TRISTRAM BELLAMY, a citizen of the United States, residing at Oak Park, in the county of Cook ⁵ and State of Illinois, have invented certain new and useful Improvements in Switchboard Incandescent Lamps, of which the following is a full, clear, concise, and exact description.

- 10 This invention relates to incandescent lamps such as are used in telephone switchboard signalling, and more particularly to an improved form and construction of globe for such lamps.
- 16 The object of the invention in general is to provide a globe which may be easily and economically produced and one which will greatly improve the end illumination of such signaling lamps.
- In accordance with the general features of this invention there is provided a molded or drawn lamp globe having a substantially flat end wall which is of uniform thickness throughout. Such a globe may be produced
- 25 by the process and with the mechanism shown and described in the Bellamy-Smith Patent No. 1,303,452, issued May 13, 1919, modified to provide a flat pad for produc-ing a substantially flat end wall in the globe. In the drawings illustrating this inven-
- 30 tion

Fig. 1 is a view in elevation of a lamp globe blank embodying the features of this invention;

Fig. 2 is a longitudinal sectional view of a completed lamp made with the globe of 36 this invention, and

Fig. 3 is a view in elevation of the completed lamp shown in section in Fig. 2.

40 In the drawings 5 designates a hollow cylindrical glass blank which may be pro-duced in accordance with the invention described in the Bellamy-Smith Patent 1,303,452, issued May 13, 1919, wherein a 45 flat pad is employed instead of the concave pad disclosed. This cylindrical member is provided at one end with an approximately flat end wall 6 which is of substantially uniform thickness throughout. At its opposite

end the blank is provided with a flange or 30 bead 7 which in the manufacture of the lamp proper is merged or fused into a glass tube 8 through which the globe is evacuated and which supports supporting wires or terminals 9—9, to the upper ends of which is 55 attached a filament 10. The lower ends of the supporting wires are brought out through the wall of the globe and secured to terminals 11-11 which are cemented to the globe and have their lower ends 12-12 secured 60 within an insulating base 13.

With this form of globe the light filament 10 may be located closely adjacent the end wall 6 thereby directing the maximum number of light rays through the wall. Due to 05 the approximately flat contour of the end wall all or approximately all of the light rays which are directed through it from the filament 10 will be directed in an approximately perpendicular direction to il- 70 luminate a lamp cap which is located above the lamp in the construction of telephone switchboards to which this invention is particularly applicable. Moreover, since the end wall 6 is of uniform thickness there will 75 be practically no distortion or deflection of the light rays from the filament 10, and the efficiency of the lamp with respect to its illumination is thereby greatly increased.

In the previous known methods of pro- 80 ducing these lamp globes, namely, by taking a glass tube and heating and working the end thereof to close it, it has not been possible to approximate a flat end wall or a wall having a uniform thickness. These difficul- 85 ties, however, have been overcome by the drawing and forming process of the Bellamy-Smith patent heretofore referred to, making it possible to produce the globes of this invention on a commercial scale. 90 What is claimed is:

A telephone switchboard incandescent lamp having a substantially flat end wall of uniform thickness.

In witness whereof, I hereunto subscribe 95 my name this fourth day of June, A. D. 1919.

HARRY TRISTRAM BELLAMY.