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LIGHT CASING FOR STEREOPTICONS.

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UNITED STATES PATENT OFFICE.

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LIGHT-CASING FOR STEREOPTICONS.

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To all whom it may concern:

Be it known that I, CHARLES BESELER, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and Improved Light-Casing for Stereopticons, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved light-casing for stereopticons which is simple and durable in construction, insures perfect ventilation, and rapidly carries off the heat generated by the flame to prevent sweating of the condensing-lens and at the same time renders the casing light-tight.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional side elevation of the improvement as applied. Fig. 2 is a transverse section of the same on the line xx of Fig. 1. Fig. 3 is a similar view of the same on the line yy of Fig. 1. Fig. 4 is a plan view of the same, and Fig. 5 is an inverted sectional plan view of the same on the line zz of Fig. 3.

The improved light-casing A has its sides B C and the top D formed of a single piece of sheet metal bent to the proper size, the sides B and C being parallel. The front end E is secured by rivets or other means to the sides and top, and is provided with the usual circular opening E', fitting onto the casing F, containing the condensing-lens forming part of the stereopticon proper G.

On the lower ends of the sides B and C are formed longitudinally-extending sleeves B' and C', respectively, fitted to slide on the horizontal rods H, projecting from the standards of the stereopticon, so as to support the casing in proper position on the rear end of the stereopticon. The rear ends of the sides B C and top D are formed with transversely-extending flanges B², C², and D', respectively, forming the rear end of the casing, the flange B² being additionally provided with the hinges for the door I for closing or opening the rear

end. A similar door C² is formed on the side C, so as to give ready access to the light within the casing. The under side of the casing A is open for the admission of the device for generating the light, only the front end of the casing being connected by a narrow cross-piece E², fastened to the end E and to the sides B and C.

In the sides B and C, at or near their upper ends, are formed longitudinal outlet-openings B³ and C⁴, respectively, over which extend on the outside of the casing the plates J and J', respectively, curved semicircularly, the lower ends being fastened to the sides of the casing, while the upper ends extend above and slightly over the top D of the casing. (See Figs. 2 and 3.) The plates J and J' form longitudinal channels open at each end on the top, so that the heat generated within the casing can readily pass out through the channels at either end or over the top of the casing.

At the front end of the top D is arranged a transverse row of apertures D², over which extends an angular plate K, secured by its lower end to the front E and having its top extending rearward, the extreme rear end being slightly curved upward, as is plainly shown in Fig. 1. The top part of the angular plate K is located a suitable distance above the transverse row of openings D², so that the heat generated within the casing and passing through the said openings is deflected rearward over the outside of the top of the casing. A similar row of openings D³ is arranged at or near the rear end of the top D, the said row being covered by an angular plate L, fastened to the top D, and also extending rearward in line with the angular plate K.

At or near the center of the top D is formed an outlet-opening D⁴, over which is arranged a plate N, supported on short studs or posts N', fastened to the top D.

It will be seen that the several plates J, J', K, L, and N permit a ready escape of the heat and gases, at the same time preventing exit of the light, so that the full power of the light generated is taken up by the condensing-lens, thus increasing the power of the stereopticon. The openings B³ and C⁴ are preferably formed by cutting tongues B⁴ and C⁵ out of the sides B and C, the said tongues being bent inward, so as to form guide-plates for

guiding the heat and gas to the outlet-openings B³ and C⁴, respectively. In constructing a casing in this manner the heat generated within the casing can readily pass out through
5 the various outlet-openings in the manner above described, so that the casing is perfectly ventilated and the heat is taken away from the condensing-lens, so as to prevent sweating of the latter. By constructing the
10 several plates over the outlet-openings in the manner described the light generated is confined within the casing and is consequently utilized to the full extent by the condensing-lens to increase the power of the stereopticon.

15 Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A light-casing for stereopticons, provided with sides having at or near the top outlet-
20 openings and curved plates extending longitudinally on the outside of the said sides over the said openings, the lower ends of the said plates being secured to the sides, while the upper free ends extend over and above the
25 top of the casing, substantially as shown and described.

2. A light-casing for stereopticons, provided with a flat top having at or near its ends trans-
30 verse openings and angular plates secured on the said top and extending transversely over

the said openings from the front of the casing to the rear, substantially as shown and described.

3. A light-casing for stereopticons, provided with a flat top having at or near its ends trans- 35 verse openings, angular plates secured on the said top and extending transversely over the said openings from the front of the casing to the rear, and a central plate supported on the top and arranged above a central opening in 40 the said top and between the said angular plates, substantially as shown and described.

4. A light-casing for stereopticons, comprising two sides, each formed at or near the top with a longitudinally-extending outlet-open- 45 ing, curved plates secured at their lower ends to the said sides and extending over the said openings, the free upper ends of the plates reaching over and above the top of the casing, the top formed at or near its ends with 50 outlet-openings, and transverse angular plates extending over the said transverse openings of the top, the free ends of the plates pointing rearward, substantially as shown and described.

CHARLES BESELER.

Witnesses:

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