No. 871,915. PATENTED NOV. 26, 1907.

A. D. CURTIS.

REFLECTOR.

APPLICATION FILED JAN. 18, 1906.

Fig. 1.

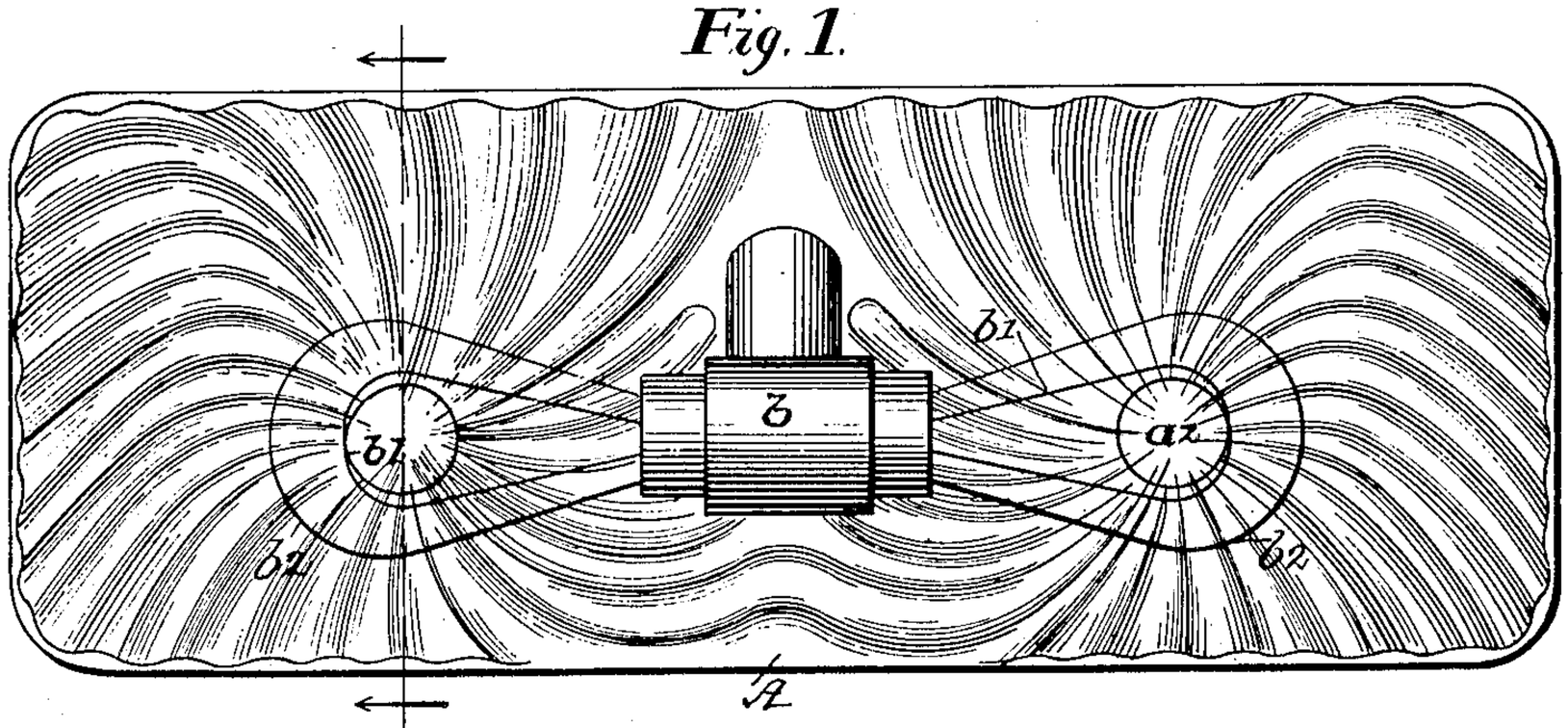


Fig 2.

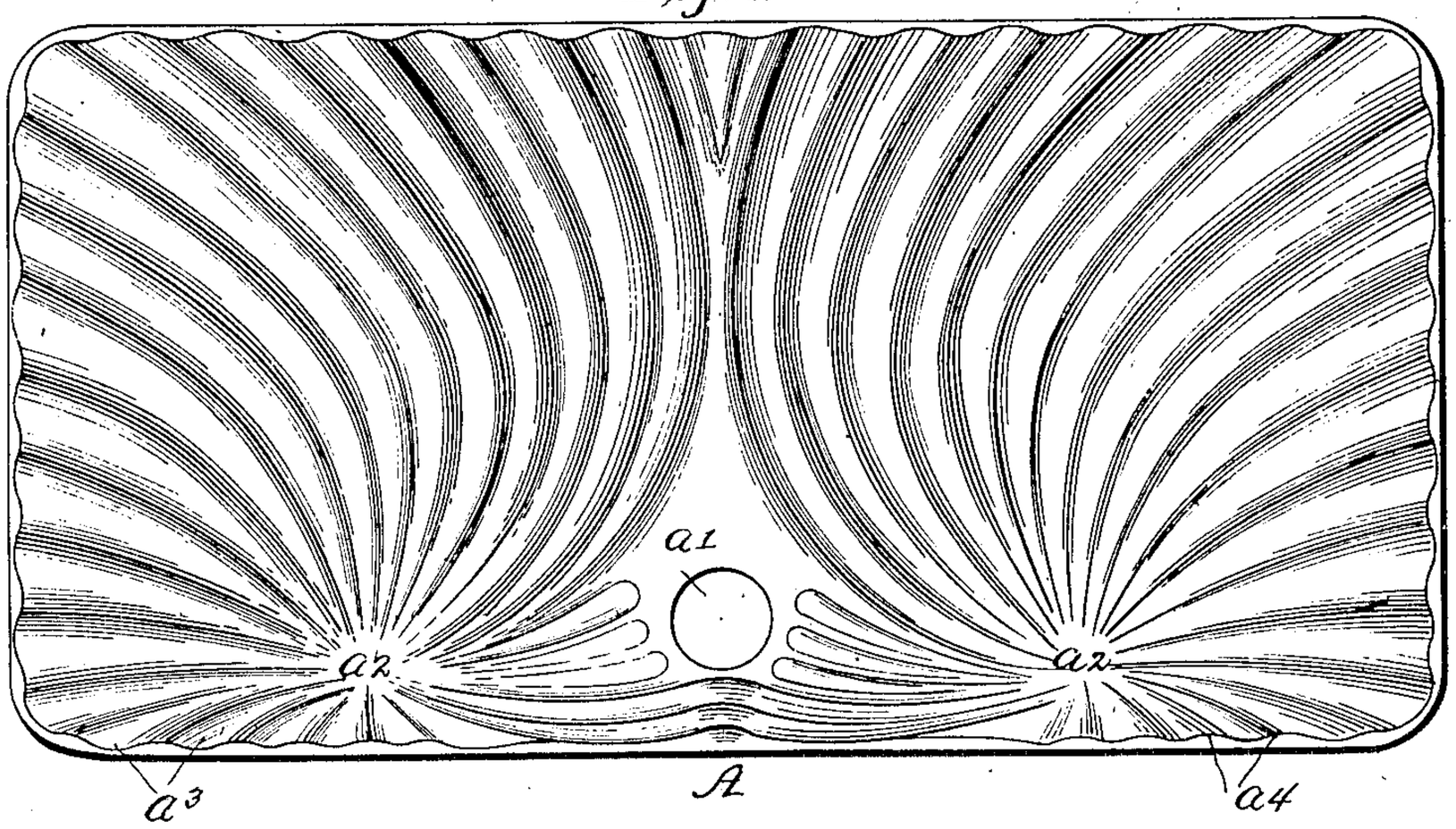
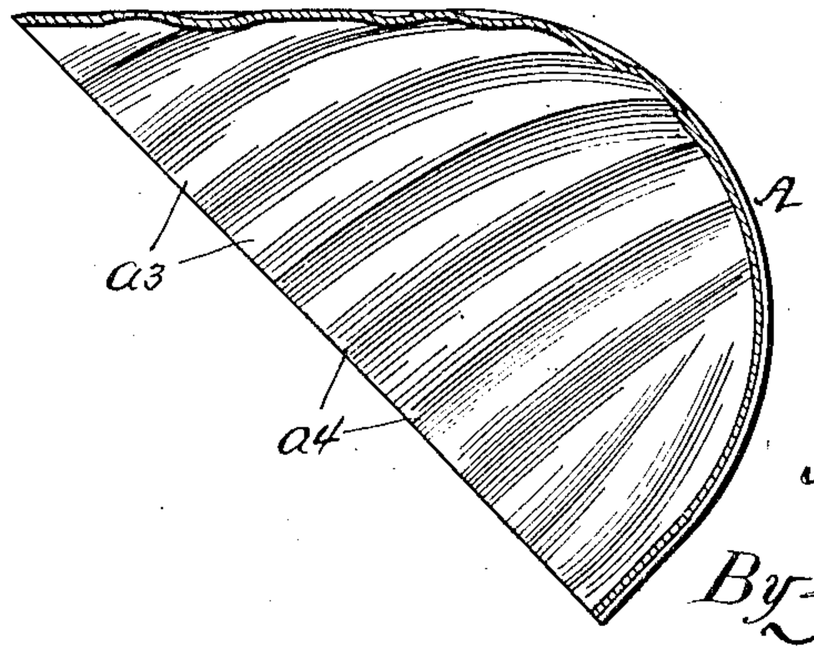


Fig. 3.



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UNITED STATES PATENT OFFICE.

AUGUSTUS D. CURTIS, OF CHICAGO, ILLINOIS.

REFLECTOR.

No. 871,915. Specification of Letters Patent. Patented Nov. 26, 1907.

Application filed January 18, 1906. Serial No. 296,599.

To all whom it may concern:

Be it known that I, AUGUSTUS D. CURTIS, citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Reflectors, of which the following is a specification.

This invention relates to improvements in the construction of light reflectors especially adapted for use in connection with incandescent electric lamps.

An important object attained through the improvements which form the subject matter of this application for patent is the diffusion of the rays of light so that there are no shadows produced or thrown on the objects illumined by the combined effect of the lamps and the reflector.

A further object is to produce a reflector having unique ornamental effects, there being in such devices a certain degree of utility in the design or conformation, inasmuch as many of this class of reflectors are used in displaying goods in store windows and it is desirable that the reflector should contribute to and harmonize with the artistic or ornamental effects produced by the window display.

In the accompanying drawing I have shown my invention as a reflector in the general shape in front elevation or around its edges of a parallelogram, and in cross-section, in the form of a hood in which the upper side overhangs the lower edge, and the back is concave conforming to the arc of a circle. I do not however wish to be understood as limiting myself herein to such general form as the essential features of my invention are applicable to many different shapes of reflectors.

In the accompanying drawing; Figure 1 is a front elevational view of my invention in operative position and in combination with two incandescent electric lamps; Fig. 2 is an inside plan view of the reflector without the lamps, and Fig. 3 is a cross-section on the dotted line shown in Fig. 1, with the lamp removed.

Referring to the details of the drawing, A represents generally a reflector constructed in accordance with my invention of any suitable material which may have a polished reflecting surface or have applied thereto a substance having light reflecting qualities.

a^1 is an opening to receive the lamp socket b which is of any well known construction and has secured thereon incandescent lamps b^2 which have the usual filaments b^1.

On each side of the opening a^1, the surface of the reflector has spots a^2, a^2, which are plain or flat and in making the reflectors these plain surfaces are so arranged that they will be directly behind the center of the rays of light from the filaments b^1. From each of the spots a^2, the inner surface of the reflector is formed with series of corrugations a^3, a^4, which radiate on curved lines from the spots as centers and most of which extend to the periphery of the reflector.

It will be apparent that as the rays of light from the lamp filaments are projected radially on straight lines that such rays will intersect the rays reflected from the corrugated surfaces of the reflector, the effect of which is to break up or diffuse the rays which are projected from the latter. The increase in brilliancy due to the multiplicity of reflecting concavo-convex surfaces is well known in this art, and it is apparent that I get the benefit of such results in this invention.

This reflector will be so mounted or hung that the rays of light will be thrown directly upon the objects to be illumined, the angle and general contour of its walls being designed to contribute to the reflective power of the corrugated surfaces.

Having thus described my invention, I claim:—

1. A reflector consisting of a hood-like structure of suitable material, having a central opening to receive a lamp attachment, and having the reflecting surface on opposite sides of said opening formed into series of corrugations, the corrugations of each series radiating on curved and slightly diverging lines from a common center.

2. A light-reflector consisting of a hood-like structure, rectangular in outline, and having its reflecting surface formed with one or more substantially flat spots and with corrugations radiating from said spots on curved and diverging lines extending to the margins of the structure, the depth of said corrugations being substantially the same throughout their length.

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

AUGUSTUS D. CURTIS.

Witnesses:
F. BENJAMIN,
WM. B. MOORE.