

PATENT SPECIFICATION

Convention Date (Austria): Aug. 10, 1928.

317,084

Application Date (in United Kingdom): Aug. 8, 1929. No. 24,282 / 29.

(Patent of Addition to No. 299,734 : dated May 27, 1927.)

Complete Accepted: Sept. 25, 1930.

COMPLETE SPECIFICATION.

Method of Preparing Distorted Three-dimensional Objects for use in place of Diapositives in Oblique Projection.



I, PAUL PLANER, a citizen of the Republic of Austria, of 1, Wiesingerstrasse 6, Vienna, Austria, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to the method of producing distorted diapositives for use in connection with oblique projection particularly for stages of theatres as set forth in the specification No. 299,734 and has for its object the production of distorted three-dimensional objects for use in such projection in place of the usual form of diapositive.

Specification No. 283,536 already discloses the use of transparent or translucent three-dimensional objects for producing particular effects in the projection of backgrounds and the like for theatres, exhibitions, advertisements, announcements and the like. For instance the projection of a faceted glass object yields astonishing effects in colour and in shape, which are continuously varied when the object is shifted in the direction of the path of the rays of light. If, however, the projection is carried out along an axis at a steep angle to the normal to the screen, as, for example, in the case of stage and advertisement projection, the projected image appears distorted in a troublesome manner. For instance, cylindrical glass members appear in the shape of the frustum of a cone and so forth.

Specification No. 299,734 relates to a method of producing pictures for oblique projection, which essentially consists in that the picture to be projected is photographed or taken not only in accordance with the angle of inclination with respect to the projection area but also with the objective of the projection lantern and under the same geometric and optical conditions as under which it is subsequently projected, so that a correct image must be the result on the projection screen.

[Price 1/-]

The essential feature of the method according to the present invention consists in producing three-dimensional objects of distorted shape according to the method set forth in the Specification No. 299,734.

The method of determining the correct shape of the object to be obliquely projected onto the projection surface can be carried out in various ways. For instance a faceted glass member or the like which is not distorted, for instance a glass-plate, or a photograph or drawing of the same, is photographed according to the method set forth in specification No. 299,734 and the member to be projected is ground or otherwise produced exactly in accordance with this distorted photograph.

Alternatively, a regular netting of wire or lines on a transparent material is photographed according to the method set forth in the specification No. 299,734, so as to produce a correctly distorted image thereof. Now the original netting is placed onto the undistorted member or onto its picture and the principal lines or places are transferred onto the distorted image of the netting. Subsequently the object to be projected is produced in accordance with such correctly distorted illustration.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. Improvement in or modification of the method set forth in specification No. 299,734, for the purpose of obtaining transparent or translucent three-dimensional objects capable of use for producing particular effects in projected images, consisting in the production of three-dimensional objects of distorted shape by photographing an undistorted original object or a photograph or illustration thereof according to the method set forth in the specification No. 299,734.

2. Improvement in or modification of the method set forth in specification No. 299,734, consisting in photographing a

netting of wires or lines on a transparent material according to the method set forth in Specification No. 299,734, subsequently placing the netting on to the undistorted object or its picture, and transferring points on the latter on to the distorted image of the netting.

3. Method of producing projection

objects for use in connection with oblique projection particularly for stages of theatres substantially as described.

Dated this 8th day of August, 1929.

F. J. CLEVELAND & Co.,
29, Southampton Buildings,
Chancery Lane, London, W.C. 2,
Agents for the Applicant.