SPECIFICATION PATENT

766.631



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COMPLETE SPECIFICATION

Improvements in and relating to the production of Stereoscopic Pictures

I, RAYMOND JOHN SPOTTISWOODE, of Kingsgate, Sudbury Hill, Harrow-on-the-Hill, Middlesex, a British Subject, do hereby declare the invention for which I pray that a patent may be granted to me, and the method by which it is to be performed to be particularly described in and by the following statement: -

The present invention relates to the production of stereoscopic pictures and consists of an improvement in, or modification of, the invention described and claimed in Patent Specification No. 708,644.

h In that "main" Specification there are described various ways of producing stereoscopic cinematographic pictures in such a way that the three-dimensional "moving" images appear to the viewers as if enclosed in a rectangular window frame which is located out 20 of the plane of the actual screen; usually in

It has now been perceived that the basic idea underlying that invention applies equally well to the production of "still" stereoscopic

In accordance with this invention, therefore, there is provided a carrier, such as a sheet of paper or film, two companion pictures which form a stereoscopic pair, each of which pic-30 tures is bordered not only along its vertical edges, but also along its horizontal edges by a mask, the profile or internal pattern of which has vertical components serving to render the mask stereoscopically fusible with a similar but not identical mask around the companion picture, so that when the companion pair of pictures are viewed appropriately, or are optically reconstituted upon a viewing screen, the three-dimensional representation produced appears to be enclosed within a complete frame located in space at a predetermined position with respect to the representation produced.

For the production of a single pair of "still" stereoscopic pictures, precisely the [Price 3s. Od.]

same methods may be used as are described 45 in the main Specification for the production of a series of cinematographic film-images.

Thus, for example, in any convenient way there is printed around each image an opaque masking strip containing a pattern the horizontal and vertical inside edges of which contain pairs of indentations, corresponding patterns or indentations being printed on the image-carrier with any convenient parallax.

It is of the essence of the invention that the horizontal elements of the mask have markings which are either vertical or at least have a vertical component, since it is only such markings which can be satisfactorily fused stereoscopically.

By this means the whole of the mask or the outline defined thereby becomes stereoscopically fusible, and is brought forward into space, as a result of its parallax, to a position in relation to which the stereoscopic picture can be viewed satisfactorily under all conditions.

The invention is also applicable to the projection, with the aid of a single projector, of a pair of images having left and right viewpoint pictures superimposed, in conjunction with suitable means for polarising or otherwise separating the two images.

The invention may be carried into effect, for example, by photographing on a film a picture of the mask or frame drawn or otherwise provided on a card or the like and printing the final images on to a carrier from two superposed films, one bearing the picture and the other the mask or frame.

The following claims are to be interpreted as excluding the case where the carrier bears a plurality of pairs of stereoscopically related pictures, i.e. stereograms which are themselves related sequentially so as to provide cinematographic pictures, such a carrier being described and claimed in my main Patent.

What I claim is: -

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1. A carrier, such as a sheet of paper or film, bearing two companion pictures which form a stereoscopic pair, each of which picture is bordered not only along its vertical edges but also along its horizontal edges by a mask the profile or internal pattern of which has vertical components serving to render the mask stereoscopically fusible with a similar but not identical mask around the companion picture, so that when the companion pair of pictures are viewed appropriately, or are optically reconstituted upon a viewing screen, the three-dimensional representation produced appears to be enclosed within a complete frame located in space at a predetermined

position with respect to the representation produced.

2. A carrier as claimed in claim 1, wherein the parallax between the two masks is such that the frame produced appears to be located between the carrier and the observer or, where the representation is produced optically upon a screen, between the screen and the observer.

3. A carrier bearing a pair of stereoscopic pictures and masks substantially as described

herein.

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